Certain Iron Mechanical Transfer Drive Components from Canada and China

Investigation Nos. 701-TA-550 and 731-TA-1304-1305 (Final)

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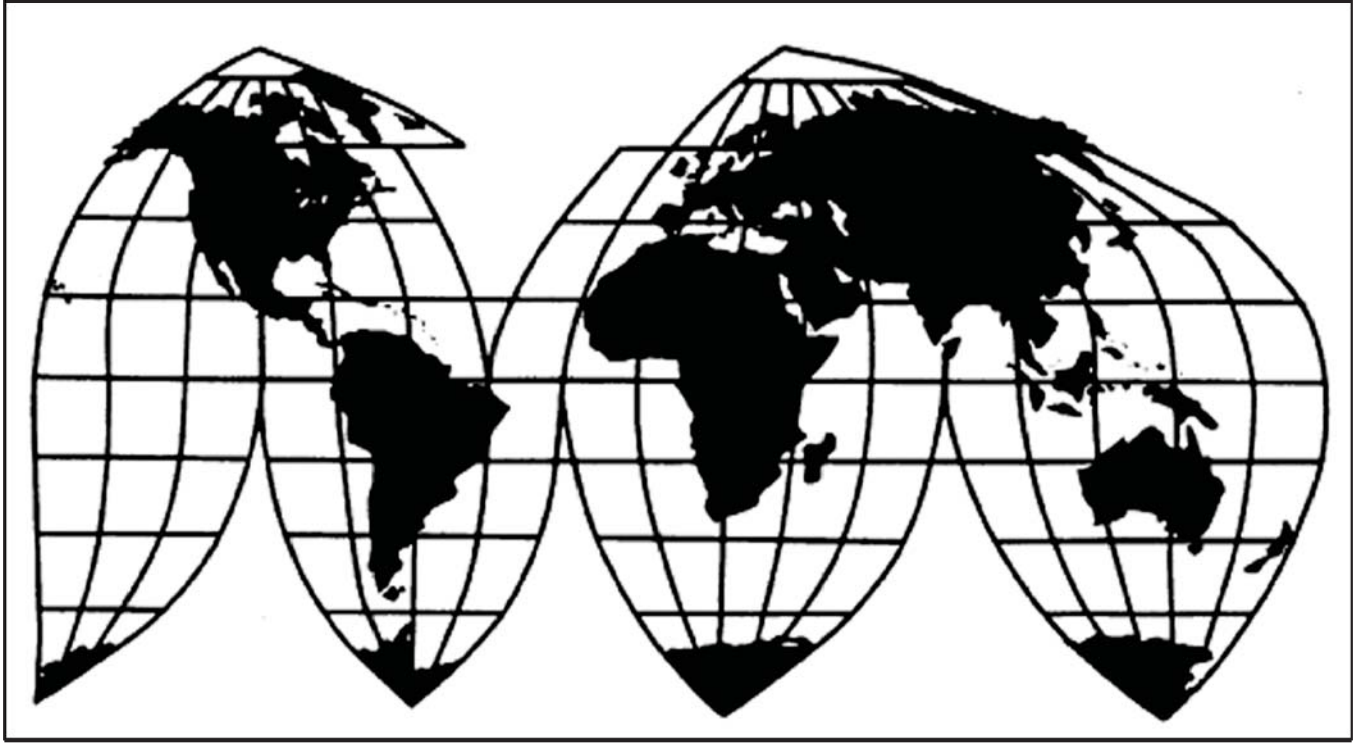

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Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report. Such deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-550 and 731-TA-1304-1305 (Final)
Certain Iron Mechanical Transfer Drive Components from Canada and China

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that an industry in the United States is not materially injured or threatened with material injury, and the establishment of an industry in the United States is not materially retarded by reason of imports of certain iron mechanical transfer drive components from Canada and China, provided for in subheadings 8483.30.80, 8483.50.60, 8483.50.90, 8483.90.30, and 8483.90.80 of the Harmonized Tariff Schedule of the United States,[2] that have been found by the Department of Commerce ("Commerce") to be sold in the United States at less than fair value ("LTFV"), and that have been found by Commerce to be subsidized by the government of China.[3]

BACKGROUND

The Commission, pursuant to sections 705(b) and 735(b) of the Act (19 U.S.C. 1671d(b) and 19 U.S.C. 1673d(b)), instituted these investigations effective October 28, 2015, following receipt of petitions filed with the Commission and Commerce by TB Wood's Incorporated, Chambersburg, Pennsylvania. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of certain iron mechanical transfer drive components from China were subsidized within the meaning of section 703(b) of the Act (19 U.S.C. 1671b(b)) and imports of certain iron mechanical transfer drive components from Canada and China were dumped within the meaning of 733(b) of the Act (19 U.S.C. 1673b(b)). Notice of the scheduling of the final phase of the Commission's investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on June 24, 2016 (81 FR 41348). The hearing was held in Washington, DC, on October 18, 2016, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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[1] The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(f)).

[2] Covered merchandise may also enter under the following HTSUS subheadings: 7325.10.00, 7325.99.10, 7326.19.00, 8431.31.00, 8431.39.00, and 8483.50.40.

[3] All six Commissioners voted in the negative.

Views of the Commission

Based on the record in the final phase of these investigations, we determine that an industry in the United States is not materially injured or threatened with material injury by reason of imports of certain large-diameter iron mechanical transfer drive components ("IMTDCs") from Canada and China found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value and subsidized by the government of China.

I. Background

A. Firms Involved in Investigations

TB Wood's Incorporated ("TBW" or "petitioner"), a U.S. producer of IMTDCs, filed the antidumping and countervailing duty petitions in these investigations on October 28, 2015.[1] Petitioner appeared at the hearing with counsel and submitted prehearing and posthearing briefs. Baldor Electric Company ("Baldor"), a U.S. producer of certain finished IMTDCs, submitted a prehearing statement in support of the petitions.[2] Martin Sprocket & Gear, Inc. ("Martin Sprocket"), a U.S. producer of IMTDCs, also submitted a written statement supporting the petitions.

Several respondent entities participating in the final phase of these investigations formed a coalition, the China Chamber of International Commerce *ad hoc* Coalition of Producers and Exporters of Certain Iron Mechanical Transfer Drive Components from the People's Republic of China. The coalition's members included Powermach Import & Export Co., Ltd. (Sichuan) ("Powermach"), Shijiazhuang CAPT Power Transmission Co., Ltd. ("Shijiazhuang CAPT"), and Yueqing Bethel Shaft Collar Manufacturing Co., Ltd. ("Bethel"), each a producer and exporter of subject merchandise (collectively, "Chinese Respondents"). Chinese Respondents were represented by counsel at the hearing and submitted prehearing and posthearing briefs.

[1] Confidential Report, Memorandum INV-OO-103 (Nov. 8, 2016) ("CR") at I-I; Public Report, *Iron Mechanical Transfer Drive Components from Canada and China*, Inv. Nos. 701-TA-550 and 731-TA-1304 to 1305 (Final), USITC Pub. 4652 (Dec. 2016) ("PR") at I-1. TBW is also an importer of ***. CR/PR at Table III-17, Table IV-1.

[2] During the preliminary phase of these investigations, Baldor and its affiliate, Baldor Electric Company Canada ("Baldor Canada"), a manufacturer/exporter of finished IMTDCs in Canada, participated in the staff conference with counsel and submitted a postconference brief opposing the petitions. Baldor Canada closed its St. Claire, Quebec IMTDC production facility on May 27, 2016 and relocated its finishing equipment from Canada to its facilities in North Carolina. CR at I-5 to I-6; PR at I-4. Baldor also had an affiliate that produced IMTDCs in China, Maska Power Transmission (Changzhou) Co. Ltd. ("Baldor Maska"), but Baldor permanently closed this affiliate in December 2014 and disposed of its equipment. CR at I-6 n.17, VII-13; PR at I-5 n.17, VII-8; Transcript of November 19, 2015 Staff Conference ("Confer. Tr.") at 22 (McCartney).

B. Background on Data Collection and Data Coverage

The October 28, 2015 petitions included five paragraphs describing the parameters of the requested scope of imported subject merchandise and a sixth paragraph identifying corresponding U.S. Harmonized Tariff Schedule ("HTSUS") statistical reporting numbers for the requested covered products.[3] Subsequent to filing the petitions, at the request of Commerce and other parties, petitioner submitted a series of requests to amend the scope language.[4] As a result, the five-paragraph scope in the petitions eventually expanded to 12 paragraphs and a table, collectively consisting of more than three single-spaced pages.[5] As discussed in more detail below, the Commission's staff continued to work with questionnaire respondents to revise and refine their data in accordance with the additional scope changes and to remove questionnaire responses from the dataset that did not meet the parameters of the revised scope or the corresponding domestic like product definition.[6] Thus, similar to the finding in our preliminary determinations,[7] multiple revisions to the scope of these investigations resulted in challenges in the Commission's collection and analysis of the relevant data.[8]

As explained below, the Commission investigated not only the firms identified in the petitions but also other possible domestic producers, importers, and foreign producers. A number of these firms, including firms identified in the petitions, reported that they do not produce or import the IMDTCs at issue in these investigations, and a number of these domestic producers, importers, and foreign producers did not respond to our data requests. Although petitioner contends that the "failure of numerous respondents to comply with the Commission's investigations merits the application of adverse facts available,"[9] we determine that application of adverse facts available under 19 U.S.C. § 1677e(b) is

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[3] Petitions, vol. I at 5-6.

[4] *See generally* Petitioner's Posthearing Brief at Exhibit 1 at 2-12; Transcript of Commission's October 18, 2016 Hearing ("Hearing Tr.") at 46-48, 64-67 (Pickard, DeFrancesco).

[5] *Compare, e.g.*, 81 Fed. Reg. 75,032 (Oct. 28, 2016) (final determinations) *with, e.g.*, 81 Fed. Reg. 36,876 (June 8, 2016) (preliminary determinations).

[6] Despite the numerous changes to the scope language, Chinese Respondents contend that the Commission's data "in the end {are} pretty good" and they "don't identify any huge data issues related to scope in this final phase." Hearing Tr. at 11, 118-119 (Grimson) (also noting that, in the final phase of these investigations, the data problems "are pretty well addressed and resolved"). Petitioner agrees that there are no meaningful data concerns stemming from these scope modifications, given that "almost all of the requested amendments to the scope" occurred before the questionnaires for the final phase of these investigations were issued. Petitioner's Posthearing Brief at 2; *see also id*. at Exhibit 1 at 9 (asserting that "all parties agree that these changes have had no material effects on the data obtained for the final phase of this investigation").

[7] Confidential Preliminary Views, EDIS Doc. 571266; USITC Pub. 4587 at 36.

[8] *Compare, e.g.*, CR/PR at Table C-1 (posthearing report) *with, e.g.*, Memorandum INV-OO-089 (Oct. 4, 2016) at Table C-1 (prehearing report) and Memorandum INV-NN-089 (Dec. 7, 2015) at Table C-1 (report in preliminary phase of these investigations).

[9] Petitioner's Prehearing Brief at 44; Hearing Tr. at 51-52 (Pickard).

inappropriate in these investigations. This provision provides that the Commission "may use an inference that is adverse to the interests of {a party that has failed to cooperate, to the best of its ability, with the Commission's request for information} in selecting from among the facts otherwise available.[10] Here, although certain questionnaire recipients failed to respond to the Commission's questionnaires, which is not uncommon in Commission investigations, many other recipients did fully comply with the Commission's requests for information. Thus, if the Commission were to take an adverse inference as petitioner advocates in these investigations, it would not solely be against those questionnaire recipients that failed to respond to the Commission's requests but also against those that did respond. Moreover, petitioner did not identify, and we could not otherwise discern, alternative facts available on this record on which the Commission could base its determination. We also note that the detailed description of the product at issue in these investigations and the lack of any publicly available information on this record specific to IMTDC market participants complicated our assessment of questionnaire coverage for the domestic industry, imports from subject and nonsubject sources, and the subject industries in Canada and China. For these reasons and those discussed in more detail below,[11] we have relied on information available, which includes information submitted and obtained in the preliminary and final phases of these investigations, including questionnaire responses from responding domestic producers, purchasers, importers, and foreign producers of subject merchandise.

II. Domestic Like Product

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of subject merchandise, the Commission first defines the "domestic like product" and the "industry."[12] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[13] In turn, the Tariff Act defines

[10] 19 U.S.C. § 1677e(b). The statute goes on to list potential sources of information on which the Commission may base its adverse inference, including the petition, a prior final determination or review determination, or any other information placed on the record. *Id*.

[11] We provide additional details about the scope amendments in the domestic like product discussion below. We provide additional explanations concerning the development and refinement of the various datasets in our respective discussions of negligible imports in section IV (imports), supply in section VI.B.2 (domestic and subject industries), and threat in section VII (subject industries).

[12] 19 U.S.C. § 1677(4)(A).

[13] 19 U.S.C. § 1677(4)(A).

"domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."[14]

The decision regarding the appropriate domestic like product in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[15] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[16] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[17] Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized or sold at less than fair value,[18] the Commission determines what domestic product is like the imported articles Commerce has identified.[19]

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[14] 19 U.S.C. § 1677(10).

[15] *See, e.g.*, *Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Torrington Co. v. United States*, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors, including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. *See Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

[16] *See*, *e.g.*, S. Rep. No. 96-249 at 90-91 (1979).

[17] *Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748-49; *see also* S. Rep. No. 96-249 at 90-91 (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

[18] *See*, *e.g., USEC, Inc. v. United States*, 34 Fed. Appx. 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States*, 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

[19] *Hosiden Corp. v. Advanced Display Mfrs.*, 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *Torrington*, 747 F. Supp. at 748-52 (affirming the Commission's determination defining six like products in investigations in which Commerce found five classes or kinds).

B. Evolution of the Scope of Subject Merchandise and Impact on Data Collection

In the October 28, 2015 petitions, TBW proposed a scope of imported subject merchandise consisting of five paragraphs describing the parameters of the requested covered products and a sixth paragraph identifying the corresponding HTSUS statistical reporting numbers.[20] During the preliminary phase of the investigations, petitioner requested two amendments to the scope prior to Commerce's decision whether to initiate the investigations. On November 5, 2015, TBW, "{u}pon further consideration of this issue," proposed changing the dimension element of the scope to specify that the merchandise subject to the investigations consists of "those not less than 4.0 inches (101 mm) in maximum nominal outside diameter."[21] On November 17, 2015, the deadline for Commerce's decision on whether to initiate the investigations or to extend the deadline for initiation in order to poll or otherwise determine industry support for the petitions, TBW proposed revising the covered products from those with a carbon content of 1.5 percent by weight or above to those with a carbon content of 1.7 percent by weight or above.[22] In its November 18, 2015 announcement of the initiation of the investigations, Commerce effectuated petitioner's requested amendments to the scope of imported subject merchandise as to both carbon content and diameter dimension.[23]

On November 18, 2015, in view of Commerce's announcement, Commission staff requested that questionnaire respondents revise their questionnaire data to conform to the new scope language, and they issued additional questionnaires to firms that had been identified in the intervening time as possible U.S. market participants that had not been named in the petitions.[24] Because the deadline for responding to these information requests was November 23, 2015, the parties based their arguments during the Commission's staff conference and in their November 23, 2015 postconference briefs on questionnaire data that had not yet been revised to reflect the intervening scope definition changes.[25] In its December 21, 2015 Preliminary Views, the Commission observed that "much of the usable information available at the time of the preliminary determinations consisted of information revised by questionnaire respondents or collected by the

[20] Petitions, vol. I at 5-6.

[21] Petitioner's November 5, 2015 Amended Petitions at 4-5.

[22] Petitioner's November 17, 2015 Amended Petitions at 1-2 and Attachment.

[23] USITC Pub. 4587 at 4-6; Confidential Preliminary Views, EDIS Doc. 571266 at 5-7; 80 Fed. Reg. 73,716, 73,721-22 (Nov. 25, 2015); 80 Fed. Reg. 73,722, 73,725-26 (Nov. 25, 2015).

[24] Commission staff asked responding U.S. producers, importers, and foreign producers to revise their questionnaire data, which had been collected based on the scope definition requested in the petitions. Commission staff also issued additional U.S. producer questionnaires to *** firms (seven possible producers of unfinished IMTDCs and *** possible producers of finished IMTDCs) that had been identified in the intervening time as possible additional U.S. producers not named in the petitions. USITC Pub. 4587 at 3, 4, 6 & n.17; Confidential Preliminary Views, EDIS Doc. 571266 at 4, 7-8 & n.17.

[25] USITC Pub. 4587 at 5-6; Confidential Preliminary Views, EDIS Doc. 571266 at 6-8.

Commission in the fifteen business days between Commerce's November 18, 2015 announcement of the revised scope and the Commission's Friday, December 11, 2015 vote."[26]

Petitioner submitted another request to amend the scope of the investigations on March 30, 2016,[27] which Commerce effectuated in its June 8, 2016 preliminary determinations by adding four paragraphs and a table that collectively served to exclude from the scope certain finished torsional vibration dampers ("TVDs"); certain light-duty fixed-pitch, non-synchronous sheaves; certain light-duty, variable-pitch, non-synchronous sheaves; and certain IMTDC bushings.[28] On June 17, 2016, following Commerce's preliminary determinations, the Commission issued to the parties for their review and comments draft questionnaires that would be used to collect data for the final phase of these investigations.[29] After considering the June 24, 2016 comments received from petitioner,[30] the Commission issued the questionnaires on July 18, 2016 and requested responses by August 18, 2016.[31] TBW sought further amendments and clarifications to the scope language from Commerce on June 27, 2016, August 4, 2016, August 17, 2016, and August 22, 2016.[32] Commerce's final determinations added language excluding certain flywheels with ring gear and certain TVD inner rings from the investigations' scope.[33]

In its final determinations, Commerce defined the scope of the imported merchandise under investigation as follows:

iron mechanical transfer drive components, whether finished or unfinished (i.e., blanks or castings). Subject iron mechanical transfer drive components are in the form of wheels or cylinders with a center bore hole that may have one or more grooves or teeth in

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[26] The Commission's staff produced a December 7, 2015 report that compiled the information obtained during the investigations, including any information obtained that was responsive to petitioner's two scope amendments that Commerce adopted. USITC Pub. 4587 at 6, 11; Confidential Preliminary Views, EDIS Doc. 571266 at 8, 56.

[27] CR at I-1; PR at I-1.

[28] *Compare, e.g.*, 81 Fed. Reg. 36,876 (June 8, 2016) (preliminary determinations) *with, e.g.*, 80 Fed. Reg. 73,716 (Nov. 25, 2015) (initiation).

[29] Draft Questionnaires for Final Phase of the Investigations, EDIS Doc. 584464.

[30] Petitioner's Comments on Draft Questionnaires for the Final Phase of the Investigations, EDIS Doc. 584552.

[31] Blank Questionnaires for the Final Phase of the Investigations, EDIS Doc. 588765 (based on the scope language in Commerce's preliminary determinations).

[32] CR at I-1; PR at I-1 (identifying the dates on which petitioner submitted these requests to Commerce, as reported in Commerce's final determinations).

[33] *Certain Iron Mechanical Transfer Drive Components from the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*, 81 Fed. Reg. 75,032 (Oct. 28, 2016); *Countervailing Duty Investigation of Certain Iron Mechanical Transfer Drive Components from the People's Republic of China: Final Affirmative Determination*, 81 Fed. Reg. 75,037 (Oct. 28, 2016); *Certain Iron Mechanical Transfer Drive Components from Canada: Final Affirmative Determination of Sales at Less Than Fair Value*, 81 Fed. Reg. 75,039 (Oct. 28, 2016).

their outer circumference that guide or mesh with a flat or ribbed belt or like device and are often referred to as sheaves, pulleys, flywheels, flat pulleys, idlers, conveyer pulleys, synchronous sheaves, and timing pulleys. The products covered by these investigations also include bushings, which are iron mechanical transfer drive components in the form of a cylinder and which fit into the bore holes of other mechanical transfer drive components to lock them into drive shafts by means of elements such as teeth, bolts, or screws.

Iron mechanical transfer drive components subject to these investigations are those not less than 4.00 inches (101 mm) in the maximum nominal outer diameter.

Unfinished iron mechanical transfer drive components (i.e., blanks or castings) possess the approximate shape of the finished iron mechanical transfer drive component and have not yet been machined to final specification after the initial casting, forging or like operations. These machining processes may include cutting, punching, notching, boring, threading, mitering, or chamfering.

Subject merchandise includes iron mechanical transfer drive components as defined above that have been finished or machined in a third country, including but not limited to finishing/machining processes such as cutting, punching, notching, boring, threading, mitering, or chamfering, or any other processing that would not otherwise remove the merchandise from the scope of the investigations if performed in the country of manufacture of the iron mechanical transfer drive components.

Subject iron mechanical transfer drive components are covered by the scope of the investigations regardless of width, design, or iron type (e.g., gray, white, or ductile iron). Subject iron mechanical transfer drive components are covered by the scope of the investigations regardless of whether they have non-iron attachments or parts and regardless of whether they are entered with other mechanical transfer drive components or as part of a belted drive assembly (which typically includes one or more of the iron mechanical transfer drive components identified above, and which may also include other parts such as a belt, coupling and/or shaft). When entered as a mechanical transfer drive assembly, only the iron components that meet the physical description of covered merchandise are covered merchandise, not the other components in the mechanical transfer drive assembly (e.g., belt, coupling, shaft). However, the scope excludes flywheels with a ring gear permanently attached onto the outer diameter. A ring gear is a steel ring with convex external teeth cut or machined into the outer diameter, and where the diameter of the ring exceeds 200mm and doesn't exceed 2,244.3 mm.

For purposes of these investigations, a covered product is of "iron" where the article has a carbon content of 1.7 percent by weight or above, regardless of the presence and amount of additional alloying elements.

Excluded from the scope are finished torsional vibration dampers (TVDs). A finished TVD is an engine component composed of three separate components: an inner ring, a

rubber ring, and an outer ring. The inner ring is an iron wheel or cylinder with a bore hole to fit a crank shaft which forms a seal to prevent leakage of oil from the engine. The rubber ring is a dampening medium between the inner and outer rings that effectively reduced the torsional vibration. The outer ring, which may be made of materials other than iron, may or may not have grooves in its outer circumference. To constitute a finished excluded TVD, the product must be composed of each of the three parts identified above and the three parts must be permanently affixed to the rubber ring. A finished TVD is excluded only if it meets the physical description provided above; merchandise that otherwise meets the description of the scope and does not satisfy the physical description of excluded finished TVDs above is still covered by the scope of the investigations regardless of end use or identification as a TVD.

Also excluded from the scope are certain TVD inner rings. To constitute an excluded TVD inner ring, the product must have each of the following characteristics: (1) a single continuous curve forming a protrusion or indentation on outer surface, also known as a sine lock, with a height or depth not less than 1.5 millimeters and not exceeding 4.0 millimeters and with a width of at least 10 millimeters as measured across the sine lock from one edge of the curve to the other; (2) a face width of the other diameter of greater than or equal to 20 millimeters but less than or equal to 80 millimeters; (3) an outside diameter greater than or equal to 101 millimeters but less than or equal to 300 millimeters; and (4) a weight not exceeding 7 kilograms. A TVD inner ring is excluded only if it meets the physical description provided above; merchandise that otherwise meets the description of the scope and does not satisfy the physical description of excluded TVD inner rings is still covered by the scope of this investigation regardless of end use or identification as a TVD inner ring.

The scope also excludes light-duty, fixed-pitch, non-synchronous sheaves ("excludable LDFPN sheaves") with each of the following characteristics: made from grey iron designated as ASTM (North American specification) Grade 30 or lower, GB/T (Chinese specification) Grade HT200 or lower, DIN (German specification) GG 20 or lower, or EN (European specification) EN-GJL 200 or lower; having no more than two grooves; having a maximum face width of no more than 1.75 inches, where the face width is the width of the part at its outside diameter; having a maximum outside diameter of not more than 18.75 inches; and having no teeth on the outside or datum diameter. Excludable LDFPN sheaves must also either have a maximum straight bore size of 1.6875 inches with a maximum hub diameter of 2.875 inches; or else have a tapered bore measuring 1.625 inches at the large end, a maximum hub diameter of 3.50 inches, a length through tapered bore of 1.0 inches, exactly two tapped holes that are 180 degrees apart, and a 2.0-inch bolt circle on the face of the hub. Excludable LDFPN sheaves more than 6.75 inches in outside diameter must also have an arm or spoke construction. Further, excludable LDFPN sheaves must have a groove profile as indicated in the table below:

Size (belt profile)	*Outside Diameter*	*Top Width Range of Each Groove*	*Max. Height*	*Angle*
MA/AK (A, 3L, 4L)	*≤ 5.45 in.*	*0.484 – 0.499 in.*	*0.531 in.*	*34°*
MA/AK (A, 3L, 4L)	*>5.45 in. but ≤ 18.75 in.*	*0.499 – 0.509 in.*	*0.531 in.*	*38°*
MB/BK (A, B, 4L, 5L)	*≤ 7.40 in.*	*0.607 – 0.618 in.*	*0.632 in.*	*34°*
MB/BK (A, B, 4L, 5L)	*>7.40 in. but ≤ 18.75 in.*	*0.620 – 0.631 in.*	*0.635 in.*	*38°*

In addition to the above characteristics, excludable LDFPN sheaves must also have a maximum weight (pounds-per-piece) as follows: for excludable LDFPN sheaves with one groove and an outside diameter of greater than 4.0 inches but less than or equal to 8.0 inches, the maximum weight is 4.7 pounds; for excludable LDFPN sheaves with two grooves and an outside diameter of greater than 4.0 inches but less than or equal to 8.0 inches, the maximum weight is 8.5 pounds; for excludable LDFPN sheaves with two grooves and an outside diameter of greater than 8.0 inches but less than or equal to 12.0 inches, the maximum weight is 15.0 pounds; for excludable LDFPN sheaves with one groove and an outside diameter greater than 12.0 inches but less than or equal to 15.0 inches, the maximum weight is 17.5 pounds; for excludable LDFPN sheaves with one groove and an outside diameter of greater than 15.0 inches but less than or equal to 18.75 inches, the maximum weight is 16.5 pounds; and for excludable LDFPN sheaves with two grooves and an outside diameter of greater than 15.0 inches but less than or equal to 18.75 inches, the maximum weight is 26.5 pounds.

The scope also excludes light-duty, variable-pitch, non-synchronous sheaves with each of the following characteristics: made from grey iron designated as ASTM (North American specification) Grade 30 or lower, GB/T (Chinese specification) Grade HT200 or lower, DIN (German specification) GG 20 or lower, or EN (European specification) EN-GJL 200 or lower; having no more than 2 grooves; having a maximum overall width of less than 2.25 inches with a single groove, or of 3.25 inches of less with two grooves; having a maximum outside diameter of not more than 7.5 inches; having a maximum bore size of 1.625 inches; having either one or two identical, internally threaded hub (i.e., with threads on the outside diameter) that enable(s) the width (opening) of the groove to be changed; and having no teeth on the outside or datum diameter.

The scope also excludes certain IMTDC bushings. An IMTDC bushing is excluded only if it has a tapered angle of greater than or equal to 10 degrees, where the angle is measured between one outside tapered surface and the directly opposing outside tapered surface.[34]

IMTDCs are iron castings in the shape of wheels or cylinders for use in belted drive assemblies in fans, conveyers, compressors, pumps, and mixers.[35] Circular IMTDCs may be referred to as sheaves, pulleys, or flywheels, and cylindrical IMTDCs, which are designed to attach the shaft to the circular IMTDC, may be referred to as bushings.[36] Regardless of size or shape, IMTDCs are connected with belts and used to transfer power from a shaft operated by a motor or engine.[37] IMTDCs may be produced in finished or unfinished (referred to as blanks or castings) form.[38] IMTDCs may be manufactured in a variety of sizes as measured by the outer diameter.[39]

C. Analysis

In its preliminary determinations, the Commission defined a single domestic like product encompassing all forms of finished and unfinished IMTDCs described in the scope of the investigations, as well as small-diameter IMTDCs under 4 inches in maximum nominal outside diameter.[40] In its preliminary determinations, the Commission found that the record did not support differentiating between so-called small- and large-diameter IMTDCs, which petitioner argued were divided by a four-inch nominal outer diameter. The Commission found overlap in the manufacturing processes and employees used to produce

[34] As Commerce explained, the merchandise covered by these investigations is currently classifiable under HTSUS statistical reporting numbers 8483.30.8090, 8483.50.6000, 8483.50.9040, 8483.50.9080, 8483.90.3000, and 8483.90.8080. Covered merchandise may also enter under the following HTSUS subheadings: 7325.10.0080, 7325.99.1000, 7326.19.0010, 7326.19.0080, 8431.31.0040, 8431.31.0060, 8431.39.0010, 8431.39.0050, 8431.39.0070, 8431.39.0080, and 8483.50.4000. 81 Fed. Reg. 75,032; 81 Fed. Reg. 75,037; 81 Fed. Reg. 75,039 (footnotes omitted).

[35] IMTDCs have a center bore hole for a shaft to be inserted and an outer circumference, often with a variety of teeth or grooves, designed to mesh with a belt. CR at I-20; PR at I-17 to I-18. Out-of-scope non-iron mechanical transfer device components ("non-iron MTDCs") are produced from other materials, including aluminum, plastic, and steel. CR at I-19 n.29; PR at I-17 n.29.

[36] CR at I-14; PR at I-12.

[37] CR at I-19; PR at I-17.

[38] Unfinished IMTDCs possess the approximate form of an IMTDC without being machined into final specifications and have the sole purpose of being manufactured into a finished IMTDC. CR at I-30; PR at I-27.

[39] CR at I-21; PR at I-18.

[40] The Commission found that finished and unfinished IMTDCs, as well as small-diameter IMTDCs, should be included in the same domestic like product, while steel MTDCs should not be included in the domestic like product. USITC Pub. 4587 at 11-19.

IMTDCs regardless of diameter,[41] and further that IMTDCs of all diameters have similar physical characteristics and overlap in end uses and are not differentiated in terms of producers or customers.[42] While IMTDCs of different sizes necessarily have price differences and a lack of substitutability, such differences apply to all IMTDCs of different sizes regardless of the dividing line. Based on an examination of the traditional domestic like product factors, the Commission found that the record supported including small-diameter IMTDCs, which were outside the investigations' scope, in the same domestic like product as the large-diameter IMTDCs corresponding to the scope.[43]

In the final phase of these investigations, the only aspect of the domestic like product definition from the preliminary determinations challenged by any party is the inclusion of small-diameter IMTDCs in the domestic like product definition, which petitioner continues to contest.[44]

Although petitioner continues to argue against including small-diameter IMTDCs in the domestic like product, it submitted no comments on the Commission's draft questionnaires regarding the domestic like product definition.[45] It failed to do so, despite the Commission's reminder in its preliminary determinations that parties would need to "identify in their comments on the draft questionnaires for any final phase of these investigations any arguments that would implicate data collection, such as requests to define the domestic like product(s) in a different manner," as required under the Commission's rules.[46]

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[41] As the Commission observed, TBW admitted in the original petitions that it uses common manufacturing facilities, processes, and employees to manufacture all IMTDCs regardless of diameter. USITC Pub. 4587 at 14 (*citing, e.g.*, Petitions, vol. I at 20, 21).

[42] USITC Pub. 4587 at 13-16.

[43] USITC Pub. 4587 at 13-16.

[44] In the final phase of these investigations, petitioner asks the Commission to define a single domestic like product corresponding to the IMTDCs described in the scope of the investigations, which would include finished and unfinished IMTDCs in all forms (sheaves, bushings, and flywheels), but not include (i) small-diameter IMTDCs in sizes less than 4 inches in nominal outer diameter or (ii) non-iron MTDCs. With respect to small-diameter IMTDCs, petitioner argues that the Commission has previously relied on diameter measurements to define domestic like products in other investigations, and witnesses for the petitioner claimed that there are distinct production processes for small- and large-diameter IMTDCs. Petitioner nonetheless concedes that the inclusion of small-diameter IMTDCs in the domestic like product will not impact the Commission's analysis. Petitioner's Posthearing Brief at Exhibit 1 at 13-16; Hearing Tr. at 35, 72, 135-136 (Pickard); Petitioner's Prehearing Brief at 2-3, Exhibit 1 at 1-12. Chinese Respondents characterize petitioner's proposed 4-inch dividing line between small- and large-diameter IMTDCs as arbitrary. They argue that regardless of whether the Commission includes small-diameter IMTDCs in the domestic like product, the record does not support affirmative determinations. Chinese Respondents' Posthearing Brief at 2; Hearing Tr. at 135-136 (Grimson).

[45] Petitioner's Comments on Draft Questionnaires (Jun. 24, 2016).

[46] USITC Pub. 4587 at 19 n.99; Confidential Preliminary Views at 28 n.99 (citing 19 C.F.R. § 207.20(b)).

We find that the record continues to support the Commission's findings in its preliminary determinations.[47] Petitioner offers no new evidence or argument to support its proposed domestic like product definition.[48] Indeed, the record does not support petitioner's argument that its own production processes are distinct for small- and large-diameter IMTDCs.[49] ***.[50] Petitioner offers no evidence that *** are not representative of other producers of IMTDCs or that any physical distinctions between small- and large-diameter IMTDCs otherwise dictate different production processes. In fact, other domestic producers that cast and/or finish IMTDCs in the United States reported that they manufacture small- and large-diameter IMTDCs on the same production equipment.[51] We

[47] *See, e.g.*, CR at I-19 to I-46, II-1, III-1 to III-4, III-8 to III-16, III-18 to III-20, III-24 to III-26; PR at I-17 to I-40, II-1, III-1 to III-3, III-4 to III-7, III-8 to III-9, III-10 to III-11; CR/PR at Table II-1, Table III-11, Table III-12. Indeed, in its original petitions, petitioner argued that an examination of each of the six domestic like product factors supported defining a single domestic like product consisting of the products within the scope of the investigations, which at the time included both small- and large-diameter IMTDCs. Petitions, vol. I at 5-6, 17-22. As petitioner explained, the IMTDCs "covered by the scope of these petitions should be considered to comprise a single domestic like product. Covered IMTDCs comprise related products of different sizes and shapes that constitute a continuum without any clear breaking point. They are sold through the same channels of distribution, are perceived by customers as parts of mechanical transfer drives, and are produced in the same production facilities using common production methods, machinery, and employees. Their prices fall within a continuum dictated by size and weight, and both finished and unfinished covered IMTDCs have similar physical characteristics, and the same end function. As such, the Commission should find a single domestic like product coterminous with the products subject to these investigations." *Id*. at 21-22.

[48] *See generally* Petitioner's Prehearing Brief at 2, Exhibit 1.

[49] Hearing Tr. at 130-136.

[50] Petitioner's Posthearing Brief at Exhibit 1 at 14-15; CR/PR at Table III-1 n.4.

[51] According to information on the record in the final phase of these investigations, five U.S. firms finish IMTDCs from castings that they purchase from third parties (B&B, Baldor, Hi-Lo, Maurey, and Sterling), and five firms are integrated producers that both cast and finish IMTDCs (Bremen, EnDyn, Goldens, Martin Sprocket, and TBW). Several foundries also reported that they manufacture unfinished IMTDCs in the United States. CR at III-1 to III-3; PR at III-1 to III-2. Domestic producers reported manufacturing small- and large-diameter IMTDCs on the same production equipment. CR/PR at Table III-11 (overlapping equipment for finishing), Table III-12 (overlapping equipment for casting); CR at III-18 to III-20; PR at III-8 to III-9; ***. Moreover, as even petitioner notes, the Commission's questionnaires instructed domestic producers to report information on small- and large-diameter IMTDCs separately from any data on MTDCs manufactured from steel, plastic, or other materials. Petitioner's Posthearing Brief at Exhibit 1 at 37-38. Thus, the overlap in production facilities for small- and large-diameter IMTDCs reflected in CR/PR at Table III-11 and Table III-12 is not based on production of steel or plastic IMTDCs, which is presented elsewhere in these tables.

remain unpersuaded that 4 inches in nominal outside diameter establishes a clear dividing line for IMTDCs.

In the absence of new arguments or evidence undermining our findings in the preliminary determinations, we retain the prior domestic like product definition: a single domestic like product including all forms of finished and unfinished IMTDCs described in the investigations' scope and including small-diameter IMTDCs under 4 inches in maximum nominal outside diameter. We also determine not to include in the domestic like product definition steel MTDCs that are manufactured from sintered steel powder or direct-machined steel bars for the same reasons articulated in our preliminary determinations.[52]

III. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[53] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market. These investigations raise two sets of domestic industry issues. The first concerns whether certain processing activities are sufficient to constitute domestic production. The second concerns whether appropriate circumstances exist to exclude any domestic producers from the domestic industry pursuant to the related parties provision.

[52] USITC Pub. 4587 at 16-19.

[53] 19 U.S.C. § 1677(4)(A).

A. Sufficient Production-Related Activities

In deciding whether a firm qualifies as a domestic producer of the domestic like product, the Commission generally analyzes the overall nature of a firm's U.S. production-related activities, although production-related activity at minimum levels could be insufficient to constitute domestic production.[54] The production of IMTDCs begins with the melting of pig iron, scrap iron, and ferrous scrap metal in a foundry furnace along with alloying agents that may be needed to ensure proper iron chemistry. Manufacturers pour the molten metal into a foundry mold that typically consists of an imprinted shape formed by sand that has been compacted into a cavity that approximates the finished shape of the desired output. Once the sand-cast molten metal has cooled into a solid, the manufacturer removes and blasts away the sand and removes any excess iron that may be present in the mold. To finish the unfinished IMTDC blanks, manufacturers machine grooves or teeth, cut tap holes, sometimes apply surface treatments such as paint or oil, and then inspect and test the material.[55] In the United States, some firms (foundries) manufacture unfinished IMTDCs, some firms (finishers) only engage in finishing operations on unfinished IMTDCs, and some firms have integrated operations that manufacture unfinished and finished IMTDCs.[56]

In its preliminary determinations, the Commission included finishers in the domestic industry based on its finding that machining operations to transform unfinished IMTDC blanks into finished IMTDCs were sufficient production-related activities to constitute domestic production.[57] At the time, petitioner argued that machining operations did not, in and of themselves, constitute domestic production.[58] In the final phase of these investigations, petitioner argues that, relative to finishing operations, casting unfinished IMTDCs is a more substantial part of the overall production process that accounts for a large portion of the cost and value of the finished IMTDCs, but it no longer argues against

[54] The Commission generally considers six factors: (1) source and extent of the firm's capital investment; (2) technical expertise involved in U.S. production activities; (3) value added to the product in the United States; (4) employment levels; (5) quantity and type of parts sourced in the United States; and (6) any other costs and activities in the United States directly leading to production of the like product. No single factor is determinative and the Commission may consider any other factors it deems relevant in light of the specific facts of any investigation. *Crystalline Silicon Photovoltaic Cells and Modules from China*, Inv. Nos. 701-TA-481 and 731-TA-1190 (Final), USITC Pub. 4360 at 12-13 (Nov. 2012).

[55] CR at I-35 to I-39; PR at I-31 to I-34; Confidential Preliminary Views, EDIS Doc. 571266 at 16; USITC Pub. 4587 at 11-12.

[56] *See, e.g.*, CR/PR at Table III-1.

[57] USITC Pub. 4587 at 20-23; Confidential Preliminary Views, EDIS Doc. 571266 at 29-35.

[58] Petitioner's Postconf. Brief at 5, Exhibit 1 at 24-29; Confer. Tr. at 15; Petitions, Vol. I at 2, 13, 22-25, 27.

including finishers in the domestic industry.[59] Chinese Respondents do not make any arguments concerning this issue in the final phase of these investigations.[60]

Based on our consideration of several factors, we determine that finishing operations to machine unfinished IMTDCs into finished IMTDCs are sufficient production-related activities to constitute domestic production. Finishing operations rely primarily on unfinished IMTDCs that are manufactured in the United States.[61] Domestic finishing operations employ fewer production-related workers ("PRWs") than casting operations,[62] but at least some specialized training is needed for these employees.[63] The value added by finishing operations is substantial.[64] Moreover, finishing operations appear to involve substantial capital investments.[65] Based on the record, we determine to include within the domestic industry U.S. firms that machine unfinished IMTDCs into finished IMTDCs.

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[59] Petitioner's Prehearing Brief at Exhibit 1 at 3-4.

[60] In the preliminary phase of these investigations, respondents argued that finishers should be included in the domestic industry. Chinese Respondents' Postconf. Brief at 14-15.

[61] U.S. firms that engage in finishing operations primarily source their raw materials from the United States. In 2015, *** percent of domestic producers' combined finished IMTDC production in terms of pieces was from unfinished IMTDCs ***, approximately *** was from ***, *** percent was from unfinished IMTDCs ***, and *** percent was from unfinished IMTDCs ***. CR at III-15 to III-16; PR at III-7.

[62] Compared to integrated producers, U.S. firms that solely machine unfinished IMTDCs into finished IMTDCs reported employing fewer, but still sizable, numbers of PRWs. CR/PR at Table III-9 (finishers that do not have casting operations employed *** to *** PRWs during the POI, whereas integrated producers employed *** to *** PRWs).

[63] Petitioner continues to argue that finishing operations are a minor step of a larger, more labor-intensive process. It asserts that casting operations create the essential characteristics of the finished final product, after which only minor additional finishing occurs. Petitioner's Prehearing Brief at Exhibit 1 at 3-4; Petitioner's Postconf. Brief at Exhibit 1 at 28-29. At least some technical expertise is required for finishing operations. Three integrated firms that manufacture unfinished and finished IMTDCs reported that no substantial technical expertise is required to manufacture finished IMTDCs from unfinished IMTDCs, whereas three integrated firms and all five firms that solely finish IMTDCs reported that technical expertise is required to machine unfinished IMTDCs into finished IMTDCs. During the preliminary phase of these investigations, Baldor reported that it utilizes robotic cells, tooling, and other specially designed equipment that are dedicated to machining blanks to perform finishing operations that include drilling, boring, turning, hobbing, broaching, flanging, coating, testing, and inspecting. It argued that its highly trained employees have undertaken extensive mathematical studies and use advanced technical skills to *** operate that equipment. Baldor's Postconf. Brief at 22-23, Exhibit 2 at paragraph 3, paragraph 6, Exhibit 10 at 4; Confer. Tr. at 18; CR/PR at Table III-6.

[64] U.S. firms performing finishing operations reported that the value added by their finishing operations was about *** percent (calculated as a ratio of conversion costs to total cost of goods sold ("COGS")) or *** percent (calculated as a ratio of conversion costs plus selling, general, and administrative expenses ("SG&A") to operating expenses). CR/PR at Table III-8.

[65] U.S. firms performing finishing operations reported that their finishing operations involved capital investments ranging from $*** to $***, and they reported various sources for their capital investment (if they reported this information), including ***. CR/PR at Table III-4.

B. Related Parties

We also must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.[66] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[67]

In its preliminary determinations, the Commission found that three firms were related parties as importers of subject merchandise: ***. The Commission found that appropriate circumstances did not exist to exclude any of these firms from the domestic industry.[68]

In the final phase of these investigations, four responding domestic producers are related parties because they imported subject merchandise during the January 2013 to June 2016 period of investigation ("POI").[69] Petitioner argues against excluding *** from the domestic industry, asserting that each of these firms' primary interest lies with domestic production.[70] Chinese Respondents argue that *** should be excluded from the domestic industry due to its significant reliance on subject and nonsubject imports.[71] We find that appropriate circumstances do not exist to exclude any of the firms from the domestic industry as related parties, as explained below.

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[66] *See Torrington Co. v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd mem.*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), *aff'd mem*., 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

[67] The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following: (1) the percentage of domestic production attributable to the importing producer; (2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market); (3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry; (4) the ratio of import shipments to U.S. production for the imported product; and (5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31 (Ct. Int'l. Trade 2015); *see also Torrington*, 790 F. Supp. at 1168.

[68] Confidential Preliminary Views, EDIC Doc. 57126 at 35-42 & n.143; USITC Pub. 4587 at 23-28 & n.143 (Vice Chairman Pinkert and Commissioner Williamson disagreeing with respect to ***, finding that the firm's ratio of subject imports to domestic production, ***, indicating that its primary interests lay with importation and not domestic production).

[69] CR/PR at Table III-17 (showing subject imports).

[70] Petitioner's Posthearing Brief at Exhibit 1 at 29-31; Petitioner's Prehearing Brief at 3-6.

[71] Respondents' Prehearing Brief at 4-9.

***. *** is a *** of IMTDCs and accounted for *** percent by pieces and *** percent by weight of responding U.S. producers' production of *** IMTDCs in 2015.[72] During the POI, *** also imported ***. On a value basis, the firm's imports of subject merchandise from ***, and on a volume basis (by pieces), its imports of subject merchandise from ***.[73] The firm's capital expenditures and research and development ("R&D") expenses were ***.[74] While *** reported sourcing *** from other U.S. producers during the POI, it also reported that it ***.[75] *** had the *** operating performance of any U.S. IMTDC *** during the POI.[76] This firm also reported *** during the POI. It ***.[77] Further, the firm ***.[78] [79]

We find appropriate circumstances do not exist to exclude this firm as a related party. Although this firm had a high ratio of subject imports to domestic production during the POI, its *** indicate a commitment to U.S. production, which is further supported by

[72] CR/PR at Table III-1.

[73] The volume (in pieces) of imports of subject merchandise from *** expressed as a ratio to the firm's U.S. production was *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in the first six months of 2015 ("interim 2015"), and *** percent in the first six months of 2016 ("interim 2016"), whereas the volume (in pieces) of subject imports from *** as a ratio to U.S. production was *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016). As a ratio to the value of the firm's total U.S. shipments, the value of imports of subject merchandise from China and Canada was *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016; as a ratio to the firm's total U.S. shipments by pieces, the volume of imports of subject merchandise from Canada and China was *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016. As explained in our volume discussion in section VI.C below, we rely primarily on value-based indicators as the best measure for the product in these investigations, although we have also considered quantity-based indicators (in pieces) where appropriate.

[74] CR/PR at Table VI-8 (indicating ***).

[75] Foreign Producer Questionnaire, EDIS Doc. *** (Oct. 21, 2016). *** reported that ***. U.S. Importer Questionnaire, EDIS Doc. *** at Response to Question II-4.

[76] CR/PR at Table E-2.

[77] CR/PR at Table III-3.

[78] CR/PR at Table III-3. With respect to the ***. Foreign Producer Questionnaire, EDIS Doc. *** (Oct. 21, 2016). Such changes are also reflected in the firm's import data, with markedly *** in both volume and value in interim 2016 than in interim 2015. CR/PR at Table III-17 (indicating imports of subject merchandise from *** of *** pieces and *** in interim 2015 versus *** pieces and *** in interim 2016).

[79] Chairman Williamson and Commissioner Pinkert note that the information in the final phase of these investigations differs in significant ways from the information that led them to exclude *** in the preliminary phase of these investigations. In particular, the ratio of ***'s subject imports to both its U.S. shipments of domestic product and its U.S. production are substantially lower now. Moreover, ***. Thus, Chairman Williamson and Commissioner Pinkert join the discussion above.

the firm's ***. Finally, the firm has *** the petitions on imports of IMTDCs from Canada and China.[80]

*******. *** is a *** of IMTDCs and accounted for *** percent by pieces and *** percent by weight of responding U.S. producers' production of *** IMTDCs in 2015.[81] During the POI, *** imported ***, although such imports were *** relative to its U.S. shipments in terms of both pieces and value.[82] The firm had capital expenditures throughout the POI that were ***,[83] and the firm was *** throughout the POI.[84]

We find that appropriate circumstances do not exist to exclude this firm as a related party. It ***, is ***,[85] and has *** imports of subject merchandise relative to its domestic production. These facts suggest that its principal interest is in domestic production.

*****.** *** is an *** with one of the *** volumes of *** IMTDCs in the United States, accounting for *** percent of pieces and *** percent of weight of ***.[86] The firm reported *** volumes of imports of subject merchandise ***. On a quantity basis, its imports of subject merchandise were ***, and on a value basis were ***.[87] *** capital expenditures *** R&D expenses.[88] The firm *** the petitions,[89] and it ***.[90]

We find that appropriate circumstances do not exist to exclude this firm as a related party. *** the petitions, is ***, and imported *** subject merchandise relative to its domestic production. These facts indicate that its principal interest is in domestic production.

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[80] CR/PR at Table III-1.

[81] CR/PR at Table III-1.

[82] CR/PR at Table III-17 (indicating that the volume in pieces of imports of subject merchandise from *** expressed as a ratio to the firm's U.S. production was *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016; the value of imports of subject merchandise from *** as a ratio to its total shipments was *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016). *** reported importing subject merchandise ***. U.S. Importer Questionnaire, EDIS Doc. *** at Answer to Question II-4.

[83] CR/PR at Table VI-8 (indicating that *** accounted for the *** highest capital expenditures among ***, with a *** increase in interim 2016).

[84] CR/PR at Table E-2.

[85] CR/PR at Table III-1.

[86] CR/PR at Table III-1.

[87] CR/PR at Table III-17 (*** ratio of subject imports to its U.S. production in quantity was *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016; by value, *** ratio of subject imports to total shipments was *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016). *** reported that ***. U.S. Importer Questionnaire, EDIS Doc. *** at Answer to Question II-4.

[88] CR/PR at Table VI-8.

[89] CR/PR at Table III-1.

[90] CR/PR at Table E-1, Table E-2.

***. *** and produces *** IMTDCs in the United States.[91] The firm accounted for *** percent by pieces and *** percent by weight of responding U.S. producers' production of *** in 2015.[92] Its capital expenditures ***, and its R&D expenses were ***.[93] The firm also ***.[94] It imported subject merchandise ***,[95] with the value of such subject imports *** over the POI, both absolutely and as a ratio of shipments.[96] It also ***.[97]

On balance, we find that appropriate circumstances do not exist to exclude the firm as a related party. Although its volume of subject imports (in pieces), as well as the ratio of such imports to total shipments, is high, the value of such imports *** over the POI, both in absolute terms and as a ratio of domestic production.[98] Further evidencing its commitment to domestic production, ***. Although ***. Thus, on balance, we find that appropriate circumstances do not exist to exclude this firm from the domestic industry as a related party.

Consequently, we define the domestic industry as all U.S. producers of the domestic like product, including foundries manufacturing unfinished IMTDCs, firms engaged solely in machining unfinished IMTDCs into finished IMTDCs, and integrated producers of IMTDCs.

IV. Negligible Imports

Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible.[99] Neither petitioner nor Chinese Respondents dispute that subject imports from Canada and China exceed negligible levels.

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[91] CR/PR at Table III-1.

[92] CR/PR at Table III-1.

[93] CR/PR at Table VI-8 (noting capital expenditures of $*** in 2013, $*** in 2014, $*** in 2015, $*** in interim 2015, and $*** in interim 2016. Its R&D expenditures were $*** in 2013, $*** in 2014, $*** in 2015, $*** in interim 2015, and $*** in interim 2016).

[94] CR/PR at Table E-1.

[95] *** that it was forced to obtain some IMTDCs from China in order to compete. ***.

[96] CR/PR at Table III-17 (the value of *** imports of subject merchandise from *** was $*** in 2013, $*** in 2014, $*** in 2015, $*** in interim 2015, and $*** in interim 2016. The ratio of the value of its subject imports to its total shipments also declined over the POI, from *** percent in 2013 to *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in 2016). In terms of volume (by pieces), the ratio of TBW's imports of subject merchandise from *** to its domestic production was *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016). *** reported that ***. U.S. Importer Questionnaire, EDIS Doc. *** at Answer to Question II-4.

[97] Petitioner's Posthearing Brief at Exhibit 21.

[98] CR/PR at Table III-17.

[99] 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B).

In the final phase of these investigations, the Commission's staff issued importer questionnaires to 91 firms, including (1) all firms identified as possible importers in the petitions (which were based on a broader proposed scope) and (2) leading companies identified in *** that together accounted for 61.0 percent of the total value of imports from all countries under HTSUS statistical reporting numbers 8483.50.6000, 8483.50.9040, and 8483.90.8080.[100] Petitioner relied in the petitions upon these three statistical reporting numbers as the best available for its calculation of U.S. imports, despite its acknowledgement that these statistical reporting numbers likely included merchandise that was outside the scope of the petitions;[101] as discussed earlier, the scope of the investigations narrowed considerably after the petitions were filed, further limiting the utility of official import statistics. The Commission also issued importer questionnaires to an additional 212 firms that were identified as possible U.S. producers of IMTDCs.[102] Twenty-five firms reported that they had imported IMTDCs and submitted usable questionnaire data, and an additional 120 firms reported that they had not imported IMTDCs since January 1, 2013.[103]

Available data on imports for our determinations in the final phase of these investigations are based on importer questionnaire responses of 25 firms that are estimated to account for at least one-half of IMTDC imports from subject and nonsubject countries in 2015.[104] A conclusive estimate of the coverage of the importer questionnaires obtained in the final phase of these investigations is complicated by the inclusion of both IMTDCs and non-IMTDC merchandise in the various relevant HTSUS statistical reporting numbers, the large number of potential importers identified by proprietary Customs data, and the diversity of sizes and applications of the product at issue (making it difficult to identify

[100] CR at IV-1, IV-3; PR at IV-1, IV-3. The remaining 39.0 percent of the total value of imports under the three primary HTSUS statistical reporting numbers were imported by more than 3,000 smaller importing firms. CR at IV-3; PR at IV-3.

[101] Petitions, vol. I at 10, 15.

[102] CR at IV-1; PR at IV-1. The posthearing report does not include imports from ***. *** had been identified as leading importers of IMTDCs from Canada in the preliminary phase of these investigations, and *** had been identified as one of the leading importers of IMTDCs from nonsubject countries. Caterpillar and GM notified the Commission that based on Commerce's preliminary determinations their imports were outside the scope of the investigations. CR at I-5 n.15; PR at I-4 n.15; Memorandum INV-NN-089 at I-6 (Dec. 7, 2015).

[103] CR at IV-1; PR at IV-1. In its brief, petitioner argued that the record did not include any importer questionnaire responses from ***. Petitioner's Prehearing Brief at 25-26. As indicated in the posthearing report, *** provided the Commission with information about their imports in the intervening time. CR at IV-1 n.2; PR at IV-1 n.2; CR/PR at Table IV-1. Due to the final scope language, the Commission's staff adjusted the importer database for the posthearing report to exclude all data for *** and to remove most of the data reported by ***. Consistent with petitioner's argument, the data reported by ***, were not included in the import dataset for the posthearing report because Commerce excluded TVDs from the scope of the investigations. Petitioner's Posthearing Brief at Exhibit 1 at 10.

[104] CR at IV-1 to IV-4; PR at IV-1 to IV-3; CR/PR at Table IV-1.

relevant importers by business line or average unit value of imports).[105] Firms that responded to the Commission's questionnaires, either with data or by certifying that they did not import subject merchandise, accounted for the following shares of 2015 imports (by value) under the three HTSUS statistical reporting numbers (which, as noted above, include merchandise outside the scope), according to ***: 82.2 percent of relevant imports from Canada; 40.0 percent of relevant imports from China; 55.7 percent of relevant imports from subject countries combined; 40.4 percent of relevant imports from nonsubject countries; and 46.2 percent of relevant imports from subject and nonsubject countries.[106] Fifteen of the eighteen firms identified in the petitions as importers responded, either with data or by certifying that they did not import the IMTDCs at issue.[107]

The available data indicate that subject imports from Canada and China are each above negligible levels. According to questionnaire data from the final phase of these investigations for calendar year 2015, subject imports of large-diameter IMTDCs from Canada accounted for *** percent by value of total imports of all sizes of IMTDCs, and subject imports from China accounted for *** percent.[108] Consequently, because each of these figures exceeds the applicable 3 percent threshold, we find that subject imports from Canada and China are not negligible.

V. Cumulation

For purposes of evaluating the volume and effects for a determination of material injury by reason of subject imports, section 771(7)(G)(i) of the Tariff Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

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[105] CR at I-8; PR at I-6.

[106] CR at IV-3; PR at IV-3.

[107] CR at IV-4; PR at IV-3.

[108] CR/PR at Table IV-4. Questionnaire data for calendar year 2015, which are more aligned with Commerce's final scope language, do not correspond to the 12-month period preceding the October 28, 2015 filing of the petitions. Consequently, the record also contains official import statistics for the October 2014 through September 2015 12-month period, although these statistics include substantial amounts of products other than the large-diameter IMTDCs within the scope of these investigations; these data also show imports from Canada and China are well above negligible levels, accounting for 16.3 percent and 22.1 percent by value of total large-diameter imports, respectively. The record also contains import data compiled from the questionnaires in the preliminary phase of the investigations for the period October 2014 to September 2015, which are overstated because they do not reflect certain scope exclusions that Commerce subsequently made; these data show that subject imports from Canada and China accounted for *** percent and *** percent, respectively, of total imports of all sizes of IMTDCs. CR/PR at Table IV-4.

(1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;
(2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;
(3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and
(4) whether the subject imports are simultaneously present in the market. [109]

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether subject imports compete with each other and with the domestic like product.[110] Only a "reasonable overlap" of competition is required.[111]

Petitioner argues in favor of cumulating subject imports from Canada and China,[112] as the Commission did in its preliminary determinations.[113] Chinese Respondents do not contest cumulation for purposes of the Commission's present material injury analysis.

We find it appropriate to consider subject imports from Canada and China on a cumulated basis in these investigations, because the statutory criteria for cumulation are

[109] *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278 to 280 (Final), USITC Pub. 1845 (May 1986), *aff'd*, *Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898 (Ct. Int'l Trade), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

[110] *See*, *e.g*., *Wieland Werke, AG v. United State*s, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

[111] The Statement of Administrative Action ("SAA") to the Uruguay Round Agreements Act ("URAA"), expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy*, 678 F. Supp. at 902); *see Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be highly fungible"); *Wieland Werke*, 718 F. Supp. at 52 ("Completely overlapping markets are not required.").

[112] Petitioner's Prehearing Brief at 7-9.

[113] USITC Pub. 4587 at 28-30.

satisfied.[114] As an initial matter, petitioner filed the petitions with respect to both subject countries on the same day, October 28, 2015.[115]

Fungibility. All responding domestic producers, nearly all responding importers, and most responding purchasers reported that large-diameter IMTDCs from Canada, China, and the United States are always or frequently interchangeable.[116] Majorities or pluralities of purchasers found the domestic like product to be comparable with subject imports from Canada for each of 14 non-price characteristics, the domestic like product and subject imports from China to be comparable for eight of the 14 characteristics, and subject imports from Canada and China to be comparable for nine of the 14 characteristics.[117]

Channels of Distribution. Questionnaire data indicate that IMTDCs from Canada, China, and the United States were primarily sold to distributors and to end users/original equipment manufacturers ("OEMs").[118]

Geographic Overlap. The record indicates that IMTDCs from Canada, China, and the United States were sold in all regions of the United States.[119]

Simultaneous Presence in Market. Questionnaire data indicate that subject imports from Canada were present in the U.S. market throughout the POI along with subject imports from China and the domestic like product.[120]

Conclusion. Based on the record, we find that subject imports from Canada and China are fungible with one another and with the domestic like product and that large-diameter IMTDCs manufactured in Canada, China, and the United States were sold simultaneously in overlapping geographic markets and through similar channels of distribution. Because the record indicates a reasonable overlap of competition among IMTDCs made in Canada, China, and the United States, we cumulate subject imports from Canada and China for purposes of our analysis of material injury by reason of subject imports.

VI. No Material Injury by Reason of Subject Imports

Based on the record in the final phase of these investigations, we find that an industry in the United States is not materially injured by reason of imports of large-diameter

[114] We observe that these investigations involve antidumping duty findings regarding IMTDCs from both Canada and China and subsidy findings solely regarding IMTDCs from China. We have previously explained why we are continuing our longstanding practice of cross-cumulating subsidized imports with dumped imports. *See Polyethylene Terephthalate (PET) Resin from Canada, China, India, and Oman*, Inv. Nos. 701-TA-531 to 532 and 731-TA-1270 to 1273 (Final), USITC Pub. 4604 at 9-11 (Apr. 2016).

[115] None of the statutory exceptions to cumulation applies.

[116] CR/PR at Table II-9.

[117] CR/PR at Table II-8.

[118] CR/PR at Table II-1.

[119] CR/PR at Table II-2, Table IV-5.

[120] CR/PR at Table II-1, Tables IV-2 to IV-3.

IMTDCs from Canada and China that Commerce has found to be sold in the United States at less than fair value and subsidized by the government of China.

A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[121] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[122] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[123] In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[124] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[125]

Although the statute requires the Commission to determine whether the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[126] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion.[127] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that

[121] 19 U.S.C. §§ 1671d(b), 1673d(b). The Trade Preferences Extension Act of 2015, Pub. 114-27, amended the provisions of the Tariff Act pertaining to Commission determinations of material injury and threat of material injury by reason of subject imports in certain respects. We applied these amendments here.

[122] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[123] 19 U.S.C. § 1677(7)(A).

[124] 19 U.S.C. § 1677(7)(C)(iii).

[125] 19 U.S.C. § 1677(7)(C)(iii).

[126] 19 U.S.C. §§ 1671d(a), 1673d(a).

[127] *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) ("{T}he statute does not 'compel the commissioners' to employ {a particular methodology}."), *aff'g,* 944 F. Supp. 943, 951 (Ct. Int'l Trade 1996).

there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[128]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.[129] In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.[130] Nor does the "by reason of" standard require that unfairly

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[128] The Federal Circuit, in addressing the causation standard of the statute, observed that "{a}s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement." *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was further ratified in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), where the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that "this court requires evidence in the record 'to show that the harm occurred "by reason of" the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.'" *See also Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass'n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

[129] SAA at 851-52 ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal*, 542 F.3d at 877.

[130] SAA at 851-52 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports."); *Taiwan Semiconductor,* 266 F.3d at 1345 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports ... . Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports." (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int'l Trade 2002) ("{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury" or make "bright-line distinctions" between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that "{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e.*, it is not an 'other causal factor,' then there is nothing to further examine regarding attribution to (Continued...)

traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[131] It is clear that the existence of injury caused by other factors does not compel a negative determination.[132]

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject imports" and the Commission "ensure{s} that it is not attributing injury from other sources to the subject imports."[133] [134] Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[135]

(…Continued)
injury") (citing *Gerald Metals,* 132 F.3d at 722 (the statute "does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.")).

[131] S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

[132] *See Nippon*, 345 F.3d at 1381 ("an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the 'dumping' need not be the sole or principal cause of injury.").

[133] *Mittal*, 542 F.3d at 877-78; *see also id.* at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.") (citing *United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75). In its decision in *Swiff-Train v. United States*, 792 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

[134] Commissioners Pinkert and Kieff do not join this paragraph or the following three paragraphs. They point out that the Federal Circuit, in *Bratsk*, 444 F.3d 1369, and *Mittal*, held that the Commission is *required*, in certain circumstances when analyzing present material injury, to consider a particular issue with respect to the role of nonsubject imports, without reliance upon presumptions or rigid formulas. The Court has not prescribed a specific method of exposition for this consideration. *Mittal* explains as follows:

> What *Bratsk* held is that "where commodity products are at issue and fairly traded, price competitive, non-subject imports are in the market," the Commission would not fulfill its obligation to consider an important aspect of the problem if it failed to consider whether non-subject or non-LTFV imports would have replaced LTFV subject imports during the period of investigation without a continuing benefit to the domestic industry. 444 F.3d at 1369. Under those circumstances, *Bratsk* requires the Commission to consider whether replacement of the LTFV subject imports might have occurred during the period of investigation, and it requires the Commission to provide an explanation of its conclusion with respect to that factor.

542 F.3d at 878.

[135] *Nucor Corp. v. United States*, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); *see also Mittal*, 542 F.3d at 879 ("*Bratsk* did not read into the antidumping statute a Procrustean formula for determining whether a domestic injury was 'by reason' of subject imports.").

The Federal Circuit's decisions in *Gerald Metals, Bratsk*, and *Mittal* all involved cases where the relevant "other factor" was the presence in the market of significant volumes of price-competitive nonsubject imports. The Commission interpreted the Federal Circuit's guidance in *Bratsk* as requiring it to apply a particular additional methodology following its finding of material injury in cases involving commodity products and a significant market presence of price-competitive nonsubject imports.[136] The additional "replacement/benefit" test looked at whether nonsubject imports might have replaced subject imports without any benefit to the U.S. industry. The Commission applied that specific additional test in subsequent cases, including the *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago* determination underlying the *Mittal* litigation.

Mittal clarified that the Commission's interpretation of *Bratsk* was too rigid and made clear that the Federal Circuit does not require the Commission to apply an additional test nor any one specific methodology; instead, the court requires the Commission to have "evidence in the record" to "show that the harm occurred 'by reason of' the LTFV imports," and requires that the Commission not attribute injury from nonsubject imports or other factors to subject imports.[137] Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

The progression of *Gerald Metals, Bratsk*, and *Mittal* clarifies that, in cases involving commodity products where price-competitive nonsubject imports are a significant factor in the U.S. market, the Court will require the Commission to give full consideration, with adequate explanation, to non-attribution issues when it performs its causation analysis.[138]

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard. Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[139]

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[136] *Mittal*, 542 F.3d at 875-79.

[137] *Mittal*, 542 F.3d at 873 (quoting *Gerald Metals*, 132 F.3d at 722), 875-79 & n.2 (recognizing the Commission's alternative interpretation of *Bratsk* as a reminder to conduct a non-attribution analysis).

[138] To that end, after the Federal Circuit issued its decision in *Bratsk*, the Commission began to present published information or send out information requests in the final phase of investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject merchandise (if, in fact, there were large nonsubject import suppliers). In order to provide a more complete record for the Commission's causation analysis, these requests typically seek information on capacity, production, and shipments of the product under investigation in the major source countries that export to the United States. The Commission plans to continue utilizing published or requested information in the final phase of investigations in which there are substantial levels of nonsubject imports.

[139] *Mittal*, 542 F.3d at 873; *Nippon*, 458 F.3d at 1350, *citing U.S. Steel*, 96 F.3d at 1357; S. Rep. 96-249 at 75 ("The determination of the ITC with respect to causation is ... complex and difficult, and is a matter for the judgment of the ITC.").

B. Conditions of Competition and the Business Cycle

The following conditions of competition inform our analysis of whether there is material injury by reason of subject imports.

1. Demand Considerations

Demand for IMTDCs is derived from demand in the various sectors in which they are used, including heating, ventilation, and air conditioning ("HVAC"); mining; upstream oil and gas; building and road construction; forestry and logging; material handling; and general industrial and agricultural sectors.[140] As discussed above, IMTDCs are incorporated into a wide range of machinery and equipment, such as pump jacks, crushers and mixers, conveyor systems, fans and blowers, pumps, and compressors.[141] Questionnaire respondents reported few substitutes for IMTDCs, and they reported that IMTDCs generally account for a small share of the cost of the downstream products in which they are utilized.[142]

Unfinished IMTDCs are primarily used in the production of finished IMTDCs, so the market for unfinished IMTDCs is primarily comprised of firms that finish IMTDCs.[143] Finished IMTDCs generally are sold to either OEMs that manufacture machinery or distributors that typically resell them to small OEMs or in the replacement parts market.[144] Of the 24 purchasers submitting usable questionnaire data in these investigations, 16 are distributors that sell to a wide variety of OEMs and other industrial customers, including material handling equipment manufacturers, and members of the HVAC, agricultural, general manufacturing, mining, petrochemicals, food processing, automotive, and oil and gas industries.[145] Eight of the responding purchasers are end users that produce various

[140] CR at II-1; PR at II-1. Petitioner estimated that the shares of the various sectors in the overall U.S. belt drives market are as follows: general industrial (*** percent); air handling (*** percent); pump and compressor (*** percent); oil and gas (*** percent); materials handling (*** percent); construction and agriculture (*** percent); and sand and gravel (*** percent). CR at II-9; PR at II-7.

[141] CR at II-1; PR at II-1. The oil industry is a significant user of large sheaves in upstream applications such as drilling. In material handling applications, conveyor pulleys are used in applications such as mining, product packaging, food processing, power generation, and recycling. In the agricultural sector, sheaves and belt drives are used in equipment ranging from combines and harvesters to conveyor belts, whereas in HVAC applications IMTDCs are often used to transmit power from a motor to a fan. Flywheels may be used with a pump jack in the oil industry or in elevators. CR at I-32 to I-34; PR at I-28 to I-31; CR/PR at Figures I-11 to I-13.

[142] CR at II-9, II-11; PR at II-7, II-9.

[143] CR at I-31; PR at I-28.

[144] IMTDC users need to replace belts more frequently but occasionally also need to replace sheaves that have worn out. CR at I-31; PR at I-28.

[145] CR at II-1 to II-2; PR at II-1.

products including HVAC, refrigeration, conveyor equipment, vibrating screens, and agricultural equipment.[146]

In response to the Commission's question regarding demand trends for IMTDCs in the United States since January 2013, questionnaire respondents reported a variety of answers, although few reported that demand had increased during this period.[147] According to questionnaire data, apparent U.S. consumption, by value, increased from $*** in 2013 to $*** in 2014, declined to $*** in 2015 (a figure lower than in 2013), and was lower in interim 2016 ($***) than in interim 2015 ($***).[148]

2. Supply Considerations

The parties agree that the Commission is bound by Commerce's scope determination,[149] which defines the country of origin of subject merchandise as the location where the IMTDCs were cast.[150] During the POI, the U.S. IMTDCs market was supplied by the domestic industry, subject imports, imports of large-diameter IMTDCs from nonsubject sources, and imports of small-diameter IMTDCs from subject and nonsubject countries.[151]

Domestic industry: In these investigations, the Commission issued U.S. producer questionnaires to 233 foundries, integrated firms, and finishers; these firms were identified as potential U.S. producers of unfinished and/or finished IMTDCs by TBW in its petitions,[152]

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[146] CR at II-2; PR at II-1.

[147] CR/PR at Table II-3. Three purchasers reported reduced demand in the energy sector, specifically IMTDCs for OEM machines and spare parts used in the coal, oil, and gas industries. *** reported reduced demand for IMTDCs due to downturns in certain sectors of the economy and the offshoring of production of machines that use IMTDCs. Purchaser *** reported increased overall demand for HVAC applications (because of new home construction and repair and replacements in older homes), and purchaser *** reported growing demand for IMTDCs in material handling conveyors. CR at II-10 to II-11; PR at II-9.

[148] As explained in our volume discussion in section VI.C below, we rely primarily on value-based indicators as the best measure for the product in these investigations, although we also have considered quantity-based indicators (in pieces) where appropriate. In terms of pieces, apparent U.S. consumption increased from *** in 2013 to *** in 2014, decreased to *** in 2015 (a figure higher than in 2013), and was lower in interim 2016 (***) than in interim 2015 (***). CR/PR at Table IV-7. Most firms (10 of 11 U.S. producers, 20 of 23 importers, and 18 of 24 purchasers) reported that the IMTDC market is not subject to business cycles. CR at II-9; PR at II-7.

[149] *See, e.g.*, Petitioner's Postconf. Brief at 20-24; Confer. Tr. at 75-77, 112-113; Baldor's Postconf. Brief at Exhibit 1 at question 3.

[150] *See, e.g.*, 81 Fed. Reg. 75,032 (Oct. 28, 2016); 81 Fed. Reg. 75,037 (Oct. 28, 2016); 81 Fed. Reg. 75,039 (Oct. 28, 2016).

[151] CR/PR at Table IV-7.

[152] In the petitions, TBW identified eight firms as producers of IMTDCs in the United States: TBW; Goldens' Foundry and Machine Company ("Goldens"); Martin Sprocket; B&B; Baldor; Custom Machine & Tool Co., Inc. ("Custom"); Maurey Manufacturing Corp. ("Maurey"); and Torque Transmission. Petitions, vol. I at Exhibit 1-1 to I-3. *** did not submit a questionnaire response, and (Continued...)

by interested parties participating in these investigations, or by other available industry sources.[153] Seventy-seven of these firms reported that they do not produce IMTDCs.[154] Five integrated firms that both cast and finish IMTDCs submitted questionnaire responses (Bremen, EnDyn, Goldens, Martin Sprocket, and TBW).[155] Five firms that finish IMTDCs in the United States from purchased castings submitted usable U.S. producer questionnaire responses (B&B, Baldor, Hi-Lo, Maurey, and Sterling).[156] [157] One foundry (Waupaca) submitted a complete questionnaire response, and four U.S. foundries reported that they were unable to provide complete questionnaire responses (Brillion, Great Lakes Castings, Osco, and Torrance).[158]

(…Continued)
*** reported that it only makes pulleys from aluminum and molded plastic. CR at I-5 n.13; PR at I-4 n.13.

[153] CR at III-1; PR at III-1; Confidential Preliminary Views, EDIS Doc. 571266 at 5-8 & n.17; USITC Pub. 4587 at 5-6 & n.17; Caterpillar's Postconference Brief at 7-9 (also arguing that there are at least 465 foundries casting iron products in the United States).

[154] CR at III-1 n.1; PR at III-1 n.1.

[155] CR at III-1 to III-2; PR at III-1.

[156] CR at III-2; PR at III-1. In a November 12, 2015 submission alleging that the petitions lacked adequate support from the domestic industry, Caterpillar identified over three dozen possible U.S. producers, and it submitted a list of *** of its major domestic suppliers of IMTDCs: ***. Confidential Preliminary Views, EDIS Doc. 571266 at 5-8 & n.17; USITC Pub. 4587 at 5-6 & n.17. In the final phase of these investigations, Caterpillar notified the Commission that with the most recent change in the scope, the items it reported importing are no longer considered subject merchandise. Four of the firms that Caterpillar previously had identified as its major domestic suppliers of finished IMTDCs (***) reported that they do not produce IMTDCs, and *** of the firms (***) did not respond to the questionnaire. CR at III-1 to III-2 at n.1; PR at III-1 n.1.

[157] Both petitioner and Chinese Respondents questioned the U.S. producer questionnaire response of *** as inconsistent with other reported information. As petitioner argued, *** manufactures certain flywheels with ring gear that correspond to items that now are expressly outside the investigations' scope, and the customers that *** identified as accounting for a large majority of its sales are not purchasing U.S.-produced IMTDCs. In the final report, data for this firm are not included in the domestic industry database based on information indicating that the firm does not manufacture the domestic like product. CR at III-2 n.2; PR at III-1 n.2; Petitioner's Posthearing Brief at Exhibit 1 at 10-11; Petitioner's Prehearing Brief at 38-40; Chinese Respondents' Prehearing Brief at 26.

[158] CR at I-4, III-2 to III-3; PR at I-4, III-1 to III-2. In a November 12, 2015 submission alleging that the petitions lacked adequate support from the domestic industry, Baldor identified seven additional U.S. foundries manufacturing unfinished IMTDCs and one finisher. Confidential Preliminary Views, EDIS Doc. 571266 at 5-8 & n.17; USITC Pub. 4587 at 5-6 & n.17. Of the seven firms identified by Baldor as major domestic suppliers of unfinished IMTDCs, ***, a firm that accounted for *** percent of Baldor's purchases of unfinished IMTDCs in 2015, supplied a completed U.S. producer questionnaire to the Commission. CR at III-1 n.1; PR at III-1 n.1.

Petitioner and Chinese Respondents argued that Waupaca's U.S. producer questionnaire data are anomalous.[159] Waupaca reported that its foundry produced *** of castings in 2015, less than *** percent of which it believed corresponded to the IMTDCs at issue in these investigations.[160] Because Waupaca's questionnaire response is believed to be overstated by the inclusion of products that are outside the domestic like product definition,[161] its data and other firm-specific information are not aggregated with the domestic industry's data in the body of the Commission's report, although Waupaca's unfinished IMTDCs that were finished by *** are reflected in the domestic industry's data as finished IMTDCs.[162] Thus, the available information on the domestic industry's operations for our final determinations is based on the questionnaire responses of 10 producers that are estimated to have accounted for approximately two-thirds of U.S. unfinished IMTDC production and approximately 90.0 percent of U.S. production of finished IMTDCs in 2015.[163]

The domestic industry accounted for between *** percent and *** percent of the U.S. market, by value, and almost ***, by pieces, between January 2013 and June 2016.[164] The domestic industry includes foundries, finishers, and some firms with integrated operations that manufacture both unfinished and finished IMTDCs, as discussed above.[165]

Subject imports: As explained in more detail in our threat discussion in section VII below, information on the industries producing IMTDCs in the subject countries is primarily based on foreign producer questionnaire data for one former producer in Canada (Baldor Canada)[166] and seven producers of IMTDCs in China,[167] as supplemented with other available record evidence. U.S. producer Baldor permanently closed the IMTDCs processing facility of its affiliate in China (Baldor Maska) in December 2014 and disposed of all of the equipment.[168] Baldor closed its IMTDCs finishing facility in Canada (Baldor Canada) in May 2016 and transferred all of the finishing equipment from this facility to its production facilities in North Carolina.[169]

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[159] Petitioner's Posthearing Brief at Exhibit 1 at 50-52; Petitioner's Prehearing Brief at 36-38; Chinese Respondents' Prehearing Brief at 24-25.

[160] CR at III-2; PR at III-1 to III-2.

[161] Of the top ten firms that Waupaca identified as its main unfinished IMTDC customers, three firms (***) reported that they do not purchase IMTDCs corresponding to the domestic like product definition. In addition, another firm (***) does not likely manufacture the domestic like product based on a review of the firm's web pages, and *** reported sourcing IMTDCs only from U.S. finishers and not from casting operations. CR at I-4, I-7 to I-8, III-2 to III-3 at n.3; PR at I-4, I-5 to I-6, III-1 to III-2 at n.3.

[162] CR at III-2; PR at III-2.

[163] CR at III-1; PR at III-1.

[164] CR/PR at Table IV-7.

[165] CR/PR at Table III-1.

[166] CR at VII-3; PR at VII-3.

[167] CR at VII-11; PR at VII-7.

[168] Confer. Tr. at 22; CR/PR at Table III-3.

[169] CR at VII-4; PR at VII-3.

Cumulated subject imports accounted for approximately *** of the U.S. market by value and by pieces during the POI. Large-diameter subject imports from China accounted for most of the imports of subject merchandise, with large-diameter IMTDCs from Canada accounting for a smaller share in terms of both value and pieces.[170]

Nonsubject imports: In these investigations, nonsubject imports include imports of large-diameter IMTDCs from nonsubject sources and imports of out-of-scope small-diameter IMTDCs from subject and nonsubject countries. Nonsubject imports of large-diameter IMTDCs accounted for between *** percent and *** percent of apparent U.S. consumption, by value, between January 2013 and June 2016, whereas imports of small-diameter IMTDCs from subject and nonsubject countries accounted for between *** percent and *** percent of the market, by value, during this period.[171] Mexico was one of the largest reported sources of nonsubject imports of IMTDCs, accounting in 2015 for *** percent of total U.S. imports of large-diameter IMTDCs, by value, *** percent of total U.S. imports of small-diameter IMTDCs, and *** percent of total U.S. imports of IMTDCs.[172] TBW has an affiliate that manufactures IMTDCs in Mexico, its ***.[173]

3. Substitutability

Importers of subject merchandise reported importing finished and unfinished IMTDCs from both Canada and China, and the domestic industry also reported U.S. shipments of both unfinished and finished IMTDCs.[174] All responding domestic producers, nearly all responding importers, and most responding purchasers reported that large-diameter IMTDCs from Canada, China, and the United States are always or frequently interchangeable.[175]

The Commission asked purchasers to report the top three factors considered in their purchasing decisions for IMTDCs. Purchasers cited quality most frequently as the most important factor (7 firms), followed by price (5 firms), whereas price was the most frequently reported second- and third-most important factor (7 firms each).[176] Purchasers also reported that "quality meets industry standards," "availability," "product consistency," "reliability of supply," and "delivery time" were important factors in their purchasing decisions.[177] A majority of firms reported that non-price differences between large-

[170] CR/PR at Table IV-7.

[171] In terms of pieces, nonsubject imports of large-diameter IMTDCs accounted for between *** percent and *** percent of apparent U.S. consumption, whereas imports of small-diameter IMTDCs from subject and nonsubject countries accounted for between *** percent and *** percent of the market during this period. CR/PR at Table IV-7.

[172] CR at IV-8; PR at IV-6.

[173] CR/PR at Table III-1 n.4 (noting that ***).

[174] CR at IV-15; PR at IV-10 (also noting that unfinished IMTDCs accounted for a very small share (*** percent) of U.S. importers' U.S. shipments).

[175] CR/PR at Table II-9.

[176] CR/PR at Table II-5.

[177] CR/PR at Table II-6.

diameter IMTDCs manufactured in the United States, Canada, and China were sometimes or never significant factors in their sales or purchases.[178]

Majorities or pluralities of purchasers found the domestic like product to be comparable with subject imports from Canada for each of 14 non-price characteristics, the domestic like product and subject imports from China to be comparable for eight of the 14 characteristics, and subject imports from Canada and China to be comparable for nine of the 14 characteristics.[179] Most responding purchasers reported that large-diameter IMTDCs manufactured in the United States, Canada, and China always or usually meet minimum quality specifications.[180] Based on the record, we find a high degree of substitutability among IMTDCs manufactured in the United States and IMTDCs imported from Canada and China.[181]

4. Purchasing Behavior

In the U.S. market, IMTDCs are sold through catalogues and are sometimes custom manufactured to order.[182] Most firms reported selling IMTDCs in the spot market or under short-term contracts.[183] Questionnaire respondents reported setting prices through transaction-by-transaction negotiations, contracts, and set price lists, and some reported offering quantity discounts, total volume discounts, or multipliers applied to price lists or other discount structures.[184]

[178] CR/PR at Table II-11.
[179] CR/PR at Table II-8.
[180] CR/PR at Table II-10.
[181] CR at II-12; PR at II-10.
[182] CR at V-4; PR at V-3.
[183] CR at V-6; PR at V-4.
[184] CR/PR at Table V-1; CR at V-4, V-5; PR at V-4, V-5.

5. Raw Materials

Raw material costs accounted for a sizable share of the total COGS to produce IMTDCs.[185] Pig iron, scrap iron, and ferrous scrap metal are the principal raw materials used to manufacture IMTDCs, and electricity and natural gas are primary sources of energy for the production process.[186] Pig iron and scrap prices were relatively stable in 2013 and into 2014, fell in late 2014 and 2015, and were higher in 2016.[187] Electricity prices were generally stable, whereas natural gas prices were stable in most of 2013, increased sharply late in 2013 and early 2014, and declined through June 2016.[188]

C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[189]

We rely primarily on value-based indicators as the best measure for the product in investigations such as these, which involve a large grouping of items differing greatly in size, characteristics, applications, and price.[190] While petitioner argued in the final phase of these investigations that weight offers a better measure for IMTDCs,[191] we do not rely on weight-based indicators in these determinations. Not all performance indicators are amenable to measurement by weight in these investigations, and not all questionnaire

[185] For all domestic producers, raw materials as a share of COGs increased from *** percent of COGS in 2013 to *** percent in 2015, whereas the ratio for firms with casting and integrated casting and finishing operations increased from *** percent in 2013 to *** percent in 2015 and the ratio for firms with only finishing operations declined from *** percent in 2013 to *** percent in 2015. CR at V-1; PR at V-1; CR/PR at Table VI-1, Table VI-3, and Table VI-5.

[186] CR at V-1; PR at V-1.

[187] CR at V-1; PR at V-1; CR/PR at Figure V-1.

[188] CR at V-1; PR at V-1; CR/PR at Figure V-2.

[189] 19 U.S.C. § 1677(7)(C)(i).

[190] *See, e.g.*, *Diamond Sawblades and Parts Thereof from China*, Inv. No. 731-TA-1092 (Review), USITC Pub. 4559 at 12 n.64 (Sept. 2015); Preliminary Confidential Views, EDIS Doc. 571266 at 37 n.133; USITC Pub. 4587 at 24 n.133. We recognize that Commerce found that subject imports were unfairly traded, and are otherwise mindful of the limitations of using value rather than quantity measures, such as the difficulty in determining whether changes in value are caused by changes in product mix or price. Therefore, we also considered quantity data based on pieces, where appropriate. We reach the same conclusions regardless of which measure is used. We also note that the petitions initially calculated market size and share by value. Petitions, vol. I at Exhibit I-15.

[191] Petitioner's Posthearing Brief at Exhibit 1 at 40-41; Hearing Tr. at 70-71, 115-116 (Pickard).

respondents maintain records with weight data.[192] We further find that petitioner's analysis of weight-based market trends in its prehearing brief is unreliable.[193]

The value of U.S. shipments of cumulated subject imports from Canada and China increased from $42.2 million in 2013 to $44.1 million in 2014, declined to $40.2 million in 2015, and was lower in interim 2016 ($15.6 million) than in interim 2015 ($21.0 million).[194] The value of the domestic industry's U.S. shipments of the domestic like product increased from $*** in 2013 to $*** in 2014, declined to $*** in 2015, and was lower in interim 2016 ($***) than in interim 2015 ($***).[195] Thus, the value of the domestic industry's U.S.

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[192] The questionnaires for the final phase of these investigations only sought weight data for U.S. importers' imports and for domestic and foreign producers' capacity and production. Even so, importers that reported their imports in terms of value and pieces (particularly importers of large-diameter IMTDCs from China and importers of large- and small-diameter IMTDCs from nonsubject sources) were unable to report their imports by weight because they do not keep records by weight. The questionnaires did not request weight data with respect to U.S. shipments or inventories from domestic producers or U.S. importers, although parties were asked for feedback on whether the questionnaires should collect inventory data by value or by quantity. In its comments on the draft questionnaires for the final phase of these investigations, petitioner responded as follows:

> TB Wood's believes that inventory data should be collected in terms of quantity. The goods subject to these investigations come in a variety of forms and sizes, and therefore there are significant variations in the *price per piece* of these goods. Accordingly, value data alone would provide only a limited understanding of the true size of inventory. Nonetheless, TB Wood's believes that collecting inventory data on the basis of quantity and value would provide the Commission with the most comprehensive picture and thus suggests that both quantity and value data be collected.

Petitioner's Comments on Draft Questionnaires, EDIS Doc. 584552 at 3 (emphasis added). In other words, petitioner could have asked at this juncture for the Commission to seek weight data for inventories (or other indicators such as U.S. shipments), but only discussed collecting value and quantity by pieces.

[193] Petitioner estimated U.S. shipments by weight for the domestic industry and importers by multiplying the number of pieces shipped by its estimate of the industry average weight per piece produced. Petitioner's Prehearing Brief at Exhibit 4. Due to the diverse product mix of IMTDCs, however, the average weight per piece produced varies widely between firms and can even vary widely between quarters for the same firm, making such averages an unreliable basis on which to extrapolate data. Compounding these concerns, petitioner predicated its analysis on domestic producers' finishing operations, even though these operations utilized a varying mixture of *** unfinished IMTDCs, as noted above. Additionally, petitioner based its analysis on certain data available at the time of the prehearing report, before these data were supplemented with additional questionnaire responses and adjusted to remove information that did not correspond to the IMTDC products at issue. Confidential Worksheet, EDIS Doc. No. 594857.

[194] In terms of pieces, U.S. shipments of cumulated subject imports increased from 1,319,110 in 2013 to 1,405,280 in 2014, declined to 1,349,482 in 2015, and were lower in interim 2016 (521,554) than in interim 2015 (695,379). CR/PR at Table IV-6.

[195] In terms of pieces, the domestic industry's U.S. shipments increased from *** in 2013 to *** in 2014, declined to *** in 2015, and were lower in interim 2016 (***) than in interim 2015 (***). CR/PR at Table IV-6.

shipments of the domestic like product and the value of U.S. shipments of cumulated subject imports from Canada and China followed similar trajectories, *i.e.*, increasing from 2013 to 2014 and declining between 2014 and 2015; both were lower in 2015 than in 2013 and were lower in interim 2016 than in interim 2015.[196] [197]

Cumulated subject imports' share of apparent U.S. consumption on a value basis decreased from *** percent in 2013 to *** percent in 2014, increased to *** percent in 2015, and was lower in interim 2016 (*** percent) than in interim 2015 (*** percent).[198] Overall, cumulated subject imports' share of apparent U.S. consumption, by value, increased only *** percentage points between 2013 and 2015, and their market share in interim 2016 was lower than in interim 2015. While cumulated subject imports' market share was generally steady (2013 to 2015) or lower (in interim 2016 than in interim 2015), the domestic industry's market share, by value, increased *** percentage points between 2013 and 2015 (from *** percent in 2013 and 2014 to *** percent in 2015), and was *** percentage points higher in interim 2016 (*** percent) than in interim 2015 (*** percent).[199]

The ratio, by pieces, of importers' U.S. shipments of cumulated subject imports to the domestic industry's U.S. production declined from *** percent in 2013 to *** percent in 2014, increased to *** percent in 2015, and was lower in interim 2016 (*** percent) than in interim 2015 (*** percent).[200]

We find that the volume of cumulated subject imports is significant on an absolute basis and relative to apparent U.S. consumption and production. As discussed below,

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[196] In terms of pieces, trends followed similar trajectories for both groups: increasing from 2013 to 2014 and declining from 2014 to 2015, and both were lower in interim 2016 than in interim 2015. CR/PR at Table IV-6.

[197] Petitioner argues, and Chinese Respondents concede, that U.S. shipments of cumulated subject imports were lower in interim 2016 than in interim 2015 at least in part due to the filing of the petitions. Petitioner's Posthearing Brief at 5; Hearing Tr. at 135 (Grimson). Nevertheless, the observed volume patterns are consistent with lower levels of apparent U.S. consumption in interim 2016 than in interim 2015 and with our observation that the volume of cumulated subject imports generally tracked apparent U.S. consumption trends between 2013 and 2015.

[198] CR/PR at Table IV-7. In terms of pieces, cumulated subject imports' share of apparent U.S. consumption was steady throughout most of the period, with little change until interim 2016, increasing incrementally from *** percent in 2013 to *** percent in 2014 and *** percent in 2015. By contrast, their market share, by pieces, was considerably lower in interim 2016 (*** percent) than in interim 2015 (*** percent). Overall, cumulated subject imports' share of apparent U.S. consumption, by pieces, increased *** percentage points from 2013 to 2015 and was *** percentage points lower in interim 2016 than in interim 2015. CR/PR at Table IV-7.

[199] CR/PR at Table IV-7. In terms of pieces, the domestic industry's market share was fairly steady throughout the period with limited changes; it increased from *** percent in 2013 to *** percent in 2014, declined to *** percent in 2015, and was lower in interim 2016 (*** percent) than in interim 2015 (*** percent). Overall, the domestic industry's market share, by pieces, decreased *** percent from 2013 to 2015 and was *** percent lower in interim 2016 than in interim 2015. CR/PR at Table IV-7.

[200] CR/PR at Table IV-2.

however, we do not find that cumulated subject imports had significant price effects or impact on the domestic industry.

D. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of the subject imports, the Commission shall consider whether

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[201]

As explained above, the record indicates that there is a high degree of substitutability between subject imports and the domestic like product and that price is one of several factors that purchasers consider in purchasing decisions. They ranked availability, product consistency, quality standards, and reliability of supply as more important to their purchasing decisions than price.[202]

After seeking input from the parties on the pricing products,[203] the Commission sought quarterly data on the total quantity and f.o.b. value of six IMTDC products from domestic producers and U.S. importers.[204] At the suggestion of TBW, the Commission

[201] 19 U.S.C. § 1677(7)(C)(ii).

[202] CR/PR at Table II-6.

[203] In its Preliminary Views, the Commission invited the parties in their comments on the draft questionnaires for the final phase of these investigations to suggest pricing products that would likely provide better coverage and that would likely generate pricing observations for the domestic like product and subject imports from Canada and China. Preliminary Views, EDIS Doc. 571266 at 70; USITC Pub. 4587 at 45. Based on information provided by the petitioner in its comments on the draft questionnaires, the Commission's staff selected the five largest-volume products for TBW and Martin Sprocket as well as a sixth product (product 1) ***. CR at V-8 n.11; PR at V-6 n.11.

[204] CR at V-8; PR at V-6. Product 1 is a narrow "3V" groove sheave, with a 6.0 inch outside diameter and three grooves, suitable for use with a Type SDS bushing. Product 2 is a narrow "5V" groove sheave, with a 23.6-inch outside diameter and eight grooves, suitable for use with a Type J bushing. Product 3 is a narrow "5V" groove sheave, with a 50-inch outside diameter and six grooves, suitable for use with a Type M bushing. Product 4 is a narrow "5V" groove sheave, with a 50-inch outside diameter and eight grooves, suitable for use with a Type M bushing. Product 5 is a Type E bushing, with a 3-3/8-inch bore. Product 6 is a Type F bushing, with a 3-3/8-inch bore. CR at V-8; PR at V-6. These pricing products differ from those in the preliminary phase of these investigations and include bushings, which were not among the pricing items in the preliminary phase of the investigations, as well as sheaves. CR at V-8 n.11; PR at V-6 n.11.

requested that questionnaire respondents segregate their sales to distributors from their sales to end users/OEMs.[205] Four domestic producers and 11 importers of subject merchandise provided usable data, although not all firms reported pricing data for all products for all quarters.[206]

As indicated earlier, IMTDCs are manufactured in a multitude of shapes, sizes, weights, and groove configurations.[207] TBW's own product catalogue advertises "close to 20,000" stock keeping units ("SKUs").[208] In 2015, reported pricing data accounted for approximately 0.6 percent of the domestic industry's U.S. shipments of IMTDCs (small- and large-diameter), 1.7 percent of U.S. shipments of subject imports from Canada, and 0.9 percent of U.S. shipments of subject imports from China.[209] In cases involving highly varied products such as this, it is unlikely that pricing data coverage will be extensive.[210] Indeed, although coverage was limited on a percentage basis, petitioner concedes that the pricing data collected in these investigations are "meaningful," "rock solid," and "representative" of competition in the U.S. market.[211]

Based on these pricing data, cumulated subject imports from Canada and China undersold the domestic like product throughout the POI for sales to distributors and end users/OEMs and for transactions involving sheaves as well as bushings. Prices for cumulated subject imports from Canada and China were lower than prices for the domestic like product in 217 of 228 instances, involving an aggregate quantity of 36,831 pieces.[212]

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[205] CR at V-8; PR at V-6; Petitioner's Comments on Draft Questionnaires for the Final Phase of the Investigations, EDIS Doc. 584552.

[206] CR at V-8 to V-9; PR at V-6.

[207] *See, e.g.*, CR at I-19 to I-20; PR at I-17 to I-18.

[208] Confer. Tr. at 39 (Pickard), 65 (DeFrancesco).

[209] CR at V-8 to V-9; PR at V-6.

[210] *See, e.g.*, *Kern-Liebers USA, Inc. v. United States*, 19 CIT 87, 114-15 (1995).

[211] *See, e.g.*, Hearing Tr. at 38-39 (Pickard) (referring to the available pricing comparisons as "meaningful data"); Hearing Tr. at 49 (Pickard) ("And you know that even when it's under-reported your pricing product data is spot on. You've got six very specific definitions through two different channels of communication that you end up getting 228 comparisons. I don't think any of that's been called into question. That's rock solid."); Hearing Tr. at 51 (Pickard) ("… when you have a domestic industry that literally has tens of thousands of SKUs, it's not surprising that pricing products aren't going to be broad; they're representative. They're examples of what's going on.").

[212] CR/PR at Table V-2 to V-7 and Table V-9; CR at V-28 to V-30; PR at V-10. For sales to distributors, subject imports were priced below prices of the domestic like product in 120 of 126 instances (22,331 pieces) at margins of 0.1 to 81.2 percent, and subject import prices were above those for the domestic like product in six instances (199 pieces) at margins of 0.8 to 24.7 percent. For sales to end users, subject imports were priced below those for the domestic like product in 97 of 102 instances (14,500 pieces) at margins of 8.4 to 84.8 percent), and subject imports were priced above those for the domestic like product in five instances (54 pieces) at margins of 2.6 to 57.9 percent. For sheaves (products 1-4), subject import prices were below domestic like product prices in 105 of 116 instances (12,336 pieces) at margins of 0.1 to 84.8 percent, and subject imports were priced above those for the domestic like product in 11 instances (253 pieces) at margins of 0.8 to (Continued...)

Margins of underselling ranged from 0.1 to 84.8 percent. In the remaining 11 instances, involving an aggregate quantity of 253 pieces, prices for subject imports (all of which involved IMTDCs imported from China) were between 0.8 and 57.9 percent higher than prices of the domestic like product.[213]

These pricing comparisons demonstrate pervasive underselling by subject imports. The record, however, reveals no significant effects as a result of this underselling.[214] As the volume data discussed above demonstrate, the record does not show any significant market share shift from the domestic industry to subject imports during the POI. In fact, as measured by value, the domestic industry increased its market share over the POI.[215] Moreover, the record does not show significant price depression or suppression caused by subject imports, as elaborated below.

We find that cumulated subject imports from Canada and China did not depress prices of the domestic like product to a significant degree. Prices of domestically produced IMTDCs showed no clear trend during the POI, with prices for five products to end users/distributors increasing by margins of *** percent to *** percent, and prices for six products to end users/distributors decreasing between *** percent and *** percent.[216] Indeed, reported U.S. shipments and prices of the domestic product actually increased over the POI for some pricing products, notwithstanding underselling by comparable or larger volumes of subject imports for those products.[217] The domestic industry's prices for some

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(…Continued)
57.9 percent. For bushings (products 5-6), subject imports' prices were below those of the domestic like product in all 112 instances (24,465 pieces) at margins of 8.4 to 52.5 percent. *Id*.

[213] Most instances of overselling by subject imports from China involved product 3, a relatively high-value, low-volume product. CR/PR at Table V-9; CR at V-28; PR at V-10.

[214] *Compare, e.g.*, *Altx, Inc. v. United States*, 26 CIT 1425, 1436-37 (2002) (affirming finding that underselling was not significant in the absence of adverse effects caused by the underselling), *aff'd*, 370 F.3d 1108 (Fed. Cir. 2004).

[215] CR/PR at Table IV-7 (indicating that the domestic industry's market share, by value, increased from *** percent in 2013 to *** percent in 2015 and was higher in interim 2016 (*** percent) than in interim 2015 (*** percent). As measured in pieces, the domestic industry's market share was fairly steady. CR/PR at Table IV-7 (indicating that the domestic industry's market share was *** percent in 2013, *** percent in 2015, and *** percent in interim 2016). Although some U.S. purchasers reported shifting purchases to subject imports during the period, the reported quantity of such shifts was small relative to apparent U.S. consumption, and the record as a whole does not show that the domestic industry lost market share to subject imports. CR/PR at Table V-10 and Table V-11 (confirming a shift of 560 pieces to subject imports during the period by *** and an unknown quantity by ***, a firm whose purchases accounted for *** percent of total reported purchases in 2015, by value, and that reported *** percent of its purchases in 2015, by value, were from the domestic industry, *** percent were from China, *** percent were from Canada, and *** percent were from other import sources).

[216] CR/PR at Table V-8.

[217] *See, e.g.*, CR/PR at Table V-6a and Table V-7a. Price comparisons for products 5 and 6 to distributors show underselling of the domestic like product by comparable or larger volumes of subject imports throughout the POI, yet prices of the domestic like product and the domestic
(Continued...)

of the pricing products fluctuated significantly throughout the period in ways that cannot be linked to the subject imports.[218] Instead, these fluctuations are consistent with the pricing variability identified by market participants, which reported that prices can vary substantially for the same product depending on factors such as brand, customer, application, and lead time.[219] Based on the record, we find that cumulated subject imports did not depress prices of the domestic like product to a significant degree.

We also considered whether cumulated subject imports from Canada and China prevented increases in prices of the domestic like product, which otherwise would have occurred, to a significant degree. The domestic industry's ratio of COGS to net sales was steady throughout most of the POI, at *** percent in 2013, *** percent in 2014, and *** percent in 2015; it was lower in interim 2016 (*** percent) than in interim 2015 (*** percent).[220] We note that the increase in the COGS to net sales ratio in 2015 occurred as apparent U.S. consumption declined. Moreover, as discussed above, many of the pricing products show that the domestic industry did experience price increases during the POI. Price increases generally would not be expected in a period of overall declines in apparent U.S. consumption during which there were no substantial cost increases.

Petitioner argues that subject imports caused price suppression by taking sales of high-volume, low-value IMTDCs and forcing the domestic industry to rely on low-volume, high-value sales, which resulted in lower volumes and increased SG&A costs for the domestic industry that prevented necessary price increases.[221] Specifically, petitioner alleges that SG&A costs increased due to additional marketing expenses incurred to compete with subject imports,[222] yet petitioner was unable to document or corroborate these allegations.[223] Further, the record contradicts petitioner's theory that the domestic industry lost sales volume due to cumulated subject import pricing, because during the POI there was no appreciable decline in the domestic industry's market share nor an

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(…Continued)
industry's reported U.S. shipments to distributors by pieces for these pricing products remained relatively steady or increased.

[218] CR/PR at Figure V-4a, V-4b, V-5a, and V-5b, showing trends for pricing products 2 and 3 to end users and distributors. Prices for the domestic like product experienced significant fluctuations even while prices for subject imports remained relatively steady.

[219] CR at V-9; PR at V-9.

[220] CR/PR at Table VI-1.

[221] Petitioner's Posthearing Brief at 10-11, Exhibit 1 at 48-49; Hearing Tr. at 105, 111-112 (Pickard).

[222] Petitioner's Posthearing Brief at 10-11, Exhibit 1 at 48-49; Hearing Tr. at 105, 111-112 (Pickard).

[223] *See, e.g.*, Petitioner's Posthearing Brief at 10 (reiterating arguments claiming that increases in SG&A were the result of increased sales expenses yet citing no record evidence to support such sales activities; no exhibits included with the brief addressed alleged additional sales expenses).

appreciable increase in the market share for subject imports.[224] To the degree that petitioner's argument references small-diameter IMTDCs, such imports correspond to out-of-scope merchandise, consistent with petitioner's requested scope amendment.[225] For these reasons, we do not find that cumulated subject imports from Canada and China prevented increases of domestic like product prices that otherwise would have occurred to a significant degree.

In sum, we find that cumulated subject imports from Canada and China did not have significant effects on prices of the domestic like product during the POI.

E. Impact of the Subject Imports[226]

Section 771(7)(C)(iii) of the Tariff Act provides that, in examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a

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[224] CR/PR at Table IV-7 (indicating that the domestic industry's market share, by value, increased overall from *** percent in 2013 to *** percent in 2015 and was higher in interim 2016 (*** percent) than in interim 2015 (*** percent), whereas subject imports' market share, by value, was *** percent in 2013, *** percent in 2015, and lower in 2016 (*** percent) than in interim 2015 (*** percent). As measured in pieces, the domestic industry's market share was fairly steady during the POI and subject imports' market share was relatively steady between 2013 and 2015 and lower in interim 2016 than in interim 2015. CR/PR at Table IV-7 (indicating that the domestic industry's market share was *** percent in 2013, *** percent in 2015, and *** percent in interim 2016, whereas subject imports' market share was *** percent in 2013, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016). As we found above, although some U.S. purchasers reported shifting purchases to subject imports during the period, the confirmed quantity of such shifts was small relative to apparent U.S. consumption and the record as a whole does not show that the domestic industry lost market share to subject imports. CR/PR at Table V-10, Table V-11.

[225] ***. CR/PR at Table III-1 n.4 and Table III-17.

[226] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). We take into account in our analysis that in its final determinations of sales at less value, Commerce assigned antidumping duty margins of 191.34 percent to Baldor Canada (an adverse facts available rate based on the firm's non-cooperation), 100.47 percent to all other firms in Canada, 13.64 percent to 21 named exporter/producer combinations in China, and 401.68 percent to the PRC-wide entity. 81 Fed. Reg. 75,039, 75,040 (Oct. 28, 2016) (Canada – AD); 81 Fed. Reg. 75,032, 75,038 (Oct. 28, 2016) (China – AD); CR/PR at Table I-2 and Table I-3. Commerce did not assign *de minimis* antidumping duty margins to any firm in Canada or China. Accordingly, for our analysis, we considered all imports of large-diameter IMTDCs from Canada and all imports of large-diameter IMTDCs from China as imports of subject merchandise that were sold at less than fair value. Our analysis of pricing of the subject imports and how subject import pricing affected the domestic industry, described in the price effects discussion and below, is particularly probative to our assessment of the impact of cumulated subject imports on the domestic industry's condition.

bearing on the state of the industry."[227] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debts, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[228]

We find that cumulated subject imports from Canada and China did not have a significant impact on the domestic industry during the POI. As discussed above, apparent U.S. consumption fluctuated during the POI; it increased from 2013 to 2014, decreased between 2014 and 2015, and was lower in interim 2016 than in interim 2015.[229] Many of the domestic industry's performance indicators mirrored these changes in apparent U.S. consumption over the POI and are not otherwise explained by trends in cumulated subject imports.

The domestic industry increased its production capacity from 2013 to 2015, although its production capacity was somewhat lower in interim 2016 than in interim 2015.[230] In terms of pieces, the domestic industry's production, capacity utilization, U.S. shipments, and net sales all followed a similar trajectory; they increased from 2013 to 2014, decreased from 2014 to 2015, and were lower in interim 2016 than in interim 2015.[231]

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[227] 19 U.S.C. § 1677(7)(C)(iii); *see also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

[228] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[229] CR/PR at Table IV-6. By value, apparent U.S. consumption was $*** in 2013, $*** in 2014, $*** in 2015, $*** in interim 2015, and $*** in interim 2016. By quantity, apparent U.S. consumption was *** pieces in 2013, *** pieces in 2014, *** pieces in 2015, *** pieces in interim 2015, and *** pieces in interim 2016. CR/PR at Table IV-6.

[230] Production capacity was *** pieces in 2013, *** pieces in 2014, *** pieces in 2015, *** pieces in interim 2015, and *** pieces in interim 2016. CR/PR at Table III-10.

[231] The domestic industry's production in pieces was *** in 2013, *** in 2014, *** in 2015, *** in interim 2016, and *** in interim 2015. The domestic industry's capacity utilization in pieces was *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016. CR/PR at Table III-10. The domestic industry's U.S. shipments, by value, were $*** in 2013, $*** in 2014, and $*** in 2015, and were lower in interim 2016 ($***) than in interim 2015 ($***); in terms of pieces, the domestic industry's U.S. shipments were *** in 2013, *** in 2014, and *** in 2015, *** in interim 2016 and *** in interim 2015. CR/PR at Table IV-6. The domestic industry's net sales, by pieces, were *** in 2013, *** in 2014, *** in 2015, *** in interim 2016, and *** in interim 2015. CR/PR at Table VI-1.

Cumulated subject imports followed similar trends,[232] and the domestic industry's share of apparent U.S. consumption showed little change over the POI.[233]

Several employment-related factors, such as PRWs, total hours worked, and wages paid, also increased from 2013 to 2014, decreased between 2014 and 2015, and were lower in interim 2016 than in interim 2015.[234] Productivity declined irregularly between 2013 and 2015, but was higher in interim 2016 than in interim 2015.[235]

The domestic industry maintained a relatively steady ratio of COGS to net sales between 2013 and 2015, and this ratio was lower in interim 2016 than in interim 2015.[236] Nevertheless, the domestic industry's financial performance was poor throughout the POI, although it was better in interim 2016 than in interim 2015. Operating income declined from 2013 to 2014 and *** in 2015, whereas operating income was higher in interim 2016 than in interim 2015.[237] The domestic industry's ratio of operating income to net sales,

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[232] CR/PR at Table IV-6. As noted above, petitioner has argued that the lower volume and market share of cumulated subject imports in interim 2016 than in interim 2015 were due at least in part to the filing of the petitions and not just lower apparent U.S. consumption in interim 2016 than in interim 2015. Notwithstanding this, we note that many performance indicators for the domestic industry also were lower in interim 2016 than in interim 2015, despite lower volumes of cumulated subject imports during this period.

[233] CR/PR at Table IV-7. The domestic industry's inventories increased overall, yet its market share by pieces was generally steady or increasing, undermining petitioner's argument that the domestic industry's inventory increases resulted from sales lost to cumulated subject imports. *See, e.g.*, CR/PR at Table III-16 (indicating that the domestic industry's end-of-period inventories, in pieces, increased from *** in 2013 to *** in 2014 and *** in 2015 and were *** in interim 2016 and *** in interim 2015); CR/PR at Table IV-7 (indicating that the domestic industry's market share, by pieces, increased from *** percent in 2013 to *** percent in 2014, decreased to *** percent in 2015, and was lower in interim 2016 (*** percent) than in interim 2015 (*** percent)).

[234] The domestic industry employed *** PRWs in 2013, *** in 2014, *** in 2015, *** in interim 2016, and *** in interim 2015. Total hours worked increased from *** in 2013 to *** in 2014, decreased to *** in 2015, and were *** in interim 2016 and *** in interim 2015. Wages paid increased from $*** in 2013 to $*** in 2014, declined to $*** in 2015, and were $*** in interim 2016 and $*** in interim 2015. Unit labor costs increased from $***/piece in 2013 to $***/piece in 2014, $***/piece in 2015, $***/piece in interim 2015, and $***/piece in interim 2016. CR/PR at Table III-18.

[235] Productivity (pieces per 1,000 hours) increased from *** in 2013 to *** in 2014, declined to *** in 2015, and was *** in interim 2016 and *** in interim 2015. Hourly wages increased from $***/hour in 2013 to $***/hour in 2014, and $***/hour in 2015, and were higher in interim 2016 ($***/hour) than in interim 2015 ($***/hour). CR/PR at Table III-18.

[236] CR/PR at Table VI-1. The domestic industry's COGS as a ratio to net sales increased incrementally from *** percent in 2013 to *** percent in 2014 and *** percent in 2015, and was lower in interim 2016 (*** percent) than in interim 2015 (*** percent). CR/PR at Table VI-1.

[237] CR/PR at Table VI-1. The domestic industry's gross profit increased from $*** in 2013 to $*** in 2014, declined to $*** in 2015, and was higher in interim 2016 ($***) than in interim 2015 $(***). Its operating income declined from $*** in 2013 to $*** in 2014 to *** in 2015, whereas operating income was higher in interim 2016 ($***) than in interim 2015 ($***). The domestic (Continued...)

which never exceeded *** percent, gradually declined between 2013 and 2015 but was higher in interim 2016 than in interim 2015.[238] The domestic industry's capital expenditures decreased from 2013 to 2015 but were higher in interim 2016 than in interim 2015.[239] The domestic industry's R&D expenses increased from 2013 to 2015 but were lower in interim 2016 than in interim 2015.[240]

The sharpest decline in the domestic industry's financial performance occurred between 2014 and 2015 during a period of declining apparent U.S. consumption. As consumption declined, the domestic industry maintained a stable or higher market share.[241] Subject imports decreased between 2014 and 2015, and their market share was essentially steady.[242] Thus, there was no increase in subject imports that would explain the declines in the domestic industry's financial performance between 2014 and 2015; rather, the record indicates that the domestic industry experienced higher labor and SG&A costs by unit when it reduced output (and net sales) during this period of lower apparent U.S. consumption.[243] As discussed above, the record does not support petitioner's allegations that the domestic industry incurred increased SG&A expenses after cumulated subject imports took sales of high-volume, low-value IMTDCs from the domestic industry.[244] Thus, the record indicates a relationship between unfavorable changes in the industry's cost structure between 2014

(…Continued)
industry's net income declined from $*** in 2013 to $*** in 2014 and *** in 2015, but its net income was higher in interim 2016 ($***) than in interim 2015 (***). CR/PR at Table VI-1.

[238] CR/PR at Table VI-1. The domestic industry's operating income margin was *** percent in 2013, *** percent in 2014, *** percent in 2015, and was higher in interim 2016 (*** percent) than in interim 2015 (*** percent). CR/PR at Table VI-1.

[239] CR/PR at Table VI-8. Capital expenditures for the domestic industry were $*** in 2013, $*** in 2014, $*** in 2015, $*** in interim 2015, and $*** in interim 2016. The higher level in interim 2016 is largely attributable to ***. CR/PR at Table VI-8 & n.1.

[240] CR/PR at Table VI-8. R&D expenses for the domestic industry were $*** in 2013, $*** in 2014, $*** in 2015, $*** in interim 2015, and $*** in interim 2016.

[241] The domestic industry's market share, by value, increased from *** percent in 2014 to *** percent in 2015, and its market share, by pieces, was stable at *** percent in 2014 and *** percent in 2015). CR/PR at Table IV-7.

[242] By value and pieces, U.S. shipments of subject imports were lower in 2015 ($40,231,000 and 1,349,482 pieces) than in 2014 ($44,129,000 and 1,405,280 pieces). By value and pieces, apparent U.S. consumption was lower in 2015 ($*** and *** pieces) than in 2014 ($*** and *** pieces). CR/PR at Table IV-6. Subject imports' market share, by value, was *** percent in 2014 and *** percent in 2014, and their market share, by pieces, was *** percent in 2014 and *** percent in 2015. CR/PR at Table IV-7.

[243] The domestic industry's unit direct labor costs decreased from $***/piece in 2013 to $***/piece in 2014, increased to $***/piece in 2015, and were lower in interim 2016 ($***/piece) than in interim 2015 ($***/piece), which follows trends in apparent U.S. consumption, output, and net sales for the domestic industry. The domestic industry's unit SG&A expenses rose from $***/piece in 2013 to $***/piece in 2014 and $***/piece in 2015, and they were lower in interim 2015 ($***/piece) than interim 2016 ($***/piece). CR/PR at Table VI-1.

[244] CR/PR at Table IV-6.

and 2015 and reductions in output and net sales associated with declines in apparent U.S. consumption and not cumulated subject imports.

Although some of the domestic industry's financial indicators, including operating income and ratio of operating income to net sales, were higher in interim 2016 after the filing of the petitions than in interim 2015, such improvements resulted from a decrease in the domestic industry's COGS,[245] not an increase in domestic shipments as a result of any retreat from the market by cumulated subject imports.[246] This trend reinforces that the domestic industry's financial condition, whether poor financial performance from 2013 to 2015 or higher levels in interim 2016 than in interim 2015, was not to any significant extent a function of cumulated subject imports.

During the POI, significant volumes of cumulated subject imports entered the United States that were good substitutes for the domestic like product,[247] and price comparisons indicate that cumulated subject imports pervasively undersold the domestic like product. Nonetheless, this underselling did not lead to significant shifts in market shares by value or pieces. As we also found above, pricing data showed no clear correlation between cumulated subject imports and the domestic industry's prices. The domestic industry did not face a cost-price squeeze and instead increased its prices for several pricing products over the POI despite the presence of significant volumes of cumulated subject imports that undersold the domestic like product at sizeable margins. Based on the record and our findings above about the lack of correlation between cumulated subject imports and the domestic industry's performance, we find that cumulated subject imports did not have a significant impact on the domestic industry.

[245] Even though the domestic industry's net sales were lower in interim 2016 ($***) than in interim 2015 ($***) than in interim 2015 ($***), which resulted in operating income of $*** in interim 2016 and $*** in interim 2015. Thus, the domestic industry's improved financial performance in interim 2016 compared to interim 2015 was related to its lower costs, and the domestic industry did not experience any higher sales associated with a lower level of cumulated subject imports in the market in interim 2016 than in interim 2015. CR/PR at Table VI-1.

[246] Market shares for subject imports by pieces and value were lower in interim 2016 than in interim 2015; market share for domestic shipments by pieces was lower in interim 2016 than in interim 2015, although market share for domestic shipments by value was slightly higher in interim 2016 than in interim 2015; the market share for nonsubject imports (small-diameter imports from all sources and large-diameter IMTDCs from nonsubject countries) was higher in terms of value and pieces, and the increase in value for nonsubject imports was greater than that for domestic shipments. CR/PR at Table IV-7 (indicating that nonsubject imports' market share, by value, was *** percent in interim 2016 and *** percent in interim 2015 and nonsubject imports' market share, by pieces, was *** percent in interim 2016 and *** percent in interim 2015).

[247] CR/PR at Table II-9 and Table II-10.

VII. No Threat of Material Injury by Reason of Subject Imports

A. Legal Standard

Section 771(7)(F) of the Tariff Act directs the Commission to determine whether the domestic industry is threatened with material injury by reason of subject imports by analyzing whether "further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted."[248] The Commission may not make such a determination "on the basis of mere conjecture or supposition," and considers the threat factors "as a whole" in making its determination whether dumped or subsidized imports are imminent and whether material injury by reason of subject imports would occur unless an order is issued.[249] In making our determinations, we consider all statutory threat factors that are relevant to these investigations.[250]

[248] 19 U.S.C. § 1677(7)(F)(ii).

[249] 19 U.S.C. § 1677(7)(F)(ii).

[250] These factors are as follows: (I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the WTO Subsidies and Countervailing Measures Agreement ("WTO SCM Agreement")) and whether imports of the subject merchandise are likely to increase; (II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports; (III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports; (IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices and are likely to increase demand for further imports; (V) inventories of the subject merchandise; (VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products; (VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time). 19 U.S.C. § 1677(7)(F)(i). To organize our analysis, we discuss the applicable statutory threat factors using the same volume, price, and impact framework that applies to our material injury analysis. Statutory threat factors (I), (II), (III), (V), and (VI) are discussed in the analysis of subject import volume. Statutory threat factor (IV) is discussed in the analysis of subject import price effects. Statutory factors (VIII) and (IX) are discussed in the analysis of impact. Statutory factor (VII) concerning agricultural products is inapplicable in these investigations, and statutory factor (I) does not apply in the investigation of imports from Canada.

B. Cumulation for Threat

We must consider whether to cumulate subject imports from Canada and China for purposes of our analysis of threat of material injury. In contrast to cumulation for purposes of present material injury, cumulation for any threat analysis is discretionary. Under section 771(7)(H) of the Tariff Act, the Commission may "to the extent practicable" cumulatively assess the volume and price effects of subject imports from all countries as to which petitions were filed on the same day if the requirements for cumulation in the material injury context are satisfied.[251]

In section V above, we found that the requirements for cumulating subject imports for our material injury analysis were satisfied. For our analysis of threat of material injury, however, we find that subject imports from Canada and China are not likely to compete under similar conditions of competition in the U.S. market in the imminent future. We base this conclusion on the fact that the largest source of subject imports from Canada during the POI (Baldor Canada) closed its St. Claire, Quebec facility on May 27, 2016 and relocated its finishing equipment from Canada to the Baldor facilities in Weaverville and Marion, North Carolina.[252] No such disruption occurred that would affect participation in the U.S. market by the industry in China in the imminent future.

We have considered petitioner's various arguments about the status of Baldor Canada's operations and the significance of the closure of this facility relative to the IMTDC industry as a whole in Canada, but we find such arguments unconvincing and lacking in record support. For example, petitioner suggests that Baldor closed its operations in May 2016 and shifted them to the United States "after the Petitions were filed and coinciding with the Department of Commerce's imposition of 191.34 percent preliminary duties on IMTDC imports from Canada."[253] In fact, ***.[254] In its November 10, 2015 U.S. producer questionnaire, Baldor reported that "***,"[255] and in its November 23, 2015 postconference brief, Baldor reported that it ***.[256] By ***.[257]

The pendency of these investigations played a role in the *** of Baldor Canada's St. Claire facility,[258] but several other reasons also motivated the closure. ABB's April 2016 press release noted that the "current economic context, the slowdown in world markets

[251] 19 U.S.C. § 1677(7)(H).

[252] CR at I-5 to I-6, III-5; PR at I-4, III-3.

[253] Petitioner's Posthearing Brief at Exhibit 1 at 18-19.

[254] CR at III-7; PR at III-4. Baldor had already permanently closed its affiliated IMTDC facility in China in December 2014. CR at I-6 n.17, VII-13; PR at I-5 n.17, VII-8.

[255] Baldor's U.S. Producer Questionnaire, EDIS Doc. 569086 at Answer to Question II-3 (reported under the category of ***).

[256] Baldor's November 23, 2015 Postconf. Brief at 38.

[257] CR at III-7; PR at III-4.

[258] In ***. CR at III-7; PR at III-4. In an April 2016 press release announcing the decision to close Baldor Canada and relocate the equipment to North Carolina, ABB identified uncertainties associated with the filing of the U.S. antidumping duty petition on IMTDCs from Canada as among several reasons for the closure. CR at III-7; PR at III-4.

and instability in oil and gas prices are all factors that have led to a decline in demand for products made in the installation of St. Claire."[259] ABB also reported that "this consolidation of operations will allow us to take advantage of the excess capacity of our other facilities, to enhance our competitiveness and improve the service to our North American customers."[260]

Petitioner speculates that it is still possible for Baldor to resume its IMTDC finishing operations in Canada at any moment.[261] ***.[262] In response to questions from the Commission's staff, Baldor Canada reported that ***.[263]

Petitioner further asserts that, despite Baldor Canada's closure, the industry in Canada maintains "massive" casting and finishing capacity for IMTDCs. Petitioner argues in its prehearing and posthearing briefs that Baldor Canada functioned solely as a finisher and that at least 29 iron foundries in Canada that produced 843 million pounds of iron castings in 2014 and over 500 machining operations in Ontario and numerous other machining operations elsewhere in Canada continue to operate.[264] We reject petitioner's contentions as speculative for several reasons.

The Commission issued foreign producer/exporter questionnaires to 23 firms that were possible producers/exporters of IMTDCs in Canada based on information contained in *** records and information submitted in the petitions.[265] We observe that the petitions, which initially requested a much broader scope of imported subject merchandise, identified only nine possible producers of subject merchandise in Canada, and four of the Canadian firms listed in the petitions reported that they are not manufacturers of IMTDCs.[266] Usable questionnaire data were received from one firm (Baldor Canada), which estimated that it accounted for approximately *** percent of all production of IMTDCs in Canada and approximately *** percent of exports of subject merchandise from Canada to the United States in 2015.[267] No other firms reported that they produced IMTDCs in Canada, and

[259] CR at III-7; PR at III-4. In its certified foreign producer questionnaire response in the final phase of these investigations, Baldor Canada reported that ***. Foreign Producer Questionnaire, EDIS Doc. 593979 (Oct. 21, 2016).

[260] CR at III-7; PR at III-4.

[261] Petitioner's Posthearing Brief at Exhibit 1 at 20.

[262] Foreign Producer Questionnaire, EDIS Doc. 593979 (Oct. 21, 2016).

[263] Baldor's November 23, 2015 Postconf. Brief at Exhibit 1 at 20; *see also id*. at 38, Exhibit 2 at paras. 22-23.

[264] Petitioner's Posthearing Brief at 13, Exhibit 1 at 18-20; Petitioner's Prehearing Brief at 14-15.

[265] CR at VII-3; PR at VII-3.

[266] CR at VII-4 n.9; PR at VII-3 n.9. Moreover, in their comments on the draft questionnaires for the final phase of these investigations, no party responded to the Commission's request in its preliminary determinations to identify any additional "foundries and any other firms that might be producing unfinished or finished IMTDCs in Canada." CR at VII-3; PR at VII-3; Confidential Preliminary Views at 62 n.230; USITC Pub. 4587 at 40 n.230.

[267] CR at VII-3 & n.4; PR at VII-3 & n.4.

Commerce selected only one firm (Baldor Canada) as the mandatory respondent for its antidumping duty investigation of IMTDCs from Canada.[268]

Baldor Canada accounted for nearly all known imports of subject merchandise during the POI, and there is no indication that another firm in Canada will export meaningful volumes of unfinished or finished IMTDCs to the United States in the imminent future.[269] Baldor Canada's reported exports of finished IMTDCs from Canada to the United States in 2015 were equivalent to *** percent of U.S. imports of IMTDCs from Canada reported in U.S. importer questionnaires for 2015.[270] Domestic producer Baldor, ***,[271] was *** importer of subject merchandise from Canada.[272] Other firms had been identified as leading importers of subject merchandise from Canada during the preliminary phase of these investigations (***), but due to modifications in the scope, these firms notified the Commission that Commerce had excluded their imports from the scope of subject merchandise.[273]

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[268] CR at I-5 to I-6; PR at I-4; 81 Fed. Reg. 75,039, 75,039 (Oct. 28, 2015).

[269] Indeed, even though the Commission must base its threat analysis on record evidence, not conjecture or speculation, when pressed at the hearing to identify likely sources of subject merchandise from Canada in the imminent future, TBW's witness admitted that doing so would "be speculation on my part." Hearing Tr. at 102.

[270] CR at VII-3; PR at VII-3.

[271] CR/PR at Table III-2.

[272] CR at I-5; PR at I-4. The Commission instructed importers to report their imports based on the country of origin of the casting. *** firms reported U.S. imports of subject large-diameter IMTDCs from Canada. U.S. importer Baldor (which accounted for *** percent of subject imports from Canada in 2015 in terms of pieces and *** percent in terms of value) sourced ***. U.S. importer *** (which accounted for *** percent of subject imports from Canada in 2015 in terms of pieces and *** percent in terms of value) listed 90 firms as Canadian producers of the items it imported; of these 90 firms, ***; importers for two of these firms (***) reported that they did not import subject merchandise from Canada; and U.S. importer *** submitted a questionnaire response. U.S. importer *** (which accounted for *** percent of subject imports from Canada in 2015 in terms of pieces and *** percent in terms of value) sourced all of its imports from ***. U.S. importer *** (which accounted for *** percent of subject imports from Canada in 2015 in terms of pieces and *** percent in terms of value) sourced all of its imports from ***. U.S. importer *** (which accounted for *** percent of subject imports from Canada in 2015 in terms of pieces and value) did not report the Canadian producer. U.S. importer *** (which imported ***) did not know the Canadian producer. U.S. Importer Questionnaire Responses.

[273] CR at I-5; PR at I-4; Memorandum INV-NN-089 at I-6 (Dec. 7, 2015). Imports from Canada of what turned out to be out-of-scope merchandise by *** were so sizable that the Commission highlighted their importance in its preliminary determinations. Confidential Preliminary Views at 61 n.227; USITC Pub. 4587 at 39 n.227 ("For example, the current record suggests that *** is largely responsible for the increase in aggregate U.S. imports from Canada during 2013 and subsequent decline thereafter, whereas *** combined are largely responsible for the increase in aggregate U.S. imports from all other sources during 2014 and subsequent decline thereafter. … To the extent that their imports consist of merchandise corresponding to the revised scope of these investigations, we seek additional information about demand trends that may explain these shifts in volume.")

Furthermore, foundries produce a broad range of products, with IMTDC castings likely accounting for a small share. For example, U.S. foundry Waupaca reported that unfinished IMTDCs accounted for less than *** percent of its production.[274] In any event, subject imports of unfinished IMTDCs from Canada "peaked" at *** pieces in 2014 and never accounted for more than $*** in any given period between January 2013 and June 2016, and unfinished IMTDCs accounted for less than *** percent of all IMTDC imports from all sources in 2015.[275]

Petitioner asserts that Baldor Canada had "a close supplier relationship" with Laforo Iron Foundry ("Laforo Foundry"), its former neighbor in Canada from which it used to purchase unfinished IMTDCs, and petitioner contends that Baldor (or others) will purchase unfinished IMTDCs from Laforo Foundry that will be exported to the United States for U.S. finishing operations.[276] The information that petitioner submitted about Laforo Foundry, however, appears to undermine rather than support petitioner's argument regarding IMTDC foundries in Canada. These articles indicate that, as of October 2005, Laforo Foundry had a capacity of "25,000 tonnes" and directed "a quarter of its production" to Baldor Canada's corporate predecessor (Maska Pulleys), with the rest of Laforo Foundry's production involving products outside the scope of these investigations, "such as castings of molded parts such as disc brakes, replacement parts, heating wood, etc." As of October 2005, Maska Pulleys was "the only manufacturing company in this niche in Canada," and Maska Pulleys held "about a third of the Canadian market and 5 percent of the U.S. market." According to a May 2013 article, Laforo Foundry specialized in parts for automobiles and trains (*i.e.*, not products that are the focus of these investigations), and it was investing $6.0 million to modernize its foundry. According to a July 2015 article, Laforo Foundry was engaging in additional modernization efforts "to move from a traditional to a more modern foundry" because the "quality that {it} had before was wavering and some of {its} customers are very demanding. For the quality, it takes consistency which was not easy with the traditional method."[277]

Other evidence corroborates that there could be difficulties obtaining unfinished IMTDCs in Canada. Baldor Canada had only finishing equipment, so it did not manufacture any unfinished IMTDCs.[278] Baldor Canada did not source all of its unfinished IMTDCs from Canada.[279] Moreover, in *** reported increasing difficulty sourcing blanks within

[274] Even this estimate is believed to be overstated. CR at III-2; PR at III-1 to III-2.

[275] CR/PR at Table IV-3.

[276] Petitioner's Posthearing Brief at Exhibit 1 at 19; Petitioner's Prehearing Brief at 15, Exhibit 3 (indicating that Laforo Foundry's founder and President was the founder and eventually majority shareholder in Maska Pulleys before Baldor purchased Maska Pulleys in October 2008). We note that Baldor currently sources castings for the IMTDCs it manufactures on the finishing equipment moved from Canada to the United States primarily from foundries in ***. CR at VII-4; PR at VII-4.

[277] Petitioner's Prehearing Brief at Exhibit 3.

[278] CR at VII-5; PR at VII-4.

[279] Baldor Canada reported that it sourced its unfinished IMTDCs from foundries in ***. U.S. Importer Questionnaire, EDIS Doc. ***.

Canada.[280] Purchaser *** also reported that since 2012, its Canadian supplier has "shorted" shipments because of a lack of availability of castings, and because the supplier closed in 2015.[281]

For the foregoing reasons, we determine that the closure of the largest source of subject merchandise from Canada has fundamentally altered how any IMTDC industry in Canada will compete in the U.S. market in the imminent future. In the absence of any similar disruption affecting participation in the U.S. market by the IMTDC industry in China, we have exercised our discretion not to cumulatively assess the volume and price effects of subject imports from Canada and China for purposes of our threat analysis.

C. No Threat of Material Injury by Reason of Subject Imports from Canada

1. Likely Volume of Subject Imports from Canada

The United States was the largest destination for IMTDCs produced in Canada during the POI.[282] Nevertheless, the volume of U.S. shipments of subject imports from Canada, by value, declined overall during the POI; it increased from $*** in 2013 to $*** in 2014, declined to $*** in 2015 (a lower level than in 2013), and was lower in interim 2016 $(***) than in interim 2015 $(***).[283] The share of apparent U.S. consumption, by value, for subject imports from Canada increased from *** percent in 2013 to *** percent in 2014 and 2015, and their market share was lower in interim 2016 (*** percent) than in interim 2015 (*** percent).[284] Baldor Canada, the sole responding exporter of subject merchandise in Canada, reported producing *** IMTDCs on the production equipment used to

[280] *** Questionnaire, EDIS Doc. *** (Oct. 21, 2016).

[281] CR at II-8; PR at II-6.

[282] Exports to the United States accounted for *** percent of the Canadian industry's total reported shipments in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016. CR/PR at Table VII-2.

[283] In terms of pieces, the volume of U.S. shipments of subject imports from Canada also declined overall during the POI; it increased from *** pieces in 2013 to *** pieces in 2014, decreased to *** pieces in 2015, and was lower in interim 2016 (*** pieces) than in interim 2015 (*** pieces). CR/PR at Table IV-6. End-of-period inventories in Canada declined from *** pieces in 2013 to *** pieces in 2015, were lower in interim 2016 (***) than in interim 2015 (*** pieces), and are projected to be *** in 2017. CR/PR at Table VII-2. Although end-of-period U.S. inventories of subject merchandise from Canada increased overall from *** pieces in 2013 to *** pieces in 2015 and were higher in interim 2016 (*** pieces) than in interim 2015 (*** pieces), CR/PR at Table VII-10, this is consistent with Baldor Canada's relocation of production operations from Canada to the United States. Moreover, importers reported *** arranged imports of unfinished IMTDCs and *** arranged imports of finished IMTDCs from Canada after 2016. CR/PR at Table VII-11.

[284] In terms of pieces, the market share of subject imports from Canada declined from *** percent in 2013 to *** percent in 2014 and *** percent in 2015, and their market share was lower in interim 2016 (*** percent) than in interim 2015 (*** percent). CR/PR at Table IV-7.

manufacture IMTDCs in Canada.[285] Moreover, Baldor Canada projects that its production capacity and production will be *** in the imminent future, given the closure of its St. Claire facility, relocation of the equipment to the United States, and consolidation of its operations in the United States.[286] The closure of Baldor Canada eliminates by far the largest source of subject imports from Canada during the POI.[287] As discussed in more detail above, although the Commission surveyed multiple possible producers of IMTDCs in Canada, there is no record evidence that any other firms in Canada will export meaningful volumes of unfinished or finished IMTDCs to the United States in the imminent future, with even petitioner conceding that such a conclusion would be speculative.[288] Based on the record and our findings above, there is no indication on this record that there are likely to be significant volumes of subject imports from Canada of finished or unfinished large-diameter IMTDCs into the U.S. market in the imminent future, let alone a likely significant increase in subject imports from Canada.

2. Likely Price Effects of Subject Imports from Canada

Subject imports from Canada undersold the domestic like product in all 84 instances (involving 21,999 pieces) at margins that ranged from 8.4 percent to 63.3 percent.[289] As we found above, however, even when the underselling by subject imports from Canada is combined with the underselling by subject imports from China, cumulated subject imports from Canada and China did not have significant price effects, given the absence of any significant market share shifts or evidence indicating that cumulated subject imports depressed prices of the domestic like product or prevented increases in prices of the domestic like product that otherwise would have occurred to a significant degree. Given our finding that the volume of subject imports from Canada is unlikely to be significant and in the absence of evidence that subject imports from Canada have caused significant price effects even when they were present in the U.S. market, we find that these imports are unlikely to cause price effects in the imminent future. We consequently conclude that subject imports from Canada are unlikely to enter the U.S. market at prices that are likely to

[285] CR/PR at Table VII-3.

[286] Reported production capacity in Canada was *** pieces between 2013 and 2015 and *** pieces in interim 2015 and interim 2016, and is projected to be *** pieces in 2017. Production of subject merchandise in Canada was *** pieces in 2013, *** pieces in 2014, *** pieces in 2015, *** pieces in interim 2015, and *** pieces in interim 2016. Capacity utilization in terms of pieces declined irregularly from *** percent in 2013 to *** percent in 2015 and was lower in interim 2016 (*** percent) than in interim 2015 (*** percent), as Baldor Canada prepared to close its operating facility. CR/PR at Table VII-2.

[287] We note that most purchasers (22 of 24) reported that no new suppliers have entered the U.S. market since January 1, 2013, and the only new entrants they reported ***. CR at II-8; PR at II-6.

[288] Hearing Tr. at 102.

[289] CR/PR at Table V-2 to Table V-9.

have significant depressing or suppressing effects on prices of the domestic like product or that are likely to increase demand for further imports.

3. Likely Impact of Subject Imports from Canada

Petitioner and other domestic producers reported that subject imports from Canada and China affected their existing development and production efforts, growth, investment, and ability to raise capital, and they anticipated further effects in the absence of relief as a result of these investigations.[290] Petitioner argues that the domestic industry is vulnerable.[291] Although the domestic industry experienced poor financial performance and declines in some of its other performance indicators in certain portions of the POI, as indicated in section VI.E above, we did not find a correlation between these domestic industry performance indicators and cumulated subject imports. Unlike the volume of cumulated subject imports, which we found above to be significant, we find that the volume of subject imports from Canada is unlikely to be significant in the imminent future. We further find that subject imports from Canada are unlikely to enter the U.S. market at prices that are likely to have significant price-depressing or -suppressing effects on prices of the domestic like product or that are likely to increase demand for further imports. Based on these considerations, we find that subject imports from Canada are not likely to have a significant impact on the domestic industry in the imminent future. Therefore, we do not find that material injury by reason of subject imports from Canada would occur absent the issuance of an antidumping duty order.

Accordingly, we conclude that the domestic industry is not threatened with material injury by reason of subject imports from Canada.

D. No Threat of Material Injury by Reason of Subject Imports from China

1. Likely Volume of Subject Imports from China

The IMTDC industry in China reported large capacity and production of subject merchandise.[292] It has the ability to shift production from other products to subject

[290] CR/PR at Appendix F.

[291] Petitioner's Posthearing Brief at 12, 14; Petitioner's Prehearing Brief at 40-42, 48-49.

[292] Reported production capacity in China was *** pieces in 2013 and 2014, *** pieces in 2015, and *** pieces in interim 2015 and interim 2016; responding producers in China project similar levels in 2016 and 2017 (*** pieces). Production of subject merchandise in China was *** pieces in 2013, *** pieces in 2014, *** pieces in 2015, *** pieces in interim 2015, and *** pieces in interim 2016, and is projected to be at similar levels in 2016 (*** pieces) and 2017 (*** pieces). Capacity utilization in terms of pieces was *** percent in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016, and is projected to be *** percent in 2016 and *** percent in 2017. CR/PR at Table VII-6.

merchandise.[293] Even though the industry in China has the ability to export significant volumes of subject merchandise to the United States, exports to the United States accounted for a declining share of total shipments by the industry in China (less than one-third).[294] Consistent with this trend, the value of U.S. shipments of subject imports from China declined overall during the POI; it increased from $*** in 2013 to $*** in 2014, declined to $*** in 2015, and was lower in interim 2016 $(***) than in interim 2015 $(***).[295] The share of apparent U.S. consumption represented by subject imports from China, by value, was relatively stable; it declined from *** percent in 2013 to *** percent in 2014, increased to *** percent in 2015 and was lower in interim 2016 (*** percent) than in interim 2015 (*** percent).[296] U.S. importers did not report arranging for sizable volumes

[293] CR/PR at Table VII-7 (indicating that approximately *** of all reported IMTDC production on shared equipment by producers in China, by pieces, consists of subject merchandise). Other products reportedly manufactured in China on the same equipment as subject merchandise include ***. CR at VII-15; PR at VII-9. Petitioner contends that the IMTDC industry in China benefits from numerous countervailable subsidy programs, many of which it alleges are dependent on export performance. Petitioner's Posthearing Brief at 14-15; Petitioner's Prehearing Brief at 49-50. In its final countervailing duty determination regarding IMTDCs from China, Commerce identified five countervailable programs that it concluded Powermach utilized: (1) policy loans to the IMTDC industry, (2) provision of inputs for less than adequate remuneration, (3) import tariff and value-added tariff exemptions for foreign-invested enterprises and certain domestic enterprises using imported equipment in encouraged industries, (4) preferential tax rate for companies in the Western Development Area, and (5) reported grants. Commerce assigned a countervailing duty rate of 33.26 percent to Powermach, an adverse facts available rate of 163.46 percent to certain named non-cooperative firms, and a rate of 33.26 percent to all other firms. 81 Fed. Reg. at 75,037 (Oct. 28, 2016); CR/PR at Table I-1; CR at I-9 to I-11; PR at I-6 to I-9; Commerce's *Issues and Decision Memorandum for the Final Determination in the Countervailing Duty Investigation of Certain Iron Mechanical Transfer Drive Components from the People's Republic of China* (Oct. 21, 2016), EDIS Doc. 594776, file 1132084. We acknowledge Commerce's findings that there were several countervailable subsidy programs benefitting IMTDC producers in China. We have considered the nature of these programs, none of which Commerce found to be an export subsidy described in Article 3 or 6.1 of the WTO SCM Agreement, in conjunction with the other factors pertaining to likely subject import volume and price effects discussed below in ascertaining whether imports of the subject merchandise are likely to increase, and any effects likely to be caused by the countervailable subsidies.

[294] Exports to the United States accounted for *** percent of total shipments by the industry in China in 2013, *** percent in 2014, *** percent in 2015, *** percent in interim 2015, and *** percent in interim 2016, and U.S. exports are projected to account for *** percent of total shipments in 2016 and *** percent in 2017. CR/PR at Table VII-6.

[295] In terms of pieces, the volume of subject imports from China increased from *** pieces in 2013 to *** pieces in 2014 and *** pieces in 2015, and was lower in interim 2016 (*** pieces) than in interim 2015 (*** pieces). CR/PR at Table IV-6.

[296] In terms of pieces, the market share of subject imports from China increased from *** percent in 2013 to *** percent in 2014 and *** percent in 2015 and was lower in interim 2016 (*** percent) than in interim 2015 (*** percent). CR/PR at Table IV-7.

of subject merchandise from China in the imminent future.[297] No firms participating in this proceeding identified any other import relief proceedings in the United States or other countries regarding IMTDCs.[298]

We acknowledge that our data coverage for the IMTDC industry in China is uncertain. Although the petitions identified 31 possible producers of subject merchandise in China, the Commission issued foreign producer/exporter questionnaires to nearly double that amount (61 possible firms), including firms named in the petitions and those identified through searches of *** records concerning U.S. imports under three HTSUS statistical reporting numbers.[299] Petitioner relied on these statistical reporting numbers as the best available information for its calculation of U.S. imports in its petitions, but it acknowledged that these statistical reporting numbers correspond to broad basket categories that likely include merchandise that is outside the scope identified in the petitions (which has narrowed considerably in the intervening time, as discussed above).[300] In the final phase of these investigations, the Commission received usable questionnaire responses from seven firms, including Powermach,[301] which Chinese Respondents reported was the "single largest producer and exporter of China."[302] Based on information provided by the responding producers in China, the reported data in the final phase of these investigations accounted for approximately *** percent of all IMTDC production in China and approximately *** percent of exports of subject merchandise from China in 2015.[303] The firms' reported exports were equivalent to *** percent of U.S. imports of IMTDCs from China in 2015 as reported in importer questionnaire responses.[304]

Petitioner asks the Commission to rely on adverse facts available based on its argument that the questionnaire data substantially understate the size of the industry in China in the absence of questionnaire responses from nine specific firms, eight of which it

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[297] U.S. importers' arranged imports of subject merchandise from China were *** pieces in the third quarter of 2016, *** pieces in the fourth quarter of 2016, *** pieces in the first quarter of 2017, and *** pieces in the second quarter of 2017. CR/PR at Table VII-11. Inventories are not unusual in this industry given the large number of product permutations and the use of catalogues to advertise offerings. CR at V-4; PR at V-3. End-of-period inventories in China and U.S. importers' end-of-period inventories were relatively stable. End-of-period inventories of subject merchandise in China were *** pieces in 2013, *** pieces in 2014, *** pieces in 2015, *** pieces in interim 2015, and *** pieces in interim 2016, and are projected to be *** pieces in 2016 and *** pieces in 2017. CR/PR at Table VII-6. U.S. importers' end-of-period inventories of subject merchandise from China were *** pieces in 2013, *** pieces in 2014, *** pieces in 2015, *** pieces in interim 2015, and *** pieces in interim 2016. CR/PR at Table VII-10.

[298] CR at VII-23; PR at VII-13.

[299] CR at VII-11; PR at VII-7.

[300] CR at IV-3; PR at IV-3; Petitions, vol. I at 10, 15.

[301] CR at VII-11; PR at VII-7.

[302] Confer. Tr. at 34 (Grimson).

[303] CR at VII-11; PR at VII-7.

[304] CR at VII-11; PR at VII-7.

argues participated in Commerce's proceedings.[305] We note that petitioner never identified four of these firms in its petitions as possible producers/exporters of subject merchandise in China.[306] Although the Commission did not receive a foreign producer questionnaire response from Min Yue (the ninth firm referenced by petitioner) in the final phase of these investigations, Min Yue submitted a questionnaire in the preliminary phase of these investigations,[307] which we have considered. The data that Min Yue submitted in the preliminary phase of these investigations may be overstated because the questionnaire predated several scope amendments that narrowed the universe of imports subject to these investigations. Nevertheless, Min Yue's data are consistent with the information discussed above for the IMTDC industry in China. Min Yue ***.[308]

We also question the premise underpinning petitioner's argument that the Commission's record does not contain questionnaire data from certain firms that participated to some degree in Commerce's proceedings. The fact that nine firms identified by petitioner submitted information on the volume and value of their exports of IMTDCs to Commerce at the outset of the investigations is not determinative of whether these firms actually manufactured or exported subject merchandise, given the many intervening scope changes. Indeed, Commerce selected two mandatory respondents to investigate for its antidumping and countervailing duty proceedings involving IMTDCs from China (Powermach and NOK Wuxi) because they "accounted for the largest volume of exports of the merchandise under consideration."[309] One of them (NOK Wuxi) subsequently notified Commerce of its intent to withdraw from Commerce's investigations contingent on Commerce's acceptance of petitioner's request to exclude certain TVDs from the investigations' scope. Once Commerce excluded TVDs from the scope in its preliminary

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[305] Petitioner's Posthearing Brief at 12-13, Exhibit 1 at 25-26; Hearing Tr. at 37, 51-52 (Pickard); Petitioner's Prehearing Brief at 14, 42-44. In these submissions, petitioner also argued that there are at least 15,000 foundries in China that collectively produced more than 74 billion pounds of iron castings in 2014. As we explained in section VII.B above, however, foundries do not exist solely to manufacture IMTDC castings, and U.S. imports of unfinished IMTDCs were relatively low over the POI.

[306] CR at VII-12 n.17; PR at VII-7 n.17.

[307] In the preliminary phase of these investigations, the Commission received usable questionnaire responses from four firms manufacturing subject merchandise in China: ***; Min Yue; Baldor Maska; and Powermach. These firms collectively accounted for *** percent of all IMTDC production in China and approximately *** percent of exports to the United States in 2014. Confidential Preliminary Views, EDIS Doc. 571266 at 58; USITC Pub. 4587 at 38. Baldor Maska did not submit a foreign producer questionnaire in the final phase of these investigations; it ceased production operations in December 2014, as indicated earlier. Confer. Tr. at 22 (McCartney); CR at III-5; PR at III-3.

[308] Min Yue's Foreign Producer Questionnaire, EDIS Doc. 570526 at Table II-10 (Nov. 25, 2015).

[309] *See, e.g.*, Commerce's *Issues and Decision Memorandum for the Final Determination in the Countervailing Duty Investigation of Certain Iron Mechanical Transfer Drive Components from the People's Republic of China* (Oct. 21, 2016), EDIS Doc. 594776, file 1132084 at 2.

determinations, NOK Wuxi, which reported itself as primarily an exporter of TVDs, withdrew from Commerce's investigations.[310]

In the preliminary phase of these investigations, respondents reported that Powermach and Min Yue were the largest exporters of subject merchandise from China, and they reported the existence of perhaps two or three other firms of any significant size.[311] The Commission's record includes information on both of these large exporters of subject merchandise from China. To the extent that the information on the record concerning the IMTDC industry in China is incomplete, the record does not indicate that the information from any producers of in-scope IMTDCs that did not respond to the Commission's foreign producer questionnaire would have been appreciably different from the information obtained from the responding producers (nor has petitioner suggested that is the case). The record does not contain (nor has petitioner provided) publicly available information about the IMTDC industry in China. The Global Trade Atlas data on the record concern a much broader product category than IMTDCs (flywheels and pulleys, including pulley blocks),[312] and are in our view less probative than the information provided by the responding producers in China. In any event, these data indicate that exports from China to the United States of flywheels and pulleys account for less than one-fifth of total exports of flywheels and pulleys from China, by value; moreover, these data do not indicate that exports of flywheels and pulleys from China to the United States, by value or as a percentage of total exports from China, are increasing.[313] Consequently, we have relied primarily on the data from the responding foreign producers, as supplemented with other available record evidence, as the facts available concerning the subject industry in China.

Based on the record, we find that the volume of subject imports from China is likely to be significant in the imminent future, but we do not find that there is likely to be a significant increase in these imports. We base this conclusion on available information about the behavior of subject imports from China between January 2013 and June 2016, discussed above, including that subject imports from China maintained a relatively stable share of the U.S. market and that the United States accounted for a declining share of the Chinese industry's total shipments of IMTDCs (less than one-third). The Chinese industry's

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[310] CR at I-6 n.18; PR at I-5 n.18; Commerce's *Issues and Decision Memoranda for the Final Determination in the Investigation of Certain Iron Mechanical Transfer Drive Components from the People's Republic of China* (Oct. 21, 2016), EDIS Doc. 594776; Commerce's *Issues and Decision Memoranda for the Preliminary Determination in the Investigation of Certain Iron Mechanical Transfer Drive Components from the People's Republic of China*, EDIS Doc. 594778; NOK's withdrawal letter, EDIS Doc. 594779.

[311] Confidential Preliminary Views, EDIS Doc. 571266 at 62-63; USITC Pub. 4587 at 40; Confer. Tr. at 34 (Grimson).

[312] CR/PR at Table VII-8; CR at VII-17; PR at VII-13 (indicating that export statistics under Harmonized Tariff Schedule subheading 8483.50 as reported by Statistics China in the GTA database include not only the in-scope IMTDCs but also a substantial amount of items that are not at issue in these investigations, including steel, plastic, and aluminum flywheels and pulleys, including pulley blocks).

[313] CR/PR at Table VII-8.

capacity was also relatively stable during the POI, and there are no reported increases anticipated. Thus, there is no basis to conclude that the likely significant volume of subject imports from China, which we are not cumulating with subject imports from Canada for our threat analysis, is likely to increase significantly in the imminent future.

2. Likely Price Effects of Subject Imports from China

Subject imports from China undersold the domestic like product in 133 of 144 instances (involving 14,832 pieces) at margins that ranged from 0.1 percent to 84.8 percent.[314] As we found above, however, even when the underselling by subject imports from China is combined with the underselling by subject imports from Canada, cumulated subject imports from Canada and China did not have significant price effects, given the absence of any significant market share shifts or evidence indicating that cumulated subject imports depressed prices of the domestic like product or prevented increases in prices of the domestic like product that otherwise would have occurred to a significant degree. In light of our finding that the volume of subject imports from China is unlikely to change significantly in the imminent future and in the absence of evidence that subject imports from China have caused significant price effects even when they were present in the U.S. market and pervasively underselling the domestic like product,[315] we find that these imports are unlikely to cause price effects in the imminent future. Consequently, the record indicates that subject imports from China are not likely to enter the U.S. market at prices that are likely to have significant price depressing or suppressing effects on prices of the domestic like product or that are likely to increase demand for further imports.

3. Likely Impact of Subject Imports from China

Petitioner and other domestic producers reported that subject imports from Canada and China affected their existing development and production efforts, growth, investment, and ability to raise capital, and they anticipated further effects in the absence of relief as a result of these investigations.[316] Petitioner argues that the domestic industry is vulnerable.[317] Although the domestic industry experienced poor financial performance and declines in some of its other performance indicators in certain portions of the POI, we did not find in section VI.E above a correlation between these domestic industry performance indicators and cumulated subject imports. Shifts in U.S. shipments and net sales for both the domestic industry and cumulated subject imports often tracked changes in apparent U.S. consumption, and changes in the domestic industry's financial performance appeared most affected by changes in SG&A and COGS due to changes in output associated with changes in apparent U.S. consumption.

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[314] CR/PR at Table V-2 to Table V-9.
[315] CR/PR at Table V-2 to Table V-9.
[316] CR/PR at Appendix F.
[317] Petitioner's Posthearing Brief at 12, 14; Petitioner's Prehearing Brief at 40-42, 48-49.

We find no evidence indicating that subject imports from China are likely to have a significant impact on the domestic industry in the imminent future. As discussed above, we find that the volume of subject imports from China is likely to be significant but at levels equivalent to those during the POI. We further find that subject imports from China are unlikely to enter the U.S. market at prices that are likely to have significant price depressing or suppressing effects on prices of the domestic like product or that are likely to increase demand for further imports. Based on these considerations and the absence of any correlation between the domestic industry's condition and the volume and price effects of cumulated subject imports during the POI, we find that subject imports from China are not likely to have a significant impact on the domestic industry in the imminent future. Therefore, we do not find that material injury by reason of subject imports from China would occur absent the issuance of antidumping and countervailing duty orders.

Accordingly, we conclude that the domestic industry is not threatened with material injury by reason of subject imports from China.

VIII. Conclusion

For the reasons stated above, we determine that an industry in the United States is not materially injured or threatened with material injury by reason of subject imports of large-diameter IMTDCs from Canada and China that Commerce found were sold in the United States at less than fair value and subsidized by the government of China.

PART I: INTRODUCTION

BACKGROUND

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("Commission") by TB Wood's Incorporated ("TBW"), Chambersburg, Pennsylvania, on October 28, 2015, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of certain iron mechanical transfer drive components ("IMTDCs")[1] from Canada and China and subsidized imports of IMTDCs from China. The petitioner subsequently amended and/or supplemented the petitions on November 5, November 6, November 10, and November 17, 2015.[2] Further amendments and clarifications to the scope language were proposed by the petitioner on March 30, June 27, August 4, August 17, and August 22, 2016, concerning the exclusion of certain finished torsional vibration dampers ("TVDs"), certain TVD inner rings, and certain flywheels with ring gear.[3] The following tabulation provides information relating to the background of these investigations.[4] [5]

Effective date	Action
October 28, 2015	Petitions filed with Commerce and the Commission; institution of Commission investigations (80 FR 67789, November 3, 2015)
November 17, 2015	Commerce's notices of initiation (80 FR 73716-73726, November 25, 2015)
April 11, 2016	Commission's preliminary countervailing duty determination and alignment of final investigations (81 FR 21316)
June 8, 2016	Commerce's preliminary antidumping duty determinations (81 FR 36876-36881 and 36887-36890, June 8, 2016); scheduling of final phase of Commission investigations (81 FR 41318, June 24, 2016)
October 18, 2016	Commission's hearing
October 28, 2016	Commerce's final determinations (81 FR 75032-75042)
November 18, 2016	Commission's vote
December 12, 2016	Commission's views

[1] See the section entitled "The Subject Merchandise" in *Part I* of this report for a complete description of the merchandise subject to these investigations.

[2] On November 5, 2015 and November 17, 2015, the petitioner proposed revising the scope language to change, among other things, the dimension and chemistry elements of the scope.

[3] The amendment of March 30, 2016, was addressed in Commerce's preliminary determination scope language. Subsequent amendments were addressed in Commerce's final determination scope language.

[4] Pertinent *Federal Register* notices are referenced in app. A, and may be found at the Commission's website (www.usitc.gov).

[5] A list of witnesses that appeared at the hearing is presented in app. B of this report.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

Section 771(7)(B) of the Tariff Act of 1930 (the "Act") (19 U.S.C. § 1677(7)(B)) provides that in making its determinations of injury to an industry in the United States, the Commission--

> *shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic like products, and (III) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.*

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[6]

> *In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant... .In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . .(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree... . In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to. . . (I) actual and potential decline in output, sales, market share, gross profits, operating profits, net profits, ability to service debt, productivity, return on investments, return on assets, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the*

[6] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—[7]

(J) EFFECT OF PROFITABILITY.—The Commission may not determine that there is no material injury or threat of material injury to an industry in the United States merely because that industry is profitable or because the performance of that industry has recently improved.

Organization of report

Part I of this report presents information on the subject merchandise, subsidy/dumping margins, and domestic like product. *Part II* of this report presents information on conditions of competition and other relevant economic factors. *Part III* presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. *Parts IV* and *V* present the volume of subject imports and pricing of domestic and imported products, respectively. *Part VI* presents information on the financial experience of U.S. producers. *Part VII* presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury as well as information regarding nonsubject countries.

MARKET SUMMARY

An IMTDC (a term that includes sheaves (also known as pulleys), flywheels, and bushings) is an iron wheel or cylinder that may be fitted with a belt around the outer circumference. IMTDCs are used for transmitting power generated by a motor, turbine, or engine to another shaft (i.e., sheave) or to store rotational energy (i.e., flywheel).

The leading integrated U.S. producers of IMTDCs[8] identified by the petitioner include TBW and Martin Sprocket & Gear ("Martin Sprocket").[9] Two leading U.S. foundries producing IMTDC castings[10] include Brillion Iron Works ("Brillion") and Waupaca Foundry Inc.

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[7] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

[8] For purposes of this report, integrated producers of IMTDCs are those firms that both cast/forge and finish/machine IMTDCs.

[9] Petitions, vol. I, exh. I-3. Petitioner TBW and domestic producer Martin Sprocket provided responses to the Commission's questionnaire. Smaller domestic integrated producers of IMTDCs that also provided a response to the Commission's questionnaire include Bremen Castings, Inc. ("Bremen"); EnDyn Ltd. ("EnDyn"); and Goldens' Foundry and Machine Company ("Goldens").

[10] For purposes of this report, foundries are firms that cast/forge, but do not finish/machine, IMTDCs at their manufacturing facilities.

("Waupaca").[11] Leading domestic finishers of IMTDCs[12] identified by the petitioner include the following four firms: B&B Manufacturing ("B&B"), Baldor Electric Company ("Baldor"), Custom Machine & Tool Co., Inc. ("Custom"), and Maurey Manufacturing Corporation ("Maurey").[13] Other leading domestic finishers of IMTDCs that responded to the Commission's questionnaire include Hi-Lo Manufacturing Co. ("Hi-Lo") and Sterling Industries, Inc. ("Sterling").[14]

Of those firms responding to the Commission's importer questionnaire, the largest U.S. importer of IMTDCs from Canada *** is ***.[15] The largest responding importers of IMTDCs from China are ***. Leading importers of IMTDCs from nonsubject countries that responded to the Commission's questionnaire include ***.

Baldor Electric Canada ("Baldor Canada") was a leading producer of IMTDCs in Canada during 2015. However, Baldor Canada closed its St. Claire, Quebec facility on May 27, 2016, and relocated its Canadian finishing equipment to the Baldor facilities in Weaverville and Marion, North Carolina. No other firms in Canada indicated that they produced IMTDCs. Baldor Canada was the sole mandatory Canadian respondent in Commerce's investigation.[16]

The leading producers/exporters of IMTDCs in China that responded to the Commission's questionnaire in the final phase of these investigations include Powermach Import & Export Co. Ltd. (Sichuan) ("Powermach"); Yueqing Bethel Shaft Collar Manufacturing. Co., Ltd. ("Yueqing"); and Martin Sprocket & Gear (Shanghai) Co., Ltd. ("Martin Sprocket China").[17] Powermach was the only cooperating mandatory Chinese respondent in Commerce's investigations.[18]

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[11] Petitions, vol. I, exh. I-3. Although Brillion provided a response to the Commission's questionnaire, it was substantially incomplete. Waupaca provided a complete response to the Commission's questionnaire but its data is believed to be substantially overstated. Other domestic foundries that responded to the Commission's questionnaire but were unable to provide the data and other information requested by the Commission include Great Lakes Castings LLC ("Great Lakes Castings"); Osco Industries, Inc. ("Osco"); and Torrance Casting, Inc. ("Torrance").

[12] For purposes of this report, finishers are firms that finish/machine, but do not cast/forge, IMTDCs at their manufacturing facilities.

[13] Petitions, vol. I, exh. I-3. Of these four finishers identified by the petitioner, only Custom did not complete a producer questionnaire. Torque Transmission ("Torque") was also identified by the petitioner as a domestic finisher of IMTDCs, however, the firm responded to the Commission's questionnaire indicating that it does not produce or import iron pulleys but that it manufactures pulleys from aluminum and molded plastic.

[14] Finisher Skyway Precision, Inc. ("Skyway") also responded to the Commission's questionnaire; however, the firm indicated that ***.

[15] In the preliminary phase of these investigations, *** were also identified as leading importers of IMTDCs from Canada. However, both Caterpillar and GM notified the Commission that, based on Commerce's preliminary determinations, their imports are not included in the scope of the investigations.

[16] *Certain Iron Mechanical Transfer Drive Components From Canada: Final Affirmative Determination of Sales at Less Than Fair Value*, 81 FR 75039, October 28, 2016.

[17] Smaller firms in China that responded to the Commission's final phase questionnaire include Haiyang Jingweida Gearing Co., Ltd. ("Haiyang"); Huade Tianjin Metal Manufacture ("Huade"); Shanxi

(*continued*...)

Leading purchasers include ***.

According to questionnaires received in the final phase of these investigations, apparent U.S. consumption of IMTDCs totaled approximately *** in 2015. Reporting U.S. producers' U.S. shipments of IMTDCs totaled *** in 2015, and accounted for *** percent of apparent U.S. consumption by quantity (in pieces) and *** percent by value. U.S. shipments of imports from responding firms reporting imports from subject sources totaled *** in 2015 and accounted for *** percent of apparent U.S. consumption by quantity (in pieces) and *** percent by value. U.S. shipments of imports from responding firms reporting imports from nonsubject sources totaled *** in 2015 and accounted for *** percent of apparent U.S. consumption by quantity (in pieces) and *** percent by value.[19]

SUMMARY DATA AND DATA SOURCES

A summary of data collected in the final phase of these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of five integrated firms and five finishers that are estimated to have accounted for approximately 90 percent of U.S. production of finished IMTDCs during 2015 and approximately two-thirds of U.S. production of unfinished IMTDCs (based on value and weight in pounds, rather than pieces). In addition to the firms noted above, the Commission has presented separately the data submitted by one foundry (Waupaca) concerning its U.S. casting operations. These data are not aggregated with the remainder of the data submitted by the U.S. industry because Waupaca's data appear to be substantially overstated by the inclusion of excluded

(…*continued*)
Huaxiang Group Co., Ltd. ("Shanxi"); and Shijiazhuang CAPT Power Transmission Co., Ltd. ("Shijiazhuang"). Two firms in China that responded to the preliminary phase questionnaire did not respond to the Commission's questionnaire in these final phase investigations: Fuzhou Min Yue Mechanical & Electrical Co., Ltd. ("Min Yue") and Maska Power Transmission (Changzhou) Co. Ltd. ("Maska"). Maska, which was owned by Baldor, permanently closed its production facilities in China in late 2014. Conference transcript, p. 22 (McCartney).

[18] *Certain Iron Mechanical Transfer Drive Components From the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*, 81 FR 75032, October 28, 2016; and *Countervailing Duty Investigation of Certain Iron Mechanical Transfer Drive Components From the People's Republic of China: Final Affirmative Determination*, 81 FR 75037, October 28, 2016. NOK (Wuxi) Vibration Control China Co. Ltd. ("NOK Wuxi") was also selected by Commerce as a mandatory Chinese respondent in its investigations. However, on March 30, 2016, NOK Wuxi notified Commerce of its intent to withdraw from the investigations, contingent on Commerce's acceptance and inclusion of the petitioner's March 30, 2016 amendment to the scope that sought to exclude certain TVDs. On April 19, 2016, NOK Wuxi withdrew from Commerce's investigation after Commerce preliminarily determined that TVDs were properly excluded from the scope. *Issues and Decision Memorandum for the Final Determination in the Countervailing Duty Investigation of Certain Iron Mechanical Transfer Drive Components from the People's Republic of China,* October 21, 2016, p. 4.

[19] As discussed below, small-diameter IMTDCs are not included in the scope of imported subject merchandise and are considered nonsubject regardless of the source of imports.

merchandise, as indicated in footnote 3 in Part III of this report. Regardless, Waupaca's data are presented separately in appendix C (tables C-2 through C-5), as it is a leading supplier of IMTDC castings for ***. Waupaca's unfinished IMTDCs that were finished by *** are reflected in the U.S. industry's data as finished IMTDCs. U.S. imports are based on questionnaire responses of 25 firms that are estimated to have accounted for at least one-half of U.S. imports of IMTDCs during 2015. Presenting a decisive estimate is complicated by the inclusion of subject and nonsubject merchandise in the various relevant HTSUS provisions, the large number of potential importers identified by proprietary Customs data (especially compared to the relatively small number of importers identified in the petitions), the diversity of sizes and applications of the product at issue (making it difficult to identify relevant importers by business line or average unit value on imports), and the shifting definition of the subject merchandise itself.

PREVIOUS AND RELATED INVESTIGATIONS

IMTDCs have not been the subject of any prior antidumping or countervailing duty investigations in the United States.

NATURE AND EXTENT OF SUBSIDIES AND SALES AT LTFV

Subsidies

On October 28, 2016, Commerce published a notice in the *Federal Register* of its final determination of countervailable subsidies for producers and exporters of IMTDCs from China.[20] Commerce selected Powermach Import & Export Co., Ltd. (Sichuan) ("Powermach") and NOK (Wuxi) Vibration Control China Co. Ltd. ("NOK Wuxi") as mandatory respondents. The period of Commerce's investigation was January 1, 2014, through December 31, 2014.

[20] *Countervailing Duty Investigation of Certain Iron Mechanical Transfer Drive Components from the People's Republic of China: Final Affirmative Determination*, 81 FR 75037, October 28, 2016.

In its final determination, Commerce found the following programs to be countervailable and used by Powermach:[21]

1. Policy Loans to the IMTDC Industry
2. Provision of Inputs (pig iron, ferrous scrap, electricity, and land-use rights in Jiangsu and Sichuan provinces) for less than adequate remuneration ("LTAR")
3. Import Tariff and VAT Exemptions for Foreign-Invested Enterprises ("FIEs") and Certain Domestic Enterprises Using Imported Equipment in Encouraged Industries
4. Preferential Tax Rate for Companies in the Western Development Area
5. Reported Grants

In its final determinations, Commerce found the following programs to be not used by, or not to confer a measurable benefit to, Powermach:[22]

1. Treasury Bond Loans or Grants
2. Preferential Loans for Key Projects and Technologies
3. Loans and Interest Subsidies Provided Pursuant to the Northeast Revitalization Program
4. Foreign Trade Development Fund Grants
5. Export Assistance Grants
6. Export Interest Subsidies
7. Subsidies for Development of "Famous Brands" and China World Top Brands
8. Sub-Central Government Subsidies for Development of Famous Brands and China World Top Brands
9. Funds for Outward Expansion of Industries in Guangdong Province
10. Provincial Fund for Fiscal and Innovation Technologies
11. State Special Fund for Promoting Key Industries and Innovation Technologies
12. Shandong Province's Special Fund for the Establishment of Key Enterprise Technology Centers
13. Grants for Antidumping Investigations
14. Shandong Province's Award Fund for Industrialization of Key Energy-Saving Technology
15. Shandong Province's Environmental Protection Industry Research and Development Funds
16. Waste Water Treatment Subsidies
17. Funds of Guangdong Province to Support the Adoption of E-Commerce by Foreign Trade Enterprises

[21] *Issues and Decision Memorandum for the Final Determination in the Countervailing Duty Investigation of Certain Iron Mechanical Transfer Drive Components from the People's Republic of China,* October 21, 2016, pp. 8-10.

[22] *Ibid.*, p. 10.

18. Technology to Improve Trade Research and Development Fund
19. Provision of Water for LTAR
20. Provision of Land to State Owned Enterprises ("SOEs") for LTAR
21. Income Tax Reductions under Article 28 of the Enterprise Income Tax Law ("EITL")
22. Tax Offsets for Research and Development under the EITL
23. Income Tax Reductions for Export-Oriented FIEs
24. Income Tax Benefits for FIEs Based on Geographic Locations
25. Local Income Tax Exemption and Reduction Programs for "Productive" FIEs
26. Tax Offsets for Research and Development by FIEs
27. Tax Refunds for Reinvestment of FIE Profits in Export-Oriented Enterprises
28. Preferential Tax Programs for FIEs Recognized as High or New Technology Enterprises
29. Preferential Income Tax Policy for Enterprises in the Northeast Region
30. Forgiveness of Tax Arrears For Enterprises Located in the Old Industrial Bases of Northeast China
31. Value Added Tax ("VAT") Rebate Exemptions on FIE Purchases of Chinese-Made Equipment
32. VAT and Tariff Exemptions for Purchases of Fixed Assets Under the Foreign Trade Development Fund Program
33. Income Tax Credits for Domestically Owned Companies Purchasing Domestically Produced Equipment

Table I-1 presents Commerce's final determination of subsidization of large-diameter IMTDCs from China.

Table I-1
IMTDCs: Commerce's final subsidy determination with respect to imports from China

Company	Final countervailable subsidy margin (percent)
Powermach Import & Export Co., Ltd. (Sichuan), Sichuan Dawn Precision Technology Co., Ltd., Sichuan Dawn Foundry Co. Ltd., and Powermach Machinery Co., Ltd.	33.26
NOK (Wuxi) Vibration Control China Co., Ltd., and Wuxi NOK - Freudenberg Oil Seal Co., Ltd.; Changzhou Baoxin Metallurgy Equipment Manufacturing Co. Ltd.; Changzhou Changjiang Gear Co., Ltd.; Changzhou Gangyou Lifting Equipment Co., Ltd.; Changzhou Juling Foundry Co., Ltd.; Changzhou Liangjiu Mechanical Manufacturing Co Ltd.; Changzhou New Century Sprocket Group Company; Changzhou Xiangjin Precision Machinery Co., Ltd.; FIT Bearings; Fuzhou Minyue Mechanical & Electrical Co., Ltd.; Hangzhou Chinabase Machinery Co., Ltd.; Hangzhou Ever Power Transmission Group; Hangzhou Vision Chain Transmission Co., Ltd.; Hangzhou Xingda Machinery Co., Ltd.; Henan Xinda International Trading Co., Ltd.; Henan Zhiyuan Machinery Sprocket Co. Ltd.; Jiangsu Songlin Automobile Parts Co., Ltd.; Martin Sprocket & Gear (Changzhou) Co., Ltd.; Ningbo Blue Machines Co., Ltd.; Ningbo Fulong Synchronous Belt Co., Ltd.; Ningbo Royu Machinery Co., Ltd.; Praxair Surface Technologies; Qingdao Dazheng Jin Hao International Trade Co., Ltd.; Quanzhou Licheng Xintang Automobile Parts Co., Ltd. ("XTP Auto Parts") Shangyu Shengtai Machinery Co., Ltd.; Shenzhen Derui Sourcing Co., Ltd.; Shengzhou Shuangdong Machinery Co., Ltd.; Shengzhou Xinglong Machinery; Sichuan Reach Jiayuan Machinery Co. Ltd.; Tran-Auto Industries Co. Ltd.; Ubet Machinery[1]	163.46
All others	33.26

[1] Non-cooperative companies to which an adverse facts available rate was applied.

Source: 81 FR 75037, October 28, 2016.

Sales at LTFV

On October 28, 2016, Commerce published notices in the *Federal Register* of its final determinations of sales at LTFV with respect to imports of large-diameter IMTDCs from Canada[23] and China.[24] Tables I-2 and I-3 present Commerce's dumping margins with respect to imports of IMTDCs from Canada and China.

Table I-2
IMTDCs: Commerce's final weighted-average LTFV margins with respect to imports from Canada

Manufacturer/exporter	Final dumping margin (percent)
Baldor Electric Company Canada[1]	191.34
All others	100.47

[1] Non-cooperative company to which an adverse facts available rate was applied.

Source: 81 FR 75039, October 28, 2016.

[23] *Certain Iron Mechanical Transfer Drive Components from Canada: Final Affirmative Determination of Sales at Less Than Fair Value*, 81 FR 75039, October 28, 2016.

[24] *Certain Iron Mechanical Transfer Drive Components from the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*, 81 FR 75032, October 28, 2016.

Table I-3
IMTDCs: Commerce's final weighted-average LTFV margins with respect to imports from China

Exporter	Producer	Final dumping margin (percent)
Powermach Import & Export Co., Ltd. (Sichuan) / Sichuan Dawn Precision Technology Co., Ltd. / Sichuan Dawn Foundry Co., Ltd. / Powermach Co., Ltd.	Powermach Import & Export Co., Ltd. (Sichuan) / Sichuan Dawn Precision Technology Co., Ltd. / Sichuan Dawn Foundry Co., Ltd. / Powermach Co., Ltd.	13.64
Fuqing Jiacheng Trading Corporation Limited	Fuzhou Min Yue Mechanical & Electrical Co., Ltd.	13.64
Haiyang Jingweida Gearing Co., Ltd.	Haiyang Jingweida Gearing Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Shijiazhuang CAPT Power Transmission Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Shanghai CPT Machinery Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Yueqing Bethel Shaft Collar Manufacturing Co., Ltd	13.64
Hangzhou Powertrans Co., Ltd.	Kezheng (Fuzhou) Mechanical & Electrical Manufacture Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Handan Hengfa Transmission Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Shijiazhuang Lihua Mechanical Manufacturing Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Xingtai Shengjia Machinery and Equipment Factory	13.64
Hangzhou Powertrans Co., Ltd.	Shanghai Keli Machinery Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Jiangsu Zhengya Technology Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Taizhou Feiyang Metal Spinning Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Taizhou Pengxun Machinery Manufacturing Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Guangde Ronghua Machinery Manufacturing Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Qiuxian Hengxin Machinery Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Reach Machinery Enterprise	13.64
Hangzhou Powertrans Co., Ltd.	Chengdu Novo Machinery Co., Ltd.	13.64
Hangzhou Powertrans Co., Ltd.	Chengdu Leno Machinery Co., Ltd.	13.64
Shijiazhuang CAPT Power Transmission Co., Ltd.	Shijiazhuang CAPT Power Transmission Co., Ltd.	13.64
Xinguang Technology Co. Ltd of Sichuan Province	Sichuan Dawn Precision Technology Co., Ltd.	13.64
PRC-wide entity		401.68

Source: 81 FR 75032, October 28, 2016.

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of these investigations in its final determinations as follows:

> *The products covered by this investigation are iron mechanical transfer drive components, whether finished or unfinished (i.e., blanks or castings). Subject iron mechanical transfer drive components are in the form of wheels or cylinders with a center bore hole that may have one or more grooves or teeth in their outer circumference that guide or mesh with a flat or ribbed belt or like device and are often referred to as sheaves, pulleys, flywheels, flat pulleys, idlers, conveyer pulleys, synchronous sheaves, and timing pulleys. The products covered by this investigation also include bushings, which are iron mechanical transfer drive components in the form of a cylinder and which fit into the bore holes of other mechanical transfer drive components to lock them into drive shafts by means of elements such as teeth, bolts, or screws.*
>
> *Iron mechanical transfer drive components subject to this investigation are those not less than 4.00 inches (101 mm) in the maximum nominal outer diameter.*
>
> *Unfinished iron mechanical transfer drive components (i.e., blanks or castings) possess the approximate shape of the finished iron mechanical transfer drive component and have not yet been machined to final specification after the initial casting, forging or like operations. These machining processes may include cutting, punching, notching, boring, threading, mitering, or chamfering.*
>
> *Subject merchandise includes iron mechanical transfer drive components as defined above that have been finished or machined in a third country, including but not limited to finishing/machining processes such as cutting, punching, notching, boring, threading, mitering, or chamfering, or any other processing that would not otherwise remove the merchandise from the scope of the investigation if performed in the country of manufacture of the iron mechanical transfer drive components.*
>
> *Subject iron mechanical transfer drive components are covered by the scope of the investigation regardless of width, design, or iron type (e.g., gray, white, or ductile iron). Subject iron mechanical transfer drive components are covered by the scope of the investigation regardless of whether they have non-iron attachments or parts and regardless of*

whether they are entered with other mechanical transfer drive components or as part of a mechanical transfer drive assembly (which typically includes one or more of the iron mechanical transfer drive components identified above, and which may also include other parts such as a belt, coupling and/or shaft). When entered as a mechanical transfer drive assembly, only the iron components that meet the physical description of covered merchandise are covered merchandise, not the other components in the mechanical transfer drive assembly (e.g., belt, coupling, shaft). However, the scope excludes flywheels with a ring gear permanently attached onto the outer diameter. A ring gear is a steel ring with convex external teeth cut or machined into the outer diameter, and where the diameter of the ring exceeds 200 mm and doesn't exceed 2,244.3 mm.

For purposes of this investigation, a covered product is of "iron" where the article has a carbon content of 1.7 percent by weight or above, regardless of the presence and amount of additional alloying elements.

Excluded from the scope are finished torsional vibration dampers (TVDs). A finished TVD is an engine component composed of three separate components: an inner ring, a rubber ring and an outer ring. The inner ring is an iron wheel or cylinder with a bore hole to fit a crank shaft which forms a seal to prevent leakage of oil from the engine. The rubber ring is a {damping} medium between the inner and outer rings that effectively reduces the torsional vibration. The outer ring, which may be made of materials other than iron, may or may not have grooves in its outer circumference. To constitute a finished excluded TVD, the product must be composed of each of the three parts identified above and the three parts must be permanently affixed to one another such that both the inner ring and the outer ring are permanently affixed to the rubber ring. A finished TVD is excluded only if it meets the physical description provided above; merchandise that otherwise meets the description of the scope and does not satisfy the physical description of excluded finished TVDs above is still covered by the scope of the investigation regardless of end use or identification as a TVD.

Also excluded from the scope are certain TVD inner rings. To constitute an excluded TVD inner ring, the product must have each of the following characteristics: (1) a single continuous curve forming a protrusion or indentation on outer surface, also known as a sine lock, with a height or

depth not less than 1.5 millimeters and not exceeding 4.0 millimeters and with a width of at least 10 millimeters as measured across the sine lock from one edge of the curve to the other;[25] *(2) a face width of the outer diameter of greater than or equal to 20 millimeters but less than or equal to 80 millimeters; (3) an outside diameter greater than or equal to 101 millimeters but less than or equal to 300 millimeters; and (4) a weight not exceeding 7 kilograms. A TVD inner ring is excluded only if it meets the physical description provided above; merchandise that otherwise meets the description of the scope and does not satisfy the physical description of excluded TVD inner rings is still covered by the scope of this investigation regardless of end use or identification as a TVD inner ring.*

The scope also excludes light-duty, fixed-pitch, non-synchronous sheaves ("excludable LDFPN sheaves") with each of the following characteristics: Made from grey iron designated as ASTM (North American specification) Grade 30 or lower, GB/T (Chinese specification) Grade HT200 or lower, DIN (German specification) GG 20 or lower, or EN (European specification) EN–GJL 200 or lower; having no more than two grooves; having a maximum face width of no more than 1.75 inches, where the face width is the width of the part at its outside diameter; having a maximum outside diameter of not more than 18.75 inches; and having no teeth on the outside or datum diameter. Excludable LDFPN sheaves must also either have a maximum straight bore size of 1.6875 inches with a maximum hub diameter of 2.875 inches; or else have a tapered bore measuring 1.625 inches at the large end, a maximum hub diameter of 3.50 inches, a length through tapered bore of 1.0 inches, exactly two tapped holes that are 180 degrees apart, and a 2.0-inch bolt circle on the face of the hub. Excludable LDFPN sheaves more than 6.75 inches in outside diameter must also have an arm or spoke construction.[26]

[25] The edges of the sine lock curve are defined as the points where the surface of the inner ring is no longer parallel to the plane formed by the inner surface of the bore hole that attaches the ring to the crankshaft.

[26] An arm or spoke construction is where arms or spokes (typically 3 to 6) connect the outside diameter of the sheave with the hub of the sheave. This is in contrast to a block construction (in which the material between the hub and the outside diameter is solid with a uniform thickness that is the same thickness as the hub of the sheave) or a web construction (in which the material between the hub and the outside diameter is solid but is thinner than at the hub of the sheave).

Further, excludable LDFPN sheaves must have a groove profile as indicated in the table below:

Size (belt profile)	Outside diameter (inches)	Top width range of each groove (inches)	Maximum height (inches)	Angle
MA/AK (A, 3L, 4L)	≤5.45	0.484–0.499	0.531	34°
MA/AK (A, 3L, 4L)	>5.45 but ≤18.75	0.499–0.509	0.531	38°
MB/BK (A, B, 4L, 5L)	≤7.40	0.607–0.618	0.632	34°
MB/BK (A, B, 4L, 5L)	>7.40 but ≤18.75	0.620–0.631	0.635	38°

In addition to the above characteristics, excludable LDFPN sheaves must also have a maximum weight (pounds-per-piece) as follows: For excludable LDFPN sheaves with one groove and an outside diameter of greater than 4.0 inches but less than or equal to 8.0 inches, the maximum weight is 4.7 pounds; for excludable LDFPN sheaves with two grooves and an outside diameter of greater than 4.0 inches but less than or equal to 8.0 inches, the maximum weight is 8.5 pounds; for excludable LDFPN sheaves with one groove and an outside diameter of greater than 8.0 inches but less than or equal to 12.0 inches, the maximum weight is 8.5 pounds; for excludable LDFPN sheaves with two grooves and an outside diameter of greater than 8.0 inches but less than or equal to 12.0 inches, the maximum weight is 15.0 pounds; for excludable LDFPN sheaves with one groove and an outside diameter of greater than 12.0 inches but less than or equal to 15.0 inches, the maximum weight is 13.3 pounds; for excludable LDFPN sheaves with two grooves and an outside diameter of greater than 12.0 inches but less than or equal to 15.0 inches, the maximum weight is 17.5 pounds; for excludable LDFPN sheaves with one groove and an outside diameter of greater than 15.0 inches but less than or equal to 18.75 inches, the maximum weight is 16.5 pounds; and for excludable LDFPN sheaves with two grooves and an outside diameter of greater than 15.0 inches but less than or equal to 18.75 inches, the maximum weight is 26.5 pounds.

The scope also excludes light-duty, variable-pitch, non-synchronous sheaves with each of the following characteristics: Made from grey iron designated as ASTM (North American specification) Grade 30 or lower, GB/T (Chinese specification) Grade HT200 or lower, DIN (German specification) GG 20 or lower, or EN (European specification) EN–GJL 200 or lower; having no more than 2 grooves; having a maximum overall width of less than 2.25 inches with a single groove, or of 3.25 inches or less with two grooves; having a maximum outside diameter of not more than 7.5 inches; having a maximum bore size of 1.625 inches; having either one or two identical, internally-threaded (i.e., with threads on the inside diameter), adjustable (rotating) flange(s) on an externally-threaded

hub (i.e., with threads on the outside diameter) that enable(s) the width (opening) of the groove to be changed; and having no teeth on the outside or datum diameter.

The scope also excludes certain IMTDC bushings. An IMTDC bushing is excluded only if it has a tapered angle of greater than or equal to 10 degrees, where the angle is measured between one outside tapered surface and the directly opposing outside tapered surface.[27]

Tariff treatment

Based upon the scope set forth by Commerce, the merchandise subject to these investigations is imported under the following statistical reporting numbers of the Harmonized Tariff Schedule of the United States ("HTS"): 8483.30.8090, 8483.50.6000, 8483.50.9040, 8483.50.9080, and 8483.90.8080. The scope also identifies HTS statistical reporting number 8483.90.3000, which covers parts of bearing housings and plain shaft bearings, other than parts of flanges, take-up, cartridge, and hanger units. Goods imported under these HTS statistical reporting numbers are dutiable at general duty rates from 2.8 percent to 4.5 percent ad valorem. Covered merchandise may also be imported under the following HTS statistical reporting numbers: 7325.10.0080, 7325.99.1000, 7326.19.0010, 7326.19.0080, 8431.31.0040, 8431.31.0060, 8431.39.0010, 8431.39.0050, 8431.39.0070, 8431.39.0080, and 8483.50.4000. General duty rates on these goods range from free to 5.7 percent ad valorem.[28]

[27] *Certain Iron Mechanical Transfer Drive Components from the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*, 81 FR 75032, October 28, 2016.

[28] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

THE PRODUCT

Description and applications

Characteristics and functions of IMTDCs

IMTDCs are typically gray or ductile iron[29] blanks or castings (if unfinished) or wheels or cylinders (if finished) known as sheaves (also commonly referred to as pulleys) (figure I-1). The subject IMTDCs are those with carbon contents, by weight, of 1.7 percent or above,[30] regardless of the presence and amount of additional alloying elements. IMTDCs also include bushings, which are used to connect the shaft to the sheave. Unfinished IMTDCs (also referred to as blanks or castings) possess the approximate shape of the finished IMTDCs, but have not yet been machined to the final specifications.

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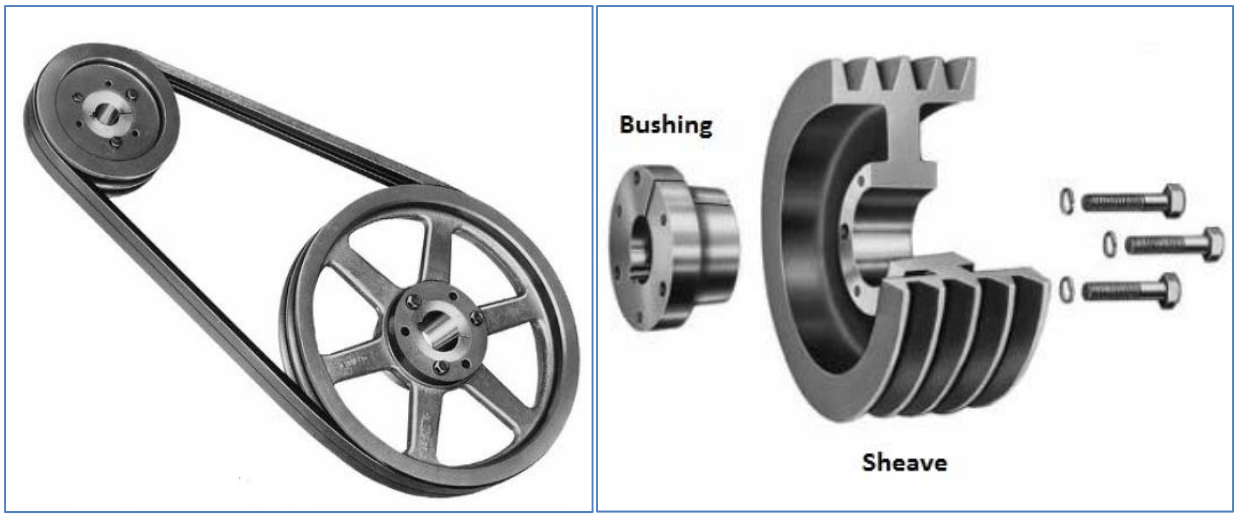
[29] Nonsubject mechanical transfer drive components are produced from other materials, including aluminum, plastic, and steel. They may also be made from powder metals, which are "discrete particles of elemental metals or of mixtures of elemental metals or of alloys." These various metals have different strengths and maximum possible rim speeds for sheaves. For example, a gray iron sheave may have a maximum rim speed of 6,500 to 7,500 feet per minute (fpm) (depending on the class of material), a ductile iron sheave 8,000 to 9,000 fpm, a steel sheave 9,000 to 11,000 fpm, a powder metal (sintered steel) sheave 7,000 to 9,000 fpm, and aluminum 11,000 to 15,000 fpm. Conference transcript, p. 19 (McCartney); Gates Corp., *Metals Technical Guide*, pp. 1-5, https://www.gates.com/~/media/files/gates/industrial/power-transmission/manuals/metals-technical-guide.pdf (accessed November 21, 2015); and Metal Powder Industries Federation Website, https://www.mpif.org/AboutMPIF/mppa.asp?linkid=31 (accessed November 28, 2015).

[30] Iron is typically defined as having a carbon content of more than 2 percent. Atlas Foundry Company Website, http://www.atlasfdry.com/cast-irons.htm (accessed November 27, 2015); and Engineers Handbook Website, http://www.engineershandbook.com/Materials/castiron.htm (accessed November 27, 2015). Steel has a carbon content of less than 2 percent, with most commercially available steel less than 1 percent. Atlas Foundry Company Website, http://www.atlasfdry.com/cast-irons.htm (accessed November 27, 2015). The five types of iron include gray iron, ductile iron, malleable iron, compacted graphite iron (CGI) and white iron. There can be overlap in the chemical composition of these irons, and they are defined by their structure. Gray iron, for example, "contains a large amount of carbon in the form of gray graphite flakes," while in ductile iron "the graphite is in the shape of spheres or nodules." Gray, ductile, and white iron with more than 3 percent of an alloy are often referred to as high-alloy iron. Gates Corp., Metals Technical Guide, pp. 1-5, https://www.gates.com/~/media/files/gates/industrial/power-transmission/manuals/metals-technical-guide.pdf (accessed November 21, 2015); Atlas Foundry Company Website, http://www.atlasfdry.com/cast-irons.htm (accessed November 27, 2015); and Engineers Handbook Website, http://www.engineershandbook.com/Materials/castiron.htm (accessed November 27, 2015).

Figure I-1
IMTDCs: Classic V-belt drive (left) and V-belt sheave cross-section (right)



Source: TBW, "Belt Drives, Sheaves, and Couplings," pp. B2-1–2.

Most sheaves are connected with belts to transmit power from a shaft operated by a motor or engine to another shaft. The combined belt and sheave are referred to as a belt drive, which is typically defined by the shape of the belt. For sheaves with grooves, the belts fit into the center grooves, though certain types of sheaves have a flat surface without grooves.[31] Sheaves vary in size depending on the application and type of sheave, and may be stock items or may be customized for individual purchasers. Stock classic sheaves, for example, range from less than 5 inches in outer diameter, with a weight of 1 to 2 pounds, to more than 58 inches and 1,500 pounds or more.[32]

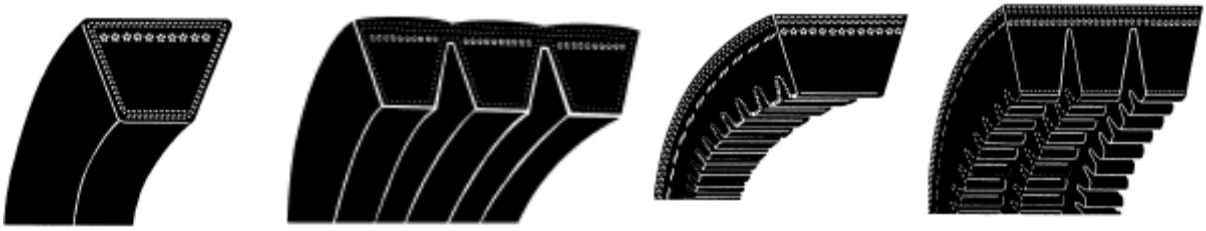
[31] Petitions, pp. 6-8; conference transcript, pp. 41 (Luberda) and 88 (Juergens); hearing transcript, p. 14 (Juergens).

[32] Baldor Maska Product Catalog, February 2014, pp. 78–99; TBW, "Belt Drives, Sheaves, and Couplings," pp. B2-4-12; and conference transcript, p. 78 (McCartney).

V-belt drives

A common type of belt drive is the V-belt drive.[33] The V-belt drive uses a belt shaped like a V that usually fits into shaped grooves in the sheave (figure I-2). This configuration provides advantages in some applications, such as lower bearing loads and longer belt life, as compared to flat pulleys (discussed below). The sheave may have one groove or multiple grooves.[34]

Figure I-2
IMTDCs: Classical V-belt, classical banded V-belt, classical cog V-belt, and classical cog banded V-belts (from left to right)



Source: TBW, "Belt Drives, Sheaves, and Couplings," pp. B2-13.

The main types of V-belt drives are classical, narrow, and light duty. Classical drives are the original V-belt drives used in industry. Narrow V-belt drives were developed later with new materials, such that a thinner belt could carry the same load as a classical V-belt.[35] Light duty V-belt drives are designed for use in applications involving less than 15 horsepower, and do not exceed 18.75 inches in diameter.[36]

[33] Hearing transcript, p. 16 (Juergens).

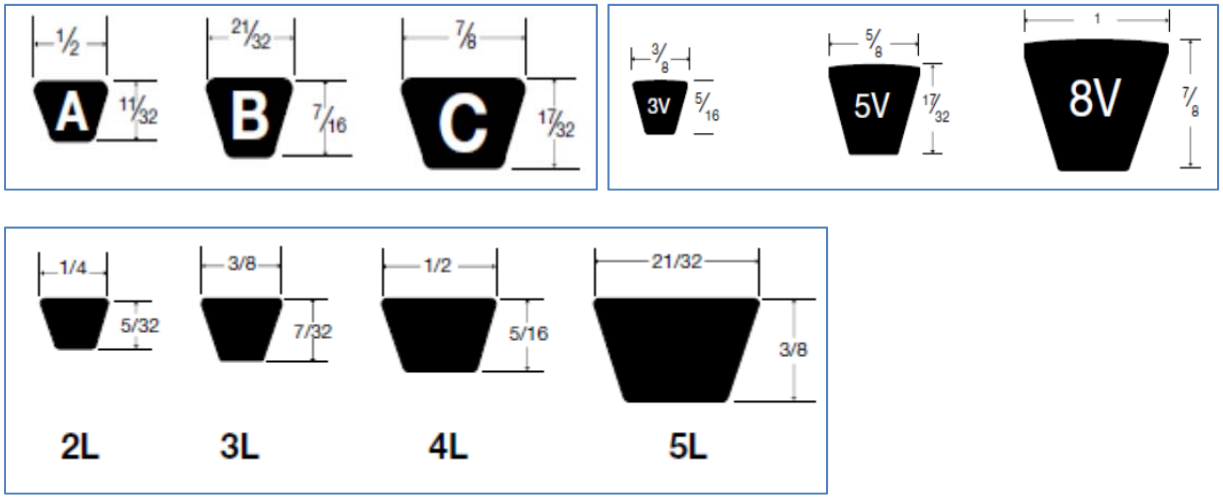
[34] Joseph L. Foszcz, "Basics of Belt Drives," *Plant Engineering*, September 1, 2001, http://www.plantengineering.com/single-article/basics-of-belt-drives/981c1be10d400323db10aa592e4cc7b3.html; Arthur G. Erdman and Raymond Giese, "Belt Drive," Access Science, 2014, http://www.accessscience.com/content/belt-drive/078100; and TBW, "Belt Drives, Sheaves, and Couplings," p. B2-13.

[35] Greg Cober, "Understanding Trade-Offs When Selecting Belted Drive Systems," TBW, p. 2, http://www.altraliterature.com/pdfs/P-7636-TBW.pdf (accessed November 11, 2015).

[36] A light duty sheave uses less material and is lighter than a sheave of the same diameter. Certain light duty sheaves are excluded from the scope of the investigation. Conference transcript, pp. 47-48 (McCartney) and 71-72 (Luberda).

Within these three types of drives, there are a range of belts of standard dimensions designated by a numbering and lettering system (figure I-3). The first number (though not used for classic V-belts) refers to the top width of the V-belt and the letter refers to the type of belt. For narrow V and light duty V-belts, for example, the first number in the belt designation refers to the top width to the nearest one-eighth of an inch. "V" denotes narrow V-belts and "L" denotes light duty.[37] There are also cogged V-belts, which are more expensive but provide advantages such as a higher power capacity and reduced friction and, therefore, heat.[38]

Figure I-3
IMTDCs: Select classic V-belts (top left), narrow V-belts (top right), and light duty v-belts (bottom)



Source: TBW, "Belt Drives, Sheaves, and Couplings," pp. B1-11, B2-13, and B3-9.

[37] This discussion only covers the first part of the coding system as additional numbers and letter may be used to denote other attributes of the belts. TBW, "Belt Drives, Sheaves, and Couplings," pp. B1-11 and B3-8; Gates, "Belt I.D. Chart," May 2012, https://www.gates.com/~/media/files/gates/industrial/power-transmission/chart/gatescorporationbeltidchart.pdf.

[38] Unlike synchronous belt drives, the cogs in the V-belts are not gripped by matching grooves on the sheaves. Greg Cober, "Understanding Trade-Offs When Selecting Belted Drive Systems," TBW, pp. 2-3, http://www.altraliterature.com/pdfs/P-7636-TBW.pdf (accessed November 11, 2015); and TBW, "Belt Drives, Sheaves, and Couplings," pp. B2-13.

Flat pulleys

Flat pulleys are sheaves that do not have grooves and typically use flat belts (figure I-4). Flat belt drives are more efficient than V-belt drives, but have drawbacks such as higher bearing loads and more wear on the belt, as noted above. In many flat belt drives, pulleys are rounded so that the center is slightly raised (or crowned) to improve the belt alignment.[39] In retrofit applications, it is possible that only one sheave in the drive will be replaced with a V-belt sheave (with the other remaining a flat pulley). In these drives, the flat pulley will use a V-belt.[40]

Figure I-4
IMTDCs: Flat pulley

Source: TBW, "Belt Drives, Sheaves, and Couplings," p. B5-1.

[39] Joseph L. Foszcz, "Basics of Belt Drives," *Plant Engineering*, September 1, 2001, http://www.plantengineering.com/single-article/basics-of-belt-drives/981c1be10d400323db10aa592e4cc7b3.html; and TBW, "Belt Drives, Sheaves, and Couplings," pp. B5-5.

[40] TBW, "Belt Drives, Sheaves, and Couplings," p. BEV-8.

Synchronous drives

Synchronous drives, including timing pulleys, use belts with teeth and sheaves with corresponding grooves (figure I-5).[41] Sheaves for synchronous belt drives may also referred to as sprockets.[42] Synchronous drives are typically more expensive than V-belt drives, but offer a number of advantages, including high efficiency, constant speeds, lower bearing loads, and lower operation and maintenance costs. They can also be used in applications, such as those requiring more precise timing, that have not traditionally used belt drives.[43] There have been a number of improvements in synchronous drives over time—including increasing load capacities—and they are the fastest growing portion of the IMTDC market.[44]

Figure I-5
IMTDCs: Synchronous belt drive

Source: TBW, "Belt Drives, Sheaves, and Couplings," p. C1-1.

[41] Hearing transcript, pp. 14, 16 (Juergens).

[42] Hearing transcript, p. 16 (Juergens); conference transcript, p. 142 (Price). Sprockets that are toothed wheels that engage with chains, rather than belts, and gears that are toothed wheels that transfer energy by engaging with other gears are not included in the scope of the investigations.

[43] Synchronous drives are also sometimes referred to as chain belt drives. TBW, "Belt Drives, Sheaves, and Couplings," pp. C1-2-3; and Greg Coper, "Understanding Trade-Offs When Selecting Belted Drive Systems," TBW, pp. 3-4, http://www.altraliterature.com/pdfs/P-7636-TBW.pdf (accessed November 11, 2015).

[44] Conference transcript, p. 79 (McCartney).

Other IMTDCs for power transfer applications

Other types of IMTDCs include variable speed drives[45] and conveyor pulleys. Variable and adjustable drives permit output speed changes by adjusting the diameter of the sheave, which results in a faster or slower speed (figure I-6).[46] Some drives require manual speed adjustment,[47] whereas others can be adjusted while the drive is in motion.[48] Conveyor pulleys, including drum pulleys, are cylindrically shaped pulleys used for moving a conveyor belt.[49]

Figure I-6
IMTDCs: Manually adjustable sheave (left) and cross section of a variable speed sheave (right)

Source: TBW, "Belt Drives, Sheaves, and Couplings," pp. D1-44 (left) and D1-14 (right).

[45] These are sometimes referred to as variable pitch drives, while those that do not allow for speed adjustments are referred to as fixed pitch drives. Regal Power Transmission Solutions, *Belt Drive Monthly*, vol. 29, December 2010, http://www.regalpts.com/PowerTransmissionSolutions/Other/Belt%20Drive%20Monthly's/Form_9406E.pdf.

[46] The term variable speed drive is used here to refer to belt drives, but can also refer to variable frequency drives (VFDs). VFDs vary the frequency and voltage delivered to an AC motor to change the speed of the motor. With VFDs, the motor is often directly connected to, for example, a fan, while with a belt drive system the engine or motor is connected by the belt. VFDs.com Website, http://www.vfds.com/blog/what-is-a-vfd (accessed September 9, 2016).

[47] For example, certain TBW sheaves are adjusted by "loosening the clamping screws and turning a single adjusting screw." TBW, "Belt Drives, Sheaves, and Couplings," pp. D1-44.

[48] TBW, "Belt Drives, Sheaves, and Couplings," p. D1-44.

[49] Martin Sprocket and Gear Website, http://www.martinsprocket.com/products/conveyor-pulleys (accessed November 10, 2015); and Baldor Website, http://www.baldor.com/brands/baldor-dodge/products/conveyor-components/pulleys/drum-pulleys (accessed November 10, 2015).

Flywheels and idler pulleys

While the function of most IMTDCs is to transmit power from one shaft to another, flywheel and idler pulleys do not have a power transmission function. Flywheels are rotating mechanical devices that are used to store rotational energy (figure I-7). The rotational momentum of the flywheel is used to provide continuous energy in applications where energy is variable, such as with a reciprocating (piston) engine.[50] Flywheels and sheaves may be produced separately so that they can be placed on different parts of the shaft, or may be produced as a part of the same unit (known as a flywheel sheave).[51] Flywheel sheaves can be large in size. For example, one project during the period involved flywheel sheaves up to 62 inches in diameter and up to 7,000 pounds.[52]

Figure I-7
IMTDCs: Flywheel

Source: TBW, "Belt Drives, Sheaves, and Couplings," p. B5-5.

Flywheels with a ring gear permanently attached onto the outer diameter are excluded from the scope. A ring gear is a steel ring with convex external teeth cut or machined into the outer diameter that engages with another gear.[53]

[50] Conference transcript, pp. 57–58 (McCartney) and 138–139 (Christenson); TBW, "Belt Drives, Sheaves, and Couplings," p. B1-70; and Baldor's postconference brief, exh. 1, pp . 17–18.

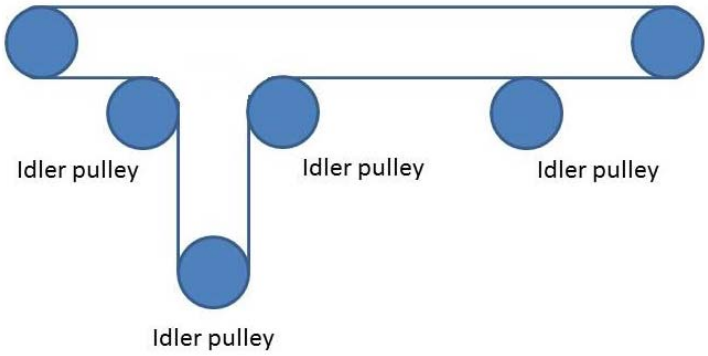
[51] Conference transcript, p. 139 (Christenson).

[52] TBW, "TB Wood's & Nuttall Gear Team up to provide Custom Sheaves and Shaft Assemblies for One World Trade Center Express Elevators," January 14, 2014, http://www.tbwoods.com/newsroom/2014/01/One-World-Trade-Center-Elevators.

[53] Engineering Dictionary Website, http://www.engineering-dictionary.org/Flywheel_ring_gear (accessed October 31, 2016).

Idler pulleys are placed inside or outside of the drive, and are used to increase tension, provide proper alignment, reduce the extent to which the belt can whip, and redirect the belts (figure I-8). They are not used to drive the pulley system. Idler pulleys are used in a range of applications, including with conveyor belts.[54]

Figure I-8
IMTDCs: Schematic of a conveyor belt with idler pulleys (right)



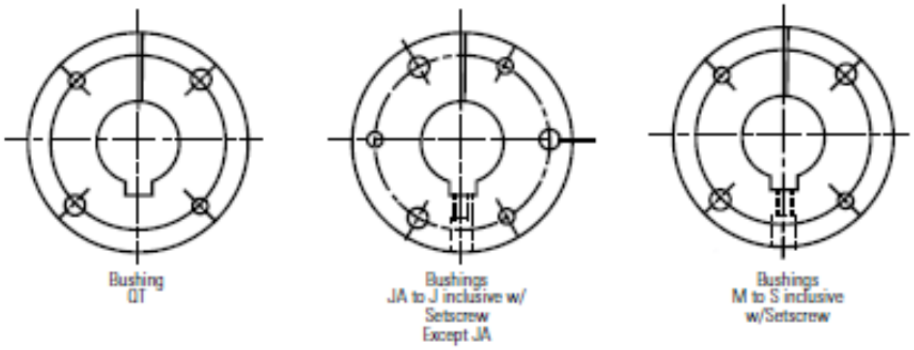
Source: Diagram developed based on information in PCI, Conveyor Pulley Selection Guide, November 2014, p. 4, http://www.pcimfg.com/wp-content/uploads/2014/11/PCI_Pulley_Selection_Guide_2014.pdf.

[54] PCI, Conveyor Pulley Selection Guide, November 2014, p. 4, http://www.pcimfg.com/wp-content/uploads/2014/11/PCI_Pulley_Selection_Guide_2014.pdf; and TBW, "Belt Drives, Sheaves, and Couplings," p. BEV-7.

Bushings

Bushings are used to connect the shaft to the sheave.[55] Standard bushing sizes and configurations are set by the Mechanical Power Transmission Association ("MPTA"). There are three main bushing types, based on the number of screw holes in the bushing (figure I-9). Standard diameters range from 2.0 inches to 17.8 inches. Standard bushing lengths are 0.7 to 15.7 inches. Some bushings are tapered, with the diameter on one end wider than the diameter on the other end. MPTA standard tapered bushings have a nominal tapered angle of 8 degrees and large end diameters ranging from 1.4 to 17.2 inches. In addition to these bushing types, there are a range of other bushings on the market, such as those in metric dimensions and flangeless bushings.[56]

Figure I-9
IMTDCs: Three standard types of bushings



Source: TBW, "Belt Drives, Sheaves, and Couplings," p. A1-3.

[55] Hearing transcript, p. 16 (Juergens).

[56] MPTA, "Quick Detachable Bushing & Mating Hub Standard," MPTA-B6i-2010, 2010, http://www.mpta.org/MPTAPubs.htm; MPTA, "Taper-Lock Bushing & Mating Hub Standard," MPTA-B9i-2013, 2013, pp. 4–6; and TBW, "Belt Drives, Sheaves, and Couplings," pp. A1-3–A2-5.

Uses for IMTDCs

Testimony by the petitioner at the staff conference indicated that unfinished IMTDCs are primarily used in the production of finished IMTDCs.[57] They may be finished at a location adjacent to the foundry (as discussed below), finished at a different location by the same company, or sold to a company that finishes the products.[58]

Most finished IMTDCs are used to transmit power from a motor or engine to products such as fans, conveyors, compressors, pumps, and mixers (figure I-10).[59] V-belt drives, synchronous drives, and flat pulleys are all used to perform this function where the speed of the drive does not need to be adjusted. Where speed adjustments are needed, variable and adjustable speed drives are used. Conveyor pulleys are used to drive a conveyor belt. In addition, flywheel and idler pulleys can be used in a belt drive system, though their primary function differs from that of other IMTDCs. Flywheels are used to store rotational energy, as noted above, while idler pulleys are used to increase tension, provide proper alignment, reduce the extent to which the belt can whip, and redirect the belts.[60]

Figure I-10
IMTDCs: Synchronous belt drive connecting a motor to a vacuum pump

Source: TBW, "TB Wood's Custom QT Power Chain II Synchronous Drive for Paper Mill Vacuum Pump," December 18, 2014, http://www.tbwoods.com/newsroom/2014/12/Custom-QT-Power-Chain-II-for-Paper-Mill-Vacuum-Pump.

[57] Conference transcript, p. 85 (McCartney).
[58] Conference transcript, pp. 10, 30 (Luberda) and p. 101 (Crist).
[59] Conference transcript, p. 92 (Coder); hearing transcript, pp. 13-14 (Juergens).
[60] Certain flywheels are excluded from the scope as noted above. Conference transcript, pp. 57-58 (McCartney) and 138–139 (Christenson); TBW, "Belt Drives, Sheaves, and Couplings," p. B1-70; Baldor's postconference brief, exh. 1, pp . 17-18; PCI, Conveyor Pulley Selection Guide, November 2014, p. 4, http://www.pcimfg.com/wp-content/uploads/2014/11/PCI_Pulley_Selection_Guide_2014.pdf; and TBW, "Belt Drives, Sheaves, and Couplings," p. BEV-7.

Markets for IMTDCs

As noted above, unfinished IMTDCs are primarily used in the production of finished IMTDCs. The market for unfinished IMTDCs, therefore, is primarily comprised of companies that finish IMTDCs.[61]

Finished IMTDCs are typically sold to either OEMs that produce machinery, or to distributors.[63] Distributors typically sell IMTDCs to small OEMs and into the replacement parts market. IMTDC users need to replace belts more frequently, but occasionally also need to replace sheaves that have worn out.[64]

Finished IMTDCs are used in a range of applications, such as mining, oilfield, material handling, agricultural, diesel engine, forestry and logging, construction, manufacturing, other industrial, and heating, ventilating, and air conditioning (HVAC) applications.[65] In material handling applications, for example, conveyor pulleys are used in applications such as mining, product packaging, food processing, power generation, and recycling (figures I-11 and I-12).[66]

[61] Conference transcript, pp. 10, 30 (Luberda) and p. 101 (Crist). See Part III regarding reported sales of unfinished IMTDCs directly to original equipment manufacturers ("OEMs").

[63] Hearing transcript, p. 80 (Christenson).

[64] TBW stated that replacement parts account for close to 40 percent of its business. Hearing transcript, pp. 90-91 (Christenson).

[65] Both small-diameter and large-diameter IMTDCs are used in used in a range of applications, some of which overlap. Petitions, p. 6; Martin Sprocket and Gear Website, http://www.martinsprocket.com/products/conveyor-pulleys (accessed November 10, 2015); conference transcript, p. 79 (McCartney); hearing transcript, p. 55 (Christenson); Baldor Maska, "HVAC Product Catalog" December 2013; Baldor Website, http://www.baldor.com/brands/baldor-maska/products/mechanical-drive-components/sheaves/step-pulleys (accessed November 28, 2015); and TBW, "Premium Belt Drive System for Tough Applications," August 2014, p. 2.

[66] Martin Sprocket and Gear Website, http://www.martinsprocket.com/products/conveyor-pulleys (accessed November 10, 2015); and Baldor Website, http://www.baldor.com/brands/baldor-dodge/products/conveyor-components/pulleys/drum-pulleys (accessed November 10, 2015).

Figure I-11

IMTDCs: Material handling applications

Source: TBW, “Premium V-Belt Drives,” November 2015, p. TOC-1.

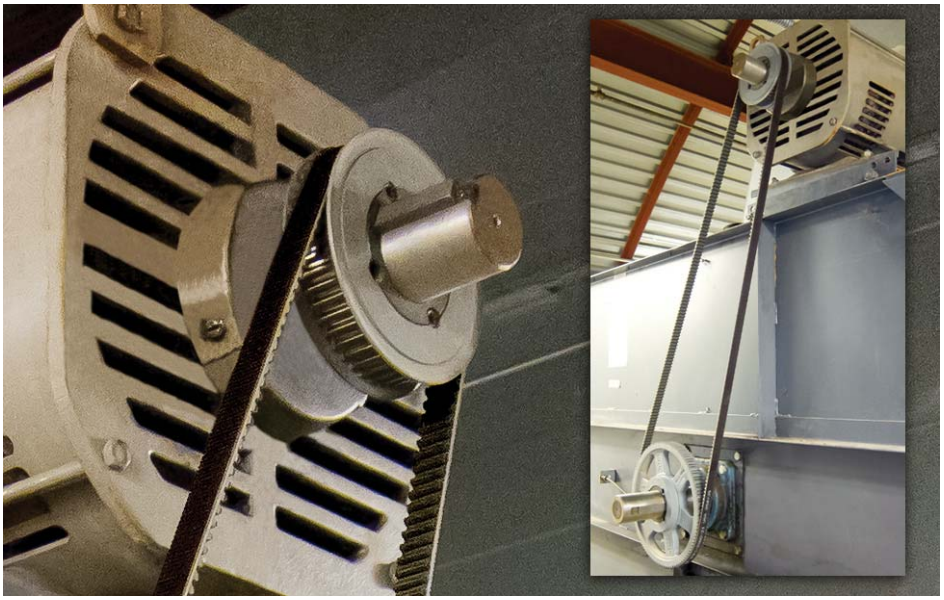
Figure I-12

IMTDCs: Bottling applications

Source: TBW, “Synchronous Drives,” November 2015, p. cover; TBW, “V-Belt Drives,” April 2015, p. cover.

The oil industry is a significant user of large sheaves in upstream applications such as drilling.[67] In the agricultural sector, sheaves and belt drives are used in equipment ranging from combines and harvesters to conveyor belts.[68] In HVAC applications IMTDCs are often used to transmit power from a motor to a fan (figure I-13).[69]

Figure I-13
IMTDCs: Synchronous drive in an HVAC application



Source: TBW, "TB Wood's QT Power Chain II Belt Drive System For HVAC Exhaust Fan," April 8, 2013, http://www.tbwoods.com/newsroom/2013/04/QT-Power-Chain-II-for-HVAC-Exhaust-Fan.

[67] Conference transcript, p. 79–80 (McCartney and Moore) and p. 93 (Coder); and petitioner's postconference brief, exh. 1, p. 55.

[68] Altra Industrial Motion, "Power Transmission Solutions for the Farm and Agriculture Market," p. 7, http://www.altraliterature.com/pdfs/P-7362-C.pdf (accessed November 11, 2015); hearing transcript, p. 55 (Christenson).

[69] Though belt drives have traditionally been used in large fans, direct drive fan set-ups—in which the motor connects directly to the fan and variable frequency drives (VFDs) are used to control the speed of the motor—are increasingly used in this application. Trane Engineers Newsletter, "Direct Drive Plenum Fans and Fan Arrays," vol. 31, no. 1 (2010), https://www.trane.com/content/dam/Trane/Commercial/global/products-systems/education-training/engineers-newsletters/acoustics/admapn036en_0310.pdf; Conference transcript, p. 79 (McCartney); and Baldor Maska Product Catalog, February 2014, p. 58.

Flywheels are commonly used in applications where energy is variable, such as with a reciprocating (piston) engine.[70] The oil industry is one example of where flywheels are used. The flywheel is used with a pump jack, for example, and is counterbalanced on the other end of the shaft from the sheave.[71] Another application is in flywheel sheaves used in elevators.[72]

Manufacturing processes

Transformation process for IMTDCs

The subject IMTDCs are manufactured in five steps: (1) design, (2) iron melting, (3) mold making, (4) casting, and (5) finishing (also known as machining).[73] Melting, mold making, and casting normally take place at a foundry, and these production steps combined are collectively referred to as "casting." Design and finishing may be performed at the foundry, but these steps may also take place at a separate plant. The manufacturing processes and technologies used by foreign producers are largely similar to those of domestic producers.[74]

Design

Sheaves and bushings are designed by engineers using computer simulations of metal flow and solidification.[75] While customers usually choose from an extensive catalog of sheaves and corresponding bushings, some applications require customized sheaves that meet specific size, strength, speed or other requirements.[76] Customers may provide the designs themselves, or design engineers at the foundry may provide design consultation and services.[77]

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[70] As noted above, certain flywheels are excluded from the scope of the investigations.

[71] Conference transcript, pp. 57-58 (McCartney).

[72] TBW, "TB Wood's & Nuttall Gear Team up to provide Custom Sheaves and Shaft Assemblies for One World Trade Center Express Elevators," January 14, 2014, http://www.tbwoods.com/newsroom/2014/01/One-World-Trade-Center-Elevators.

[73] Hearing transcript, p. 13-17 (Juergens); and U.S. International Trade Commission, "Foundry Products: Competitive Conditions in the U.S. Market," Investigation No. 332-460, May 2005, pp. 2-7 to 2-8.

[74] Conference transcript, p. 150 (Crist).

[75] USITC, "Foundry Products," p. 2-7.

[76] ***.

[77] USITC, "Foundry Products," p. 2-7.

Iron melting

The melting takes place at the foundry using a variety of raw materials, such as pig iron, recycled materials (gates, risers, and scrap castings), and scrap steel (figure I-14).[78]

Figure I-14
IMTDCs: Molten iron raw materials -- pig iron (left), rail steel (middle), and scrap castings (right)

Source: TBW, "V-Belt, Synchronous, and Variable Speed Drives," p. 5.

[78] Hearing transcript, p. 14 (Juergens); and USITC, "Foundry Products," p. 2-7.

Each furnace is specific to the iron type, such as gray iron or ductile iron (figure I-15). A combination of raw materials ("the recipe") is weighed and processed through a preheater to evaporate moisture and then placed gradually in the furnace to melt at a high temperature.[79] White iron is not commonly used because it is brittle and not easily machined.[80] The chemistry of the melting material inside the furnace (called the "charge") is measured *** to ensure a desired composition of iron, carbon, silicon, and other content specific to the iron type.[81] ***.[82] Once the desired chemistry and temperature is reached, the molten iron is ready to be poured.

Figure I-15
IMTDCs: Iron melting furnace at TBW's facility in Chambersburg

Source: TBW, "V-Belt, Synchronous, and Variable Speed Drives," p. 6.

Mold making

The mold making process begins with making patterns mounted on flasks. Patterns determine the contours and shapes of the sand mold through which molten metal will flow to fill the cavity of the finished mold (figure I-16).[83] Patterns are made of metal and wood plates. Patterns may be made at the foundry or made at a separate facility.[84]

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[79] TBW, "V-Belt, Synchronous, and Variable Speed Drives," p. 6; Hearing transcript, p. 14; and ***.
[80] Machine design, "Cast iron," http://machinedesign.com/basics-design/cast-iron (accessed December 3, 2015).
[81] TBW, "V-Belt, Synchronous, and Variable Speed Drives," p. 6; and ***.
[82] ***.
[83] Hearing transcript, p. 15 (Juergens); and USITC, "Foundry Products," 2-7.
[84] USITC, "Foundry Products," p. 2-7.

Figure I-16

IMTDCs: Upside-down flask with molding patterns (left) and two molding halves in flasks (right)

Source: TBW, "V-Belt, Synchronous, and Variable Speed Drives," p. 7.

Sand is filled into the patterned flask, pressed, and hardened by a heat or chemical treatment. Different types of sands are used for specific iron types.[85] Sand that is hardened primarily through chemical treatment (referred to as "chemical sand" or "no bake sand") is used to make ductile iron castings; sand that is hardened by pressure treatment (referred to as "green sand") is used to make gray iron castings.[86]

***.[87] After the sand hardens sufficiently, the molds are removed from the flasks. Two halves of the molds are usually hardened separately (figure I-16), and then placed together to make a complete mold.[88]

Casting: pouring, cooling, and cleaning

Castings, otherwise referred to as "blanks," are made by pouring molten iron into the sand mold using pouring ladles (figure I-17). The molten iron within the sand mold is left to cool and harden. After cooling and hardening, the sand mold is broken away, and the sand is recycled. Limited processing is performed on the molds to remove excess materials, such as sand, gate connections, and risers (figure I-18).[89] Resulting scrap materials are returned to the melting furnace to be recycled.

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[85] TBW's Foundry Capabilities, http://www.tbwoods.com/Products_Mechanical_Castings.asp (accessed December 3, 2015).

[86] The American Foundry Society, "Guide to Casting and Molding Processes", p. 1-3; and ***.

[87] ***.

[88] Conference transcript, p. 89 (Juergens); TBW, "Description of the Manufacturing Process," p. 4.

[89] USITC, "Foundry Products," p. 2-8; Hearing transcript, p. 15 (Juergens).

Figure I-17

IMTDCs: Casting process: pouring ladle deposits molten iron to sand molding (left), and cooled to harden (right)

Source: TBW, "V-Belt, Synchronous, and Variable Speed Drives," p. 10.

Figure I-18

IMTDCs: Excess material is ground away to complete the casting process

Source: TBW, "V-Belt, Synchronous, and Variable Speed Drives," p. 11.

Finishing

Castings undergo a finishing process to achieve their final specified size and characteristics (figures I-19 and I-20). Grooves or teeth are cut into the casting's outer circumference using a variety of machines.[90] Other machining processes include drilling holes in sheaves and bushings, balancing large sheaves, broaching, and painting.[91] The various machining processes can be completely automated, or can utilize a combination of machines and labor. The finishing process may take place at a facility adjacent to the foundry, or may take place at a separate plant.[92]

Figure I-19
IMTDCs: Unfinished castings: V-belt sheave (left), synchronous sheave (middle), bushing (right)

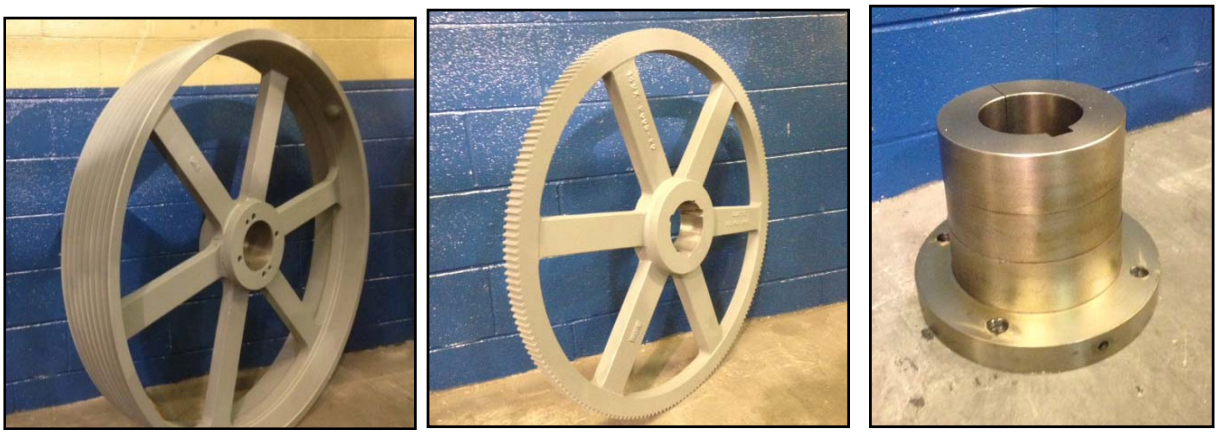
Source: TBW, "V-Belt, Synchronous, and Variable Speed Drives," p. 12.

[90] Examples of automated machines can be found at JK Pulley Company's *website* http://www.jkpulley.com/high-production-robotic-machining-services.html (accessed December 3, 2015), and TBW also lists machining capabilities on its website. http://www.tbwoods.com/Products_Mechanical_Castings.asp (accessed December 3, 2015); Hearing transcript, p. 16; and ***.

[91] TBW website, http://www.tbwoods.com/Products_Mechanical_Castings.asp (accessed December 3, 2015). ***.

[92] USITC, "Foundry Products," 2-8; and ***.

Figure I-20
IMTDCs: Finished products: V-belt sheave (left), synchronous sheave (middle), bushing (right)



Source: TBW, "V-Belt, Synchronous, and Variable Speed Drives," p. 13.

Value added of castings and finishing

Value is added by both casting and finishing stages of the manufacturing process. The division between value added by casting and machining varies by the product size, complexity of the casting and machining, and the end-use of the products. The value added by machining is a point of dispute in this case, with the respondents arguing that machining adds as much as one-half of the value of the finished products, while the petitioner argues that the casting process adds significantly more value than machining.[93] Further information compiled from questionnaire responses in these investigations concerning value added is presented in tables III-7 and III-8 in Part III of this report.

[93] Petitioners argue that value added by machining can be inflated if the unfinished imported castings have been dumped at low prices. See Conference transcript, pp. 18, 19, 116, 117, and 156. The 2012 Economic Census found that the value added in gray and ductile iron foundry castings accounts for approximately 51 percent of the total value of castings shipments and receipts for services. Census, 2012 Manufacturing Survey, NAICS 331511. A 2005 Commission survey of gray and ductile iron foundries found that machining costs accounted for about 25 percent of the total costs of finished products. USITC, "Foundry Products," pp. 5-16 and 5-17.

DOMESTIC LIKE PRODUCT ISSUES

Summary of findings from preliminary phase

In the preliminary phase of the investigations, the parties discussed three domestic like product issues: (1) whether to include unfinished and finished IMTDCs in the same domestic like product; (2) whether to include IMTDCs under 4 inches in maximum nominal outside diameter (herein "small-diameter" IMTDCs) in the same domestic like product definition as the "large-diameter" IMTDCs that correspond to the scope of these investigations (those whose maximum nominal outside diameter is at least 4 inches); and (3) whether to include mechanical transfer drive components ("MTDCs") that are manufactured from sintered steel powder or direct-machined steel bars (collectively "steel MTDCs") in the same domestic like product definition as the iron MTDCs corresponding to the scope of these investigations. For the reasons discussed below, the Commission defined the domestic like product in the preliminary determinations as all forms of unfinished and finished IMTDCs described in the scope of these investigations, as well as small-diameter IMTDCs under 4 inches in maximum nominal outside diameter. The Commission did not include steel MTDCs that are manufactured from sintered steel powder or direct-machined steel bars in the domestic like product definition.[94]

Unfinished and finished IMTDCs

The scope of the imported merchandise subject to these investigations includes unfinished and finished IMTDCs. Based on an analysis of the semifinished product factors, the Commission defined unfinished and finished IMTDCs as part of the same domestic like product in its preliminary phase determinations. Specifically, the Commission found that unfinished and finished IMTDCs have similar physical characteristics and that unfinished IMTDCs serve no function other than being machined into finished IMTDCs. That is, unfinished IMTDCs are dedicated to the production of finished IMTDCs, and finishing operations are a necessary step for an unfinished IMTDC to be usable. The Commission noted in its preliminary determinations that the extent of any separate markets for unfinished and finished IMTDCs was disputed by the parties and was unclear from the record. The record at the time of the preliminary phase investigations suggested the possible existence of several firms that only cast unfinished IMTDCs and at least one firm that only finished IMTDCs, but the record also indicated that at least two U.S. firms manufactured both unfinished and finished IMTDCs. The Commission further noted that although the value added by finishing operations was disputed by the parties in the preliminary phase of the investigations, the value of finishing operations was not insignificant.[95]

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[94] *Certain Iron Mechanical Transfer Drive Components from Canada and China, Inv. Nos. 701-TA-550 and 731-TA-1304-1305 (Preliminary)*, USITC Publication 4587, December 2015, pp. 10 and 19.

[95] *Certain Iron Mechanical Transfer Drive Components from Canada and China, Inv. Nos. 701-TA-550 and 731-TA-1304-1305 (Preliminary)*, USITC Publication 4587, December 2015, p. 13.

Small-diameter IMTDCs

Based on an analysis of the traditional domestic like product factors, the Commission concluded in its preliminary determinations that small-diameter IMTDCs are part of the same domestic like product definition as the large-diameter IMTDCs corresponding to the investigations' scope. In making its preliminary determinations, the Commission noted that the preliminary phase record did not support TBW's assertion that a clear line divides small-diameter IMTDCs from the large-diameter IMTDCs that correspond to the scope of these investigations. The record in the preliminary phase investigations also showed that certain firms produce small- and large-diameter IMTDCs using some common facilities, processes, and employees. The Commission noted in its preliminary determinations that small- and large-diameter IMTDCs have similar physical characteristics, some overlap in their end uses, and are sold through similar channels of distribution. In addition, the Commission noted that the record in the preliminary phase of the investigations suggested that producers and customers do not differentiate among IMTDCs based on a four-inch diameter dividing line, as shown by available product catalogues and industry standards. Furthermore, although the Commission recognized that it is not unexpected that prices differ for small- and large-diameter IMTDCs or that small- and large-diameter IMTDCs are not interchangeable, it noted that the same can be said of IMTDCs of different sizes regardless of the diameter used as the dividing line.[96]

Steel MTDCs

In its preliminary determinations, the Commission determined not to include MTDCs manufactured from sintered steel powder or direct-machined steel bars in the domestic like product definition with iron MTDCs, notwithstanding some similarities between the two types of products. In making its determinations, the Commission noted that although customers and industry associations may not differentiate between MTDCs made from iron and steel and all such products appeared to share channels of distribution, some evidence suggested that they have different physical qualities due to their different chemical properties. The Commission further determined that not only are iron MTDCs priced differently than steel MTDCs, but that those firms that manufacture MTDCs from iron and one or more of the steel raw materials (i.e.,

[96] The Commission noted that the record in the preliminary phase of the investigations that included the small-diameter IMTDC operations of *** and the finishing operations conducted by *** suggested that production volumes of small-diameter IMTDCs in the United States were relatively small and that small-diameter MTDCs were often manufactured from sintered steel powder or direct-machined steel bars instead of iron, but it observed that the record at that time was unclear as to whether there were additional firms that might also cast and/or finish small-diameter IMTDCs using the same or similar production equipment, processes, and equipment. *Certain Iron Mechanical Transfer Drive Components from Canada and China, Inv. Nos. 701-TA-550 and 731-TA-1304-1305 (Preliminary)*, USITC Publication 4587, December 2015, pp. 15-16; and Confidential Preliminary Views, EDIS Doc. 571242, pp. 22-23.

sintered steel powder or direct-machined steel bar) do so using different raw materials, production facilities, processes, and employees.[97]

Party arguments

Preliminary phase

The arguments of parties are summarized briefly below. Whereas parties disagreed about the treatment of small-diameter IMTDCs and non-iron MTDCs in the preliminary phase of the investigations, no party argued that unfinished and finished IMTDCs are separate domestic like products.[98]

In the preliminary phase of the investigations, the petitioner proposed that IMTDCs constituted a single domestic like product, coextensive with the scope of these investigations as initiated by Commerce. Specifically, the petitioner noted that the Commission should not include in the domestic like product IMTDCs that are less than four inches in diameter or MTDCs that are not made of iron (such as sintered steel powder MTDCs and MTDCs made from direct machined steel bars).[99]

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[97] *Certain Iron Mechanical Transfer Drive Components from Canada and China, Inv. Nos. 701-TA-550 and 731-TA-1304-1305 (Preliminary)*, USITC Publication 4587, December 2015, p. 19.

[98] Baldor's postconference brief, exh. 1; Chinese Respondents' postconference brief, pp. 11-13; Petitioner's postconference brief, p. 5; Petitions, vol. I, pp. 20-21; and conference transcript, pp. 32, 58-59, and 110.

[99] Petitioner's postconference brief, p. 5. The petitioner amended its original October 28, 2015 petitions on November 5, 2015 to propose revisions to the scope language. As part of those revisions, the petitioner proposed excluding items of less than 4.00 inches (101 mm) in maximum nominal outer diameter from the scope. The petitioner argued that the addition of a diameter limit to define the IMTDCs covered by the scope improves the scope's clarity and ability to distinguish between iron and steel products since it argues that some small-diameter (i.e., below 4.0 inches) imported components may be produced from either steel or iron (or their production processes may be changed relatively easily to utilize steel), while large-diameter components are predominantly produced from iron. *Response to the Department's November 3, 2015 Supplemental Questions Regarding Volume I of the Petition for the Imposition of Antidumping and Countervailing Duties*, November 5, 2015, pp. 4-5. The petitioner again amended its petitions during the Commission's preliminary phase investigations on November 17, 2015 to propose further modifications to the scope language by adjusting the carbon content threshold from 1.5 to 1.7 percent by weight or above for items included in the scope. *Additional Revision to the Scope*, November 17, 2015, p. 1. As previously noted, further amendments and clarifications to the scope language were proposed by the petitioner subsequent to Commerce's preliminary determinations on June 27, 2016, August 4, 2016, and August 17, 2016, and August 22, 2016, concerning the exclusion of certain torsional vibration damper inner rings and certain flywheels with ring gear.

Respondent Baldor and Chinese respondents Powermach and Min Yue argued in the preliminary phase of the investigations that all IMTDCs should be considered to be within the same domestic like product regardless of diameter, and that MTDCs made from sintered steel or machined steel bar should also be included in the same domestic like product as MTDCs made from iron.[100] Additionally, based on its proposed expanded domestic like product, Baldor argued that the domestic industry should include those firms that produce items using a sintering and/or direct machining process, regardless of the carbon content, and those that produce items below 4 inches in diameter.[101]

In the preliminary phase of the investigations, respondent Caterpillar argued that the petitioner's suggestion that the Commission's domestic like product must necessarily be coterminous with Commerce's scope was incorrect, but otherwise made no specific arguments as to domestic like product and domestic industry. It simply noted that the definitions remain "wide open questions" and argued that the petitioner's change in the scope language very late during the preliminary phase of the Commission's investigations hindered the Commission's ability to gather the appropriate industry information.[102]

Final phase

In its preliminary phase determinations, the Commission reminded parties to identify in their comments on the draft questionnaires for the final phase of these investigations any arguments that would implicate data collection, such as requests to define the domestic like product in a different manner.[103] Only one party, TBW, provided comments on the draft questionnaires in the final phase of these investigations, none of which involved a change in the manner in which the proposed data were collected in these final phase investigations that would suggest a different domestic like product definition.[104]

[100] Baldor's postconference brief, p. 5; and Chinese respondents' postconference brief, p. 7.
[101] Baldor's postconference brief, p. 27.
[102] Caterpillar's postconference brief, pp. 4-7.
[103] *Certain Iron Mechanical Transfer Drive Components from Canada and China, Inv. Nos. 701-TA-550 and 731-TA-1304-1305 (Preliminary)*, USITC Publication 4587, December 2015, p. 19.
[104] *TBW's Comments on Draft Questionnaires*, June 24, 2016.

In its prehearing brief in the final phase of the investigations, TBW argued that the Commission should find that IMTDCs constitute a single domestic like product, coextensive with the scope of these investigations. Specifically, unfinished and finished IMTDCs should be treated as part of a single domestic like product and mechanical transfer drive components not made of iron should be excluded from the domestic like product definition. Further, TBW argues that the Commission should also not include IMTDCs that are less than four inches in diameter in the domestic like product.[105]

The China Chamber of International Commerce's ad hoc Coalition of Producers and Exporters of Certain Iron Mechanical Transfer Drive Components from the People's Republic of China,[106] Powermach Import & Export Co., Ltd., (Sichuan); Shijiazhuang CAPT Power Transmission Co., Ltd.; and Yueqing Bethel Shaft Collar Manufacturing. Co., Ltd. provided briefs in the final phase of these investigations but did not make any arguments concerning the definition of the domestic like product.

[105] TBW's prehearing brief, pp. 2-3.

[106] The members of the Coalition are Powermach Import & Export Co., Ltd. (Sichuan), Shijiazhuang CAPT Power Transmission Co., Ltd. and Yueqing Bethel Shaft Collar Manufacturing Co., Ltd.

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET CHARACTERISTICS

IMTDCs are used in the HVAC, mining, upstream oil and gas, building and road construction, and general industrial and agricultural sectors.[1] They can vary substantially in size and are incorporated into a wide range of machinery and equipment, such as fans, conveyors, pumps, compressors, and mixers. Small-diameter IMTDCs generally are used with small machinery and large-diameter IMTDCs are used in large-scale machinery such as that used in mining and oil and gas rigs.[2] IMTDCs are produced in two primary phases: casting and finishing. IMTDCs may be cast by one firm, and finished by another.[3]

Overall, apparent U.S. consumption of IMTDCs in 2015 was *** percent lower than in 2013 on a value basis and *** percent higher on a unit (piece) basis.

U.S. PURCHASERS

The Commission received 24 usable questionnaire responses from firms that have purchased IMTDCs since January 2013.[4] Sixteen responding purchasers are distributors and eight are end users. Most of the responding U.S. purchasers are located in the Midwest and Central Southwest. The responding end users represent firms producing a variety of products including HVAC, refrigeration, conveyor equipment, vibrating screens, and agricultural equipment. The responding distributors sell to a wide variety of OEMs and other industrial customers including material handling equipment manufacturers, HVAC, agricultural, general manufacturing, mining, petrochemicals, food processing, automotive, and oil and gas. The largest responding purchasers were ***.

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[1] Conference transcript, pp. 92-93 (Coder).

[2] Hearing transcript, p. 17 (Juergens).

[3] As noted in Part I, this report presents separately certain data submitted by one foundry (Waupaca) regarding its U.S. casting operations because of concerns over the inclusion of substantial amounts of excluded merchandise. Although Waupaca's data are presented separately in appendix C, ***.

[4] Eighteen of the 24 responding purchasers reported data for their purchases of large-diameter IMTDCs, including 14 for domestically-produced product, 9 for subject imports from Canada, 9 for subject imports from China, 8 for product from Mexico, 2 for product from other countries, and 9 for product of unknown origin. Sixteen purchasers reported data for their purchases of small-diameter IMTDCs, including 9 for domestic product, 7 for imported product, and 8 for unknown origin product. A number of purchasers were not able to provide any data for their purchases of IMTDCs, or were not able to report by size or by country of origin.

CHANNELS OF DISTRIBUTION

U.S. producers and importers sold finished IMTDCs to both distributors and end users (table II-1). TBW stated that its industrial distribution channel serves smaller OEMs and the replacement parts business and that it sells IMTDCs directly to larger OEMs.[5]

Table II-1
IMTDCs: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2013-15, January-June 2015, and January-June 2016

Item	Calendar year			January to June	
	2013	2014	2015	2015	2016
	Share of commercial U.S. shipment value (percent)				
U.S. producers (finished only).-- Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers: subject Canada.-- Distributors	***	***	***	***	***
End users	***	***	***	***	***
U.S. importers: subject China.-- Distributor	61.9	60.5	60.7	61.6	69.8
End users	38.1	39.5	39.3	38.4	30.2
U.S. importers: Nonsubject sources[1].-- Distributors	76.8	76.5	78.2	77.0	74.3
End users	23.2	23.5	21.8	23.0	25.7

[1] Nonsubject sources includes imports of large-diameter IMTDCs from countries other than Canada and China and imports of small-diameter IMTDCs from all sources.

Note.--U.S. producers' data excludes unfinished IMTDCs. Channels of distribution data were not gathered for imports by level of finishing, however the vast majority of imports were of finished IMTDCs.

Source: Compiled from data submitted in response to Commission questionnaires.

[5] Hearing transcript, p. 90 (Christenson).

GEOGRAPHIC DISTRIBUTION

U.S. producers and subject importers reported selling IMTDCs to all regions in the United States (table II-2). For U.S. producers, 13 percent of sales were within 100 miles of their production facility, 68 percent were between 101 and 1,000 miles, and 20 percent were over 1,000 miles. Subject importers sold 5 percent within 100 miles of their U.S. point of shipment, 62 percent between 101 and 1,000 miles, and 32 percent over 1,000 miles.

Table II-2
IMTDCs: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	Subject U.S. importers	
		Canada	China
Northeast	9	5	16
Midwest	11	6	18
Southeast	10	6	17
Central Southwest	9	6	18
Mountains	8	6	15
Pacific Coast	8	6	15
Other[1]	3	3	8
All regions (except Other)	7	5	14
Reporting firms	11	6	19

[1] All other U.S. markets, including AK, HI, PR, and VI.

Source: Compiled from data submitted in response to Commission questionnaires.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

Based on available information, U.S. producers of IMTDCs have the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced IMTDCs to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, availability of inventories, and the ability to produce alternate products.

Industry capacity

Domestic capacity utilization for IMTDCs on a combined basis decreased irregularly from *** percent in 2013 to *** percent in 2015. Capacity of the domestic industry increased slightly from *** pieces in 2013 to *** pieces in 2015. The relatively low level of capacity utilization suggests that U.S. producers may have a substantial ability to increase production of IMTDCs in response to an increase in prices.

Alternative markets

U.S. producers' exports comprised a small share of the value of total shipments of finished IMTDCs (*** percent) in 2013-15, but a larger share of unfinished IMTDCs (*** percent). U.S. producers indicated that their principal export markets were Canada and Mexico.

Inventory levels

U.S. producers' inventories of finished IMTDCs increased and were equivalent to *** percent of total shipments in 2013 and *** percent in 2015. While there is substantial variation among different sizes and some IMTDCs may be custom products, the vast majority of IMTDCs are standard catalog products.[6] The relatively high inventory levels and large proportion of standard items suggest that U.S. producers may have a substantial ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Seven of 11 responding U.S. producers stated that they could switch production from IMTDCs to other products. Other products that producers reportedly can produce on the same

[6] Conference transcript, p. 69 (Beck); and Notes from Staff fieldwork at TBW's manufacturing facility, November 12, 2015.

equipment as IMTDCs are couplings and castings for non-IMTDC products, adapters, covers, spacers, rotors, calipers, housings, and other machine shop products. U.S. producers reported that production of other products besides IMTDCs accounted for about *** of production (in pieces) using the same finishing equipment and about *** of production (in pieces) using the same casting equipment in 2015. According to the Petitioner, after the initial investment in a foundry and the necessary equipment, it is very easy for firms to switch production from other products to IMTDCs.[7]

Subject imports from Canada

The sole responding producer in Canada, Baldor Canada, shut down its IMTDC finishing operations on May 26, 2016 and relocated its IMTDC finishing equipment to North Carolina. Baldor Canada did not have casting operations. ***.

Subject imports from China[8]

Based on available information, Chinese producers of large-diameter IMTDCs have the ability to respond to changes in demand with large changes in the quantity of shipments of large-diameter IMTDCs to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, ability to ship among alternate markets, available inventories, and the ability to produce alternate products.

Industry capacity

Chinese producers' capacity utilization for large-diameter IMTDCs (based on pieces) increased from *** percent in 2013 to *** percent in 2014 and then declined somewhat to *** percent in 2015. This moderate level of capacity utilization suggests that Chinese producers may have an ability to increase production of IMTDCs in response to an increase in prices.

Alternative markets

Chinese producers' reported shipments to third-country markets increased markedly over the period, rising from *** percent of total shipments in 2013 to *** percent in 2015, as shipments to the United States and the Chinese home market declined. The share of shipments to the Chinese home market declined from *** percent in 2013 and *** percent in 2014 to *** percent in 2015. Export shipments to the United States were about *** percent of total

[7] Conference transcript, p. 145 (Crist).

[8] For data on the number of responding foreign firms and their share of U.S. imports from China, please refer to Part I, "Summary Data and Data Sources." Data in this section are for large-diameter IMTDCs.

shipments in 2013 and 2014, declining to *** percent in 2015. Other markets identified by Chinese producers were Europe, Canada, Australia, Asia, Africa, and the Middle East.

Inventory levels

Chinese producers' inventories relative to total shipments decreased irregularly from *** percent in 2013 to *** percent in 2015. The relatively high inventory levels suggest that Chinese producers may be able to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Chinese producers manufacture out-of-scope IMTDCs as well as other products on the same machinery used for casting and finishing subject IMTDCs. In 2015, out-of-scope IMTDCs and other products accounted for more than *** of production (in pieces) on machinery used for casting IMTDCs and *** of production (in pieces) on machinery used for finishing IMTDCs.

Five Chinese producers reported that they are not able to shift production between IMTDCs and other products using the same equipment, while two Chinese producers reported that they are able to shift production. Chinese producers also reported being able to produce compressor parts, pump parts, bearings, and rollers.

Nonsubject imports

The largest source of nonsubject imports of IMTDCs during January 2013-June 2016 was Mexico, which accounted for *** percent of reported nonsubject imports of large- and small-diameter IMTDCs (in pieces) in 2015,[9] and *** percent of nonsubject imports of large-diameter IMTDCs (in pieces).

Supply constraints

Nearly all purchasers (23 of 24) reported no supply constraints for IMTDCs from any source. However, purchaser *** stated that since 2012, its Canadian supplier has "shorted" shipments because of lack of availability of castings, and because the supplier closed in 2015.

New suppliers

Most (22 of 24) purchasers indicated that no new suppliers have entered the U.S. market since January 1, 2013. Two purchasers indicated that Master Drive (an importer) and Powermach (a Chinese producer) have done so.

[9] Nonsubject imports include imports of small-diameter IMTDCs from Canada and China.

U.S. demand

Based on available information, the overall demand for IMTDCs is likely to experience small changes in response to changes in price. The main contributing factors are the lack of substitute products and the small cost share of IMTDCs in most of its end-use products.

End uses

U.S. demand for IMTDCs depends on the demand for U.S.-produced downstream products. Reported end uses include pump jacks, crushers and mixers, conveyor systems, OEM equipment, fans and blowers, HVAC applications (e.g., exhaust ventilation fans), heat exchangers, oil and gas applications, and agricultural applications (e.g., combines).

At the conference, TBW stated that IMTDCs are used in a wide variety of downstream applications, including fans, conveyors, pumps, compressors, rock crushers, and mixers.[10] TBW stated that the overall U.S. belted drives market was divided among the following sectors: general industrial (*** percent), air handling (*** percent), pump and compressor (*** percent), oil and gas (*** percent), materials handling (*** percent), construction and agriculture (*** percent), and sand and gravel (*** percent).[11]

Cost share

IMTDCs account for a small share of the cost of the downstream end-use products in which they are used, but can be a larger share of replacement components. Purchasers' reported cost shares for some end uses were as follows: camshafts, combines, vibrating screens, conveyors, tractors, line sorters (1 percent); compressors (5 percent); and pumps (10 percent).

Business cycles

Most firms (10 of 11 U.S. producers, 20 of 23 importers, and 18 of 24 purchasers) indicated that the IMTDC market was not subject to business cycles. A few firms reported that certain sectors that use IMTDCs, including agriculture and oil and gas, are cyclical or seasonal.

Petitioner stated that IMTDC demand is derived from a variety of end-use sectors and generally tracks overall economic conditions more closely than any particular market segment (see figure II-1). It added that demand is driven by general industrial and construction demand, including building and road construction, demand in the food and beverage sectors, and demand in the oil and gas sectors.[12]

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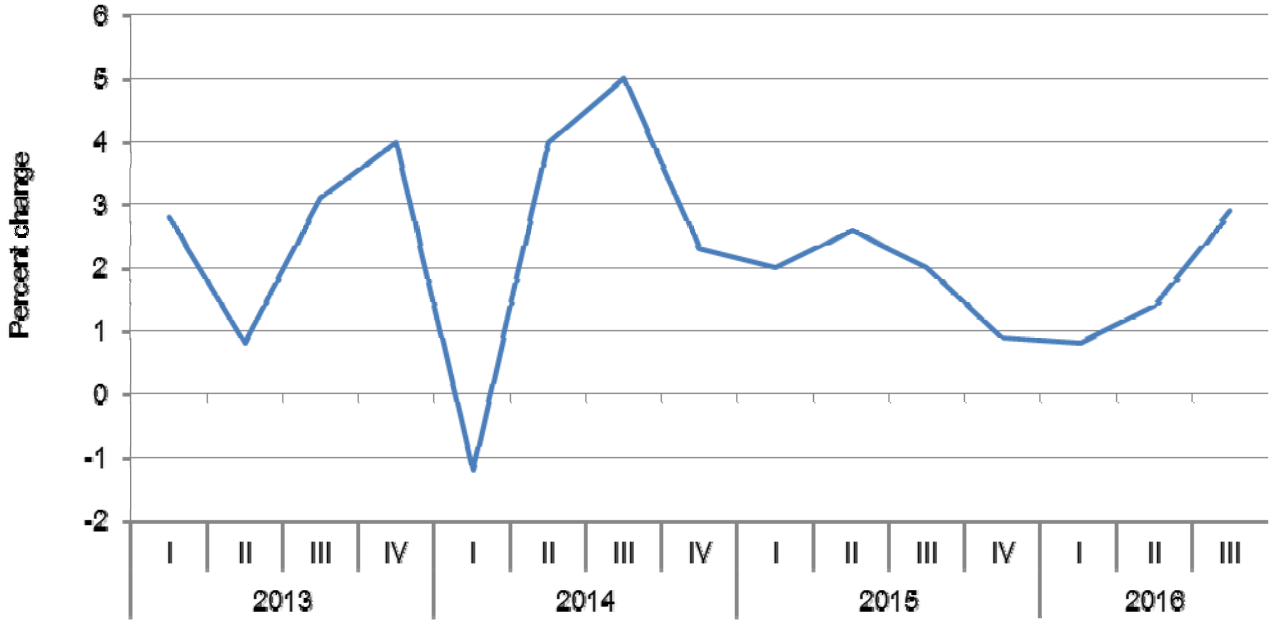
[10] Conference transcript, pp. 92-93 (Coder), 120 (Christenson).

[11] Petitioner's postconference brief, exh. 1, p. 55.

[12] Petitioner's postconference brief, pp. 9-10. Petitioner's prehearing brief, p. 13.

Figure II-1
GDP: Percent change from preceding period in real GDP in the United States, seasonally adjusted at annual rates, in percent, January 2013-September 2016



Source: BEA, Table 1.1.1. Percent Change From Preceding Period in Real Gross Domestic Product. http://www.bea.gov/iTable/index_nipa.cfm, October 28, 2016.

Demand trends

Responding firms reported a variety of responses with respect to changes in demand in the United States for IMTDCs since January 1, 2013, though few indicated an increase in demand (table II-3). Petitioner and Chinese respondents stated that U.S. demand for IMTDCs has decreased since 2013.[13]

Table II-3
IMTDCs: Firms' responses regarding U.S. demand and demand outside the United States

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand inside the United States:				
U.S. producers	1	1	5	4
Importers	0	4	6	8
Purchasers	1	8	6	7
Demand outside the United States:				
U.S. producers	2	1	2	2
Importers	2	4	3	5
Purchasers	1	5	3	2
Demand for purchasers' final products:				
Purchasers	2	3	4	2

Source: Compiled from data submitted in response to Commission questionnaires.

Three purchasers reported reduced demand in the energy sector, specifically IMTDCs for OEM machines and spare parts used in the coal, oil, and gas industries. *** reported reduced demand because of a downturn in certain sectors of the economy, as well as machines that use IMTDCs being produced in other countries. On the other hand, purchaser *** reported increased demand for HVAC applications (because of new home construction and in older homes for repairs and replacements), and purchaser *** reported growing demand for IMTDCs in material handling conveyors.

Substitute products

Substitutes for IMTDCs are limited. Most U.S. producers (4 of 6), importers (17 of 21), and purchasers (20 of 23) reported that there were no substitutes for IMTDCs. Two of the three purchasers that reported substitutes stated that the substitutes were more expensive IMTDCs but more efficient. Substitutes listed by purchasers were variable frequency drives for the HVAC industry, direct drives for oilfield pumping equipment, integral gear motors for speed reduction applications, and right angle gear drives for heat transfer products. No firm reported that changes in the prices of substitutes had affected prices of IMTDCs.

[13] Petitioner's prehearing brief, pp. 11-13. Respondent's prehearing brief, pp. 19-21.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported IMTDCs depends upon such factors as relative prices, quality (e.g., appearance, durability, meeting tolerances, packaging, and performance), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Based on available data, staff believes that there is a high degree of substitutability between domestically produced IMTDCs and IMTDCs imported from subject sources.

Lead times

IMTDCs are sold both produced-to-order and from inventory. Most responding U.S. producers reported that the majority of their sales were produced-to-order, although two producers reported that less than half of their sales were produced-to-order (***). U.S. producers' reported produced-to-order lead times averaged 52 days. Most U.S. producers' reported lead times from inventory were 1 to 5 days. Most importers reported that the majority of their sales were from U.S. inventories, with most reporting lead times from U.S inventories of 1 to 7 days.

Knowledge of country sources

Twenty-one of 24 purchasers indicated that they had marketing/pricing knowledge of domestic product, 8 of Canadian product, 9 of Chinese product, 9 of Mexican product, and 3 of product from other countries (Germany and India).

As shown in table II-4, most purchasers and their customers sometimes or never make purchasing decisions based on the producer or country of origin. Of the three purchasers that reported that they always make decisions based on the manufacturer, *** stated that it only purchases from firms on its approved supplier list,[14] *** stated that it selects suppliers based on quality and value, and *** did not give a reason. *** answered "usually," explaining that it stocks U.S.-produced IMTDCs for customers that state a preference for domestic product, and a more cost-effective solution for other customers.

Table II-4
IMTDCs: Purchasing decisions based on producer and country of origin

Purchaser/customer decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	3	6	6	10
Purchaser's customers make decision based on producer	0	3	10	8
Purchaser makes decision based on country	0	3	9	11
Purchaser's customers make decision based on country	0	2	13	8

Source: Compiled from data submitted in response to Commission questionnaires.

[14] ***.

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for IMTDCs were price (19 firms), quality (19 firms), and availability (16 firms) as shown in table II-5. Quality was the most frequently cited first-most important factor (cited by 7 firms), followed by price (5 firms); price was the most frequently reported second-most important factor (7 firms); and price, was the most frequently reported third-most important factor (7 firms).

Table II-5
IMTDCs: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Factor	First	Second	Third	Total
Price	5	7	7	19
Quality	7	6	6	19
Availability	4	6	6	16
Delivery/lead time	1	2	1	4
Product range	1	0	2	3
Traditional supplier	1	0	0	1
Other[1]	5	2	1	8

[1] Other factors include customer preference, distribution agreement, brand, and relationship with supplier.

Source: Compiled from data submitted in response to Commission questionnaires.

Purchasers reported that the characteristics they consider in determining quality included: appearance, casting quality, durability, dimensional consistency, labeling, meeting tolerances, packaging, and performance in applications. Several distributors noted that they may not directly assess quality but instead rely on brand reputation, supplier history, and feedback from their customers. *** stated that it assesses quality based on industry standards, and that over time, Chinese product has met those standards "so it comes down to price."

The majority of purchasers (14 of 24) reported that they "sometimes" purchase the lowest-priced product, while 8 indicated "usually," 2 "always," and 1 "never."

When asked if they purchased large-diameter IMTDCs from one source although a comparable product was available at a lower price from another source, 13 purchasers reported reasons including availability, consistency of supply, customer preference, delivery, and relationship with vendor. Several purchasers reported sometimes purchasing domestic product even though it was priced higher because of a reputation for better quality, requests for domestic product, reliability of delivery, and preferences for use in critical applications. Only 1 of 22 responding purchasers indicated that certain types of IMTDCs were only available from a single source.[15]

[15] *** stated that less popular styles and sizes are only available domestically.

Seventeen of 23 purchasers indicated that they or their customers do not have a country preference for large-diameter IMTDCs. Of those who indicated a country preference, several indicated that occasionally a customer will request domestic product or will specify no products from a "low-cost country."

Importance of specified purchase factors

Purchasers were asked to rate the importance of 15 factors in their purchasing decisions (table II-6). The factors rated as "very important" by more than half of responding purchasers were quality meets industry standards (all 24 purchasers); availability, product consistency, and reliability of supply (23 each); delivery time and price (19 each); and product range (13).

Table II-6
IMTDCs: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Number of firms reporting		
	Very important	Somewhat important	Not important
Availability	23	1	0
Delivery terms	7	15	2
Delivery time	19	5	0
Discounts offered	10	12	1
Extension of credit	8	8	7
Minimum quantity requirements	8	13	3
Packaging	3	15	5
Price	19	4	0
Product consistency	23	1	0
Product range	13	8	3
Quality meets industry standards	24	0	0
Quality exceeds industry standards	8	14	1
Reliability of supply	23	1	0
Technical support/service	9	15	0
U.S. transportation costs	9	12	2

Source: Compiled from data submitted in response to Commission questionnaires.

Supplier certification

Most purchasers (19 of 24) do not require their suppliers to become certified or qualified to sell IMTDCs to their firm. The purchasers that did report a qualification process reported that the time to qualify a new supplier ranged from 30 days to one year. No purchaser reported that a supplier had failed in its attempt to qualify product, or had lost its approved status since 2013.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since 2013 (table II-7); reasons reported for changes in sourcing included price, quality, decline in demand, availability, brand support, focus on key brands, the closure of Baldor Canada, and customer demand. Six of 24 responding purchasers reported that they had changed suppliers since January 1, 2013.

Table II-7
IMTDCs: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	0	8	4	7	4
Canada	7	4	2	4	2
China	5	2	6	3	2
Mexico	7	1	2	5	3
All other sources	8	2	1	4	1
Sources unknown	6	1	1	4	3

Source: Compiled from data submitted in response to Commission questionnaires.

*** reported that as a large distributor with many customers, its mix of suppliers changes, but that most of its purchases are sourced to long-term suppliers. *** reported that with over 25 suppliers in this product category, its business moves back and forth based on cost and customer preference. *** reported dropping *** for custom manufactured flywheels in favor of *** based on better pricing and shorter delivery times.[16] *** noted the closure of its Canadian supplier. *** reported dropping *** and *** as suppliers.

[16] ***.

Importance of purchasing domestic product

Nine of 21 responding purchasers reported no domestic requirements for any of their purchases. Five purchasers reported that domestic product was required by law (for 1 to 7 percent of their purchases). Eleven purchasers reported that domestic product was required by their customers (for 6 of these purchasers, 1 to 14 percent of their purchases, for 4 purchasers, 50-55 percent, and for one purchaser, 90 percent).[17] Three purchasers reported other preferences for domestic product (for 1 to 25 percent of purchases). Three purchasers (***) did not answer the question.

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing IMTDCs produced in the United States, subject countries, and nonsubject countries. Purchasers were asked for a country-by-country comparison of large-diameter IMTDCs on the same 15 factors (table II-8) for which they were asked to rate the importance. Most purchasers reported that U.S. and Canadian product were comparable on all factors except price (for which 6 rated the Canadian product as lower priced and 5 rated them as comparable) and reliability of supply (for which 5 of 11 firms rated the U.S. product as superior). In comparing U.S. and Chinese products, a majority or plurality of purchasers rated the products comparable on 7 factors, the U.S. product as superior on 6 factors (availability, delivery time, product range, quality exceeds industry standards, reliability of supply, and technical support/service), the Chinese product as superior on price (i.e., lower priced). On product consistency, an equal number of firms rated the U.S. product as superior as rated the products as comparable. In comparing product from Canada and China, a majority of purchasers rated them as comparable on 9 factors, Canada as superior on 5 factors (delivery terms, delivery time, product consistency, reliability of supply, and technical support/service), and China as superior on price.

[17] The purchasers reporting 50-55 percent were distributors ***, which serve customers in a wide variety of industries including oil and gas, agricultural, HVAC, general manufacturing, and mining, and end user ***. Distributor *** reported 90 percent.

Table II-8

Large-diameter IMTDCs: Purchasers' comparisons between U.S.-produced and imported product

Factor	Number of firms reporting								
	United States vs. Canada			United States vs. China			Canada vs. China		
	S	C	I	S	C	I	S	C	I
Availability	2	9	0	7	5	0	3	5	1
Delivery terms	0	10	0	3	7	1	4	3	0
Delivery time	0	11	0	7	3	2	5	3	0
Discounts offered	0	8	2	0	6	4	0	6	1
Extension of credit	0	10	0	2	8	0	1	7	0
Minimum quantity requirements	0	11	0	5	7	0	2	5	1
Packaging	0	11	0	4	7	0	3	5	0
Price[1]	0	5	6	1	1	10	1	3	4
Product consistency	2	9	0	5	5	2	5	3	0
Product range	5	6	0	6	5	1	3	4	1
Quality meets industry standards	2	9	0	4	8	0	2	6	0
Quality exceeds industry standards	2	9	0	7	4	1	3	5	0
Reliability of supply	5	5	1	6	5	1	5	2	1
Technical support/service	5	6	0	9	2	1	5	3	0
U.S. transportation costs[1]	5	6	0	5	7	0	3	5	0

Factor	Number of firms reporting								
	United States vs. Nonsubject			Canada vs. Nonsubject			China vs. Nonsubject		
	S	C	I	S	C	I	S	C	I
Availability	2	2	0	1	0	0	0	1	0
Delivery terms	2	2	0	1	0	0	0	1	0
Delivery time	2	2	0	1	0	0	0	1	0
Discounts offered	1	1	2	0	0	1	0	1	0
Extension of credit	2	2	0	1	0	0	0	1	0
Minimum quantity requirements	2	2	0	1	0	0	0	1	0
Packaging	2	2	0	1	0	0	0	1	0
Price[1]	0	1	3	0	0	1	0	1	0
Product consistency	3	1	0	1	0	0	0	1	0
Product range	2	2	0	1	0	0	0	1	0
Quality meets industry standards	2	2	0	1	0	0	0	1	0
Quality exceeds industry standards	2	2	0	1	0	0	0	1	0
Reliability of supply	2	2	0	1	0	0	0	1	0
Technical support/service	2	2	0	1	0	0	0	1	0
U.S. transportation costs[1]	2	2	0	1	0	0	1	0	0

[1] A rating of superior means that price/U.S. transportation cost is generally lower. For example, if a firm reported "U.S. superior," it meant that the U.S. product was generally priced lower than the imported product.

Note.--S=first listed country's product is superior; C=both countries' products are comparable; I=first list country's product is inferior.

Source: Compiled from data submitted in response to Commission questionnaires.

Comparison of U.S.-produced and imported large-diameter IMTDCs

In order to determine whether U.S.-produced large-diameter IMTDCs can generally be used in the same applications as imports from Canada and China, U.S. producers, importers, and purchasers were asked whether the products can "always," "frequently," "sometimes," or "never" be used interchangeably. As shown in table II-9, all responding producers, nearly all responding importers, and most responding purchasers indicated that large-diameter IMTDCs from all listed sources were always or frequently interchangeable.

Table II-9

Large-diameter IMTDCs: Interchangeability between IMTDCs produced in the United States and in other countries, by country pairs

Country pair	U.S. producers				U.S. importers				U.S. purchasers			
	A	F	S	N	A	F	S	N	A	F	S	N
United States vs. Canada	4	2	0	0	8	5	1	0	7	7	2	0
United States vs. China	4	2	0	0	8	8	1	0	4	10	3	0
Canada vs. China	4	1	0	0	6	5	1	0	3	6	3	0
United States vs. Mexico	5	1	0	0	6	4	0	0	6	8	1	0
United States vs. Other	2	1	0	0	3	5	0	0	1	3	2	0
Canada vs. Mexico	4	1	0	0	6	4	0	0	4	7	1	0
Canada vs. Other	2	1	0	0	3	5	0	1	1	2	2	0
China vs. Mexico	3	1	0	0	4	5	0	0	5	7	1	0
China vs. Other	2	1	0	0	3	5	0	0	2	3	0	0
Mexico vs. Other	2	1	0	0	4	4	0	0	2	2	1	0

Note.—A=Always, F=Frequently, S=Sometimes, N=Never.

Source: Compiled from data submitted in response to Commission questionnaires.

Only four purchasers provided additional explanations regarding interchangeability, reporting that quality differences, material tolerances, finish, cost, bore size, and sheave diameter may limit interchangeability in some cases.

Most (15 of 19) responding purchasers reported that domestically produced large-diameter IMTDCs "always" met minimum quality specifications (table II-10). Eight of 14 responding purchasers reported that Canadian large-diameter IMTDCs "always" met minimum quality specifications, and 5 reported that they "usually" did. Four of 14 responding purchasers reported that Chinese large-diameter IMTDCs "always" met minimum quality specifications, and 7 reported that they "usually" did.

Table II-10

Large-diameter IMTDCs: Ability to meet minimum quality specifications, by source[1]

Source	Always	Usually	Sometimes	Rarely or never
United States	15	4	0	0
Canada	8	5	1	0
China	4	7	2	1
Mexico	2	6	2	0
All other sources	0	1	1	0

[1] Purchasers were asked how often domestically produced or imported IMTDCs meet minimum quality specifications for their own or their customers' uses.

Source: Compiled from data submitted in response to Commission questionnaires.

In addition, U.S. producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of large-diameter IMTDCs from the United States, subject, or nonsubject countries. As seen in table II-11, a majority of firms indicated that differences other than price between large-diameter IMTDCs from specified sources were sometimes or never significant factors in their sales or purchases of the products.

Table II-11

Large-diameter IMTDCs: Significance of differences other than price between IMTDCs produced in the United States and in other countries, by country pairs

Country pair	U.S. producers				U.S. importers				U.S. purchasers			
	A	F	S	N	A	F	S	N	A	F	S	N
United States vs. Canada	0	0	3	4	2	2	4	3	3	0	10	3
United States vs. China	0	0	5	2	3	3	8	3	3	4	6	2
Canada vs. China	0	0	3	2	2	2	5	2	1	2	4	1
United States vs. Mexico	0	0	4	3	1	1	4	2	3	2	6	3
United States vs. Other	0	0	3	2	1	2	2	2	0	2	0	2
Canada vs. Mexico	0	0	3	2	1	2	3	2	1	2	4	2
Canada vs. Other	0	0	2	2	1	2	2	2	0	1	0	1
China vs. Mexico	0	0	2	2	1	2	2	2	1	2	4	3
China vs. Other	0	0	2	2	1	1	3	2	0	0	0	2
Mexico vs. Other	0	0	2	2	1	1	3	2	0	0	0	2

Note.--A = Always, F = Frequently, S = Sometimes, N = Never.

Source: Compiled from data submitted in response to Commission questionnaires.

Six purchasers provided additional explanations regarding differences other than price.[18] *** stated that the United States and Canada are perceived as similar while Mexico, China, and India are considered lower quality. *** reported difficulties with availability and transportation for specialty products imported from China. *** stated that as a distributor, transportation, quality, supply chain risk, and lead times are challenges in sourcing from non-NAFTA countries. *** indicated that U.S. product is higher quality than Chinese product, and that Chinese product is higher quality than Mexican product. *** indicated that availability was always a significant factor in its purchases of IMTDCs.

ELASTICITY ESTIMATES

This section discusses elasticity estimates; parties did not comment on these estimates.

U.S. supply elasticity

The domestic supply elasticity[19] for IMTDCs measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of IMTDCs. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced IMTDCs. Analysis of these factors earlier indicates that the U.S. industry has the ability to increase or decrease shipments to the U.S. market greatly; an estimate in the range of 4 to 7 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for IMTDCs measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of IMTDCs. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, as well as the component share of the IMTDCs in the production of any downstream products. Based on the available information, the aggregate demand for IMTDCs is likely to be inelastic; a range of -0.5 to -0.9 is suggested.

[18] One of these purchasers, ***, indicated that its comparisons are based on total cost, quality, delivery, and lead time, not on country of origin.

[19] A supply function is not defined in the case of a non-competitive market.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[20] Product differentiation, in turn, depends upon such factors as quality (e.g., appearance, packaging, performance, etc.) and conditions of sale (e.g., availability, sales terms/discounts/promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced large-diameter IMTDCs and imported large-diameter IMTDCs is likely to be in the range of 3 to 5.

[20] The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

PART III: U.S. PRODUCER'S PRODUCTION, SHIPMENTS, AND EMPLOYMENT

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of 10 producers that are estimated to have accounted for approximately 90 percent of U.S. production of finished IMTDCs during 2015 and approximately two-thirds of U.S. production of unfinished IMTDCs.

U.S. PRODUCERS

The Commission issued U.S. producers' questionnaires to 233 foundries, integrated firms, and finishers identified as potential producers of unfinished and/or finished IMTDCs by TBW in its petitions, by interested parties participating in these investigations, or by other available industry sources.[1] Five integrated firms that both cast and finish IMTDCs provided a response to the Commission's producer questionnaire: Bremen, EnDyn, Goldens, Martin Sprocket, and TBW. In addition, five finishers that finish IMTDCs in their facilities from purchased castings provided a usable response to the Commission's producer questionnaire: B&B, Baldor, Hi-Lo, Maurey, and Sterling.[2]

One foundry (Waupaca) that casts IMTDCs but does not finish the items in its manufacturing facilities also provided a complete response to the producer questionnaire and indicated ***. Waupaca, which is wholly owned by ***, reported that its foundry produced ***

[1] The list of possible producers to which questionnaires were sent includes integrated firms, foundries, and finishers. Seventy-seven firms responded that they did not produce IMTDCs. *** of the firms to which questionnaires were issued but that did not respond were firms identified in the preliminary phase of these investigations by Baldor as major domestic suppliers of unfinished IMTDCs (***) and finished IMTDCs (***). *** listed by Baldor that supplied a completed producer questionnaire response to the Commission. Baldor noted that *** accounted for *** percent of its unfinished IMTDC purchases in 2015. In addition, *** firms identified by Caterpillar in the preliminary phase of these investigations as its major domestic suppliers of finished IMTDCs (***) did not respond to the Commission's producer questionnaire in these final phase investigations, although four firms it identified as suppliers (***) indicated that they do not produce IMTDCs. Caterpillar has notified the Commission in these final phase investigations that, with the most recent change in the scope, the items it imports are no longer subject merchandise.

[2] Finisher Skyway also responded to the Commission's producer questionnaire reporting data concerning its ***. However, according to additional language concerning the exclusion of such items in Commerce's final determinations, the items produced by Skyway are no longer in-scope merchandise. Therefore, Skyway's questionnaire response is not included in the aggregate data presented in this report.

of castings during 2015, *** percent of which are believed to be in-scope IMTDCs. It also reported that ***. However, because Waupaca's questionnaire response with respect to in-scope IMTDCs is believed to be overstated by the inclusion of out-of-scope items, its data and other firm-specific information are not aggregated with the U.S. industry data presented in the body of this report but are presented separately in appendix C, tables C-2 through C-5.[3] Waupaca's unfinished IMTDCs that were finished by *** are reflected in the U.S. industry's data as finished IMTDCs.

The following four additional domestic foundries responded to the Commission's producer questionnaire but were unable to provide complete data and other information requested by the Commission: Brillion, Great Lakes Castings, Osco, and Torrance. *** reported that it produced approximately *** of IMTDCs in 2015 and that its foundry has an overall casting capacity of *** pounds. *** reported that its foundry has an overall casting capacity of ***. It noted that it produces "numerous" other products, such as hydraulic brake components, oil pump bodies, oil pump covers, valve bodies, pump bodies, end bells, pillow blocks, elbows, and numerous other parts. It stated that "most foundries produce a variety of castings not just one product line such as sheaves, pulleys, etc." *** reported that its overall casting business amounts to approximately ***, of which IMTDCs are estimated to account for ***. *** reported that it shipped *** of IMTDC castings in 2015 to customers that incorporated the castings as components in their product lines rather than selling the machined part.

[3] Of the top ten firms that Waupaca listed as it main customers of IMTDCs (***), three firms (i.e., ***) have reported that in-scope merchandise is not part of their product line purchases. In addition, *** is a firm that is not likely to include in-scope items in its product lines based on a review of the firm's webpages and *** reported sourcing IMTDCs only from U.S. finishers and not from casting operations.

Table III-1 lists responding integrated U.S. producers and finishers of IMTDCs, their production locations, positions on the petitions, and shares of reported 2015 production.

Table III-1
IMTDCs: U.S. producers, their position on the petitions, location of production, and share of reported production, 2015

Firm	Position on petition	Production location(s)	Share of casting production (percent)		Share of finishing production (percent)	
			Based on pieces	Based on pounds	Based on pieces	Based on pounds
B&B	***	La Porte, IN	***	***	***	***
Baldor	***	Weaverville, NC[1]	***	***	***	***
Bremen	***	Bremen, IN	***	***	***	***
EnDyn	***	Alice, TX San Antonio, TX	***	***	***	***
Goldens	***	Columbus, GA	***	***	***	***
Hi-Lo	***	Stacy, MN	***	***	***	***
Martin Sprocket	***	Arlington, TX Abilene, TX Ft. Worth, TX Dallas, TX	***	***	***	***
Maurey	***[3]	Holly Springs, MS	***	***	***	***
Sterling	***	Columbus, IN	***	***	***	***
TBW[4]	Petitioner	Chambersburg, PA	***	***	***	***
Total			***	***	***	***

[1] Baldor closed its Canadian facility and relocated the production finishing equipment to its facilities in Weaverville and Marion, North Carolina.
[2] Less than 0.05 percent.
[3] ***.
[4] ***.

Source: Compiled from data submitted in response to Commission questionnaires.

Related and/or affiliated firms

Table III-2 presents information on U.S. producers' ownership and related and/or affiliated firms. As shown, *** are (or were) related to foreign producers of the subject merchandise. However, as previously noted, Baldor Canada closed its St. Claire, Quebec facility on May 27, 2016 and relocated its Canadian finishing equipment to the Baldor facilities in Weaverville and Marion, North Carolina. Also Baldor China/Maska permanently closed its Changzhou, China facility in December 2014 and disposed of all of the production equipment.[4]

Table III-2
IMTDCs: U.S. producers' ownership, related and/or affiliated firms

* * * * * * *

[4] Conference transcript, p. 22 (McCartney).

Changes in operations

Several responding domestic producers reported changes in their operations related to the production of IMTDCs since January 1, 2013. Details concerning the changes reported are presented in table III-3.

Table III-3
IMTDCs: U.S. producers' reported changes in operations, since January 1, 2013

* * * * * * *

With regards to the closure of its Canadian facility, Baldor reported that, ***.[5] This decision to close its St. Claire facility and relocate its equipment to North Carolina was reported by parent ABB publicly in an April 2016 press release.[6] In that announcement, the company noted that "The current economic context, the slowdown in world markets and instability in oil and gas prices are all factors that have led to a decline in demand for products made in the installation of St. Claire. In addition, the petition launched in the U.S. in autumn 2015 to the imposition of antidumping duties on certain components used in installations St. Claire led to further uncertainties. Therefore, this consolidation of operations will allow us to take advantage of the excess capacity of our other facilities, to enhance our competitiveness and improve the service to our North American customers."[7]

Baldor reported to the Commission that the relocation of the Canadian facility to the United States was done to ***. In fact, Baldor reported that the St. Claire manufacturing facility in Canada is ***. Baldor reported that it currently sources castings for the parts machined on the finishing equipment moved from Canada to the United States primarily from ***.[8]

PRODUCTION-RELATED ACTIVITIES

In the Commission's producer questionnaire, firms with finishing operations but not casting operations were asked to describe the source and extent of their capital and investment, the quantity and type of parts sourced in the United States, the value-added operations performed in the United States, the technical expertise involved in the U.S. finishing operations, and any other costs or activities in the United States directly leading to the production of finished IMTDCs. In addition, firms with both casting and finishing operations in

[5] ***.

[6] "ABB consolide ses activités de Sainte-Claire aux États-Unis," *CNW Telbic*, April 26, 2016, accessed at http://www.newswire.ca/fr/news-releases/abb-consolide-ses-activites-de-sainte-claire-aux-etats-unis-577168771.html.

[7] Ibid. (translated from press release in French).

[8] ***. In the preliminary phase of these investigations, Baldor reported that it sourced castings for its U.S. facility solely from U.S. foundries. Conference transcript, pp. 17-18 (McCartney).

the United States were asked to describe and quantify the amount of capital investment needed to produce IMTDCs for casting and for finishing separately. The responses of U.S. producers to these items are summarized below.

Capital investments

Five domestic producers with finishing operations but not casting operations provided feedback on the Commission's request to describe the source and extent of their capital and investments. The responses of these five finishers are summarized in table III-4.

Table III-4
IMTDCs: U.S. finishers' source and extent of capital investment

* * * * * * *

Five integrated producers (i.e., firms that operate both casting and finishing operations in the United States) provided feedback on the Commission's request to describe and quantify the amount of capital investment needed to produce IMTDCs for casting and for finishing separately. The responses of these five integrated producers are listed in table III-5.

Table III-5
IMTDCs: U.S. integrated producers' extent of capital investment

* * * * * * *

Technical expertise

Ten domestic producers provided feedback on the Commission's request to describe the technical expertise involved in the U.S. finishing operations. All five firms that finish IMTDCs but do not also cast the items indicated in their questionnaire responses that technical expertise is required to machine IMTDCs from the unfinished castings. Three integrated firms (***) reported that no substantial technical expertise is required to machine IMTDCs from the unfinished castings and three smaller integrated firms (***) indicated that such expertise is required. The responses of these firms are summarized in table III-6.

Table III-6
IMTDCs: U.S. producers' technical expertise

* * * * * * *

Value added

Six domestic producers provided narrative feedback on the Commission's request to describe the value added operations by finishers in the United States. The responses of these firms are summarized in table III-7.

Table III-7
IMTDCs: U.S. finishers' value added

* * * * * * *

The Commission examined converting/finishing operations and the value added to the raw materials purchased or provided by the firm using such services (a tollee to toller relationship, for example). The value-added analysis uses two ratios: (1) the ratio of conversion costs, which are direct labor and other factory costs (factory overhead) to total COGS; and (2) the ratio of the sum of conversion costs plus SG&A expenses to the sum of total COGS plus SG&A expenses. The analysis relies on the separation of costs of the input raw material from costs related to that raw material's conversion to finished product. In these investigations, the cost structure of the firms that perform finishing operations reflects their purchases of castings and their finishing operations only.[9] Table III-8 depicts value-added calculations for the five finishers and Martin Sprocket. A value-added calculation is shown separately for TBW's Mexico finishing operations.

Table III-8
IMTDCs: Value-added analysis of U.S. firms performing finishing operations in the United States, and TBW's Mexico finishing operations, fiscal years 2013-15, January-June 2015, and January-June 2016

* * * * * * *

Employment levels

The employment levels reported by integrated producers (Bremen, EnDyn, Goldens, Martin Sprocket, and TBW) and finishers (B&B, Baldor, Hi-Lo, Maurey, and Sterling) are presented separately by type of producer in table III-9. A presentation of full aggregate employment indicators for all domestic producers is presented later in Part III (see table III-18).

[9] Five reporting firms that are finishers only, i.e., those that do not have casting capability and rely on purchases of cast blanks, were identified in footnote 1 of Part VI: B&B, Baldor, Hi-Lo, Maurey, and Sterling. Martin Sprocket also utilizes castings ***. Additionally, TBW finishes castings that were made at its U.S. facility at a facility in Mexico.

Table III-9

IMTDCs: U.S. production and related workers, by type of producer, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Sourcing of parts

With regard to the Commission's request of finisher Baldor to describe the quantity and type of parts sourced in the United States, the firm responded ***.[10] The domestic foundries from which Baldor purchased unfinished IMTDC castings in 2015 with the percentage each represented of the firm's total unfinished casting purchases is as follows: ***.[11] During 2015, Baldor's U.S. purchases of unfinished castings produced in the United States amounted to $***.

Finisher Sterling reported that *** of its castings/forgings for IMTDCs are sourced in the United States and listed the following domestic suppliers of unfinished IMTDCs: ***. During 2015, Sterling's U.S. purchases of unfinished castings produced in the United States amounted to almost $***.

Finisher Maurey, which reported $*** of U.S. purchases of unfinished castings produced in the United States in 2015, listed its domestic suppliers of unfinished IMTDCs as follows: ***. Maurey reported that *** of its production of finished IMTDCs in 2015 (based on quantity in pieces) were from domestically produced castings and the remaining *** were from imported castings.

Finisher Hi-Lo reported that *** of its castings/forgings for IMTDCs are sourced in the United States from ***. Although Hi-Lo did not provide data concerning the amount of its U.S. purchases of castings, it reported that U.S. shipments of finished IMTDCs (*** produced from domestic castings) amounted to $*** in 2015.

During 2015, *** percent of U.S. producers' combined finished IMTDC production in terms of pieces was from unfinished IMTDCs ***. Approximately *** of U.S. producers' combined finished IMTDC production in 2015 was from *** cast IMTDCs. Only *** percent was from unfinished IMTDCs *** and *** percent was from unfinished IMTDCs ***.

Other costs and activities

Other costs or activities in the United States described by IMTDC producers as directly leading to the production of finished IMTDCs include the following: sourcing, manufacturing, design engineering, machine set-up, production scheduling, maintenance (plant, tooling, and equipment), staffing, human resources, insurance, overhead, SG&A expenses, and subcontracted specifications, such as painting or plating.

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[10] However, Baldor reported to the Commission that ***. Baldor's response to supplemental questions, EDIS Document Number 593979.

[11] All of these foundries were issued producer questionnaires ***.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Combined U.S. capacity, production, and capacity utilization data for all finished and unfinished IMTDCs are presented in table III-10 and figure III-1. The capacity and production presented is reported on a combined or "merged" basis, removing the double-counting for casting production and capacity that is either reflected in finishers' capacity and production because (1) the firm internally consumes unfinished IMTDCs that it produces, or (2) the finisher reported capacity and production of products that it manufactured from unfinished IMTDCs that it purchased at an arm's length from a domestic foundry. The reported data show that the domestic producers' aggregate capacity increased from 2013 to 2015, while reported domestic production increased from 2013 to 2014, but fell in 2015 to a level higher than reported in 2013. Capacity utilization increased from *** percent in 2013 to *** percent in 2014 but fell to *** percent in 2015. Capacity, production, and capacity utilization were lower during the first half of 2016 than in the comparable period of 2015.

Table III-10
IMTDCs: U.S. producers' capacity, production, and capacity utilization, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Figure III-1
IMTDCs: U.S. producers' capacity, production, and capacity utilization, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Alternative products

Finished IMTDCs

Presented in table III-11 are data concerning domestic firms' overall capacity and production in their finishing operations. These data show that during 2015, *** (in terms of pounds) and approximately *** (in terms of pieces) of finished items produced by responding U.S. firms are IMTDCs, regardless of size, whereas *** (in terms of pounds) and approximately *** (in terms of pieces) of production are other non-IMTDC items. Six domestic producers reported the production of other products finished on the same equipment as IMTDCs. These other products include ***. Six responding firms that finish IMTDCs (***) indicated that they were able to switch production from IMTDCs to other products using the same equipment and labor, whereas four firms (***) indicated that they could not.

Table III-11
IMTDCs: U.S. firms' overall finishing capacity and production on the same equipment as in-scope finished IMTDC production, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Unfinished IMTDCs

Presented in table III-12 are data concerning domestic firms' overall casting capacity and production. These data show that during 2015, *** percent (in terms of pieces) of unfinished items (i.e., castings) produced by responding U.S. firms are IMTDCs, regardless of size, whereas *** percent (in terms of pieces) of production are other non-IMTDC castings. Other non-IMTDC castings include ***. Three responding firms that cast IMTDCs (***) indicated that they were able to switch production from IMTDC castings to other products using the same equipment and labor, whereas two firms (***) indicated that they could not.

Table III-12
IMTDCs: U.S. firms' overall casting capacity and production on the same equipment as in-scope unfinished IMTDC production, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

U.S. PRODUCERS' U.S. SHIPMENTS AND EXPORTS

Total U.S. shipments of IMTDCs

Table III-13 presents total U.S. shipments of IMTDCs for purposes of the apparent U.S. consumption calculation. These U.S. shipment data reflect U.S. producers' U.S. shipments of finished IMTDCs produced from internally consumed unfinished IMTDCs and from domestically purchased unfinished IMTDCs. The data also include commercial U.S. shipments of unfinished IMTDCs net of those used and reported by finishers as finished IMTDCs. The value of U.S. producers' U.S. shipments for apparent U.S. consumption purposes reflects the total shipment values of the quantity measures described above, but also adds in the incremental value attributable to finishing operations conducted in the United States on imports of unfinished IMTDCs. However, the average unit value of U.S. producers' U.S. shipments does not include the value added to the imported unfinished IMTDCs, as the quantities are counted as imports in apparent U.S. consumption. These data show that total U.S. producers' U.S. shipments of IMTDCs declined irregularly in terms of quantity and value from 2013 to 2015. U.S. shipments were lower in the first half of 2016 in terms of pieces and value than in the comparable period of 2015.

Table III-13

IMTDCs: U.S. producers' U.S. shipments for use in apparent U.S. consumption, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Finished IMTDCs

Table III-14 presents U.S. producers' U.S. shipments, export shipments, and total shipments of finished IMTDCs. Virtually no internal consumption or U.S. company transfers of finished IMTDCs were reported by U.S. producers. U.S. producers' total shipments, of which more than *** percent were U.S. shipments during 2013-15, increased from 2013 to 2014, but fell in 2015 to a level that was higher than reported in 2013. U.S. producers' total shipments were lower in the first half of 2016 than in the first half of 2015. Total U.S. producers' U.S. shipments of finished IMTDCs in terms of quantity (in pieces) and value likewise increased from 2013 to 2014, but declined in 2015 to levels higher than those reported in 2013. Total U.S. producers' U.S. shipments of finished IMTDCs were lower in the first half of 2016 than they were in the comparable period of 2015 in terms of quantity (in pieces) and value. Unit values of U.S. shipments, which were consistently lower than U.S. producers' export unit values, fell from 2013 to 2014 but increased in 2015. The unit value of U.S. shipments in the first half of 2016 was lower than the unit value in the first half of 2015.

*** firms reported export shipments of the IMTDCs they finished. Principal export markets identified *** include ***, whereas ***. *** did not identify their principal export markets. *** was the largest exporter of finished IMTDCs, accounting for more than *** of domestic producers' U.S. exports during 2015 in terms of value. Exports accounted for *** percent of U.S. producers' combined total shipments of finished IMTDCs in terms of pieces during 2015 and *** percent in terms of value.

Table III-14

IMTDCs: U.S. producers' U.S. shipments, export shipments, and total shipments of finished IMTDCs, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Unfinished IMTDCs (not further finished by firm in the United States)

Table III-15 presents U.S. producers' U.S. shipments, export shipments, and total shipments of unfinished IMTDCs. Two responding IMTDC integrated producers with casting operations reported commercial U.S. shipments of unfinished IMTDCs produced in their facilities (***). *** was the only responding IMTDC caster that reported exports of unfinished castings. ***. U.S. producers' U.S. shipments of unfinished IMTDCs generally declined from 2013 to 2015 in terms of quantity (in pieces) and value. In addition, such shipments during the first half of 2016 were lower than reported in the comparable period in 2015.

Table III-15
IMTDCs: U.S. producers' U.S. shipments, export shipments, and total shipments of unfinished IMTDCs, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

U.S. PRODUCERS' INVENTORIES

Table III-16 presents U.S. producers' end-of-period inventories of finished IMTDCs and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments during 2013-15, January to June 2015, and January to June 2016. Seven domestic producers held inventories of finished IMTDCs during 2015, of which *** accounted for *** percent of the total held in inventory. Aggregate data show that inventories of finished IMTDCs increased during 2013-15 and were higher in the first half of 2016 than in the first half of 2015. U.S. producers' inventories were equivalent to between *** percent of U.S. producers' total shipments during 2013-15, and reached *** percent during the first half of 2016. There were no reported inventories of unfinished castings held by U.S. producers.

Table III-16
IMTDCs: U.S. producers' inventories of finished IMTDCs, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

U.S. PRODUCERS' IMPORTS

U.S. producers' imports of IMTDCs are presented in table III-17.

Table III-17
IMTDCs: U.S. producers' imports, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-18 shows U.S. producers' employment-related data. Combined U.S. producers' employment measured by production and related workers ("PRWs") increased overall from 2013 to 2015, but was lower during the first half of 2016 as compared with the first half of 2015. Total hours worked, hours worked per PRW, and wages paid followed this same general trend. Productivity showed overall declines since 2013 before partially recovering in January-June 2016; however, hourly wages and unit labor cost showed consistent increases.

Table III-18

IMTDCs: U.S. producers' employment related data, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

PART IV: U.S. IMPORTS, APPARENT U.S. CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

The Commission issued importer questionnaires to 91 firms believed to be possible importers of subject large-diameter IMTDCs, as well as to an additional 212 firms that were identified as possible U.S. producers of IMTDCs.[1] Usable questionnaire responses were received from 25 companies indicating that they had imported IMTDCs, while an additional 120 firms reported that they had not imported IMTDCs since January 1, 2013. Table IV-1 lists all responding U.S. importers of IMTDCs from Canada, China, and other sources, their locations, and their shares of reported U.S. imports of IMTDCs in 2015.[2]

For purposes of identifying possible importers of the subject merchandise to which questionnaires were issued in these investigations, staff focused on available information pertaining to the following three HTS statistical reporting numbers: 8483.50.6000, 8483.50.9040, and 8483.90.8080. The petitioner relied on these three numbers as the best available for its calculation of U.S. imports in its petitions, although it noted that these numbers are broader product categories which likely include merchandise that is outside the scope of the petitions.[3]

[1] The Commission issued questionnaires to 18 firms identified in the petitions, along with additional firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), are leading importers of items imported under HTS statistical reporting numbers 8483.50.6000, 8483.50.9040, and 8483.90.8080 (the primary HTS statistical reporting numbers identified in the petitions) since 2013. In addition, all firms receiving a U.S. producer questionnaire also received a U.S. importer questionnaire.

[2] In addition to the 25 companies listed in table IV-1 that provided usable importer questionnaire responses, Loren Cook Co. ("Cook") also provided a questionnaire response that included ***.

[3] Petitions, vol. I, p. 10.

Table IV-1

IMTDCs: U.S. importers, their headquarters, and share of total imports by source (based on pieces), 2015

Firm	Headquarters	Share of imports by source (percent)						
		Canada	China	Subject sources	Non-subject large-diameter	Total large-diameter	Total small-diameter	Total all sizes
AMEC Industry	Ontario, CA	***	***	***	***	***	***	***
ATP Inc.	Elk Grove Village, IL	***	***	***	***	***	***	***
B&B	Laporte, IN	***	***	***	***	***	***	***
Baart Industrial Group	Boise, ID	***	***	***	***	***	***	***
Baldor	Ft. Smith, AR	***	***	***	***	***	***	***
Bando USA Inc.	Itasca, IL	***	***	***	***	***	***	***
CNH Industrial	Racine, WI	***	***	***	***	***	***	***
Cummins Inc.	Columbus, IN	***	***	***	***	***	***	***
Daimler Trucks North America	Portland, OR	***	***	***	***	***	***	***
Detroit Diesel	Detroit, MI	***	***	***	***	***	***	***
Martin Sprocket	Arlington, TX	***	***	***	***	***	***	***
MasterDrive, Inc.	Fort Atkinson, WI	***	***	***	***	***	***	***
Maurey	Holly Springs, MS	***	***	***	***	***	***	***
McGuire Bearing	Portland, OR	***	***	***	***	***	***	***
MTU America Inc.	Novi, MI	***	***	***	***	***	***	***
New Standard Power Transmission	Ontario, CA	***	***	***	***	***	***	***
New Hampshire Industries	Lebanon, NH	***	***	***	***	***	***	***
Nord Gear Corp.	Waunakee, WI	***	***	***	***	***	***	***
RAK Ind., Inc., dba Power Rite Products	New Brunswick, NJ	***	***	***	***	***	***	***
Regal Beloit Corp.	Beloit, WI	***	***	***	***	***	***	***
Schaeffler Group USA	Fort Mill, SC	***	***	***	***	***	***	***
Scott Engineering	Loveland, OH	***	***	***	***	***	***	***
TBW	Chambersburg, PA	***	***	***	***	***	***	***
The Crosby Group	Tulsa, OK	***	***	***	***	***	***	***
U.S. Tsubaki	Wheeling, IL	***	***	***	***	***	***	***
Total		***	***	***	***	***	***	***

[1] ***.

Source: Compiled from data submitted in response to Commission questionnaires.

Staff issued questionnaires to leading companies identified in *** that together accounted for 61.0 percent of the total value of imports from all countries under the three primary HTS provisions identified by petitioner.[4] Companies that responded to the Commission's questionnaires, either with data or by certifying that they did not import the subject merchandise, accounted for the following shares of 2015 imports (by value) under those provisions, according to ***:

- Canada: 82.2 percent
- China: 40.0 percent
- Subject countries (Canada and China): 55.7 percent
- Nonsubject countries: 40.4 percent
- Total (subject and nonsubject): 46.2 percent

Staff also issued questionnaires to all companies identified as importers in the petitions (based on a broader proposed scope than that on which Commerce made its preliminary determinations). Fifteen of the eighteen companies identified in the petitions as importers responded (83 percent), either with data or by certifying that they did not import the subject merchandise.

Staff estimates importers' questionnaire data coverage to be at least 50 percent. However, presenting a decisive estimate is complicated by the inclusion of subject and nonsubject merchandise in the various relevant HTS provisions, the large number of potential importers identified by proprietary Customs data (especially compared to the relatively small number of importers identified in the petitions), the diversity of sizes and applications of the product at issue (making it difficult to identify relevant importers by business line or average unit value on imports), and the shifting definition of the imported subject merchandise itself.

U.S. IMPORTS

U.S. imports from subject and nonsubject sources

IMTDCs

Table IV-2 and figure IV-1 present data for U.S. imports of IMTDCs from Canada, China, and all other sources. These data show that imports of in-scope IMTDCs (i.e., at least 4 inches in outside diameter) from the subject countries increased by 7.4 percent based on quantity (in pieces) and 10.3 percent based on value from 2013 to 2015. These imports were 23.1 percent lower based on quantity (in pieces) and 28.2 percent lower based on value during the first half of 2016 compared with the first half of 2015. The average unit value of subject imports

[4] The remaining 39 percent of the total value of imports under the three primary HTS provisions were imported by more than 3,000 smaller importing firms.

increased overall from 2013 to 2015, but was lower in the first half of 2016 compared with the first half of 2015.

Table IV-2

IMTDCs: U.S. imports, by source, 2013-15, January to June 2015, and January to June 2016

Item	Calendar year			January to June	
	2013	2014	2015	2015	2016
	Quantity (pieces)				
U.S. imports from.--					
Canada large-diameter	***	***	***	***	***
China large-diameter	***	***	***	***	***
Subtotal, subject sources	1,461,606	1,525,610	1,569,599	757,013	582,468
Nonsubject sources large-diameter	636,044	652,449	633,414	321,527	346,244
Nonsubject sources small-diameter	2,645,744	2,836,622	2,873,882	1,431,003	1,586,087
Nonsubject sources of all sizes	3,281,788	3,489,071	3,507,296	1,752,530	1,932,331
All sources all sizes	4,743,394	5,014,681	5,076,895	2,509,543	2,514,799
	Value (1,000 dollars)				
U.S. imports from.--					
Canada large-diameter	***	***	***	***	***
China large-diameter	***	***	***	***	***
Subtotal, subject sources	34,241	35,732	37,778	18,456	13,246
Nonsubject sources large-diameter	24,544	24,998	23,578	11,880	11,213
Nonsubject sources small-diameter	28,050	34,476	21,116	10,581	9,930
Nonsubject sources of all sizes	52,594	59,474	44,693	22,461	21,143
All sources all sizes	86,835	95,205	82,471	40,917	34,388
	Unit value (dollars per piece)				
U.S. imports from.--					
Canada large-diameter	***	***	***	***	***
China large-diameter	***	***	***	***	***
Subtotal, subject sources	23.43	23.42	24.07	24.38	22.74
Nonsubject sources large-diameter	38.59	38.31	37.22	36.95	32.39
Nonsubject sources small-diameter[1]	10.60	12.15	7.35	7.39	6.26
Nonsubject sources of all sizes	16.03	17.05	12.74	12.82	10.94
All sources all sizes	18.31	18.99	16.24	16.30	13.67

Table continued on next page.

Table IV-2--Continued

IMTDCs: U.S. imports, by source, 2013-15, January to June 2015, and January to June 2016

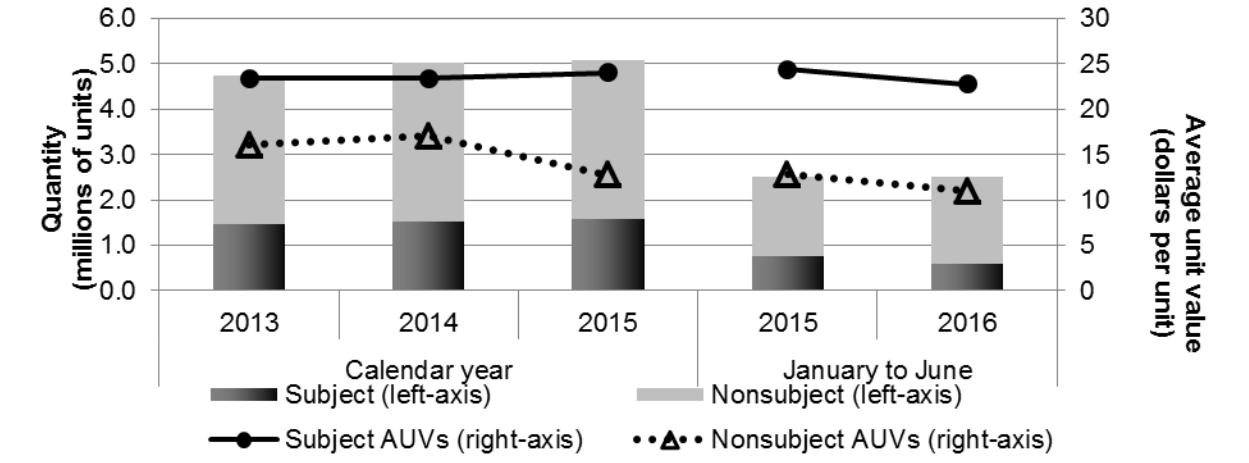
Item	Calendar year			January to June	
	2013	2014	2015	2015	2016
	Share of quantity (percent)				
U.S. imports from.--					
Canada large-diameter	***	***	***	***	***
China large-diameter	***	***	***	***	***
Subtotal, subject sources	30.8	30.4	30.9	30.2	23.2
Nonsubject sources large-diameter	13.4	13.0	12.5	12.8	13.8
Nonsubject sources small-diameter	55.8	56.6	56.6	57.0	63.1
Nonsubject sources of all sizes	69.2	69.6	69.1	69.8	76.8
All sources all sizes	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.--					
Canada large-diameter	***	***	***	***	***
China large-diameter	***	***	***	***	***
Subtotal, subject sources	39.4	37.5	45.8	45.1	38.5
Nonsubject sources large-diameter	28.3	26.3	28.6	29.0	32.6
Nonsubject sources small-diameter	32.3	36.2	25.6	25.9	28.9
Nonsubject sources of all sizes	60.6	62.5	54.2	54.9	61.5
All sources all sizes	100.0	100.0	100.0	100.0	100.0
	Ratio to U.S. production (percent)				
U.S. imports from.--					
Canada large-diameter	***	***	***	***	***
China large-diameter	***	***	***	***	***
Subtotal, subject sources	***	***	***	***	***
Nonsubject sources large-diameter	***	***	***	***	***
Nonsubject sources small-diameter	***	***	***	***	***
Nonsubject sources of all sizes	***	***	***	***	***
All sources all sizes	***	***	***	***	***

[1] The increase in unit value for U.S. imports of small-diameter IMTDCs from nonsubject sources from 2013 and 2014 and the decline in unit value from 2014 to 2015 is largely attributable to a change in imported product mix by ***, which accounted for ***.

Source: Compiled from data submitted in response to Commission questionnaires.

Figure IV-1

IMTDCs: U.S. import volumes and prices, 2013-15, January to June 2015, and January to June 2016



Source: Compiled from data submitted in response to Commission questionnaires.

As a share of total IMTDC imports (in terms of pieces), in-scope imports from Canada and China combined decreased from 30.8 percent in 2013 to 30.4 percent in 2014, before increasing to 30.9 percent in 2015. In-scope imports from subject countries accounted for 30.2 percent of total imports (in terms of pieces) in the first half of 2015 and 23.2 percent of total U.S. imports in the first half of 2016. As a share of total IMTDC imports (in terms of value), in-scope imports from Canada and China combined decreased from 39.4 percent in 2013 to 37.5 percent in 2014, before increasing to 45.8 percent in 2015. In-scope imports from subject countries accounted for 45.1 percent of total imports (in terms of value) in the first half of 2015 and 38.5 percent of total U.S. imports in the first half of 2016.

Mexico was one of the largest reported nonsubject sources for U.S. imports of IMTDCs, accounting for *** percent of total U.S. imports of large-diameter IMTDCs in 2015 in terms of quantity (in pieces), *** percent of total U.S. imports of small-diameter IMTDCs, and *** percent of the quantity of total U.S. imports of IMTDCs in 2015.[5] U.S. imports of IMTDCs from all nonsubject countries increased overall from 2013 to 2015 (in terms of quantity in pieces), and were higher during the first half of 2016 than in the comparable period of 2015. The average unit values of nonsubject imports decreased from 2013 to 2015, and were lower in the first half of 2016 compared with the first half of 2015.

The combined ratio of in-scope imports from Canada and China to U.S. production (on the basis of quantity in pieces) fell from *** percent in 2013 to *** percent in 2014, but increased to *** percent in 2015. The combined ratio was lower in the first half of 2016 at *** percent than in the first half of 2015 at *** percent. A declining overall trend in the ratio of

[5] These data do not include TBW's imports of IMTDCs finished in Mexico from castings produced in the United States.

imports to U.S. production was observed for Canada individually, with the ratio of in-scope imports from Canada to U.S. production falling from *** percent in 2013 to *** percent in 2015. An overall increasing trend in the ratio of imports to U.S. production was observed for China individually, with the ratio of in-scope imports from China to U.S. production increasing from *** percent in 2013 to *** percent in 2015. The ratios for Canada and China were lower in the first half of 2016 at *** percent and *** percent than in the first half of 2015 at *** percent and *** percent, respectively.

Finished and unfinished IMTDCs

Table IV-3 presents data for U.S. shipments of imports, by source and by level of finishing (i.e., finished and unfinished). These data show that almost all IMTDC imports (*** percent of U.S. shipments of imports in 2015 based on quantity in pieces and *** percent of U.S. shipments of imports in 2015 based on value) are finished. Of the limited volume of unfinished IMTDCs, U.S. shipments of in-scope imports from China accounted for the majority of the total U.S. shipments of unfinished IMTDC imports (***). For finished IMTDCs, Commerce's scope indicates that the country of origin for imported ITDCs is the country where the finished IMTDC was cast/forged, so the Commission's questionnaire data were collected on that basis.

Table IV-3
IMTDCs: U.S. importers' U.S. shipments by source and finishing, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Table continued on following page.

Table IV-3--Continued

IMTDCs: U.S. importers' U.S. shipments by source and finishing, 2013-15, January to June 2015, and January to June 2016

Item	Calendar year			January to June	
	2013	2014	2015	2015	2016
	Quantity (pieces)				
U.S. shipments of IMTDCs imported from.--					
Canada large-diameter	***	***	***	***	***
China large-diameter	***	***	***	***	***
Subtotal, subject sources	1,319,110	1,405,280	1,349,482	695,379	521,554
Nonsubject sources large-diameter	578,694	588,300	561,421	281,534	305,140
Nonsubject sources small-diameter	2,536,367	2,583,807	2,555,265	1,296,437	1,276,258
Nonsubject sources of all sizes	3,115,061	3,172,107	3,116,686	1,577,971	1,581,398
All sources all sizes	4,434,171	4,577,387	4,466,168	2,273,350	2,102,952
	Value (1,000 dollars)				
U.S. shipments of IMTDCs imported from.--					
Canada large-diameter	***	***	***	***	***
China large-diameter	***	***	***	***	***
Subtotal, subject sources	42,171	44,129	40,231	21,036	15,612
Nonsubject sources large-diameter	28,290	27,518	26,430	13,170	13,191
Nonsubject sources small-diameter	33,645	39,695	25,623	12,964	12,107
Nonsubject sources of all sizes	61,934	67,213	52,053	26,135	25,298
All sources all sizes	104,105	111,342	92,284	47,170	40,910
	Unit value (dollars per piece)				
U.S. shipments of IMTDCs imported from.--					
Canada large-diameter	***	***	***	***	***
China large-diameter	***	***	***	***	***
Subtotal, subject sources	31.97	31.40	29.81	30.25	29.93
Nonsubject sources large-diameter	48.89	46.78	47.08	46.78	43.23
Nonsubject sources small-diameter	13.26	15.36	10.03	10.00	9.49
Nonsubject sources of all sizes	19.88	21.19	16.70	16.56	16.00
All sources all sizes	23.48	24.32	20.66	20.75	19.45
	Share of total (percent)				
U.S. shipments of IMTDCs imported from.--					
Canada large-diameter	***	***	***	***	***
China large-diameter	***	***	***	***	***
Subtotal, subject sources	29.7	30.7	30.2	30.6	24.8
Nonsubject sources large-diameter	13.1	12.9	12.6	12.4	14.5
Nonsubject sources small-diameter	57.2	56.4	57.2	57.0	60.7
Nonsubject sources of all sizes	70.3	69.3	69.8	69.4	75.2
All sources all sizes	100.0	100.0	100.0	100.0	100.0

[1] ***.

[2] ***.

Note.--U.S. shipments of imports of small-diameter IMTDCs are included in the nonsubject sources small-diameter aggregate as these imports from subject countries are out-of-scope and therefore not considered subject imports.

Source: Compiled from data submitted in response to Commission questionnaires.

Negligible imports

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[6] Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[7]

Table IV-4 presents data on U.S. imports of IMTDCs during the 12-month period preceding the filing of the petitions for which data are available. Three separate sets of import data are presented for comparison purposes: (1) Import data compiled from official import statistics for the period October 2014-September 2015, which are vastly overstated with the inclusion of a large amount of out-of-scope merchandise; (2) Import data compiled from preliminary phase questionnaires for the period October 2014-September 2015, which are somewhat overstated because they do not reflect certain scope exclusions subsequently made by Commerce; and (3) Import data compiled from final phase questionnaires for calendar year 2015, which are more aligned with Commerce's current scope but are not for the exact time period immediately preceding the filing of the petitions. These data show that reported imports from Canada and China individually accounted for more than 3 percent of total imports of large-diameter IMTDCs and collectively accounted for more than 7 percent of total imports of large-diameter IMTDCs.

[6] Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

[7] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

Table IV-4

IMTDCs: U.S. imports in the 12-month period immediately preceding the filing of the petitions, October 2014 through September 2015

Item	October 2014 through September 2015				Calendar year 2015	
	Official import statistics		Preliminary phase questionnaire data		Final phase questionnaire data	
	Value (1,000 dollars)	Share of value (percent)	Value (1,000 dollars)	Share of value (percent)	Value (1,000 dollars)	Share of value (percent)
U.S. imports from--						
Canada	123,849	16.3	***	***	***	***
China	167,412	22.1	***	***	***	***
Subtotal, subject sources	291,261	38.4	38,905	47.9	37,778	45.8
Nonsubject sources	467,016	61.6	42,320	52.1	44,693	54.2
All sources	758,277	100.0	81,225	100.0	82,471	100.0

Source: Compiled from data submitted in response to Commission questionnaires, and official U.S. import statistics using HTS statistical reporting numbers 8483.50.6000, 8483.50.9040, and 8483.90.8080, accessed September 10, 2016.

Cumulation

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the U.S. market. Certain information concerning these factors is presented in Part II of this report. Information concerning fungibility and sales in the geographical markets is presented below.

Data concerning U.S. importers' U.S. shipments of small- and large-diameter IMTDCs were presented previously in table IV-3. These data show that during 2015, 57.2 percent of U.S. importers' U.S. shipments were small-diameter IMTDCs, *** percent were large-diameter Chinese IMTDCs (in-scope), *** percent were large-diameter Canadian IMTDCs (in-scope), and 12.6 percent were large-diameter IMTDCs from nonsubject countries. U.S. producers provided production data concerning small- and large-diameter IMTDCs. These data were presented previously in Part III of this report in table III-11 (finished) and table III-12 (unfinished). These data show that during 2015, *** percent of U.S. production of finished IMTDCs and *** percent of U.S. production of unfinished IMTDCs were large-diameter and *** percent of U.S. production of finished IMTDCs and *** percent of U.S. production of unfinished IMTDCs were small-diameter.

Data concerning U.S. importers' U.S. shipments of finished and unfinished IMTDCs were presented previously in table IV-3. These data show that during 2015, *** percent of U.S. importers' U.S. shipments were finished IMTDCs and *** percent were unfinished. U.S. producers' U.S. shipments of unfinished and finished IMTDCs were presented previously in Part III of this report in table III-14 (finished) and table III-15 (unfinished). These data show that during 2015, U.S. producers' U.S. shipments of finished IMTDCs amounted to *** pieces and U.S. producers' U.S. shipments of unfinished IMTDCs that were not further finished (internally consumed) by their firm in the United States amounted to *** pieces.

Table IV-5 presents official U.S. import statistics by Customs districts of entry. These data are based on imports entering the United States under three broad HTS statistical reporting numbers (8483.50.6000, 8483.50.9040, and 8483.90.8080) that include a substantial amount of merchandise that falls outside the scope of these investigations. Regardless, these data show that, although a substantial share of imports from Canada, China, and other countries under these broad categories enter the United States in Customs districts located in Midwest states (e.g., Illinois, Ohio, and Michigan), these imports also enter Customs districts in Northeast, Mountains, Southeast, Pacific Coast, and Central Southwest geographical areas (e.g., New York, Montana, Georgia, South Carolina, California, Louisiana, and Texas).

Table IV-5

IMTDCs: U.S. imports by customs districts of entry, 2015

Customs entry district	Calendar year 2015	
	Value (1,000 dollars)	Share of value (percent)
U.S. imports from Canada.--		
Detroit, MI	107,828	89.1
Buffalo, NY	3,341	2.8
Great Falls, MT	2,990	2.5
Ogdensburg, NY	1,678	1.4
New Orleans, LA	1,546	1.3
All other districts	3,615	3.0
Total U.S. imports from Canada	120,998	100.0
U.S. imports from China.--		
Chicago, IL	67,339	40.0
Cleveland, OH	22,116	13.1
Los Angeles, CA	13,928	8.3
Charleston, SC	13,131	7.8
Savannah, GA	8,970	5.3
All other districts	43,061	25.5
Total U.S. imports from China	168,545	100.0
U.S. imports from nonsubject sources.--		
Chicago, IL	114,533	25.2
Cleveland, OH	39,510	8.7
New York, NY	37,976	8.4
Laredo, TX	31,197	6.9
New Orleans, LA	28,815	6.3
All other districts	201,753	44.5
Total U.S. imports from nonsubject sources	453,784	100.0

Source: Official U.S. import statistics using HTS statistical reporting numbers 8483.50.6000, 8483.50.9040, and 8483.90.8080, accessed September 10, 2016.

APPARENT U.S. CONSUMPTION AND MARKET SHARES

Apparent U.S. consumption

Table IV-6 and figure IV-2 present calculated data on apparent U.S. consumption of IMTDCs. The U.S. component of the consumption calculation reflects U.S. producers' U.S. shipments of finished IMTDCs produced from unfinished IMTDCs cast in the United States plus U.S. producers' U.S. shipments of unfinished IMTDCs produced in the United States not already reported as a finished IMTDC. The U.S. component also includes U.S. importers' U.S. shipments of finished IMTDCs that were cast/forged in the United States but finished abroad (e.g., in Mexico). This quantity measure excludes any IMTDCs finished in the United States from imported unfinished IMTDCs, as those are reported for the purposes of apparent U.S. consumption as imports; as discussed above, IMTDCs finished in the United States from imported unfinished IMTDCs were nominal.

Table IV-6
IMTDCs: Apparent U.S. consumption, 2013-15, January to June 2015, and January to June 2016

Item	Calendar year			January to June	
	2013	2014	2015	2015	2016
	Quantity (pieces)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments from.--					
Canada large-diameter	***	***	***	***	***
China large-diameter	***	***	***	***	***
Subtotal, subject sources	1,319,110	1,405,280	1,349,482	695,379	521,554
Nonsubject sources large-diameter	578,694	588,300	561,421	281,534	305,140
Nonsubject sources small-diameter	2,536,367	2,583,807	2,555,265	1,296,437	1,276,258
Nonsubject sources of all sizes	3,115,061	3,172,107	3,116,686	1,577,971	1,581,398
All sources all sizes	4,434,171	4,577,387	4,466,168	2,273,350	2,102,952
Apparent U.S. consumption	***	***	***	***	***
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments from.--					
Canada large-diameter	***	***	***	***	***
China large-diameter	***	***	***	***	***
Subtotal, subject sources	42,171	44,129	40,231	21,036	15,612
Nonsubject sources large-diameter	28,290	27,518	26,430	13,170	13,191
Nonsubject sources small-diameter	33,645	39,695	25,623	12,964	12,107
Nonsubject sources of all sizes	61,934	67,213	52,053	26,135	25,298
All sources all sizes	104,105	111,342	92,284	47,170	40,910
Apparent U.S. consumption	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.

Figure IV-2
IMTDCs: Apparent U.S. consumption, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Apparent U.S. consumption (in terms of quantity in pieces) increased by *** percent from 2013 to 2014, but declined by *** percent in 2015. Apparent U.S. consumption in terms of pieces was *** percent lower during the first half of 2016 than in the comparable period of 2015. Similarly, apparent U.S. consumption in terms of value increased by *** percent from 2013 to 2014, but declined by *** percent in 2015. Apparent U.S. consumption in terms of value was *** percent lower during January-June 2016 as compared with January-June 2015.

U.S. market shares

Calculated U.S. market share data for IMTDCs are presented in table IV-7. On the basis of quantity, these data show that the U.S. producers' ***-percent market share in 2013 increased by *** percentage points in 2014 before dropping back to *** percent in 2015. The market share held by U.S. producers in terms of pieces during the first half of 2016 was *** percentage points less than that held during the first half of 2015. On the basis of value, U.S. producers held a ***-percent market share in 2013-14, which increased to *** percent in 2015. The market share held by U.S. producers in terms of value during the first half of 2016 (*** percent) was *** percentage points more than that held during the first half of 2015.

The market share held by subject sources in terms of pieces increased by *** percentage points from *** percent in 2013 to *** percent in 2015. The market share held by subject sources combined in terms of pieces was lower at *** percent in in the first half of 2016 when compared to *** percent in the first half of 2015. The market share held by subject sources in terms of value fell from *** percent in 2013 to *** percent in 2014 before increasing to *** percent in 2015. The market share held by subject sources combined in terms of value was lower at *** percent in the first half of 2016 when compared to *** percent in the first half of 2015.

Nonsubject sources showed an overall decline in market share during 2013-15, but the market share held by nonsubject sources during the first half of 2016 was higher than that reported in the comparable period of 2015.

Table IV-7
IMTDCs: Market shares, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material and energy costs

For all of the 10 reporting U.S. firms together, producing both castings and finished IMTDCs, raw material costs as a share of total cost of goods sold ("COGS") increased from *** percent in 2013 to *** percent in 2015. For U.S. reporting firms with casting and integrated casting and finishing operations, that ratio increased from *** percent in 2013 to *** percent in 2015, while for U.S. firms with finishing operations only, the ratio declined from *** percent in 2013 to *** percent in 2015.

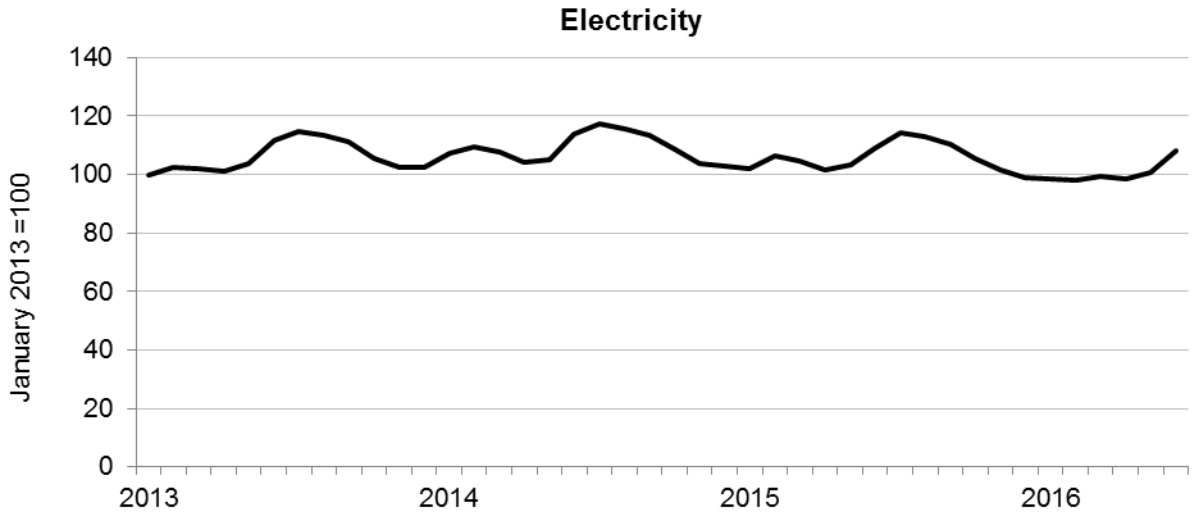
Pig iron, scrap iron, and ferrous scrap metal are the principal raw materials used in production.[1] Pig iron and ferrous scrap prices are shown in figure V-1. Electricity and natural gas are also costs,[2] and their prices are provided in figure V-2.

Figure V-1
Raw materials: Prices of imported pig iron and of ferrous scrap, January 2013-September 2016

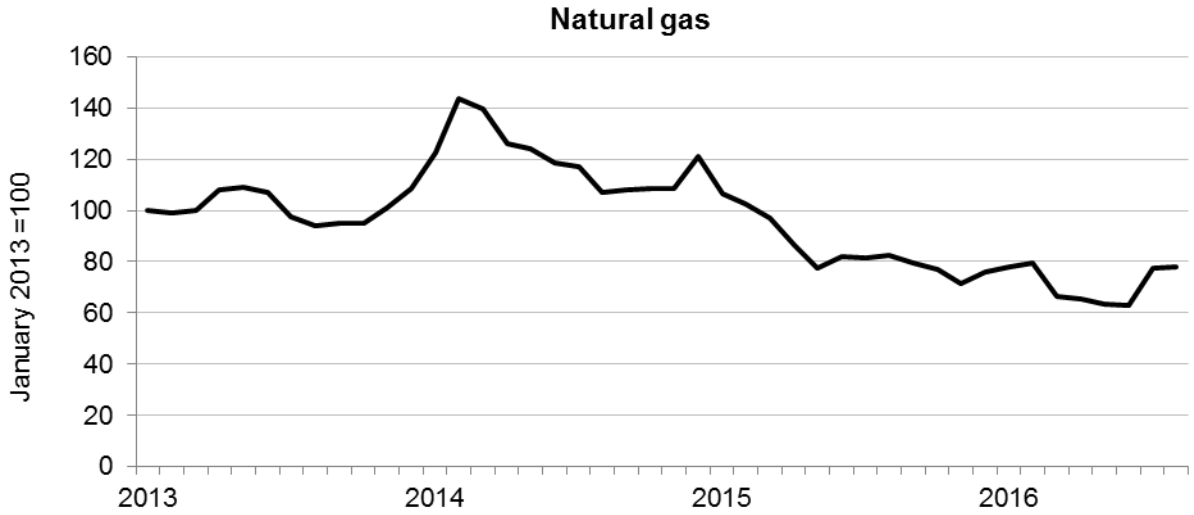
* * * * * * *

[1] Petition, p. 9.
[2] Conference transcript, p. 104 (Christenson), and ***.

Figure V-2
Energy prices: Prices of industrial electricity and natural gas, January 2013-August 2016



Source: Energy Information Administration and staff calculations.



Source: Energy Information Administration and staff calculations.

Overall, pig iron and scrap prices were stable in 2013 and into 2014, fell in late 2014 and 2015, and then increased somewhat in 2016. Natural gas prices were stable during most of 2013, increased sharply in late 2013 and early 2014, and then declined through June 2016 before increasing slightly in July and August 2016. Electricity prices were generally stable with seasonal fluctuations.

U.S. producers generally reported that raw material prices had decreased or had fluctuated since January 2013.[3] *** reported that raw material prices generally increased from 2013 to 2014, decreased somewhat in 2015, and then began to increase in the first half of 2016.

Transportation costs to the U.S. market

In 2015, transportation costs to the U.S. market were 0.7 percent for IMTDCs from Canada, 6.4 percent for IMTDCs from China, and 0.9 percent for IMTDCs from Mexico.[4]

U.S. inland transportation costs

Six of 11 U.S. producers and 13 of 21 importers typically arrange transportation to their customers, while 5 producers and 9 importers reported that their purchasers typically arrange transportation. U.S. producers and importers generally reported U.S. inland transportation costs of 1 to 5 percent of the total delivered cost of IMTDCs.

PRICING PRACTICES

Pricing methods

U.S. producers and importers reported using transaction-by-transaction negotiations, contracts, and price lists (table V-1). TBW and Baldor described selling IMTDCs by catalogue as well as through custom orders. TBW added that custom orders often involve smaller volumes with lower profit margins[5] and an economic consultant for Baldor stated that both firms sell more products from their catalogues than from custom orders.[6] *** reported that its prices to OEMs are set transaction by transaction whereas its prices to distributors are set by price lists. *** reported that each of its distribution customers has a different multiplier added to the list price to determine the actual selling price. It also stated that its pricing to end users and OEMs

[3] Five producers reported that raw material prices decreased, four reported that they fluctuated, one reported no change, and one reported that they increased.

[4] Transportation costs were determined by comparing the c.i.f. value of imports to the Customs value of imports for HTS codes 8483.50.6000, 8483.50.9040, and 8483.90.8080.

[5] Conference transcript, pp. 21 and 69 (McCartney), and p. 100 (Crist).

[6] Conference transcript, p. 69 (Beck).

is more competitive than pricing to distributors, and that ***.[7] Some suppliers also offer multiple brands of IMTDCs that are sold at different price points.[8]

Table V-1

IMTDCs: U.S. producers and importers reported price setting methods, by number of responding firms[1]

Method	U.S. producers	U.S. importers
Transaction-by-transaction	8	10
Contract	3	7
Set price list	4	16
Other	2	2
Total responding firms	11	21

[1] The sum of responses in each column may not add up to the total number of responding firms, as each firm was instructed to check all applicable price setting methods employed.

Note.—***.

Source: Compiled from data submitted in response to Commission questionnaires.

At the hearing, TBW stated that in the past OEMs almost always purchased the lowest-priced product whereas distributors considered factors such as quality, brand, and availability but that these factors have become less important to distributors.[9] It also stated that the IMTDC industry used to have standardized pricing with list and discount structures particularly in the distribution channel, but that pricing now more commonly occurs through transaction based negotiations.[10]

Eight of the 11 responding producers and 12 of 18 responding importers reported selling mainly on a spot or short-term contract basis. *** sold exclusively on a spot basis in 2015, while *** were on an annual or long-term contract basis. Importers *** also sold mostly on an annual or long-term contract basis.

Long-term contract length ranged from one year *** to two years *** and up to three or more years (***). U.S. producers' and importers' annual and long-term contracts typically allowed price renegotiation during the contract, but did not have meet-or-release provisions.

Thirteen of 24 purchasers reported that they purchase IMTDCs daily, 8 weekly, and 2 monthly. Most purchasers (20 of 24) reported no change in their purchasing frequency since 2013. Most purchasers reported contacting 1 to 5 suppliers before making a purchase.

[7] ***.

[8] For example, Baldor sells IMTDCs under the Maska and Dodge brands and Regal Beloit sells IMTDCs under the Browning and Leeson brands. ***. Emails from *** and purchaser questionnaire responses.

[9] Hearing transcript, p. 19 (Crist).

[10] Hearing transcript, pp. 86-87 (Christenson).

Sales terms and discounts

U.S. producers and a majority of importers typically quote prices on an f.o.b. basis, but one-third of responding importers also quote prices on a delivered basis.

Five of the 11 responding U.S. producers offer quantity discounts, and 3 of these producers also offer total volume and/or other discounts. The other six producers reported having no discount policy. Most responding importers reported offering quantity, total volume, or other discounts. Most producers and importers also reported sales terms of net 30 days.

Price leadership

Seventeen of 24 purchasers listed one or more price leaders. The firms most frequently reported to be price leaders were Baldor (listed by 10 purchasers), TBW (listed by 8 purchasers), and Regal Beloit (listed by 5 purchasers). One purchaser stated that the major manufacturers were first to announce price increases. Several firms listing Baldor (including specifying Baldor's Dodge brand and Maska brand) stated that Baldor offered good quality at a reasonable price, one stated that it was an industry leader and primary brand for IMTDCs, and one purchaser stated that Baldor's Maska brand was a leader in "down" pricing. Firms listing TBW noted that it had not increased price in the last 3 years, offered good value (quality and cost), and that it maintained prices and resisted price decreases. One purchaser stated that Regal Beloit (Browning brand) was the highest priced supplier.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following IMTDC products[11] shipped to unrelated U.S. distributors and end users/OEMs during January 2013-June 2016.

***Product 1*.--Narrow "3V" groove sheave, with a 6.0-inch outside diameter and three grooves, suitable for use with Type SDS bushing**

***Product 2*.--Narrow "5V" groove sheave, with a 23.6-inch outside diameter and eight grooves, suitable for use with Type J bushing**

***Product 3*.--Narrow "5V" groove sheave, with a 50-inch outside diameter and six grooves, suitable for use with Type M bushing**

***Product 4*.--Narrow "5V" groove sheave, with a 50-inch outside diameter and eight grooves, suitable for use with Type M bushing**

***Product 5*.--Type E bushing, with 3-3/8-inch bore**

***Product 6*.--Type F bushing, with 3-3/8-inch bore**

Four U.S. producers[12] and 11 importers[13] provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[14] Pricing data reported by these firms accounted for approximately 0.6 percent of U.S. producers' shipments of IMTDCs (small- and large-diameter), 1.7 percent of U.S. shipments of subject imports from Canada and 0.9 percent of U.S. shipments of subject imports from China in 2015.[15]

Price data for products 1-6 are presented in tables V-2 to V-7 and figures V-3 to V-8. Nonsubject country prices are presented in Appendix D.

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[11] The pricing products are different from those in the preliminary-phase investigations and include bushings, which were not among the pricing items in the preliminary phase, as well as sheaves. Based on information provided by the petitioner in comments on the draft questionnaires, staff selected the five largest volume products for TBW and Martin Sprocket, as well as a sixth product (product 1) ***.

[12] U.S. producers reporting data were ***.

[13] Eleven importers reported data for China, one (***) reported data for Canada, and two (***) reported data for Mexico.

[14] Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

[15] Petitioner noted that since there are many IMTDC specifications, its suggested pricing products account for a small share of total IMTDC sales. It stated that TBW's and other producers' catalogues list thousands of different part numbers. TBW's Comments on Draft Questionnaires, pp. 5-6.

Table V-2

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarters, January 2013-June 2016

* * * * * * *

Table V-3

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarters, January 2013-June 2016

* * * * * * *

Table V-4

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarters, January 2013-June 2016

* * * * * * *

Table V-5

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by quarters, January 2013-June 2016

* * * * * * *

Table V-6

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 5 and margins of underselling/(overselling), by quarters, January 2013-June 2016

* * * * * * *

Table V-7

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 6 and margins of underselling/(overselling), by quarters, January 2013-June 2016

* * * * * * *

Figure V-3a

IMTDCs: Weighted-average prices and quantities of domestic and imported product 1 sold to distributors, by quarters, January 2013-June 2016

* * * * * * *

Figure V-3b

IMTDCs: Weighted-average prices and quantities of domestic and imported product 1 sold to end users, by quarters, January 2013-June 2016

* * * * * * *

Figure V-4a

IMTDCs: Weighted-average prices and quantities of domestic and imported product 2 sold to distributors, by quarters, January 2013-June 2016

* * * * * * *

Figure V-4b

IMTDCs: Weighted-average prices and quantities of domestic and imported product 2 sold to end users, by quarters, January 2013-June 2016

* * * * * * *

Figure V-5a

IMTDCs: Weighted-average prices and quantities of domestic and imported product 3 sold to distributors, by quarters, January 2013-June 2016

* * * * * * *

Figure V-5b

IMTDCs: Weighted-average prices and quantities of domestic and imported product 3 sold to end users, by quarters, January 2013-June 2016

* * * * * * *

Figure V-6a

IMTDCs: Weighted-average prices and quantities of domestic and imported product 4 sold to distributors, by quarters, January 2013-June 2016

* * * * * * *

Figure V-6b

IMTDCs: Weighted-average prices and quantities of domestic and imported product 4 sold to end users, by quarters, January 2013-June 2016

* * * * * * *

Figure V-7a

IMTDCs: Weighted-average prices and quantities of domestic and imported product 5 sold to distributors, by quarters, January 2013-June 2016

* * * * * * *

Figure V-7b

IMTDCs: Weighted-average prices and quantities of domestic and imported product 5 sold to end users, by quarters, January 2013-June 2016

* * * * * * *

Figure V-8a

IMTDCs: Weighted-average prices and quantities of domestic and imported product 6 sold to distributors, by quarters, January 2013-June 2016

* * * * * * *

Figure V-8b

IMTDCs: Weighted-average prices and quantities of domestic and imported product 6 sold to end users, by quarters, January 2013-June 2016

* * * * * * *

Some of the pricing data submitted by firms showed large variations. Several firms explained that their prices can vary substantially depending on factors including the brand, the customer, the application, and the lead time.[16] Because of such variations for an individual supplier as well as among suppliers, prices shown in the tables can vary widely for some products and some quarters.

Price trends

Prices fluctuated during January 2013-June 2016, and did not show a clear trend. Table V-8 summarizes the price trends, by country and by product. As shown in the table, five of the price series for domestic product showed overall increases and six showed overall decreases. Price data for Canada also showed mixed trends, while price data for China showed overall increases.

[16] ***.

Table V-8

IMTDCs: Summary of weighted-average f.o.b. prices for products 1-6 from the United States, Canada, and China

* * * * * * *

Price comparisons

As shown in table V-9, prices for IMTDCs imported from subject countries were below those for U.S.-produced product in 217 of 228 instances (36,831 pieces); margins of underselling ranged from 0.1 to 84.8 percent. In the remaining 11 instances (253 pieces), prices for IMTDCs imported from subject countries were 0.8 to 57.9 percent above prices for the domestic product. The 11 instances of overselling were all for Chinese product, and mostly in product 3, a relatively high-value low-volume product.

Table V-9

IMTDCs: Instances of underselling/overselling and the range and average of margins, by country, January 2013-June 2016

Source	Underselling				
	Number of quarters	Quantity[1] (pieces)	Average margin (percent)	Margin range (percent)	
				Min	Max
Canada	84	21,999	33.8	8.4	63.3
China	133	14,832	39.6	0.1	84.8
Total, underselling	217	36,831	37.4	0.1	84.8
Source	**(Overselling)**				
	Number of quarters	Quantity[1] (pieces)	Average margin (percent)	Margin range (percent)	
				Min	Max
Canada	0	0	---	---	---
China	11	253	(15.6)	(0.8)	(57.9)
Total, overselling	11	253	(15.6)	(0.8)	(57.9)

[1] These data include only quarters in which there is a comparison between the U.S. and subject product.

Source: Compiled from data submitted in response to Commission questionnaires.

For sales to distributors, subject import prices were below those for U.S.-produced product in 120 of 126 instances (22,331 pieces, margins of 0.1 to 81.2 percent); and above those for domestic product in 6 instances (199 pieces, margins of 0.8 to 24.7 percent). For sales to end users, subject import prices were below those for U.S.-produced product in 97 of 102 instances (14,500 pieces, margins of 8.4 to 84.8 percent); and above those for domestic product in 5 instances (54 pieces, margins of 2.6 to 57.9 percent).

For sheaves (products 1-4), subject import prices were below those for U.S.-produced product in 105 of 116 instances (12,336 pieces, margins of 0.1 to 84.8 percent); and above those for domestic product in 11 instances (253 pieces, margins of 0.8 to 57.9 percent). For

bushings (products 5-6), subject import prices were below those for U.S.-produced product in all 112 instances (24,465 pieces, margins of 8.4 to 52.5 percent).

LOST SALES AND LOST REVENUE

In the final phase of the investigations, 8 of the 11 responding U.S. producers reported that they had to reduce prices, 3 reported they had to roll back announced price increases, and 8 reported that they had lost sales.[17] As noted in Part II, the Commission received purchaser questionnaire responses from 24 purchasers.[18] Responding purchasers reported purchasing $93 million of IMTDCs, of which $62 million were large-diameter IMTDCs, during 2015 (table V-10). As noted in the table, some purchasers had difficulty in providing data on their IMTDC purchases for total IMTDC purchases, or by large- and small-diameter IMTDCs, and/or by country of origin.[19]

Table V-10
Large-diameter IMTDCs: Purchasers' responses to purchasing patterns

* * * * * * *

Of the 23 responding purchasers, 13 reported that they had purchased subject imports instead of IMTDCs from U.S. producers since 2013, with 13 reporting purchasing imports from Canada and 10 reporting purchasing imports from China (table V-11).[20] Eleven of the 13 purchasers that reported purchasing subject imports instead of domestic product reported that subject imports were priced lower than domestic product.[21]

Table V-11
Large-diameter IMTDCs: Purchasers' responses to shifting supply sources

* * * * * * *

[17] Three producers reported that they did not reduce prices; seven reported that they did not roll back announced price increases; and 2 reported that had not lost sales.

[18] Two purchasers (***) submitted lost sales lost revenue survey responses in the preliminary phase, and one of these firms (***) submitted a purchaser questionnaire response in the final phase.

[19] Firms were instructed to report country of origin of finished IMTDCs based on the location where the IMTDC was cast/forged.

[20] One purchaser (***) did not provide a response to this question.

[21] Ten firms reported that the Canadian product was priced lower than domestic product and 9 firms reported that the Chinese product was priced lower than domestic product.

Six of these 13 purchasers reported that price was the reason for purchasing subject imports.[22] Only one firm provided an estimate of the quantity shifted to subject imports; *** reporting shifting *** pieces to Canada and *** to China. Other identified reasons for shifting from U.S. producers were customer demand and availability.

Of the 24 responding purchasers, 4 reported that U.S. producers had reduced prices in order to compete with lower-priced imports from Canada and China (table V-12; 14 reported that they did not know). The reported estimated price reduction ranged from 4 to 30 percent. Two firms reported 4 and 9 percent respectively for both Canada and China, and one reported 30 percent for Canada. In describing the price reductions, purchasers noted increased discounts from price lists, that TBW held prices steady, and that TBW and Martin Sprocket lowered their prices to compete with Baldor's low-priced Maska brand sheaves from Canada.

Table V-12
Large-diameter IMTDCs: Purchasers' responses to U.S. producer price reductions

* * * * * * *

[22] Six purchasers reported that price was a primary reason for Canada, and 5 reported that it was a primary reason for China.

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Ten U.S. producers provided useable financial data. These include five integrated firms that produce castings and perform finishing operations on their own castings[1] and five firms that perform finishing operations on purchased castings.[2] Differences between the trade and financial sections of the Commission's questionnaire are ***. As explained below, the data in this section of the report are for the sales and costs of small- and large-diameter, finished and unfinished IMTDCs.[3]

OPERATIONS ON IMTDCS

The presentation of data is organized as follows:[4]

- Table VI-1 presents aggregated data on the integrated (five firms reporting integrated casting and finishing) and stand-alone finishing (five firms reporting finishing operations only) operations of the reporting U.S. producers' operations in relation to IMTDCs and table VI-2 provides a calculation of changes in the average unit values for selected financial elements presented in table VI-1.

- Table VI-3 presents profit-and-loss data of U.S. producers with integrated casting and finishing operations,[5] and table VI-4 (like table VI-2) provides a calculation of changes in the average unit values of selected financial elements.

- Table VI-5 provides profit-and-loss data of the five reporting firms (***) with finishing operations only.[6] Table VI-6 provides a calculation of changes in the average unit values of selected financial elements for table VI-5.

---

[1] There were five reporting firms that are integrated producers, i.e., cast and finish the firm's own castings (although their finishing operations may be supplemented by purchases of castings): Bremen (***); EnDyn (***); Goldens' Foundry (***); Martin Sprocket (***); and TBW (***). ***. ***.

[2] There were five reporting firms that are finishers only, that do not have casting capability and rely on purchases of cast blanks: B&B (***); Baldor (***); Hi-Lo (***); Maurey (***); and Sterling (***). A sixth firm, ***.

[3] The responding firms generally produce products other than IMTDCs in their facilities, hence the data represent allocations. Generally speaking, the percentage of sales value accounted for by IMTDCs ranges from ***. See U.S. producers' questionnaire responses, section III-5.

[4] Data presented here differ from those in the prehearing staff report: as discussed in section III of the report, the data for ***. The data for Waupaca separately are provided in appendix C.

[5] ***. Firm-by-firm data on their integrated operations are presented in appendix E, table E-1.

Table VI-1
IMTDCs: Results of operations of U.S. producers, all firms, fiscal years 2013-15, January-June 2015, and January-June 2016

* * * * * * *

Table VI-2
IMTDCs: Changes in average unit values for all firms, between fiscal years 2013-15, and between January-June 2015 and January-June 2016

* * * * * * *

Table VI-3
IMTDCs: Results of operations of U.S. producers with integrated casting and finishing operations, fiscal years 2013-15, January-June 2015, and January-June 2016

* * * * * * *

Table VI-4
IMTDCs: Changes in average unit values for U.S. producers with integrated casting and finishing operations, between fiscal years 2013-15, and between January-June 2015 and January-June 2016

* * * * * * *

Table VI-5
IMTDCs: Results of operations of U.S. producers with finishing operations only, fiscal years 2013-15, January-June 2015, and January-June 2016

* * * * * * *

Table VI-6
IMTDCs: Changes in average unit values for U.S. producers with finishing operations only, between fiscal years 2013-15, and between January-June 2015 and January-June 2016

* * * * * * *

(…*continued*)

[6] These data are for firms with finishing operations only, i.e., the firms purchase castings from which they produce finished product. Included in these data are ***. Firm-by-firm data on their finishing operations are presented in appendix E, table E-2.

Net sales

Based on the data in tables VI-1 (all firms), total net sales by quantity and value increased irregularly from 2013 to 2015 and were lower in January-June 2016 ("interim 2016") than in January-June 2015 ("interim 2015"). The average unit value of sales for all reporting firms increased from 2013 to 2015 and was *** higher in interim 2016. Sales by U.S. integrated firms (table VI-3) declined by quantity but increased *** from 2013 to 2015 and were lower in interim 2016 compared with interim 2015. Sales by U.S. finishers (table VI-5) increased irregularly from 2013 to 2015 but were lower in interim 2016 compared to interim 2015.

Based on the data in table E-1 (integrated casting and finishing operations), *** reported lower sales between 2013 and 2015; the ***. The average unit value of sales increased irregularly from 2013 to 2015 and was *** higher in interim 2016 than in the period one year earlier (tables VI-3 and E-1). This change also was led by the data reported by ***. Based on the data in tables VI-5 and E-2, sales by finishers increased from 2013 to 2015, accounted for by the data of ***. The average unit value of sales of the finishers declined from 2013 to 2015 but was higher in interim 2016 than in interim 2015.

Costs and expenses

Based on the data in table VI-1, total COGS irregularly increased from 2013 to 2015 and was lower in interim 2016 compared to the period one year earlier. The ratio of total COGS to total net sales rose *** by *** percentage points over the annual periods but was *** percentage points lower in interim 2016 compared with interim 2015. The average unit value of total COGS followed that same trends. Changes in total COGS, the ratio of total COGS to net sales, and the average unit value of total COGS in tables VI-3 and VI-5 are similar to those in table VI-1. Changes in total COGS were generally due to the data of *** (table E-1). Among finisher firms the data of *** accounted for much of the increase in total COGS between the yearly periods (table E-2). Changes in raw material costs generally led to the changes in total COGS. Raw materials, as inputs to the production of castings or as purchased blanks, accounted for approximately *** percent of total COGS and *** percent of total net sales during the periods for which data were gathered. The value of SG&A expenses increased during 2013-15 but was lower in interim 2016 compared to interim 2015. The ratio of SG&A expenses to total net sales and per-unit values increased between the annual periods and were higher in interim 2016.

Profitability

Based on the data in table VI-1, operating income and net income of all firms together fell from 2013 to a loss in 2015, but the two indicators were higher in interim 2016 than in interim 2015; changes in these measures were lower when expressed as a ratio to total net sales and on a per-unit basis followed the trends in value. Two firms, ***, accounted for ***.

Variance analysis

A variance analysis for the operations of all U.S. producers of IMTDCs is presented in table VI-7 that corresponds to the data in table VI-1.[7] A variance analysis is a method to assess the changes in profitability from period to period by measuring the impact of changes in the relationships between price, cost, and volume. A calculation is made of the impact of each factor by varying only that factor while holding all other factors constant. The components of net sales variances are either favorable (positive), resulting in an increase in net sales and profitability or unfavorable (negative) resulting in the opposite.

Table VI-7
IMTDCs; Variance analysis for U.S. producers, all firms, fiscal years 2013-15, January-June 2015, and January-June 2016

* * * * * * *

The analysis in table VI-7 indicates that the industry's operating income and net income declined between 2013 and 2015 because unfavorable operating costs variances (unit costs increased) were greater than favorable price variances (unit sales values increased). The industry's operating and net income increased between the interim periods because the favorable price variance was greater than the unfavorable net cost/expense variance. The analysis also indicates that the mix of favorable and unfavorable variances changed between periods—both the price variance and net cost/expense variances were unfavorable between 2013 and 2014 and caused a decline in operating income while only the price variance was unfavorable but was greater than the favorable net cost/expense variance and caused a decline in net income between those two years. Although not shown, a variance analysis for the integrated firms (corresponding to the data in table VI-3) and for the firms with finishing operations only (corresponding to the data in table VI-5) is similar to that presented here.

[7] The Commission's variance analysis is calculated in three parts: Sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of each table, the price variance is from sales, the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-8 presents capital expenditures and research and development ("R&D") expenses by firm.

Table VI-8
IMTDCs: Capital expenditures and R&D expenses of U.S. producers, by firm, fiscal years 2013-15, January-June 2015, and January-June 2016

* * * * * * *

Capital expenditures, which are included in a firm's statement of cash flows within the section, "cash flows from investing activities," increase the value of specific plant and equipment and total assets, while charges for depreciation and amortization, impairments, and divestitures, retirement or abandonment of property decrease the value of assets. Capital expenditures are made and R&D expenses are incurred to achieve improvements in equipment or reduce operating costs and the quality of products produced. Total capital expenditures fell from 2013 to 2015 but were greater in interim 2016 than in interim 2015.

Firms' comments about the nature, focus, and significance of their capital expenditures and their R&D expenses are shown in in table VI-9.

Table VI-9
IMTDCS: Narrative responses by U.S. producers on their capital expenditures and R&D expenses

* * * * * * *

ASSETS AND RETURN ON INVESTMENT

Tables VI-10 and VI-11 present data on the U.S. producers' total assets and their return on investment ("ROI") for firms with casting operations and finishing operations, respectively.

Table VI-10
IMTDCs: Total assets and ratio of operating income to assets for U.S. producers with integrated casting and finishing operations, fiscal years 2013-15

* * * * * * *

Table VI-11
IMTDCs: Total assets and ratio of operating income to assets for U.S. producers with finishing operations only, fiscal years 2013-15

* * * * * * *

The data for operating income are from table VI-3, and the ratio to total net assets followed the table VI-3 data. It fell steadily from 2013 to 2015. The asset turnover ratio is the ratio of total net sales to total net assets and is a measure of efficiency because it provides an indication of how efficiently $1 of assets generates $1 of sales. In table VI-10, on average $1 of assets generated approximately $*** of sales in 2015 for integrated U.S. producers.

The data for operating income are from table VI-5, and the ratio to total net assets fell from 2013 to 2015, partly because the total value of assets increased. The asset turnover ratio is the ratio of total net sales to total net assets and is termed a measure of efficiency because it provides an indication of how efficiently $1 of assets generates $1 of sales. In table VI-11, $1 of assets generated approximately $*** of sales in 2015 for U.S. producers with finishing operations only.

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of IMTDCs to describe any actual or potential negative effects of imports of IMTDCs from China or Canada on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Appendix F presents U.S. producers' responses.

PART VII: THREAT CONSIDERATIONS AND INFORMATION ON NONSUBJECT COUNTRIES

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

> *In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

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[1] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition."

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

(VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

Information on the nature of the subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

[2] Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

THE INDUSTRY IN CANADA

Overview

In its opinion in the preliminary phase of these investigations, the Commission invited the parties in any final phase of these investigations, to identify "foundries and any other firms that may be producing unfinished or finished IMTDCs in Canada."[3] In their comments on the draft questionnaires, no party identified any additional firms that might be producing unfinished or finished IMTDCs in Canada. In the final phase of these investigations, the Commission issued foreign producers' or exporters' questionnaires to twenty-three firms, including nine firms identified in the petitions, believed to produce and/or export IMTDCs from Canada.[4] [5] Useable responses to the Commission's questionnaire were received from one firm: Baldor Electric Canada ("Baldor Canada"). According to estimates provided by the responding Canadian producer in its questionnaire response, Baldor Canada accounted for approximately *** percent of all production of IMTDCs in Canada and approximately *** percent of Canadian exports to the United States during 2015. The firm's reported exports to the United States were equivalent to *** percent of U.S. imports of IMTDCs from Canada during 2015 as reported in Commission importer questionnaire responses.

As previously noted, Baldor Canada closed its St. Claire, Quebec facility on May 27, 2016 and relocated its Canadian finishing equipment to the Baldor facilities in Weaverville and Marion, North Carolina. The petitioner has argued, however, that the closed Baldor Canada plant was only a finishing facility, and the closure has had no effect on Canadian casting capacity.[6] The petitioner cited an additional 42 iron casting plants in Canada, at least 29 of which it claims already cast IMTDCs or have the capability to do so.[7] The petitioner also noted that Laforo Iron Foundry had a close supplier relationship with Baldor Canada.[8] Furthermore, in its post-hearing brief, the petitioner provided the names of 14 Canadian machining facilities and alluded to the presence of over 500 machining operations that could possibly have the capacity to finish IMTDCs.[9] Baldor reported that it currently sources castings for the parts

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[3] Preliminary Opinion at footnote 230.

[4] These firms were identified through a review of information submitted in the petition and contained in *** records.

[5] Firms reported production of large-diameter IMTDCs to match Commerce's scope. For purposes of determining overall plant capacity, data on out-of-scope items (including small-diameter IMTDCs) produced using the same equipment and employees were collected.

[6] Hearing transcript, pp. 43-44 (Pickard).

[7] Petitioner's posthearing brief, pp. 19-20.

[8] Petitioner's prehearing brief, exh. 3.

[9] Petitioner's posthearing brief, exhs. 14 and 15. In its petition, the petitioner identified only nine possible producers of IMTDCs in Canada, four of which indicated in their response to the Commission's questionnaire that they had not produced IMTDCs.

machined on the finishing equipment moved from Canada to the United States primarily from foundries in ***.[10]

Table VII-1 presents information on Baldor's IMTDC operations in Canada and certain 2015 summary data reported in its questionnaire response.

Table VII-1
IMTDCs: Summary data on the responding firm in Canada, 2015

* * * * * * *

Changes in operations

Baldor Canada shut down operations in Canada effective May 27, 2016 and its finishing equipment was relocated to the Baldor plants in Weaverville, North Carolina and Marion, North Carolina. ***.[11]

Operations on IMTDCs

Table VII-2 presents information on the IMTDC operations of Baldor Canada. The data presented for Canada are the portion of finished IMTDCs machined in Baldor's Canadian finishing facility from unfinished IMTDCs cast/forged in Canada.

Table VII-2
IMTDCs: Data on the industry in Canada, 2013-15, January to June 2015, January to June 2016, and projected calendar years 2016 and 2017

* * * * * * *

Baldor Canada's production and shipments rose from 2013 to 2014 before decreasing below 2013 levels in 2015 following the ***. Capacity did not change and capacity utilization rose and fell but did not fall below 2013 levels in 2015. Production, capacity utilization, and shipments were higher during the first half of 2015 than in the comparable period of 2016. Capacity did not change. Baldor Canada's exports to the United States accounted for *** of the firm's total shipments, rising from *** percent of total shipments in 2013 to *** percent of total shipments in 2015. The firm's exports to the United States accounted for *** percent of total shipments during January-June 2016. Exports of IMTDCs to the United States by Baldor Canada increased by *** percent from *** pieces in 2013 to *** pieces in 2015, but were *** percent lower at *** pieces in the first half of 2016 compared with *** pieces in the first half of 2015. Home market shipments accounted for *** of the firm's shipments, decreasing from *** percent of total shipments in 2013 to *** percent of total shipments in 2015. The firm's home

[10] ***.
[11] ***.

market shipments accounted for *** percent of its total shipments during January-June 2016. Baldor Canada *** export IMTDCs to markets other than the United States.

Alternative products

As shown in table VII-3, IMTDCs constitute *** reported production on shared equipment by Baldor in Canada. In-scope (large) IMTDCs represent slightly less than *** of production volume by weight, and slightly more than *** by piece count.

Table VII-3
IMTDCs: Canada producer's overall capacity and production on the same (finishing) equipment as subject production, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Exports

Global Trade Atlas ("GTA") data for the value of total exports from Canada by destination market for 2013 to 2015 are presented in table VII-4.[12] These official exports statistics, which cover items exported under HS subheading 8483.50 ("flywheels and pulleys, including pulley blocks"), include not only the in-scope IMTDCs but also a substantial amount of items that are not covered by the scope of these investigations (e.g., steel, plastic, and aluminum pulleys). In-scope IMTDCs may also be exported under other subheadings. The data presented in table VII-4 show that Canada's top export market for these products is the United States, accounting for 44.8 percent of total exports from Canada during 2015. The next two largest destination markets for exports of flywheels and pulleys from Canada are Japan and China, accounting for 14.5 percent and 10.2 percent of total exports from Canada in 2015, respectively.

[12] Only value data are presented because quantity data are not consistently available for all destination markets.

Table VII-4

Flywheels and pulleys: Canada exports by destination markets, 2013-15

Item	Calendar year		
	2013	2014	2015
	Value (1,000 dollars)		
Canada's exports to the United States	181,355	197,320	193,345
Canada's exports to other major destination markets.--			
Japan	38,587	56,185	62,478
China	29,912	42,978	43,938
Germany	31,802	36,625	34,172
Korea	14,520	25,479	21,658
France	24,784	20,114	13,985
Poland	10,061	12,275	10,553
Mexico	1,558	1,071	8,937
Italy	6,021	4,633	6,601
All other destination markets	31,401	48,445	35,620
Total Canada exports	370,001	445,126	431,287
	Share of value (percent)		
Canada's exports to the United States	49.0	44.3	44.8
Canada's exports to other major destination markets.--			
Japan	10.4	12.6	14.5
China	8.1	9.7	10.2
Germany	8.6	8.2	7.9
Korea	3.9	5.7	5.0
France	6.7	4.5	3.2
Poland	2.7	2.8	2.4
Mexico	0.4	0.2	2.1
Italy	1.6	1.0	1.5
All other destination markets	8.5	10.9	8.3
Total Canada exports	100.0	100.0	100.0

Source: Official Canada exports statistics under HTS subheading 8483.50, as reported by Statistics Canada in the GTIS/GTA database, accessed September 10, 2016.

THE INDUSTRY IN CHINA

Overview

The Commission issued foreign producers' or exporters' questionnaires to sixty-one firms, including thirty-one firms identified in the petitions (including revisions to the petitions) believed to produce and/or export IMTDCs from China.[13] [14] Useable responses to the Commission's questionnaire were received from seven firms: Haiyang Jingweida Gearing Co., Ltd. ("Jingweida"), Huade Tianjin Metal Manufacture ("Huade Tianjin"), Martin Sprocket & Gear (Shanghai) Co., Ltd. ("Martin Sprocket Shanghai"), Powermach Import & Export Co. Ltd. Sichuan ("Powermach"), Shanxi Huaxiang Group Co. Ltd. ("Shanxi Huaxiang"), Shijiazhuang CAPT Power Transmission Co., Ltd. ("Shijiazhuang CAPT"), and Yueqing Bethel Shaft Collar Mfg Co ("Yueqing Bethel").[15]

According to estimates provided by responding Chinese producers in questionnaire responses, aggregate data on IMTDCs produced in China accounted for approximately *** percent of all production of IMTDCs in China[16] and approximately *** percent of exports to the United States during 2015. These firms' exports to the United States were equivalent to *** percent of U.S. imports of IMTDCs from China during 2015 as reported in responses to the Commission's importer questionnaire. The petitioner believes that these responses substantially understate the actual Chinese market, identifying nine additional Chinese producers that failed to provide the Commission with questionnaire responses.[17] [18]

Table VII-5 lists the Chinese producers of IMTDCs that responded to the Commission's questionnaire and certain 2015 summary data reported in response to Commission questionnaires.

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[13] These firms were identified through a review of information submitted in the petitions and contained in *** records.

[14] Firms reported production of large-diameter IMTDCs to match Commerce's scope. For purposes of determining overall plant capacity, data on out-of-scope items (including small-diameter IMTDCs) produced using the same equipment and employees were collected.

[15] A response was received from one other firm, Shenzhen In-sail Precision Parts Co., Ltd. but data were not in useable condition.

[16] Coverage was based on the market size estimated by ***.

[17] The petitioner indicated that eight firms (Fuqing Jiacheng Trading Corp. Ltd.; Hangzhou Powertrans Co., Ltd.; Xinguang Technology Co. Ltd of Sichuan Province; Yantai Henry Hardware Co., Ltd.; Zhejiang Dongzing Auto Parts Co., Ltd.; Changzhou Juling Foundry Co., Ltd.; Tran-Auto Industries Co., Ltd.; and Changzhou Liangjiu Mechanical Manufacturing) participated in Commerce's proceedings. Only four of these firms were identified by the petitioner in its petitions as possible IMTDC producers/exporters in China. The petitioner further noted that Fuzhou Min Yue Mechanical and Electrical Co. Ltd. participated in the Commission's preliminary phase of the investigations but did not provide a response to the Commission's questionnaire in the final phase. Petitioner's posthearing brief, exh. 1, p. 26.

Table VII-5
IMTDCs: Summary data on firms in China, 2015

* * * * * * *

Changes in operations

One responding producer in China reported in its questionnaire response in the final phase of these investigations that it had experienced a change in its operations related to the production of IMTDCs since January 1, 2013. ***. In its questionnaire response in the Commission's preliminary phase of the investigations, Baldor reported ***.

Operations on IMTDCs

Table VII-6 presents information on the IMTDC operations of the responding producers/exporters in China. Chinese capacity, production, capacity utilization, inventories, and shipments increased from 2013 to 2015, with production and shipments peaking in 2014. Capacity (in pieces) was higher in the first half of 2016 than in the comparable period of 2015 but production, capacity utilization (based on pieces), and shipments were lower during the first half of 2016 compared with the first half of 2015.[19]

Table VII-6
IMTDCs: Data on the industry in China, 2013-15, January to June 2015, January to June 2016, and projected calendar years 2016 and 2017

* * * * * * *

Home market sales accounted for *** of total shipments by the Chinese producers in 2015, declining from *** percent of total shipments in 2013. Home market sales by responding Chinese producers accounted for *** percent of total sales during the first half of 2016. Export markets other than the United States accounted for between *** percent and *** percent of the responding Chinese producers' total shipments since 2013. Other major export markets identified by the producers in China include ***.

Exports of IMTDCs to the United States by the producers in China decreased by *** percent from *** pieces in 2013 to *** pieces in 2015, and were *** percent lower at *** pieces in the first half of 2016 compared with *** pieces in the first half of 2015. As a share of Chinese producers' total shipments, exports to the United States decreased from *** percent in

[19] The petitioner asserts the underreporting of capacity on the part of Powermach and CAPT. Respondent denies this allegation. Petitioner's prehearing brief, pp. 43-44, Respondent's posthearing brief, exh. 1, p. 1.

2013 to *** percent in 2015, and were *** percent of total shipments during the first half of 2016.[20]

Alternative products

As shown in table VII-7, approximately *** of all reported IMTDC production on shared equipment by responding Chinese producers is subject merchandise. Other products reportedly produced in China on the same equipment as finished IMTDCs include ***.

Table VII-7
IMTDCs: Chinese producers' overall capacity and production on the same (finishing) equipment as subject production for IMTDCs, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

Exports

Global Trade Atlas ("GTA") data for the value of total exports from China by destination market for 2013 to 2015 are presented in table VII-8.[21] As previously noted, these official exports statistics, which cover items exported under HS subheading 8483.50 ("flywheels and pulleys, including pulley blocks"), include not only the in-scope IMTDCs but also a substantial amount of items that are not covered by the scope of these investigations (e.g., steel, plastic, and aluminum pulleys). In-scope IMTDCs may also be exported under other subheadings. The data presented in table VII-8 show that China's top export market for these products is the United States, accounting for 18.5 percent of total exports from China during 2015. The next two largest destination markets for exports of flywheels and pulleys from China are Japan and Germany, accounting for 16.5 percent and 8.0 percent of total exports from China in 2015, respectively.

[20] Respondent argues that exports to third-country markets rose as shipments to the United States declined to account for claims of excess Chinese capacity argued by the petitioner. Respondent's posthearing brief, pp. 13-14.

[21] Only value data are presented because quantity data are not consistently available for all destination markets.

Table VII-8

Flywheels and pulleys: China exports by destination markets, 2013-15

Item	Calendar year		
	2013	2014	2015
	Value (1,000 dollars)		
China's exports to the United States	53,912	55,374	51,106
China's exports to other major destination markets.-- Japan	46,391	50,288	45,616
Germany	12,604	14,909	22,087
Korea South	14,765	15,347	16,903
Spain	8,756	10,809	9,679
Netherlands	7,370	11,033	9,007
Italy	9,558	9,506	8,807
Mexico	5,964	6,643	6,414
United Kingdom	8,931	7,329	5,818
All other destination markets	121,923	108,774	100,387
Total China exports	290,174	290,011	275,823
	Share of value (percent)		
China's exports to the United States	18.6	19.1	18.5
China's exports to other major destination markets.-- Japan	16.0	17.3	16.5
Germany	4.3	5.1	8.0
Korea South	5.1	5.3	6.1
Spain	3.0	3.7	3.5
Netherlands	2.5	3.8	3.3
Italy	3.3	3.3	3.2
Mexico	2.1	2.3	2.3
United Kingdom	3.1	2.5	2.1
All other destination markets	42.0	37.5	36.4
Total China exports	100.0	100.0	100.0

Source: Official China exports statistics under HTS subheading 8483.50, as reported by Statistics China in the GTIS/GTA database, accessed September 10, 2016.

THE COMBINED SUBJECT INDUSTRIES

Table VII-9 presents information on the IMTDC operations of the responding producers and exporters in both Canada and China combined for 2013-15, January-June 2015, and January-June 2016, as well as projections for 2016-17.

Table VII-9
IMTDCs: Data on industry in subject countries, 2013-15, January to June 2015, and January to June 2016 and projection calendar years 2016 and 2017

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2013	2014	2015	2015	2016	2016	2017
	Quantity (1,000 pounds)						
Capacity	72,513	72,785	73,476	36,678	36,651	65,693	58,510
Production	53,205	59,794	56,237	24,677	27,262	51,789	47,355
	Quantity (pieces)						
Capacity	4,549,125	4,560,219	4,651,946	2,295,336	2,309,543	4,149,952	3,704,722
Production	3,037,945	3,569,464	3,348,696	1,669,901	1,475,656	2,963,413	2,592,641
End-of-period inventories	985,407	1,005,513	961,179	985,026	891,973	937,041	773,429
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial shipments	***	***	***	***	***	***	***
Subtotal, home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	1,064,424	1,180,027	963,908	497,218	354,373	693,203	543,509
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	3,059,531	3,549,358	3,393,030	1,690,388	1,544,862	2,996,381	2,787,377
	Ratios and shares (percent)						
Capacity utilization (based on pounds)	73.4	82.2	76.5	67.3	74.4	78.8	80.9
Capacity utilization (based on pieces)	66.8	78.3	72.0	72.8	63.9	71.4	70.0
Inventories/production	32.4	28.2	28.7	29.5	30.2	31.6	29.8
Inventories/total shipments	32.2	28.3	28.3	29.1	28.9	31.3	27.7
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial shipments	***	***	***	***	***	***	***
Subtotal, home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	34.8	33.2	28.4	29.4	22.9	23.1	19.5
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. IMPORTERS' INVENTORIES

Table VII-10 presents data on U.S. importers' reported inventories of IMTDCs. During 2015, Canadian and Chinese in-scope IMTDCs accounted for *** and *** percent, respectively, of all inventories of imported large diameter IMTDCs held in the United States. Canadian and Chinese in-scope IMTDC inventories in the aggregate declined from 2013 to 2014, increased in 2015, and were higher in January-June 2016 than in the comparable period in 2015.

Table VII-10
IMTDCs: U.S. importers' end-of-period inventories of imports by source, 2013-15, January to June 2015, and January to June 2016

Item	Calendar year			January to June	
	2013	2014	2015	2015	2016
Imports from Canada: Inventories (pieces)	***	***	***	***	***
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Imports from China: Inventories (pieces)	***	***	***	***	***
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Imports from subject sources: Inventories (pieces)	690,333	654,579	743,681	661,113	749,396
Ratio to U.S. imports (percent)	47.2	42.9	47.4	43.7	64.3
Ratio to U.S. shipments of imports (percent)	52.3	46.6	55.1	47.5	71.8
Ratio to total shipments of imports (percent)	47.8	42.4	50.0	43.2	62.8
Imports from nonsubject large diameter: Inventories (pieces)	176,354	147,331	105,798	128,361	146,045
Ratio to U.S. imports (percent)	27.7	22.6	16.7	20.0	21.1
Ratio to U.S. shipments of imports (percent)	30.5	25.0	18.8	22.8	23.9
Ratio to total shipments of imports (percent)	26.7	21.6	15.7	18.9	20.0
Imports from all sources large diameter: Inventories (pieces)	866,687	801,910	849,479	789,474	895,441
Ratio to U.S. imports (percent)	41.3	36.8	38.6	36.6	48.2
Ratio to U.S. shipments of imports (percent)	45.7	40.2	44.5	40.4	54.2
Ratio to total shipments of imports (percent)	41.2	36.0	39.3	35.7	46.6
Imports from all sources small diameter: Inventories (pieces)	1,036,124	909,715	812,555	854,732	900,288
Ratio to U.S. imports (percent)	39.2	32.1	28.3	29.9	28.4
Ratio to U.S. shipments of imports (percent)	40.9	35.2	31.8	33.0	35.3
Ratio to total shipments of imports (percent)	35.9	30.9	27.4	28.6	29.6
Imports from all sources all sizes: Inventories (pieces)	1,902,811	1,711,625	1,662,034	1,644,206	1,795,729
Ratio to U.S. imports (percent)	40.1	34.1	32.7	32.8	35.7
Ratio to U.S. shipments of imports (percent)	42.9	37.4	37.2	36.2	42.7
Ratio to total shipments of imports (percent)	38.1	33.1	32.4	31.6	36.1

Source: Compiled from data submitted in response to Commission questionnaires.

U.S. IMPORTERS' CURRENT ORDERS

The Commission requested importers to indicate whether they had imported or arranged for the importation of in-scope IMTDCs for delivery after June 30, 2016. Fifteen firms reported data concerning such imports or arrangements of imports of IMTDCs, 2 of which[22] reported imports from Canada and 15 of which reported such imports from China. Data concerning U.S. imports subsequent to June 30, 2016 are presented in table VII-11. These data show a decline in arranged U.S. imports from Canada and China from the third quarter of 2016 to the second quarter of 2017. There are no arranged imports from Canada expected after the fourth quarter of 2016.

Table VII-11
IMTDCs: Arranged imports, July 2016 through June 2017

* * * * * * *

DUMPING IN THIRD-COUNTRY MARKETS

The Commission asked questionnaire recipients to identify whether the products subject to this proceeding have been the subject of any other import relief proceedings in the United States or in any other countries. No firms participating in this proceeding have identified any other import relief proceedings or orders in the United States or in any other countries with regard to IMTDCs.

INFORMATION ON NONSUBJECT COUNTRIES

Global production of IMTDCs is geographically dispersed, with production in multiple countries in Europe, Latin America, and Asia.[23] Global exports by nonsubject producers totaled $4.0 billion in 2015, down slightly from $4.3 billion in 2013, although these data include a substantial portion of nonsubject products such as steel, aluminum, and plastic pulleys (table VII-12).

[22] ***.

[23] Compiled from data submitted in response to Commission questionnaires.

Table VII-12

IMTDCs: Flywheels and pulleys: Global exports by destination markets, 2013-15

Item	Calendar year		
	2013	2014	2015
	Value (1,000 dollars)		
United States	408,439	1,155,746	1,152,645
Subject exporters.--			
Canada	370,001	445,126	431,287
China	290,174	290,011	275,823
All subject exporters	660,175	735,138	707,110
All other major exporting countries.--			
Germany	1,478,996	1,522,121	1,377,492
Japan	562,918	483,617	402,330
France	425,396	417,878	395,568
Italy	360,497	386,824	339,760
South Korea	200,457	228,369	245,526
Slovakia	135,554	158,036	159,335
Belgium	191,885	175,867	156,715
Czech Republic	86,387	91,576	119,395
Thailand	77,575	83,968	78,208
Poland	33,963	53,837	60,716
All other exporting countries.	768,497	760,581	647,493
Total global exports	5,390,738	6,253,556	5,842,294
	Share of value (percent)		
United States	7.6	18.5	19.7
Subject exporters.--			
Canada	6.9	7.1	7.4
China	5.4	4.6	4.7
All subject exporters	12.2	11.8	12.1
All other major exporting countries.--			
Germany	27.4	24.3	23.6
Japan	10.4	7.7	6.9
France	7.9	6.7	6.8
Italy	6.7	6.2	5.8
South Korea	3.7	3.7	4.2
Slovakia	2.5	2.5	2.7
Belgium	3.6	2.8	2.7
Czech Republic	1.6	1.5	2.0
Thailand	1.4	1.3	1.3
Poland	0.6	0.9	1.0
All other exporting countries.	14.3	12.2	11.1
Total global exports	100.0	100.0	100.0

Note.--Includes nonsubject products such as steel, plastic, and aluminum pulleys. IMTDCs may also be exported under other subheadings.

Source: Official exports statistics under HTS subheading 8483.50 as reported by various national statistical authorities in the IHS/GTA database, accessed September 10, 2016.

Germany was the leading nonsubject global exporter, with $1.4 billion in 2015 exports.[24] Japan was the second largest exporter, with $402 million in exports in 2015,[25] and France was the third largest exporter, with $396 million in exports. The EU and Mexico are discussed in more detail below.

Mexico

The industry in Mexico produces castings and finished sheaves. Firms engaged in production in Mexico include the subsidiaries of multinational firms as well as Mexico-based firms.[26] Mexico based firms include machining-only shops (e.g. Magonza), and integrated firms offering both foundry and machining services (e.g. Fundición Qualy and Valcon).[27] ***.[28]

[24] Official exports statistics under HTS subheading 8483.50 as reported by various national statistical authorities in the IHS/GTA database, accessed September 10, 2016. IMTDCs may also be exported under other subheadings.

[25] Japanese manufacturers produce both castings and finished IMTDCs. Business Information in Hiroshima Website, http://www.hitec.city.hiroshima.jp/EE/ee00268.html; Kinoshita Manufacturing Company Website, http://www.kinoshitaseisakusho.co.jp/en/profile/ (accessed November 10, 2015); Protechnology Website, http://protechnology.jp/companies/parts-manufacturing/kinsei-engineering (accessed November 10, 2015); The Leading Japan Foundries Catalog, http://www.japan-foundries.com/The-Leading-Japan-Foundries-Catalog.pdf (accessed November 10, 2015); J-GoodTech Website, https://jgoodtech.smrj.go.jp/corporations/90?locale=en (accessed November 9, 2015).

[26] Directorio de Exportadores Website, http://www3.promexico.gob.mx (accessed November 20, 2015); TBW Website, http://www.tbwoods.com/Company_WorldWide_Locations.asp (accessed November 12, 2015; Martin Sprocket and Gear Website, http://www.martinsprocket.com/locations/mexico (accessed November 21, 2015); Petitioners' postconference brief, exh. 1, p. 53.

[27] Valcon website, http://valcon.com.mx/?lang=en (accessed October 24, 2016); Magonza website, http://www.magonza.com.mx/ (accessed October 24, 2016); and Fundicion Qualy website, http://www.qualy.com.mx/ (accessed October 24, 2016).

[28] ***.

European Union

The EU has substantial sheave manufacturing, with EU-28 production of flywheels and pulleys—including nonsubject products—totaling 86,800 metric tons (95,700 short tons) in 2015, up slightly from 85,400 metric tons (94,100 short tons) in 2013. The value of EU production (excluding goods retained for internal use) totaled $568 million in 2015, with Germany ($225 million), Slovakia ($171 million), and France ($62 million) combined accounting for a majority of EU production.[29] The EU industry produces various types of subject products, such as V-belt sheaves, synchronous drives, adjustable speed drives, and flywheels, and has production capabilities ranging from less than 10 inches in diameter to more than 100 inches.[30]

[29] For many EU member states, reported exports exceeded reported production in 2015. Eurostat database, http://ec.europa.eu/eurostat/data/database (accessed September 2, 2016); and Board of Governors of the Federal Reserve System Website, Historical Rates for the EU Euro, http://www.federalreserve.gov/releases/h10/hist/dat00_eu.htm (accessed September 2, 2016).

[30] George Taylor and Co. Website, http://www.gtham.co.uk (accessed September 6, 2016); Profil Industrie Website, http://www.profilindustrie.com (accessed September 6, 2016); PTP Industry Website, http://www.ptpindustry.com (accessed September 6, 2016); Walther Flender Group Website, http://walther-flender-gruppe.de (accessed September 7, 2016).

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
80 FR 67789, November 3, 2015	*Certain Iron Mechanical Transfer Drive Components From Canada and China; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	http://www.gpo.gov/fdsys/pkg/FR-2015-11-03/pdf/2015-27956.pdf
80 FR 73716, November 25, 2015	*Certain Iron Mechanical Transfer Drive Components from Canada and The People's Republic of China: Initiation of Less-Than-Fair-Value Investigations*	http://www.gpo.gov/fdsys/pkg/FR-2015-11-25/pdf/2015-29985.pdf
80 FR 73722, November 25, 2015	*Certain Iron Mechanical Transfer Drive Components From the People's Republic of China: Initiation of Countervailing Duty Investigation*	http://www.gpo.gov/fdsys/pkg/FR-2015-11-25/pdf/2015-29945.pdf
80 FR 79095 December 18, 2015	*Certain Iron Mechanical Transfer Drive Components From Canada and China Determinations*	https://www.gpo.gov/fdsys/pkg/FR-2015-12-18/pdf/2015-31779.pdf
81 FR 21316 April 11, 2016	*Countervailing Duty Investigation of Certain Iron Mechanical Transfer Drive Components From the People's Republic of China: Preliminary Affirmative Determination and Alignment of Final Determination With Final Antidumping Duty Determination*	https://www.gpo.gov/fdsys/pkg/FR-2016-04-11/pdf/2016-08235.pdf

Citation	Title	Link
81 FR 36876 June 8, 2016	*Certain Iron Mechanical Transfer Drive Components From the People's Republic of China: Preliminary Determination of Sales at Less Than Fair Value and Postponement of Final Determination*	https://www.gpo.gov/fdsys/pkg/FR-2016-06-08/pdf/2016-13533.pdf
81 FR 36887 June 8, 2016	*Certain Iron Mechanical Transfer Drive Components From Canada: Affirmative Preliminary Determination of Sales at Less Than Fair Value and Postponement of Final Determination*	https://www.gpo.gov/fdsys/pkg/FR-2016-06-08/pdf/2016-13535.pdf
81 FR 41348 June 24, 2016	*Iron Mechanical Transfer Drive Components From Canada and China; Scheduling of the Final Phase of Countervailing Duty and Antidumping Duty Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2016-06-24/pdf/2016-14977.pdf
81 FR 75032 October 28, 2016	*Certain Iron Mechanical Transfer Drive Components From the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value*	https://www.gpo.gov/fdsys/pkg/FR-2016-10-28/pdf/2016-26104.pdf
81 FR 75037 October 28, 2016	*Countervailing Duty Investigation of Certain Iron Mechanical Transfer Drive Components From the People's Republic of China: Final Affirmative Determination*	https://www.gpo.gov/fdsys/pkg/FR-2016-10-28/pdf/2016-26105.pdf
81 FR 75039 October 28, 2016	*Certain Iron Mechanical Transfer Drive Components From Canada: Final Affirmative Determination of Sales at Less Than Fair Value*	https://www.gpo.gov/fdsys/pkg/FR-2016-10-28/pdf/2016-26106.pdf

APPENDIX B

HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject:	Iron Mechanical Transfer Drive Components from Canada and China
Inv. Nos.:	701-TA-550 and 731-TA-1304-1305 (Final)
Date and Time:	October 18, 2016 - 9:30 am

Sessions were held in connection with these investigations in the Main Hearing Room (Room 101), 500 E Street, S.W., Washington, DC.

OPENING REMARKS:

Petitioner (**Daniel B. Pickard**, Wiley Rein LLP)
Respondents (**Jeffrey S. Grimson**, Mowry & Grimson, PLLC)

In Support of the Imposition of Antidumping and Countervailing Duty Orders:

Wiley Rein LLP
Washington, DC
on behalf of

TB Wood's Incorporated

Carl R. Christenson, Chairman and Chief Executive Officer, Altra Industrial Motion Corp.

Holly M. Shields, Group Controller, Couplings, Clutches & Brakes Division, Altra Industrial Motion Corp.

Lew Crist, General Manager, TB Wood's Incorporated

William R. Juergens, Commercial Castings Sale Manager, TB Wood's Incorporated

Daniel B. Pickard)
Robert E. DeFrancesco) – OF COUNSEL
Stephanie M. Bell)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:

Mowry & Grimson, PLLC
Washington, DC
on behalf of

The China Chamber of Commerce of International Commerce's ad hoc Coalition of Producers and Exporters of Certain Iron Mechanical Transfer Drive Components from the People's Republic of China; Powermach Import & Export Co., Ltd. (Sichuan); Shijiazhuang CAPT Power Transmission Co., Ltd.; and Yueqing Bethel Shaft Collar Manufacturing Co., Ltd.

Jeffrey S. Grimson)
Jill A. Cramer) – OF COUNSEL
Yuzhe PengLing)

CLOSING REMARKS/REBUTTAL:

Petitioner (**Daniel B. Pickard**, Wiley Rein LLP)
Respondents (**Jeffrey S. Grimson**, Mowry & Grimson, PLLC)

APPENDIX C

SUMMARY DATA

Table C-1
IMTDCs: Summary data concerning the U.S. market, 2013-15, January to June 2015, and January to June 2016
(Quantity=pieces; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per piece; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to June		Calendar year			Jan-Jun
	2013	2014	2015	2015	2016	2013-15	2013-14	2014-15	2015-16
U.S. consumption quantity:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Canada	***	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
Nonsubject sources large diameter	***	***	***	***	***	***	***	***	***
Nonsubject sources small diameter	***	***	***	***	***	***	***	***	***
Nonsubject sources of all sizes	***	***	***	***	***	***	***	***	***
All sources all sizes	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Canada	***	***	***	***	***	***	***	***	***
China	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
Nonsubject sources large diameter	***	***	***	***	***	***	***	***	***
Nonsubject sources small diameter	***	***	***	***	***	***	***	***	***
Nonsubject sources of all sizes	***	***	***	***	***	***	***	***	***
All sources all sizes	***	***	***	***	***	***	***	***	***
U.S. importers' U.S. shipments of imports from.--									
Canada:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
China:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Subject sources:									
Quantity	1,319,110	1,405,280	1,349,482	695,379	521,554	2.3	6.5	(4.0)	(25.0)
Value	42,171	44,129	40,231	21,036	15,612	(4.6)	4.6	(8.8)	(25.8)
Unit value	$31.97	$31.40	$29.81	$30.25	$29.93	(6.7)	(1.8)	(5.1)	(1.0)
Ending inventory quantity	690,333	654,579	743,681	661,113	749,396	7.7	(5.2)	13.6	13.4
Nonsubject sources large diameter:									
Quantity	578,694	588,300	561,421	281,534	305,140	(3.0)	1.7	(4.6)	8.4
Value	28,290	27,518	26,430	13,170	13,191	(6.6)	(2.7)	(4.0)	0.2
Unit value	$48.89	$46.78	$47.08	$46.78	$43.23	(3.7)	(4.3)	0.6	(7.6)
Ending inventory quantity	176,354	147,331	105,798	128,361	146,045	(40.0)	(16.5)	(28.2)	13.8
Nonsubject sources small diameter:									
Quantity	2,536,367	2,583,807	2,555,265	1,296,437	1,276,258	0.7	1.9	(1.1)	(1.6)
Value	33,645	39,695	25,623	12,964	12,107	(23.8)	18.0	(35.4)	(6.6)
Unit value	$13.26	$15.36	$10.03	$10.00	$9.49	(24.4)	15.8	(34.7)	(5.1)
Ending inventory quantity	866,687	801,910	849,479	789,474	895,441	(2.0)	(7.5)	5.9	13.4
Nonsubject sources of all sizes:									
Quantity	3,115,061	3,172,107	3,116,686	1,577,971	1,581,398	0.1	1.8	(1.7)	0.2
Value	61,934	67,213	52,053	26,135	25,298	(16.0)	8.5	(22.6)	(3.2)
Unit value	$19.88	$21.19	$16.70	$16.56	$16.00	(16.0)	6.6	(21.2)	(3.4)
Ending inventory quantity	1,036,124	909,715	812,555	854,732	900,288	(21.6)	(12.2)	(10.7)	5.3
All sources all sizes:									
Quantity	4,434,171	4,577,387	4,466,168	2,273,350	2,102,952	0.7	3.2	(2.4)	(7.5)
Value	104,105	111,342	92,284	47,170	40,910	(11.4)	7.0	(17.1)	(13.3)
Unit value	$23.48	$24.32	$20.66	$20.75	$19.45	(12.0)	3.6	(15.1)	(6.2)
Ending inventory quantity	1,902,811	1,711,625	1,662,034	1,644,206	1,795,729	(12.7)	(10.0)	(2.9)	9.2
U.S. producers':									
Average capacity quantity	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***
Capacity utilization (fn1)	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value (fn3)	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn1) (fn4)	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***	***	***	***	***
Hourly wages (dollars)	***	***	***	***	***	***	***	***	***
Productivity (pieces per 1,000 hours)	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***
Net sales:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
Unit net income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales (fn1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.
***
***
***

Source: Compiled from data submitted in response to Commission questionnaires.

The trade and employment data reported by Waupaca are presented in table C-2. Waupaca's reported data concerning overall capacity and production on the same equipment as IMTDCs are presented in table C-3.

Table C-2
IMTDCs: U.S. capacity, production, capacity utilization, shipments, and employment data reported by Waupaca, 2013-15, January to June 2015, and January to June 2016

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Table C-3
IMTDCs: Waupaca's reported overall U.S. capacity and production on the same equipment as IMTDC production, 2013-15, January to June 2015, and January to June 2016

* * * * * * *

The results of operations on IMTDCs by Waupaca are presented in table C-4 and the firm's reported assets, capital expenditures, and R&D expenses are presented in table C-5.

Table C-4
IMTDCs: Results of casting operations of Waupaca, 2013-15, January-June 2015, and January-June 2016

* * * * * * *

Table C-5
IMTDCs: Assets, capital expenditures, and R&D expenses reported by Waupaca, 2013-15, January-June 2015, and January-June 2016

* * * * * * *

APPENDIX D

NONSUBJECT COUNTRY PRICE DATA

Two importers reported price data for Mexico for products 1-6. Price data reported by these firms accounted for 0.7 percent of U.S. commercial shipments of IMTDCs from Mexico. These price items and accompanying data are comparable to those presented in tables V-3 to V-8. Price and quantity data for Mexico are shown in tables D-1 to D-6 and in figure D-1 to D-6 (with domestic and subject sources).

Table D-1

IMTDCs: Weighted-average f.o.b. prices and quantities of imported product 1, by quarters, January 2013-June 2016

* * * * * * *

Table D-2

IMTDCs: Weighted-average f.o.b. prices and quantities of imported product 2, by quarters, January 2013-June 2016

* * * * * * *

Table D-3

IMTDCs: Weighted-average f.o.b. prices and quantities of imported product 3, by quarters, January 2013-June 2016

* * * * * * *

Table D-4

IMTDCs: Weighted-average f.o.b. prices and quantities of imported product 4, by quarters, January 2013-June 2016

* * * * * * *

Table D-5

IMTDCs: Weighted-average f.o.b. prices and quantities of imported product 5, by quarters, January 2013-June 2016

* * * * * * *

Table D-6

IMTDCs: Weighted-average f.o.b. prices and quantities of imported product 6, by quarters, January 2013-June 2016

* * * * * * *

Figure D-1a

IMTDCs: Weighted-average prices and quantities of domestic and imported product 1 sold to distributors, by quarters, January 2013-June 2016

* * * * * * *

Figure D-1b

IMTDCs: Weighted-average prices and quantities of domestic and imported product 1 sold to end users, by quarters, January 2013-June 2016

* * * * * * *

Figure D-2a

IMTDCs: Weighted-average prices and quantities of domestic and imported product 2 sold to distributors, by quarters, January 2013-June 2016

* * * * * * *

Figure D-2b

IMTDCs: Weighted-average prices and quantities of domestic and imported product 2 sold to end users, by quarters, January 2013-June 2016

* * * * * * *

Figure D-3a

IMTDCs: Weighted-average prices and quantities of domestic and imported product 3 sold to distributors, by quarters, January 2013-June 2016

* * * * * * *

Figure D-3b

IMTDCs: Weighted-average prices and quantities of domestic and imported product 3 sold to end users, by quarters, January 2013-June 2016

* * * * * * *

Figure D-4a

IMTDCs: Weighted-average prices and quantities of domestic and imported product 4 sold to distributors, by quarters, January 2013-June 2016

* * * * * * *

Figure D-4b

IMTDCs: Weighted-average prices and quantities of domestic and imported product 4 sold to end users, by quarters, January 2013-June 2016

* * * * * * *

Figure D-5a

IMTDCs: Weighted-average prices and quantities of domestic and imported product 5 sold to distributors, by quarters, January 2013-June 2016

* * * * * * *

Figure D-5b

IMTDCs: Weighted-average prices and quantities of domestic and imported product 5 sold to end users, by quarters, January 2013-June 2016

* * * * * * *

Figure D-6a

IMTDCs: Weighted-average prices and quantities of domestic and imported product 6 sold to distributors, by quarters, January 2013-June 2016

* * * * * * *

Figure D-6b

IMTDCs: Weighted-average prices and quantities of domestic and imported product 6 sold to end users, by quarters, January 2013-June 2016

* * * * * * *

In comparing nonsubject country pricing data with U.S. producer pricing data, prices for product imported from Mexico were lower than prices for U.S.-produced product in 71 instances and higher in 48 instances. In comparing nonsubject country pricing data with Canadian pricing data, prices for product imported from Mexico were lower than prices for product imported from Canada in 12 instances and higher in 59 instances. In comparing nonsubject country pricing data with subject Chinese pricing data, prices for product imported from Mexico were lower than prices for product imported from China in 11 instances and higher in 104 instances. A summary of price differentials is presented in table D-7.

Table D-7
IMTDCs: Summary of price differentials, by country, January 2013-June 2016

Comparison	Total number of comparisons	Nonsubject priced lower		Nonsubject priced higher	
		Number of quarters	Quantity (pieces)	Number of quarters	Quantity (pieces)
Nonsubject vs United States.--					
Mexico vs. United States	119	71	463	48	260
Nonsubject vs Subject.--					
Mexico vs. Canada	71	12	84	59	288
Mexico vs. China	115	11	93	104	615

Source: Compiled from data submitted in response to Commission questionnaires.

APPENDIX E

SELECTED FINANCIAL RESULTS OF U.S. PRODUCERS

This appendix presented firm-by-firm data for U.S. producers on their operations on IMTDCs. Table E-1 presents data for the five firms reporting integrated casting and finishing operations. These five firms are: Bremen, EnDyn, Goldens' Foundry, Martin Sprocket, and TBW. TBW's U.S. integrated casting and finishing operations and its finishing operations in Mexico based on castings made in the United States are both included in table E-1. The data in table E-1 correspond to those in table VI-3. Table E-2 presents data for the five firms reporting stand-alone finishing operations based on purchased castings. These firms are: B&B, Baldor, Hi-Lo, Maurey, and Sterling. In addition, the finishing operations of *** are included in this data set. The data in table E-2 correspond to those in table VI-5. Tables E-1 and E-2 are confidential in their entirety.

Table E-1
IMTDCs: Selected results of operations of U.S. producers with integrated casting and finishing operations, fiscal years 2013-15, January-June 2015, and January-June 2016

* * * * * * *

Table E-2
IMTDCs: Selected results of U.S. producers on their finishing operations only, fiscal years 2013-15, January-June 2015, and January-June 2016

* * * * * * *

APPENDIX F

ALLEGED EFFECTS OF SUBJECT IMPORTS ON U.S. PRODUCERS' EXISTING DEVELOPMENT AND PRODUCTION EFFORTS, GROWTH, INVESTMENT, AND ABILITY TO RAISE CAPITAL

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of IMTDCs to describe any actual or potential negative effects of imports of IMTDCs from Canada and/or China on their return on investment, or their growth, investment, ability to raise capital, existing development and production efforts (including efforts to develop a derivative or more advanced version of the product), or the scale of capital investments as a result of imports of IMTDCS from Canada and/or China. Table F-1 tabulates the responses on actual negative effects on investment, growth, and development while table F-2 presents responses on actual negative effects on growth of domestic producers.

Table F-1
IMTDCS: Actual and anticipated negative effects of imports on investment and growth and development since January 1, 2013

Item	No	Yes
Negative effects on investment[1]	3	7
Cancellation, postponement, or rejection of expansion projects		4
Denial or rejection of investment proposal		1
Reduction in the size of capital investments		3
Return on specific investments negatively impacted		4
Other		4
Negative effects on investment differ by country[2]	8	3
Negative effects on growth and development[3]	4	6
Rejection of bank loans		0
Lowering of credit rating		0
Problem related to the issue of stocks or bonds		0
Ability to service debt		0
Other		6
Negative effects on growth differ by country	9	0
Anticipated negative effects of imports[4]	2	7
Anticipated negative effects of imports differ by country[5]	8	1

[1] Firms that responded "no" were: ***.

[2] Firms that responded "yes" were: ***.

[3] Firms that responded "no" were ***. Firms that responded "yes" were: ***.

[4] Firms that responded "no" were ***.

[5] Firms that responded "yes" were ***.,

Source: Compiled from data submitted in response to Commission questionnaires.

Table F-2
IMTDCs: Narrative comments relating to actual and anticipated negative effects of imports on investment and growth and development since January 1, 2013

* * * * * * *