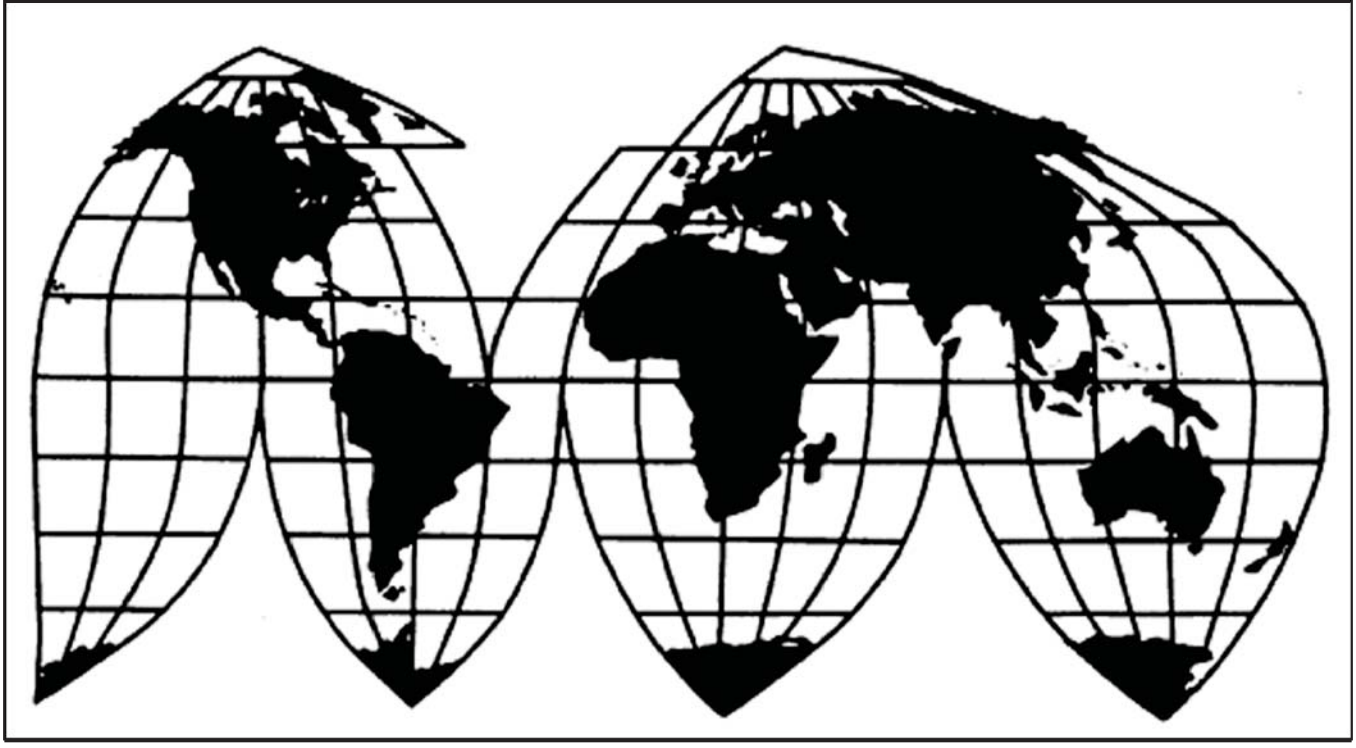
Cold-Drawn Mechanical Tubing from China and India

Investigation Nos. 701-TA-576-577 (Final)

Publication 4755 **January 2018**

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

COMMISSIONERS

Rhonda K. Schmidtlein, Chairman
David S. Johanson, Vice Chairman
Irving A. Williamson
Meredith M. Broadbent

Catherine DeFilippo
Director of Operations

Staff assigned

Keysha Martinez Investigator
Karen Taylor, Industry Analyst
Lauren Gamache, Economist
Jennifer Brinckhaus, Accountant
Mara Alexander, Statistician
Carolyn Holmes, Statistical Assistant
Brian Soiset, Attorney
Elizabeth Haines, Supervisory Investigator

Special assistance from

Rimma Gurevich, Investigations Intern
Lev Klarnet, Investigations Intern

Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

U.S. International Trade Commission

Washington, DC 20436
www.usitc.gov

Cold-Drawn Mechanical Tubing from China and India

Investigation Nos. 701-TA-576-577 (Final)

Publication 4755

January 2018

CONTENTS

CONTENTS

CONTENTS

CONTENTS

CONTENTS

Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-576-577 (Final)

Cold-Drawn Mechanical Tubing from China and India

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 materially injured by reason of imports of cold-drawn mechanical tubing from China and India, provided for in subheadings 7304.31.30, 7304.31.60, 7304.51.10, 7304.51.50, 7306.30.50, and 7306.50.50 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce ("Commerce") to be subsidized by the governments of China and India.[2]

BACKGROUND

The Commission, pursuant to section 705(b) of the Act (19 U.S.C. 1671d(b)), instituted these investigations effective April 19, 2017, following receipt of a petition filed with the Commission and Commerce by ArcelorMittal Tubular Products, Shelby, Ohio; Michigan Seamless Tube, LLC, South Lyon, Michigan; PTC Alliance Corp., Wexford, Pennsylvania; Webco Industries, Inc., Sand Springs, Oklahoma; and Zekelman Industries, Inc., Farrell, Pennsylvania. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of cold-drawn mechanical tubing from China and India were subsidized within the meaning of section 703(b) of the Act (19 U.S.C. 1671b(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 October 5, 2017 (82 FR 46522). The hearing was held in Washington, DC, on December 6, 2017, and all persons who requested the opportunity were permitted to appear in person or by counsel.

---

[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] The Commission also finds that imports subject to Commerce's affirmative critical circumstances determination are not likely to undermine seriously the remedial effect of the countervailing duty order on cold-drawn mechanical tubing from China.

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 materially injured by reason of imports of cold-drawn mechanical tubing ("CDMT") found by the U.S. Department of Commerce ("Commerce") to be subsidized by the governments of China and India.

I. Background

ArcelorMittal Tubular Products ("ArcelorMittal Tubular"), Michigan Seamless Tube, LLC, Plymouth Tube Co. USA ("Plymouth Tube"), PTC Alliance Corp. ("PTC Alliance"), Webco Industries Inc. ("Webco"), and Zekelman Industries Inc. (collectively the "Petitioners"), each a U.S. producer of CDMT, filed the petitions in these investigations on April 19, 2017.[1] Petitioners appeared at the hearing with counsel and submitted prehearing and posthearing briefs.

A number of respondent entities participated in these investigations: Benteler Steel/Tube GmbH and Benteler Rothrist AG (together "Benteler"), producers of subject merchandise from Germany and Switzerland, respectively; Autoliv ASP, Inc. ("Autoliv"), a U.S. importer of subject merchandise; Salzgitter Mannesmann Precision Tubes GmbH and Salzgitter Mannesmann International (USA) Inc. (collectively "Mannesmann"), a producer of subject merchandise from Germany and a U.S. importer of subject merchandise, respectively; Salem Steel NA LLC ("Salem Steel"), an importer of subject merchandise from ***; Tube Fabrication Industries, Inc. ("Tube Fabrication"), an importer of subject merchandise from ***; voestalpine Rotec Inc. ("voestalpine"), an importer of subject merchandise from ***; Borghi USA, an importer of subject merchandise from ***, DADCO, Inc. ("DADCO"), an importer of subject merchandise from ***; and Dana Incorporated ("Dana"), a purchaser of subject merchandise. Benteler, Autoliv, and Mannesmann each filed prehearing and posthearing briefs, and Salem Steel, voestalpine, and Tube Fabrication jointly filed prehearing and posthearing briefs ("Joint Prehearing Brief" and "Joint Posthearing Brief," respectively). DADCO and Dana each filed posthearing submissions. With the exception of DADCO, each of these parties also participated in the hearing.

U.S industry data are based on the questionnaire responses of eight firms that accounted for the vast majority of U.S. production of CDMT in 2016.[2] U.S. import data are

[1] Petitioners filed countervailing duty petitions on CDMT from China and India and antidumping duty petitions on CDMT from China, Germany, India, Italy, Korea, and Switzerland on the same day, April 19, 2017. However, the investigations' schedules became staggered when Commerce extended the deadline for its preliminary determinations only in the antidumping investigations, thereby reaching earlier final determinations in the countervailing duty investigations on China and India. Pursuant to the statutory provision on staggered investigations, the record for the antidumping duty investigations will be the same as that for the countervailing duty investigations except that the final Commerce antidumping duty determinations, and the parties' final comments concerning those investigations, will be added to the record. *See* 19 U.S.C. § 1677(7)(G)(iii).

[2] Confidential Report ("CR") at I-5, Public Report ("PR") at I-4.

based on the questionnaire responses of U.S. importers, and are supplemented with proprietary Customs data for certain U.S. Harmonized Tariff Schedule ("HTS") statistical reporting numbers.[3] The Commission issued questionnaires to 228 firms believed to be importers of subject CDMT and received responses from 50 companies representing *** percent of total imports and *** percent of subject imports during 2016.[4] Firms responding to the Commission's questionnaire accounted for *** percent of subject imports from China, *** percent of subject imports from Germany, *** percent of subject imports from India, *** percent of subject imports from Italy, *** percent of subject imports from Korea, and *** percent of subject imports from Switzerland.[5]

The Commission received responses to its foreign producer questionnaires from producers in each subject country. There were five responding producers accounting for *** percent of subject imports from China in 2016, five responding producers accounting for *** percent of subject imports from Germany, three responding producers accounting for *** percent of subject imports from India, four responding producers accounting for *** percent of subject imports from Italy, two responding producers accounting for *** percent of subject imports from Korea, and three responding producers accounting for *** percent of subject imports from Switzerland.[6]

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."[7] 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."[8] In turn, the Tariff Act defines "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."[9]

---

[3] CR at I-5, IV-1-2; PR at I-4, IV-1-2. Import data for firms submitting questionnaire responses are based on these responses, and proprietary Customs data for the primary HTS numbers under which imports of CDMT may enter into the United States are used for those firms that did not provide a questionnaire response.

[4] CR at IV-1; PR at IV-1.

[5] CR at IV-2; PR at IV-1.

[6] *See* CR at VII-3, VII-9, VII-15, VII-21, VII-27, and VII-33; PR at VII-8, VII-14, VII-19, VII-24, and VII-28.

[7] 19 U.S.C. § 1677(4)(A).

[8] 19 U.S.C. § 1677(4)(A).

[9] 19 U.S.C. § 1677(10).

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.[10] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[11] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[12] 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,[13] the Commission determines what domestic product is like the imported articles Commerce has identified.[14]

B. Product Description

Commerce defined the scope of the imported merchandise under investigation as follows:

> ...cold-drawn mechanical tubing of carbon and alloy steel (cold-drawn mechanical tubing) of circular cross-section, 304.8 mm or more in length, in actual outside diameters less than 331 mm, and regardless of wall thickness, surface finish,

---

[10] *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).

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

[12] *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.").

[13] *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).

[14] *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).

end finish or industry specification. The subject cold-drawn mechanical tubing is a tubular product with a circular cross-sectional shape that has been cold-drawn or otherwise cold-finished after the initial tube formation in a manner that involves a change in the diameter wall or wall thickness of the tubing, or both. The subject cold-drawn mechanical tubing may be produced from either welded (e.g., electric resistance welded, continuous welded, etc.) or seamless (e.g., pierced, pilgered or extruded, etc.) carbon or alloy steel tubular products. It may also be heat treated after cold working. Such heat treatments may include, but are not limited to, annealing, normalizing, quenching and tempering, stress relieving or finish annealing. Typical cold-drawing methods for subject merchandise include, but are not limited to, drawing over mandrel, rod drawing, plug drawing, sink drawing and similar processes that involve reducing the outside diameter of the tubing with a die or similar device, whether or not controlling the inside diameter of the tubing with an internal support device such as mandrel, rod, plug or similar device. Other cold-finishing operations that may be used to produce subject merchandise include cold-rolling and cold-sizing the tube.

Subject cold-drawn mechanical tubing is typically certified to meet industry specifications for cold-drawn tubing including but not limited to: (1) American Society for Testing and Materials (ASTM) or American Society of Mechanical Engineers (ASME) specifications ASTM A-512, ASTM-A-513 Type 3 (ASME SA513 Type 3), ASTM A-513 Type 4 (ASME SA513 Type 4), ASTM A-513 Type 5 (ASME SA513 Type 5), ASTM A-513 Type 6 (ASME SA513 Type 6), ASTM A-519 (cold-finished); (2) SAE International (Society of Automotive Engineers) specifications SAE J524, SAE J525, SAE J2833, SAE J2614, SAE J2467, SAE J2435, SAE J2613; (3) Aerospace Material Specification (AMS) AMS T-6736 (AMS 6736), AMS 6371, AMS 5050, AMS 5075, AMS 5062, AMS 6360, AMS 6361, AMS 6362, AMS 6371, AMS 6372, AMS 6374, AMS 6381, AMS 6415; (4) United States Military Standards (MIL) MIL-T-5066 and MIL-T-6736; (5) foreign standards equivalent to one of the previously listed ASTM, ASME, SAE, AMS, or MIL specifications including but not limited to: (a) German Institute for Standardization (DIN) specifications DIN 2391-2, DIN 2393-2, DIN 2394-2; (b) European Standards (EN) EN 10305-1, EN 10305-2, EN 10305-4, EN 10305-6 and European national variations on those standards (e.g., British Standard (BS EN), Irish Standard (IS EN), and German Standard (DIN EN) variations, etc.); (c) Japanese Industrial Standard (JIS) JIS G 3441 and JIS G 3445; and (6) proprietary standards that are based on one of the above-listed standards.

The subject cold-drawn mechanical tubing may also be dual or multiple certified to more than one standard. Pipe that is multiple certified as cold-drawn mechanical tubing, and to other specifications not covered by this scope, is also covered by the scope of these investigations when it meets the physical description set forth above.

Steel products included in the scope of these investigations are products in which (1) iron predominates, by weight, over each of the other contained elements; (2) the carbon content is 2 percent or less by weight.

For purposes of this scope, the place of cold-drawing determines the country of origin of the subject merchandise. Subject merchandise that is subject to minor working in a third country that occurs after drawing in one of the subject countries including, but not limited to, heat treatment, cutting to length, straightening, nondestruction testing, deburring or chamfering, remains within the scope of these investigations.

All products that meet the written physical description are within the scope of these investigations unless specifically excluded or covered by the scope of an existing order. Merchandise that meets the physical description of cold-drawn mechanical tubing above is within the scope of the investigations even if it is also dual or multiple certified to an otherwise excluded specification listed below. The following products are outside of, and/or specifically excluded from, the scope of these investigations: (1) cold-drawn stainless steel tubing, containing 10.5 percent or more of chromium by weight and not more than 1.2 percent of carbon by weight; (2) products certified to one or more of the ASTM, ASME, or American Petroleum Institute (API) specifications listed below: ASTM A-53; ASTM A-106; ASMT A-179 (ASME SA 179); ASTM A-192 (ASME SA 192); ASTM A-209 (ASME SA 209); ASTM A-210 (ASME SA 210); ASTM A-213 (ASME SA 213); ASTM A-334 (ASME SA 334); ASTM A-423 (ASME SA 423); ASTM A-498; ASTM A-496 (ASME SA 496); ASTM A-199; ASTM A-500; ASTM A-556; ASTM A-565; API 5L; and API 5CT, except that any cold-drawn tubing product certified to one of the above excluded specifications will not be excluded from the scope if it is also dual- or multiple-certified to any other specification that otherwise would fall within the scope of these investigations.

The products subject to these investigations are currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) under item numbers 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, 7306.50.5030. Subject merchandise may also enter under numbers 7306.30.1000 and 7306.50.1000. The HTSUS subheadings above are provided for convenience and customs purposes only. The written description of the scope of these investigations is dispositive.[15]

---

[15] *Countervailing Duty Investigation of Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel from the People's Republic of China: Final Affirmative Determination, and Final Affirmative Determination of Critical Circumstances, in Part*, 82 Fed. Reg. 58,175 (Dec. 11, 2017). Commerce has made several amendments to the scope of investigations since the preliminary phase: (i) excluding tubes less than 304.8 mm in length; (ii) adding a sentence to clarify that types of cold-finishing operations covered under the scope include cold-rolling and cold-sizing; and (iii) initially adding a reference to specification EN-10305-3, which refers to certain as-welded tubes that have undergone cold-sizing, before removing this reference, with Petitioners requesting both the initial addition and subsequent removal. *See* Petitioners' Prehearing Br. at Exh 2 (U.S. Department of Commerce Scope Comments Decision Memorandum for the Preliminary Determinations (Nov. 15, 2017) ("Preliminary Scope Memo"));

(*continued*...)

CDMT are steel tubular products with a circular cross-section shape that have been cold-drawn or otherwise cold-finished in a manner that changes the product's diameter, wall thickness, or both.[16] Cold-drawing, or similar cold-finishing activities, impart CDMT with distinct physical characteristics, including size and dimensional tolerance, higher yield strength, tensile strength, elongation, and a high weight to strength ratio.[17] The characteristics imparted by cold-drawing or cold-finishing make CDMT suitable for a variety of applications, including mechanical parts in automobiles, trucks, aircraft, construction, agricultural and drilling equipment, and hydraulic cylinders.[18] CDMT may be produced in a variety of outside diameter and wall thickness combinations that meet particular customer specifications and end-use needs.[19]

C. Arguments of the Parties

Petitioners argue that the Commission should define a single domestic like product that is coextensive with the scope of the investigations, as the Commission did in the preliminary determinations.[20] Respondent Mannesmann argues that the Commission should include standard welded tubing or as-welded mechanical tubing ("as-welded tubing") in the domestic like product. Respondent Autoliv argues that the Commission should define airbag tubing as a separate domestic like product.

1. Whether As-Welded Tubes Are Within the Scope of Investigations

Petitioners' Arguments. Petitioners assert that tubes that have undergone a change in diameter as a result of cold-sizing ("cold-sized tubes"), and which Commerce has clarified are within the scope of investigations, should be included in the Commission's definition of domestic like product.[21] While respondents argue that the scope of these investigations potentially includes as-welded tubes, Petitioners discount this possibility, stating that they only sought to include within the scope tubing that has been cold-sized beyond the "light-rolling" that characterizes as-welded tubes.[22] Petitioners clarify that cold-drawing typically results in a reduction in tube diameter ranging from 10 to 40 percent or *** percent per pass, and cold-

(…*continued*)
Petitioners' Posthearing Br. at Exh. 1, 14-16 (describing addition and then removal of specification EN-10305-3 from scope).

[16] CR at I-4; PR at I-3.

[17] CR at I-16; PR at I-12.

[18] CR at I-16; PR at I-12.

[19] CR at V-8 n.17; CR at V-5-6, n.17.

[20] Petitioners' Prehearing Br. at 4-5.

[21] Petitioners' Prehearing Br. at 7; Petitioners' Posthearing Br. at Exh. 1, 15-16; Hearing Tr. at 58-60 (Luberda). Petitioners state that they have included certain cold-sized tubes within the scope of investigations primarily due to the concern that *** could circumvent the orders through cold-sizing tubes rather than cold-drawing them. Petitioners' Posthearing Br. at Exh. 1, 15-16.

[22] Petitioners Posthearing Br. at 15 and Exh. 1, 14-16; Hearing Tr. at 58-60 (Luberda).

sized tubes would need to undergo an equivalent reduction in diameter as a result of cold-sizing to be included within the scope.[23]

Petitioners indicate that they initially requested Commerce to add a reference in the scope to specification EN-10305-3, which refers to certain as-welded tubes that have undergone cold-sizing, because it was unclear whether such tubing might include cold-sized tubes that have undergone a sufficient change in diameter, but Petitioners subsequently requested the removal of this specification when respondents clarified that tubes under this specification undergo only "light-rolling" for concentricity and straightness.[24] Petitioners emphasize that the scope's coverage of cold-sized tubes has not changed during the course of the investigations, and argue that respondents have confused the issue with conflicting arguments regarding the cold-sizing operations on their imports.[25]

Respondents' Arguments. While not arguing that the Commission should define a domestic like product differently from the scope of investigations, Mannesmann argues that Commerce's inclusion of cold-sized tubing in the scope of investigations has resulted in the expansion of the scope to include as-welded tubes.[26] Mannesmann emphasizes that the definition of specification EN-10305-3, industry literature on cold-sizing, and descriptions of cold-sizing processes by Mannesmann and Benteler before Commerce indicate that as-welded tubes all undergo cold-sizing that results in small changes to a tube's diameter and wall thickness.[27] Mannesmann also notes that neither the Commission's opinion nor staff report in the preliminary phase described cold-sizing operations, supporting the view that Commerce's inclusion of such tubes has expanded the scope of investigations from the preliminary phase.[28] Mannesmann argues that the Commission must include as-welded tubes within its domestic like product and collect data for such products.[29]

Mannesmann further asserts that Petitioners' refusal to clarify the amount of change in diameter necessary to bring cold-sized tubes inside the scope has created ambiguity and confusion regarding the scope of investigations.[30] Mannesmann notes that at the Commission's hearing, industry witnesses for the Petitioners argued, for the first time, that in-scope cold-sized tubes should undergo similar changes in diameter as those changes that result from cold-drawing, *i.e*., diameter reductions of between 15 to 40 percent.[31] Mannesmann argues that Petitioners, however, have taken a contrary position before Commerce, arguing there that a

---

[23] Petitioners' Posthearing Br. at Exh. 1, 14-16; Hearing Tr. at 62-63 (Boyer). In contrast, Petitioners argue that the as-welded tubes reported by respondents undergo only a small average reduction of *** percent in diameter as a result of cold-sizing, which Petitioners argue makes such tubes out-of-scope products. Petitioners' Posthearing Br. at Exh. 1, 14-16.

[24] Petitioners' Posthearing Br. at 15 and Exh. 1, 14-15; Hearing Tr. at 58-60 (Luberda).

[25] Petitioners' Posthearing Br. at 15; Hearing Tr. at 58-59 (Luberda).

[26] Mannesmann Prehearing Br. at 9.

[27] Mannesmann Prehearing Br. at 7-9.

[28] Mannesmann Prehearing Br. at 7-8.

[29] Mannesmann Prehearing Br. at 10-11.

[30] Mannesmann Posthearing Br. at Add. 1, 1-2.

[31] Mannesmann Posthearing Br. at Add. 1, 2; Hearing Tr. at 62-63 (Boyer).

change in diameter of less than 1 percent was sufficient to bring cold-sized tubes into the definition of the scope.[32] Mannesmann argues that if the Commission accepts the Petitioners' definition of cold-sized tubing argued before Commerce (*e.g.*, cold-sizing that results in a change in diameter of less than 1 percent), then the Commission must include all as-welded tubes within its domestic like product and that the prehearing report lacks data for such products.[33]

2. Airbag Tubing as a Separate Domestic Like Product

Petitioners' Arguments. Petitioners argue that the Commission should not define airbag tubing as a separate domestic like product. Petitioners emphasize that there is no domestic production of airbag tubing and that the statute does not permit the Commission to define a separate domestic like product for items not produced domestically.[34] Petitioners note that Autoliv did not file timely comments requesting the Commission to collect separate data on U.S.-produced products like or most similar to airbag tubing.[35] Petitioners also argue that Autoliv's proposal that the Commission undertake a material retardation analysis for production of airbag tubing is misplaced, because there is already an established domestic industry producing CDMT that has previously produced airbag tubing and that retains the equipment to do so.[36]

Respondent's Arguments. Autoliv argues that the Commission should define airbag tubing as a separate domestic like product. While Autoliv acknowledges that there is no domestic production of airbag tubing, Autoliv asserts that the lack of domestic production does not preclude the Commission from finding a separate domestic like product and that the Commission may undertake an analysis of whether domestic production is materially retarded by reason of subject imports in such instances.[37]

Autoliv argues that the statute requires that the Commission define the domestic like product and the domestic industry with reference to subject imports, and the statute thus requires that the Commission determine whether airbag tubing is a separate like product with respect to other subject imports before considering whether there is any domestic

---

[32] Mannesmann Posthearing Br. at Add. 1, 2-3 & Exh. 2, 7-8 (Petitioners' submission before Commerce on the scope of investigations).

[33] Mannesmann Posthearing Br. at Add. 1, 3-4.

[34] Petitioners' Prehearing Br. at 6 n.5; Petitioners' Posthearing Br. at Exh. 1, 33-34; Hearing Tr. at 61-62 (Luberda) (confirming no domestic production of airbag tubing during January 1, 2014-June 30, 2017 period of investigations ("POI")).

[35] Petitioners' Prehearing Br. at 6 n.5.

[36] Petitioners' Posthearing Br. at Exh. 1, 34-35; Hearing Tr. at 27-28 (Van Pelt) (confirming that Plymouth Tube has in past made airbag tubing and retains the ability to make such products).

[37] Autoliv Prehearing Br. at 8-9. Autoliv disagrees with the Commission's position in its preliminary determinations that it cannot define a domestic like product for which there is no domestic production (regarding certain heat-treated tubing produced by Hubei Steel). Autoliv Prehearing Br. at 9-10; Autoliv Posthearing Br. at 5.

production.[38] Autoliv references the Commission's 1983 investigation of *Thin Sheet Glass*[39] to argue that the Commission has in the past defined a domestic like product that was not produced domestically and that the Court of International Trade affirmed this analysis.[40] Autoliv further references the Commission's investigations of *Antifriction Bearings* to argue that the Commission has reaffirmed its ability to define a domestic like product for which there is no domestic production.[41]

Autoliv argues that an examination of the Commission's six like product factors supports defining airbag tubing as a separate domestic like product, and Autoliv also emphasizes that Petitioners have not contested that airbag tubing differs from other CDMT under the Commission's like product factors.[42]

D. Domestic Like Product Analysis

For the reasons explained below, we define a single domestic like product consisting of all CDMT coextensive with the scope of the investigations.

1. Whether As-Welded Tubes Are Within the Scope

Parties disagree as to what degree of cold-sizing brings tubes within the scope of investigations and thus whether as-welded tubing should be within the definition of domestic like product. The initial scope of investigations included mechanical tubing that was "cold-drawn *or otherwise cold-finished* after the initial tube formation in a manner that involves a change in the diameter or wall thickness of the tubing, or both"[43] (emphasis added). Commerce subsequently added, at Petitioners' request, a clarification that "[o]ther cold-finishing operations that may be used to produce subject merchandise include cold-rolling and cold-sizing the tube."[44] The Commission's questionnaires in the final phase of these investigations incorporated this scope language regarding cold-sized tubes.[45]

---

[38] Autoliv Prehearing Br. at 8; Autoliv Posthearing Br. at 4.

[39] *Thin Sheet Glass from Switzerland, Belgium, and the Federal Republic of Germany*, USITC Inv. Nos. 731-TA-127-129 (Preliminary), USITC Pub. No. 1376 (May 1983) ("Thin Sheet Glass").

[40] Autoliv Prehearing Br. at 10-11; Autoliv Posthearing Br. at 5-6 (citing *Jeannette Sheet Glass Corp. v. United States*, 607 F. Supp. 123 (CIT 1985)).

[41] Autoliv Prehearing Br. at 10-11 (citing *Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof from the Federal Republic of Germany, France, Italy, Japan, Romania, Singapore, Sweden, Thailand, and the United Kingdom*, USITC Inv. Nos. 303-TA-19-20, and 731-TA-391-399 (Final), USITC Pub. 2185 (May 1989) at 39, n.78 ("Antifriction Bearings")).

[42] Autoliv Prehearing Br. at 14-18; Autoliv Posthearing Br. at 7.

[43] *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel from the Federal Republic of Germany, India, Italy, the Republic of Korea, the People's Republic of China, and Switzerland: Initiation of Less-Than-Fair-Value Investigations*, 82 Fed. Reg. 22491 (May 16, 2017).

[44] *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel from the People's Republic of China: Preliminary Affirmative Determination of Sales at Less-Than-Fair-Value and Preliminary Determination of Critical Circumstances, in Part, and Postponement of Final Determination*, 82 Fed. Reg.

(*continued*...)

Commerce has acknowledged that the current scope definition does not clarify whether there is a threshold for how much a tube's diameter or wall thickness must change as a result of cold-sizing to be within the scope of investigations, and if so, the nature of any such threshold. In its final scope comments decision memorandum, dated December 4, 2017, Commerce indicated that it would "in theory" be useful to identify such a threshold but that it was unable to identify such a threshold "at this time" and thus did not clarify this scope issue in its Final Scope Memo.[46] Commerce's comments would suggest that there is a threshold for how much a tube's diameter and wall thickness must change and that not all cold-sized tubes are within the scope of investigations (contrary to Mannesmann's argument),[47] but do not specify the nature of such a limitation.[48]

Notwithstanding the scope's ambiguity, we reject Mannesmann's argument that the Commission should have included as-welded tubes in the domestic like product and collected data on such products. The Commission collects data based upon its reasonable knowledge of the scope of investigations and on issues raised by the parties in comments on draft questionnaires. The Commission incorporated all scope language adopted by Commerce with respect to cold-sized tubes in its data collection for the final phase of these investigations. Mannesmann, however, did not request that the Commission collect data for as-welded tubes in its comments on draft questionnaires and has not otherwise indicated why it could not have

---

(…*continued*)
55,574 (Nov. 22, 2017). As noted above, Commerce also added, and subsequently removed, reference to specification EN-10305-03 to the scope of investigations. Petitioners appear to concede that tubes under this specification may not be within the scope of investigations. Mannesmann Posthearing Br. at Exh 1 (Petitioners' letter to Commerce requesting removal of specification from scope of investigations).

[45] Blank Questionnaires, EDIS Doc. 624464.

[46] U.S. Department of Commerce, Scope Comments Decision Memorandum for the Final Determinations, Dec. 4, 2017, EDIS Doc 632308 at 10 ("Final Scope Memo").

[47] Petitioners explain that they requested that Commerce remove reference to specification EN-10305-03 from the scope of investigations after clarification that tubes under this specification do not undergo sufficient reductions in diameter as a result of cold-sizing. Petitioners' Posthearing Br. at 15 and Exh. 1, 14-15; Hearing Tr. at 58-60 (Luberda). The removal of this specification further supports the existence of some threshold for how much a tube's diameter and wall thickness must change to fall within the scope of investigations.

[48] While Commerce has not currently specified which cold-sized tubes are within the scope of investigations, Petitioners have represented that as-welded tubes do not undergo sufficient reductions in diameter as a result of cold-sizing to fall within the scope of investigations. At the Commission's hearing, witnesses for the Petitioners indicated that in-scope cold-sized tubes must undergo reductions in diameter similar to those of cold-drawn tubes, "in the area of…15, 20, 30, 35, 40 percent." Hearing Tr. at 62-63 (Boyer). Petitioners further clarified in their posthearing brief that in-scope cold-sized tubes undergo reductions in diameter of *** percent. Petitioners' Posthearing Br. at Exh. 1, 14-16. Petitioners represented that as-welded tubes undergo much smaller reductions in diameter, typically *** percent, as a result of cold-sizing and would thus not fall within the scope of investigations. Petitioners' Posthearing Br. at Exh. 1, 14-16. Given Commerce's recognition of the cold-sizing issue and Petitioners' clarification as to the intended reductions necessary, we do not believe that interpreting the scope in the expansive manner advocated by Mannesmann is appropriate.

made such a request in a timely manner.[49] Accordingly, we have not included as-welded tubes within the definition of the domestic like product.

2. Airbag Tubing as a Separate Domestic Like Product

Petitioners and Autoliv agree that airbag tubing is within the scope of investigations but that there is no domestic production of airbag tubing. Autoliv, however, contends that the Commission has authority to define a domestic like product for which there is no domestic production. We disagree. The statute defines the "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."[50] Emphasizing the statute's mandate to identify a domestic item that is like or most similar to subject imports, the Commission has reasoned that defining a domestic like product that is not produced domestically would ignore this mandate and contradict the statute.[51] For products not made domestically, the Commission has found that parties seeking a separate domestic like product must identify a domestically produced variant that is "most similar in characteristics and uses" with such product.[52] Accordingly, the Commission's consistent practice has been to reject requests by parties to define a separate domestic like product for merchandise not manufactured domestically and for which parties have not identified a domestically produced variant most similar in characteristics and uses.[53]

Autoliv misinterprets the Commission opinion in *Antifriction Bearings* to support its argument. The Commission in *Antifriction Bearings* specifically rejected the argument now asserted by Autoliv that the Commission may define the domestic like product with reference to subject imports rather than domestically produced items.[54] Instead, the Commission clarified that it would identify the domestically produced item most similar in characteristics

---

[49] 19 C.F.R. § 207.20(b). Mannesmann's comments proposed a variety of new pricing products, but did not address cold-sized tubing. *See* Mannesmann's Comments on Draft Questionnaires, EDIS Doc. 622994.

[50] 19 U.S.C. § 1677(10).

[51] *Certain Aluminum Extrusions from China*, Inv. Nos. 701-TA-475 and 731-TA-1177 (Review), USITC Pub. 4677 (March 2017), at 12-14.

[52] *See, e.g.*, *Nepheline Syenite from Canada*, Inv. No. 731-TA-525 (Final), USITC Pub. 2502 at 5-11 (Apr. 1992), *aff'd*, *Feldspar Corp. v. United States*, 825 F. Supp. 1095 (Ct. Int'l Trade 1993); *Certain Frozen Fish Fillets from Vietnam*, Inv. No. 731-TA-1095 to 1097 (Preliminary), USITC Pub. 3533 at 5 (Aug. 2002); *Ferrovanadium and Nitrided Vanadium from Russia*, Inv. No. 731-TA-702 (Review), USITC Pub. 3420 at 5 (May 2001). *See also Raw In-Shell Pistachios from Iran*, Inv. No. 731-TA-287 (Second Review), USITC Pub. 4701 at 6 n.20 (June 2017).

[53] *See, e.g.*, *Certain Lined Paper School Supplies from China, India, and Indonesia*, Inv. Nos. 701-TA-442 to 443 and 731-TA-1095 to 1097 (Preliminary), USITC Pub. 3811 at 12 n.50 (Oct. 2005); *Extruded Rubber Thread from Malaysia*, Inv. No. 753-TA-34, USITC Pub. 3112 at 5 n.14 (June 1998); *Certain Cold-Rolled Steel Products from Australia, India, Japan, Sweden, and Thailand*, Inv. Nos. 731-TA-965, 971 to 972, 979, and 981 (Final), USITC Pub. 3536 at 10 n.30 (Sept. 2001); *see also Large Residential Washers from China*, Inv. No. 731-TA-1306 (Preliminary), USITC Pub. 4591 at 10 (Feb. 2016).

[54] *Antifriction Bearings*, USITC Pub. 2185 at 36.

and uses to an imported item not otherwise made domestically when defining a domestic like product.[55] The footnote in *Antifriction Bearings* cited by Autoliv indicates that the Commission must define a domestic like product not produced domestically only in the instance of a material retardation analysis where there is no domestic industry, not in investigations where there is a domestic industry that does not produce particular in-scope items that are imported.[56] Subsequent investigations confirmed that where material retardation of the domestic industry was not at issue, the Commission would not define a separate domestic like product for items not produced domestically and for which parties had not identified a domestic variant that was most similar in characteristics and uses.[57]

This approach is confirmed by the *Thin-Sheet Glass* investigations also cited by Autoliv. Petitioners in those investigations specifically alleged that subject imports were materially retarding the establishment of an industry manufacturing the domestic like product for which there was no current production.[58] Material retardation is not an issue in these investigations. Petitioners have confirmed that they have in the past manufactured airbag tubing and retain the capacity to do so.[59]

In accordance with this practice, the Commission reminded parties in its preliminary determinations that those parties seeking a separate domestic like product for items not manufactured domestically must identify a domestically produced variant most similar in

---

[55] *Antifriction Bearings*, USITC Pub. 2185 at 36. In evaluating theories of domestic like product analysis, the Commission stated:

> The "no like product" theory of exclusion *begins by dividing subject imports into several groups*, some of which have a domestic counterpart or like product, while others do not…This "no domestic like product" theory was rejected by the Commission in *Lime Oil from Peru*…The Commission determined that there cannot be a finding of "no like product" as such a finding runs counter to the statute's definition of "like product" as a "product like, or in the absence of like, most similar in characteristics and uses with, the article subject to investigation." (emphasis added) (citations omitted)

[56] *Antifriction Bearings*, USITC Pub. 2185 at 39 n. 78.

[57] *See e.g., Professional Electric Cutting and Sanding/Grinding Tools from Japan*, Inv. No. 731-TA-571, USITC Pub. 2536 (July 1992) at 6, stating:

> A product not produced in the United States is not an appropriate candidate for a separate domestic like product determination, unless material retardation of the establishment of an industry in the United States is a genuine issue. It is not an issue in this investigation. (citations omitted)

[58] *Thin-Sheet Glass*, USITC Pub. 1376, at 14-17 and A-22-23. Contrary to Autoliv's assertion, the Court of International Trade opinion affirming the Commission determinations in *Thin-Sheet Glass* did not address the domestic like product definition and consequently does not support Autoliv's argument that the Commission may define a domestic like product for which there is no domestic production. *Jeannette Sheet Glass Corp. v. United States*, 607 F. Supp. 123 (Ct. Int'l Trade 1985).

[59] Hearing Tr. at 27-28 (Van Pelt).

characteristics and uses to such items.[60] Autoliv has nonetheless failed to identify a domestically produced variant for airbag tubing in the final phase of these investigations. Accordingly, because there is no domestic production of airbag tubing and Autoliv has not identified a domestically produced variant that is most similar in characteristics and uses with airbag tubing, we do not define it as a separate domestic like product.[61]

We accordingly define a single domestic like product that is coextensive with the scope of investigations.

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."[62] 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 do not raise issues concerning related parties.[63] As we explain above, we have not included as-welded tubes within the domestic like product.[64] Accordingly

---

[60] *Cold-Drawn Mechanical Tubing from China, Germany, India, Italy, Korea, and Switzerland*, Inv. Nos. 701-TA-576-577 and 731-TA-1362-1367 (Preliminary), USITC Pub. 4700 (June 2017) ("Preliminary Determinations") at 10 n.22.

[61] U.S. importer DADCO also argues that the Commission should define CDMT that has been certified to 2014/68/EU-Pressure Equipment Directive and that is used in the manufacture of high-pressure nitrogen gas spring products as a separate domestic like product, arguing that such products have distinct physical characteristics, stringent customer requirements, and distinct end-uses from other CDMT. DADCO Posthearing Br. at 1-3. DADCO also asserts, however, that such CDMT is not manufactured in the United States. DADCO Posthearing Br. at 3-4. For the reasons discussed above, because DADCO has not identified a domestically produced variant that is most similar in characteristics and uses to this product, we decline to define CDMT that has been certified to 2014/68/EU-Pressure Equipment Directive and that is used in the manufacture of high-pressure nitrogen gas spring products as a separate domestic like product.

[62] 19 U.S.C. § 1677(4)(A).

[63] No U.S. producer reported being related to foreign producers of subject merchandise or importing subject merchandise. The issue of whether cutting and finishing CDMT in the United States constitutes domestic production discussed in the preliminary determinations has been rendered moot by the exclusion of tubes less than 304.8 mm in length from the scope of investigations. *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel from the People's Republic of China: Preliminary Affirmative Determination of Sales at Less-Than-Fair-Value and Preliminary Affirmative Determination of Critical Circumstances, in Part, and Postponement of Final Determination*, 82 Fed. Reg. 55574 (Nov. 22, 2017); *see also* Preliminary Scope Memo at 8-9. Respondents acknowledge that such products have been excluded from the scope of investigations and do not argue that companies engaged in cutting and finishing CDMT should be included within the domestic industry. Joint Prehearing Br. at 17-21.

and in light of our definition of the domestic like product, we define the domestic industry to include all producers of CDMT, and it does not include producers of as-welded tubes.

IV. Cumulation[65]

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:

(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.[66]

(…*continued*)

[64] The parties have expressed divergent views in the final phase of these investigations concerning whether manufacturers of as-welded tubes should be included within the domestic industry. Mannesmann Prehearing Br. at 9-10 & Exh. 9; Petitioners' Prehearing Br. at 7-8; Petitioners' Posthearing Br. at 15 & Exh. 1, 14-16.

[65] 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. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i). In the case of countervailing duty investigations involving developing countries (as designated by the United States Trade Representative), the statute indicates that the negligibility limits are 4 percent and 9 percent, rather than 3 percent and 7 percent. 19 U.S.C. § 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)).

For April 2016-March 2017, the 12-month period preceding the filing of the petitions, subsidized imports from China were *** percent as a share of total imports and subsidized imports from India were *** percent as a share of total imports. CR/PR at Table IV-9. Accordingly, negligibility is not an issue in these investigations.

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 the subject imports compete with each other and with the domestic like product.[67] Only a "reasonable overlap" of competition is required.[68]

A. Arguments of the Parties

Petitioners. Petitioners argue that all criteria for cumulation are satisfied in these investigations.[69] Petitioners further contest Benteler and Mannesmann's claims that imports from Germany and Switzerland should not be cumulated with other subject imports because such merchandise is sold through distinct channels of trade and is not fungible with other subject imports or the domestic like product.[70]

Respondents. Mannesmann argues that subject imports from Germany should not be cumulated with other subject imports because of their different channels of distribution and limited fungibility.[71] Benteler similarly argues that subject imports from Germany and Switzerland should not be cumulated with other subject imports because of their different channels of distribution and limited fungibility with CDMT from other sources.[72]

B. Analysis and Conclusion

The statutory threshold for cumulation is satisfied in these investigations because Petitioners filed the antidumping and countervailing duty petitions with respect to all six subject countries on the same day, April 19, 2017.[73]

Fungibility. Nearly all U.S. producers reported that subject imports from each country are "always" interchangeable with each other and with the domestic like product.[74] Responses

(…*continued*)

[66] *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-280 (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).

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

[68] The Statement of Administrative Action for the Uruguay Round Agreements Act ("SAA"), which is an authoritative expression by the United States concerning the interpretation and application of the statute, 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." SAA, H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy, S.A. v. United States*, 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, AG*, 718 F. Supp. at 52 ("Completely overlapping markets are not required.").

[69] Petitioners' Prehearing Br. at 10-13.

[70] Petitioners' Posthearing Br. at 7-9; Hearing Tr. at 112-114 (Luberda).

[71] Mannesmann Prehearing Br. at 12-14; Mannesmann Posthearing Br. at 6-10.

[72] Benteler Prehearing Br. at 1-4; Benteler Posthearing Br. at 4-6.

[73] None of the statutory exceptions to cumulation apply.

[74] CR/PR at Table II-11.

from U.S. importers were more varied.[75] While U.S. importers most frequently reported that subject imports from Germany and Switzerland were only "sometimes" interchangeable with other subject imports or the domestic like product, majorities of U.S. importers reported that products were "always" or "frequently" interchangeable in most comparisons involving the other four subject countries and the domestic like product.[76] U.S. purchasers most frequently reported that subject imports from each country, with the exception of Switzerland, were "always" or "frequently" interchangeable between each other and in comparisons between imports from individual subject countries and the domestic like product.[77]

Nearly all U.S. purchasers reported that subject imports from each country and the domestic like product "always" or "usually" meet minimum quality specifications.[78] Additionally, data indicate that U.S. shipments of the domestic like product and subject imports from each country all included CDMT made from alloy and carbon steel, albeit in different concentrations.[79] There is also an overlap in end-uses; during the POI, the domestic like product was present in each of the four identified major end-use categories (agricultural, automotive, oil and gas, and industrial). Imports from all six subject countries were present in automotive applications, and imports from four subject countries (all but Korea and Switzerland) were present in the oil and gas sector.[80] The record indicates that numerous purchasers purchased the domestic like product as well as subject imports from individual subject countries, with six purchasers indicating that they purchased both domestically produced CDMT and subject imports from Germany; one of these purchasers also purchased subject imports from Switzerland.[81]

In arguing for lack of fungibility, Benteler and Mannesmann cite the more varied responses from U.S. importers regarding the interchangeability and non-price differences between subject imports from Germany and Switzerland and other sources of CDMT. We observe, however, that the vast majority of reporting importers found that subject imports from Germany or Switzerland were "always" or "frequently" interchangeable with CDMT from other subject sources, and that substantial percentages (roughly 45 percent in either comparison) found such products were at least "frequently" interchangeable with domestically produced CDMT.[82] Moreover, purchasers' comparisons of subject imports from Germany and Switzerland, on the one hand, and the domestic like product, on the other, do not support a finding that there are significant differences between the products. Majorities or pluralities of purchasers found the domestic like product and subject imports from Germany comparable in

---

[75] CR/PR at Table II-11.

[76] CR/PR at Table II-11.

[77] CR/PR at Table II-11. A majority of purchasers reported that the domestic like product and subject imports from Switzerland were "sometimes" interchangeable.

[78] CR/PR at Table II-12.

[79] CR/PR at Figure IV-8.

[80] CR/PR at Tables IV-15, IV-16. In the other two identified sectors, imports from three subject countries were present in appreciable quantities. CR/PR at Tables IV-14, IV-17.

[81] *See* CR/PR at Tables V-13, V-15.

[82] CR/PR at Table II-11,

14 out of 15 purchasing factors, and substantial majorities found the products comparable in terms of product range and quality meeting industry standards.[83] Majorities and pluralities found that the domestic like product and subject imports from Switzerland were comparable in all 15 purchasing factors, with majorities finding the products comparable in terms of product range and quality meeting industry standards.[84]

Although the pricing product data appear to suggest some differences in product mix between subject imports from Germany and Switzerland, on the one hand, and domestic CDMT and imports from other subject sources, on the other,[85] we do not believe that this is sufficient to indicate a lack of fungibility in light of marketplace participants' perceptions of interchangeability and comparability, broad overlaps in product type, and some purchaser overlap. Consequently, we find sufficient fungibility between the domestic like product and subject imports from China, Germany, India, Italy, Korea, and Switzerland to meet the reasonable overlap standard.

Channels of Distribution. The record indicates that both the domestic like product and imported subject merchandise share the same channels of distribution, with shipments to distributors and to end users, albeit in different concentrations. The domestic like product and subject imports from *** were shipped primarily to distributors, and subject imports from *** were shipped primarily to end users.[86]

The record further shows overlap in shipments to end-use sectors between the domestic like product and subject merchandise, albeit with different concentrations.[87] While Benteler and Mannesmann argue that their shipments of customer-specific products to automotive end users constitute distinct channels of trade, the record indicates that domestic producers and importers from other subject countries also make shipments directly to end users in the automotive market.[88] Mannesmann further highlights its imports sold pursuant to global frame contracts, but these types of sales apply to *** of subject imports from Germany.[89] Further, such agreements are essentially equivalent to long-term contracts,[90] and both U.S. producers and U.S. importers of subject merchandise from other countries reported using a mix of long-term contracts, annual contracts, short-term contracts, and spot sales for CDMT, albeit in different concentrations.[91]

---

[83] CR/PR at Table II-10. A majority of responding purchasers found the domestic product superior in terms of delivery time. *Id*.

[84] CR/PR at Table II-10.

[85] *See* CR/PR at Table V-11. Nevertheless, the pricing data do not constitute a large percentage of shipments for the domestic like product or shipments of imports from any subject country. *See* CR at V-8; PR at V-5-6.

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

[87] CR/PR at Table II-2.

[88] CR/PR at Table II-2.

[89] Mannesmann Posthearing Br. at 6 & Exh. 5.

[90] Petitioners' Posthearing Br. at Exh. 1, 26-28.

[91] CR/PR at Table V-2.

Thus, despite some differences in the concentration of sales to distributors and end users, sales in end-use sectors, and types of sale, we find overlap in each of these areas between the domestic like product and subject imports from all six subject countries.

Geographic Overlap. The record indicates that CDMT is generally shipped nationwide. The domestic like product and subject imports from all six subject countries were present in the Northeast, Midwest, Southeast, Central Southwest, Mountains, and Pacific Coast regions of the United States during the POI.[92]

Simultaneous Presence in Market. The domestic like product was present in the U.S. market throughout the POI.[93] Imports from each subject country were also present in the U.S. market in every month of the POI.[94]

Conclusion. As previously discussed, we find sufficient fungibility between the domestic like product and imports from each of the subject countries to meet the reasonable overlap standard. The record reflects that market participants generally perceive the domestic like product and subject imports from all sources to be interchangeable. The domestic like product and subject imports also share the same channels of distribution, to distributors and end users. The domestic like product and subject imports from all six subject countries were simultaneously present in the U.S. market throughout the POI, and are all sold in the same U.S. regions. Consequently, the record indicates that there is a reasonable overlap of competition between and among subject imports and the domestic like product. We accordingly analyze subject imports from China, Germany, India, Italy, Korea, and Switzerland on a cumulated basis to determine whether there is material injury by reason of subject imports.

V. Material Injury by Reason of Subject Imports

Based on the record in the final phase of this investigation, we find that an industry in the United States is materially injured by reason of imports of CDMT that Commerce has found to be subsidized by the governments of China and India.

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.[95] 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

---

[92] CR/PR at Table II-3.

[93] CR at IV-32; PR at IV-11.

[94] CR/PR at Table IV-10.

[95] 19 U.S.C. §§ 1671d(b), 1673d(b). The Trade Preferences Extension Act of 2015, Pub. L. 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 have applied these amendments here.

like product, but only in the context of U.S. production operations.[96] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[97] 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.[98] 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."[99]

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,[100] 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.[101] 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 there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[102]

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

---

[96] 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).

[97] 19 U.S.C. § 1677(7)(A).

[98] 19 U.S.C. § 1677(7)(C)(iii).

[99] 19 U.S.C. § 1677(7)(C)(iii).

[100] 19 U.S.C. §§ 1671d(a), 1673d(a).

[101] *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).

[102] 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).

inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.[103] In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.[104] Nor does the "by reason of" standard require that unfairly 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.[105] It is clear that the existence of injury caused by other factors does not compel a negative determination.[106]

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

---

[103] 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 Steel*, 542 F.3d at 877.

[104] SAA at 851-52 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports."); *Taiwan Semiconductor Industry Ass'n,* 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 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.").

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

[106] *See Nippon Steel Corp*., 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.").

the subject imports."[107] Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[108]

The Federal Circuit's decisions in *Gerald Metals, Bratsk*, and *Mittal Steel* 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.[109] 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 that underlies the *Mittal Steel* litigation.

Mittal Steel clarifies that the Commission's interpretation of *Bratsk* was too rigid and makes 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.[110] 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 Steel* 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.[111]

---

[107] *Mittal Steel*, 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*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

[108] *Nucor Corp. v. United States*, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); *see also Mittal Steel*, 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.").

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

[110] *Mittal Steel*, 542 F.3d at 873 (quoting from *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).

[111] 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

(*continued*...)

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.[112] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[113]

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

CDMT is a tubular product that has been cold-drawn or otherwise cold-finished in a manner that changes the diameter and/or wall thickness of the tube.[114] CDMT is used in the production of bushings, spacers, bearings, axles, steering columns, and other mechanical parts that are incorporated into a variety of downstream products in the automotive, trucking, aviation, hydraulic, construction, agricultural, and drilling industries.[115] The vast majority of respondents indicated that there are no substitutes for CDMT, while 8 of 40 importers and 6 of 29 purchasers reported that some products could be substituted for CDMT but only in certain applications.[116] CDMT accounts for a moderate share of the cost of the direct downstream product in which it is used (*e.g.*, bushings, bearings, axles, etc.), and for a much smaller share of the cost of the final end-use product (*e.g.*, automobiles, oil rigs, etc.).[117]

Due to the use of CDMT in disparate sectors, demand for CDMT depends on overall economic growth and demand in these individual downstream sectors.[118] With respect to individual sectors, expenditures on agricultural vehicles and machinery declined over the POI, U.S. crude oil and natural gas rigs in operation fluctuated but declined overall, and U.S. automotive production declined overall.[119] Majorities of U.S. producers, importers, and

---

(…*continued*)
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.

[112] We provide in our respective discussions of volume, price effects, and impact a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

[113] *Mittal Steel*, 542 F.3d at 873; *Nippon Steel Corp.*, 458 F.3d at 1350, *citing U.S. Steel Group*, 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.").

[114] CR at II-1; PR at II-1.

[115] CR at II-1, PR at II-1.

[116] CR at II-21; PR at II-13.

[117] CR at II-15-16; PR at II-8.

[118] CR at II-18; PR at II-10. GDP growth fluctuated for much of the POI but increased overall. CR/PR at Figure II-1.

[119] CR/PR at Figures II-2, II-3, and II-4.

purchasers reported that overall demand for CDMT decreased or fluctuated over the POI.[120] Across end-use sectors, majorities of responding firms also reported that demand decreased or fluctuated in the agricultural, industrial, and oil and gas sectors.[121] Responses were more mixed with respect to demand in the automotive sector, with approximately 45 percent of firms reporting that demand increased, 35 percent reporting that demand decreased or fluctuated, and the remainder reporting that demand did not change.[122] Majorities of U.S. producers, importers, and purchasers reported that the CDMT market was not subject to distinctive business cycles or conditions of competition.[123]

Apparent U.S. consumption declined from 558,573 short tons in 2014 to 473,923 short tons in 2015 and 445,089 short tons in 2016, and was higher in January-June ("interim") 2017 (255,358 short tons) than in interim 2016 (227,613 short tons).[124]

2. Supply Considerations

The domestic industry, subject imports, and imports from nonsubject sources all supplied the U.S. market over the POI. The domestic industry accounted for the largest market share over the POI, with its share of apparent U.S. consumption declining from 77.4 percent in 2014 to 75.1 percent in 2015 and 71.6 percent in 2016; its market share was higher in interim 2017 (74.7 percent) than in interim 2016 (74.1 percent).[125] The domestic industry's annual production capacity increased and remained above apparent U.S. consumption throughout the POI.[126] The record demonstrates that although there may be some differences in product mix that might affect lead times to supply certain products, the domestic industry has the ability to manufacture and supply such products.[127]

Subject imports accounted for the second largest source of supply over the POI. The market share of cumulated subject imports, by quantity, increased from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; it was higher in interim 2017 (*** percent) than in interim 2016 (*** percent).[128]

Imports from nonsubject sources accounted for the remaining, and smallest, source of supply over the POI. Their market share, by quantity, increased from *** percent of apparent U.S. consumption in 2014 to *** percent in 2015 and *** percent in 2016, and was lower in

---

[120] CR/PR at Table II-5.
[121] CR/PR at Table II-5.
[122] CR/PR at Table II-5.
[123] CR at II-16; PR at II-9.
[124] CR/PR at Table IV-12. Additionally, apparent U.S. merchant market consumption for each of the agricultural, automotive, industrial, and oil and gas end-use sectors declined between 2014 and 2016, and was higher in interim 2017 than in interim 2016. CR/PR at Tables IV-14, IV-15, IV-16, and IV-17.
[125] CR/PR at Table IV-13.
[126] CR/PR at Table C-1.
[127] *See infra* discussion in section V.B.3.
[128] CR/PR at Table IV-13.

interim 2017 (*** percent) than in interim 2016 (*** percent).[129] The largest sources for nonsubject imports over the POI were Japan, Romania, Mexico, Argentina, and Taiwan.[130]

3. Substitutability and Other Conditions

For the reasons discussed below, we find that CDMT from the subject countries have moderate to high substitutability with the domestic like product, and we further find that price plays an important role in purchasing decisions.

CDMT encompasses a broad variety of products with different dimensions and specifications catered to particular end-uses, which necessarily entails that not all types of CDMT are interchangeable.[131] However, for CDMT with similar dimensions and specifications, record evidence suggests that there is generally a high degree of substitutability between domestically produced CDMT and CDMT imported from subject countries, although certification requirements for certain CDMT may result in more moderate substitutability for certain products, as discussed below.[132]

As indicated above, the vast majority of U.S. producers reported that the domestic like product and imports from each subject country are "always" interchangeable.[133] While U.S. importer and purchaser responses were more varied, nearly all such parties responded that the domestic like product and imports from each subject country were at least "frequently" or "sometimes" interchangeable.[134]

With one exception, all U.S. producers reported that non-price differences are "sometimes" or "never" significant in comparisons of the domestic like product and subject imports from each of the six subject countries, as well as in all comparisons of subject imports from different subject countries.[135] U.S. importers and purchasers provided mixed responses as to the significance of non-price differences between the domestic like product and subject imports.[136] In comparisons of subject imports from the different subject countries, majorities

---

[129] CR/PR at Table IV-13.

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

[131] CR at II-1; PR at II-1.

[132] CR at II-22; PR at II-13.

[133] CR/PR at Table II-11.

[134] CR/PR at Table II-11.

[135] CR/PR at Table II-13. One U.S. producer reported that non-price differences were "frequently" significant in comparisons between CDMT manufactured in the United States and imported from each of the subject countries. *Id*.

[136] Majorities of importers reported that non-price differences were "sometimes" or "never" significant in their respective comparisons of the domestic like product with subject imports from India (10 of 17 responses) and Italy (eight of 15 responses); importers were evenly divided between reporting non-price differences being "sometimes" or "never" significant and "always" or "frequently" significant in their respective comparisons of the domestic like product with subject imports from China (11 versus 11) and Korea (seven versus seven); a majority of importers reported that non-price factors were "always" or "frequently" significant with respect to subject imports from Germany (14 of 18 responses) and Switzerland (eight of nine responses). Majorities of purchasers reported that non-price differences

(*continued*...)

or pluralities of U.S. importers reported that non-price differences were "frequently" significant in four comparisons,[137] and "sometimes" or "never" significant in eight comparisons,[138] while majorities or pluralities of U.S. purchasers reported that non-price differences were "always" or "frequently" significant in one comparison,[139] and "sometimes" or "never" significant in 13 comparisons.[140]

The record also shows that price is an important factor in purchasing decisions.[141] Purchasers most frequently cited price or overall costs (29 firms) as an important purchasing factor in their questionnaire responses, followed by quality (26 firms) and lead time/delivery (14 firms).[142] Both U.S and foreign producers manufacture CDMT to the same industry standards and specifications, such as the STN or the EN specifications.[143] Most responding purchasers reported that domestically produced product and CDMT from all subject sources (with the exception of China) always met minimum quality specifications.[144]

Responding parties also indicated the importance of supplier certifications for certain types of CDMT. Twenty-five of 31 purchasers reported that they required suppliers to become certified to provide CDMT, and all responding purchasers reported that quality meeting

---

(…*continued*)
were "always" or "frequently" significant with respect to comparisons of the domestic like product and subject imports from China (10 of 16), Italy (five of nine), and Switzerland (three of four); purchasers were evenly divided as to whether non-price differences were "always" or "frequently" significant or were "sometimes" or "never" significant in comparisons of the domestic like product and subject imports from Germany (six versus six) and India (six versus six); a majority of purchasers reported that non-price differences were "sometimes" or "never" significant in comparisons of the domestic like product and subject imports from Korea (seven of 12). CR/PR at Table II-13.

[137] CR/PR at Table II-13. U.S. importers most frequently reported non-price differences were "frequently" significant in comparisons between China and Germany, China and Switzerland, Germany and India, Germany and Switzerland, India and Korea, India and Switzerland, and Korea and Switzerland. *Id*.

[138] CR/PR at Table II-13. U.S. importers reported non-price differences were "sometimes" or "never" significant in comparisons between China and India, China and Italy, China and Korea, Germany and Italy, Germany and Korea, India and Italy, India and Korea, Italy and Korea, and Italy and Switzerland. *Id*.

[139] CR/PR at Table II-13. U.S. purchasers most frequently reported non-price differences were "always" or "frequently" significant in comparisons between China and Italy. *Id*.

[140] CR/PR at Table II-13. U.S. purchasers most frequently reported non-price differences were "sometimes" or "never" significant in comparisons between China and Germany, China and India, China and Korea, China and Switzerland, Germany and India, Germany and Italy, Germany and Korea, Germany and Switzerland, India and Italy, India and Korea, India and Switzerland, Italy and Korea, Italy and Switzerland, and Korea and Switzerland. Purchasers were evenly divided as to whether non-price differences were "always" or "frequently" significant, or were "sometimes" or "never" significant, in comparisons of subject imports from China and India, China and Korea, and Italy and Korea. *Id*.

[141] Asked to identify the importance of purchasing factors, 27 of 31 purchasers reported that price was "very" important and one of the leading purchasing factors reported. CR/PR at Table II-8.

[142] CR/PR at Table II-7.

[143] CR at II-39; PR at II-27.

[144] CR/PR at Table II-12.

industry standards was "very" important in CDMT purchasing decisions.[145] In the automotive and agricultural end-use sectors, many firms adhere to the Production Part Approval Process ("PPAP"), which is a standardized approval process that ensures engineering design record and specification requirements are met.[146] Parties provided mixed responses as to the time required for new suppliers to be certified.[147]

Pointing to the importance of certifications and the alleged difficulty of switching suppliers due to these certification requirements, numerous respondents argue that there is attenuated competition between subject imports and the domestic like product.[148] In response, Petitioners note that the domestic industry has the ability to produce all types of CDMT demanded within the U.S. market and are therefore able to meet certification requirements and serve the needs of all purchasers in the market.[149] Indeed, the domestic industry reported shipments to end users in all reported end-use sectors, indicating an ability to produce CDMT to a variety of specifications and certifications.[150] Purchasers reported only that foreign producers from China or India had failed certification or lost approved status over the POI, but not that any domestic producers had failed certification or lost such status.[151] While domestic producers may not hold certifications for particular products, purchaser responses on the substitutability of domestic and imported CDMT, summarized above, indicate that this results not from an inability to produce such products but rather is due to the diverse product mix of CDMT and the reality that producers do not produce all types of CDMT products at any given time.

Key raw materials for CDMT include hot-rolled steel sheet, bar, or billet.[152] Prices for hot-rolled steel fluctuated from January 2014 to June 2017, ending the period lower than where they started.[153] Petitioners reported that raw material prices and prices for CDMT are directly correlated and follow similar trends.[154]

---

[145] CR at II-28; PR at II-18; CR/PR at Table II-8.

[146] CR at II-21; PR at II-14.

[147] Purchasers reported that certification of a new supplier could take between two days and two years. CR at II-28; PR at II-18. Respondent Autoliv indicated that it takes two to four years for a supplier to meet its certification requirements for airbag tubing, whereas Petitioners estimated it would take between *** weeks to develop a trial for producing airbag tubing. Hearing Tr. at 150, 202 (Hadfield); Petitioners' Posthearing Br. at Exh. 1, p. 31. Mannesmann reported that it took nearly *** years for it to qualify as a CDMT supplier for one of its customers. Mannesmann Posthearing Br. at 10.

[148] Dana Posthearing Br. at 1-2; Hearing Tr. at 209-211 (Vander Schaaf); Hearing Tr. at 218-219 (Ball).

[149] Petitioners' Posthearing Br. at 5.

[150] CR/PR at Table II-2.

[151] CR at II-29; PR at II-18.

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

[153] CR/PR at Figure V-1. Raw materials as a share of cost of goods sold ("COGS") declined from 55.8 percent of COGS in 2014 to 49.6 percent in 2015 and 48.1 percent in 2016. Raw materials as a ratio of COGS was higher in interim 2017 (52.2 percent) than in interim 2016 (46.1 percent). CR/PR at Table VI-1.

[154] CR at V-2; PR at V-1; Hearing Tr. at 115-116 (Hart).

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."[155]

Cumulated subject imports had a significant presence in the U.S. market throughout the POI.[156] Cumulated subject import volumes decreased from *** short tons in 2014 to *** short tons in 2015 and *** short tons in 2016, but were greater in interim 2017 (*** short tons) than in interim 2016 (*** short tons.[157] From 2014 to 2016, subject imports decreased by *** percent, or considerably less than apparent U.S. consumption, which fell *** percent. As a result, the subject imports' U.S. shipments gained market share at the expense of the domestic industry during the POI. U.S. shipments of cumulated subject imports' share of apparent U.S. consumption increased from *** percent in 2014 to *** percent in 2015 and *** percent in 2016, and was higher in interim 2017 (*** percent) than in interim 2016 (*** percent).[158] In contrast, the domestic industry's share of apparent U.S. consumption declined from 2014 to 2016, from *** percent in 2014 to *** percent in 2015 and *** percent in 2016, and was somewhat higher in interim 2017 (*** percent) than in interim 2016 (*** percent).[159]

Based on the record of these investigations, we find that the volume of cumulated subject imports from China, Germany, India, Italy, Korea, and Switzerland is significant both in absolute terms and relative to consumption in the United States.

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

---

[155] 19 U.S.C. § 1677(7)(C)(i).

[156] Salem Steel, Tube Fabrication, and voestalpine argue that the Commission should rely on data for pieces rather than short tons in these investigations. Joint Prehearing Br. at 14-15. No parties, however, requested that the Commission collect data on pieces in their comments on draft questionnaires. 19 C.F.R. § 207.20(b). Because Salem Steel, Tube Fabrication, and voestalpine have shown neither a compelling need for such information nor any reasons why such information was not requested in comments on draft questionnaires, we accordingly do not accept their untimely request. Finally, while Petitioners argue that the Commission should rely on official import statistics because of incomplete questionnaire coverage from some subject countries, we note that we have supplemented our questionnaire data with proprietary Customs data for companies that did not provide a questionnaire response. CR at IV-2; PR at IV-2. Because official import statistics would include products outside the scope of investigations, we have not adopted Petitioners' suggestion.

[157] CR/PR at Table IV-2. U.S. shipments of cumulated subject imports followed a somewhat different trend; they declined from *** short tons in 2014 to *** short tons in 2015, and increased to *** short tons in 2016, and were higher in interim 2017 (*** short tons) than in interim 2016 (*** short tons). CR/PR at Table IV-12.

[158] CR/PR at Table IV-13.

[159] CR/PR at Table IV-13.

> (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.[160]

As stated above, we find a moderate to high degree of substitutability between subject imports and the domestically produced product. The record also indicates that price is an important factor in purchasing decisions.

The Commission requested that U.S. producers and importers provide quarterly pricing data for eight CDMT products shipped to unrelated U.S. customers between January 2014 and June 2017.[161] Five U.S. producers and 11 importers submitted usable pricing data on sales of

---

[160] 19 U.S.C. § 1677(7)(C)(ii).

[161] The pricing products were: **Product 1.**—ASTM A519 (or equivalent specification) Cold-Drawn Seamless Tube, Grade 1010-1026, outside diameter 5.000 inches, wall thickness 0.990-1.010 inches, length 17-24 feet, not honed, deburred ends; **Product 2.**—ASTM A519 (or equivalent specification) Cold-Drawn Seamless Tube, Grade 1010-1026, outside diameter 4.500 inches, wall thickness 0.990-1.010 inches, length 17-24 feet, not honed, deburred ends; **Product 3.**—ASTM A513-5 (or equivalent specification) Cold-Drawn Over Mandrel Welded Tube, Grade 1010-1026, outside diameter 2.500 inches, wall thickness 0.240-0.260 inches, length 17-24 feet, not honed, deburred ends; **Product 4.**—ASTM A513-5 (or equivalent specification) Cold-Drawn Over Mandrel Welded Tube, Grade 1010-1026, outside diameter 3.000 inches, wall thickness 0.178-0.198 inches, length 17-24 feet, not honed, deburred ends; **Product 5.**—ASTM A513-5 (or equivalent specification) Cold-Drawn Over Mandrel Welded Tube, Grade ST52.3, outside diameter 3.750 inches, wall thickness 0.245-0.265 inches, length 17-24 feet, not honed, deburred ends; **Product 6.**—ASTM A513-5 (or equivalent specification) Cold Drawn Over Mandrel Welded Tube, Grade ST52.3, outside diameter 4.000 inches, wall thickness 0.245-0.265 inches, length 17-24 feet, not honed, deburred ends; **Product 7**. – ASTM A519 Cold Drawn Seamless Tube, Grade 4140/4142, outside diameter 8.000 inches, wall thickness 0.875 inch, length 17.35 feet and 21.68 feet, not honed, deburred ends; and **Product 8**. – ASTM A519 Cold Drawn Seamless Tube, Grade 4140, outside diameter 9.625 inches, wall thickness 0.875 inch, length 218.25 inches, not honed, deburred ends. CR at V-7-8; PR at V-5.

In our preliminary determinations, we requested that parties propose alternative pricing products in an effort to improve pricing coverage. Preliminary Determinations, USITC Pub. 4700 at 31, n. 162. In response, Petitioners proposed broader specifications for the pricing products, and Mannesmann proposed numerous CDMT products specific to certain end-uses. Petitioners' Comments on Draft Questionnaires, EDIS Doc. 622988; Mannesmann Comments on Draft Questionnaires, EDIS Doc. 622994 (suggesting 19 industry standards and dimensions); and Mannesmann Clarification of Pricing Products, EDIC Doc. 623462 (narrowing Mannesmann's suggested pricing products to two highest volume products and in format of Commission questionnaires). We accepted the proposed changes to the pricing products from these parties for our data collection in the final phase of these investigations.

the requested products, although not all firms reported pricing for all quarters.[162] [163]

The pricing data yielded a total of 105 direct price comparisons, with cumulated subject imports underselling the domestic like product in 61 of 105 quarterly price comparisons (involving *** short tons of subject imports) at underselling margins that averaged *** percent.[164] The pricing data further indicate that subject imports oversold the domestic like product in the remaining 44 of 105 quarterly comparisons (involving *** short tons of subject imports) by margins that averaged *** percent.[165] While we recognize that coverage is relatively low for price comparison data, this level of coverage is not uncommon for investigations that include a wide variety of products.[166] Moreover, these results are confirmed by a large majority of responding purchasers, who reported that: (i) subject imports were lower priced than domestically produced CDMT and (ii) they had purchased subject imports instead of the domestic like product because of price, as discussed below. Given these findings, we find there has been significant price underselling by cumulated subject imports.[167]

---

[162] CR at V-8, PR at V-5-6. The pricing data accounted for approximately *** percent of the domestic industry's U.S. commercial shipments, *** percent of subject imports from China, *** percent of subject imports from Germany, *** percent of subject imports from India, *** percent of subject imports from Korea, and *** percent of subject imports from Italy during the POI. No pricing data were provided for subject imports from Switzerland or from nonsubject sources. Pricing data were reported for U.S. produced CDMT for pricing products 1-6 and for subject imports from Germany for pricing products 7-8. CR at V-8, PR at V-5-6; *calculated from* Staff Worksheet, EDIC Doc. 632703, at pgs. 51-52.

[163] Because no pricing data comparisons between the U.S. produced product and subject imports from Germany were available, Petitioners suggest that the Commission rely on direct purchase costs reported by U.S. importer ***, which was an end user for its subject imports from Germany. We have not included this data in our pricing comparison analysis because these direct purchases were not at the same level of trade as f.o.b. prices for commercial shipments to unrelated customers. CR at V-8, n. 16; PR at V-5, n.16. We note that *** only submitted this data in error, and Petitioners did not otherwise request that we collect direct purchase cost data. Revision to U.S. Importer Questionnaire, EDIS Doc. ***.

[164] CR/PR at Table V-12. Underselling margins ranged from *** percent to *** percent. *Id*.

[165] CR/PR at Table V-12. Overselling margins ranged from *** percent to *** percent. *Id*.

[166] *See, e.g., Certain Iron Mechanical Transfer Drive Components from Canada and China*, Inv. Nos. 701-TA-550 and 731-TA-1304-1305 (Final), USITC Pub. 4652 (Dec. 2016) at 40.

[167] Respondents argue that no price comparison data between the domestic like product and subject imports from Germany and Switzerland indicate a lack of competition between these products. Benteler Prehearing Br. at 4; Benteler Posthearing Br. at 8; Mannesmann Prehearing Br. at 24. As noted above, however, we are examining subject imports on a cumulated basis. Furthermore, the lack of price comparisons between these subject countries and the U.S.-produced product reflect the diverse product mix for CDMT, not a lack of competition. CDMT is produced in a wide variety of dimensions and shape tolerances that are often specific to individual customers, resulting in "thousands" of different individual products. CR at II-1; PR at II-1; Hearing Tr. at 78 (Luberda). In such cases, it is unlikely that pricing data coverage, when based on only a small number of products, will be extensive. Indeed, Mannesmann proposed pricing product 8 as one of the highest volume products for specific end-uses, yet it resulted in

(*continued*...)

Purchasers reported decreasing their share of total purchases from domestic producers by *** percentage points between 2014 and 2016, while increasing their purchases of subject merchandise by the same amount (*** percentage points) over those years.[168] Nineteen of 31 responding purchasers reported purchasing subject imports rather than the domestic like product.[169] Of these purchasers, 16 reported that subject imports were lower priced than the U.S. product, and 15 reported that price was the primary reason for purchasing subject imports rather than the domestic product.[170] [171] Fifteen of these purchasers estimated that they purchased *** short tons of subject imports rather than the domestic like product over the POI because of price.[172] These confirmed lost sales, combined with an apparent shift in these firms' purchases toward subject imports, are consistent with evidence discussed above indicating that cumulated subject imports increased their market share at the expense of the domestic industry from 2014 to 2016.[173]

We have also considered price trends during the POI. Prices for each of the U.S.-produced products and for subject imports declined over the POI, and were lower at the end of the POI than at the beginning of the period for which data was reported.[174] In response to the Commission's questionnaires, six purchasers reported that domestic producers reduced prices over the POI to compete with subject imports, with price reductions averaging *** percent.[175]

(…*continued*)
only a single quarter of pricing data for subject imports from Germany. Clarification of Pricing Products, EDIC Doc. 623462; CR/PR at Table V-11. Regardless, pricing data need not be extensive to provide an accurate measure of import pricing and competition. *See, e.g.*, *Kern-Liebers USA, Inc. v. United States*, 19 CIT 87, 114-15 (1995) (upholding Commission reliance on small sample size of subject import pricing data). Other evidence further demonstrates competition. Six U.S. purchasers also reported purchasing subject imports from Germany rather than the domestic like product, and two purchasers reported purchasing subject imports from Switzerland rather than the domestic like product, indicating some level of competition between such products. CR/PR at Table V-14.

[168] CR/PR at Table V-13.

[169] CR/PR at Table V-14.

[170] CR/PR at Tables V-14 and V-15.

[171] Mannesmann argues that U.S. purchaser responses concerning subject imports from Germany are not representative because they account for less than *** percent of such imports, or conversely that purchaser responses indicate that subject imports from Germany were not available from other sources. Mannesmann Posthearing Br. at 13-14. As noted above, however, we are examining subject imports on a cumulative basis, not from individual subject countries, and a majority of U.S. purchaser responses reported shifting purchases to subject imports because of price. CR/PR at Tables V-14 and V-15.

[172] CR/PR at Table V-15.

[173] CR/PR at Table IV-13. The U.S. market share for U.S. shipments of cumulated subject imports increased *** percentage points between 2014 and 2016, while that of the domestic industry declined by *** percentage points over this period. In interim 2017, U.S. market share for both cumulated subject imports and the domestic industry was higher than in interim 2016, and such improvement was at the expense of nonsubject imports, indicating that the domestic industry failed to recoup market share lost to subject imports during 2014 to 2016. *Id*.

[174] CR/PR at Table V-11. No domestic pricing data were reported for pricing products 7 and 8. *Id*.

[175] CR/PR at Table V-16. Price reductions ranged from ranging from 10.0 percent to 40.0 percent. *Id*.

Nonetheless, price decreases for both the domestic like product and subject imports would be expected in light of other market factors, such as substantial decreases in apparent U.S. consumption and decreases in raw material costs.[176] Indeed, Petitioners confirmed that CDMT prices closely correlate with raw materials costs, and the increase in average unit values for the domestic like product between interim 2016 and interim 2017 corresponded with an increase in raw material costs during this time.[177] As a result, we do not find that cumulated subject imports depressed prices for the domestic like product to a significant degree.

We also considered whether cumulated subject imports prevented increases in prices of the domestic like product that otherwise would have occurred to a significant degree. During the POI, the domestic industry's COGS to net sales ratio increased from 88.9 percent in 2014 to 96.5 percent in 2015 and then decreased to 93.7 percent in 2016 (a higher level than in 2014); it was lower in interim 2017 (91.0 percent) than in interim 2016 (93.6 percent).[178] From 2014 to 2016, however, apparent U.S. consumption, raw material costs, and average unit COGS all decreased.[179] Because price increases were unlikely in light of declines in apparent U.S. consumption and falling raw material costs, we do not find that cumulated subject imports prevented price increases, which otherwise would have occurred to a significant degree.

As explained above, we find that the significant volume of subject imports significantly undersold the prices of the domestic like product, resulting in the domestic industry losing sales and market share to subject imports. We consequently conclude that the cumulated subject imports had significant price effects.[180]

---

[176] CR/PR at Table C-1.

[177] Hearing Tr. at 115-116 (Hart) (confirming connection between CDMT prices and raw material costs); CR/PR at Table VI-1 (showing increase in reported raw material costs and unit value raw material costs between interim 2016 and interim 2017).

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

[179] CR/PR at Table VI-1 (showing declining raw material costs reported by U.S. producers); CR/PR at Table C-1 (showing declining apparent U.S. consumption). Unit costs also fluctuated during the POI but finished the period lower than in the beginning, increasing from $1,674 in 2014 to $1,720 in 2015 and then declining to $1,558 in 2016, and was lower in interim 2017 ($1,499) than in interim 2016 ($1,501). *Id*.

[180] Salem Steel, Tube Fabrication, and voestalpine argue that U.S. producer Metal Matic, which did not provide data for these investigations, offers lower prices and has performed better financially than other U.S. producers, and that the Commission should take adverse inferences against Metal Matic's pricing data and financial performance. Respondents provided as facts otherwise available only an alleged quote from Metal Matic for a single product that does not correspond to the Commission's pricing products, and no information as to the alleged financial condition of Metal Matic. Joint Prehearing Br. at 45-46 & Exh. 2. We determine that application of adverse facts available under 19 U.S.C. § 1677e(b) is 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. 19 U.S.C. § 1677e(b). Eight other U.S. producers (accounting for the vast majority of U.S. production) did fully comply with the Commission's requests for information. Given that Metal Matic has not provided data for these investigations, the inference proposed by

(*continued*...)

E. Impact of the Subject Imports

Section 771(7)(C)(iii) of the Tariff Act provides that examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry."[181] 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."[182] [183]

While apparent U.S. consumption for CDMT declined between 2014 and 2016 and was lower in the end of this period than in the beginning, the domestic industry's shipments, market share, and revenues declined to an even greater extent. As a result, the domestic industry's financial performance deteriorated over the POI.

As discussed above, the domestic industry's market share declined from 77.4 percent of apparent U.S. consumption in 2014 to 75.1 percent in 2015 and 71.6 percent in 2016, and while higher in interim 2017 (74.7 percent) than in interim 2016 (74.1 percent) still ended the POI at a lower level than it was in the beginning.[184] Although the domestic industry's capacity increased

(…*continued*)
respondents would not be adverse to Metal Matic but rather unlawfully to those U.S. producers that cooperated with the Commission's requests for information. For these reasons, we have relied on the information available, which includes the pricing and financial data submitted by eight U.S. producers accounting for the vast majority of domestic production of CDMT.

[181] 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.").

[182] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[183] Salem Steel, Tube Fabrication, and voestalpine further request that the Commission consider the effects of these investigations on downstream industries, specifically manufacturers of automotive components. As previously stated by the Commission, however, "…our analysis of the impact of subject imports is limited by law to their impact on the operations of the domestic industry producing the like product, and the difficulties of domestic industries producing other products are beyond the purview of *** investigations." *Titanium Sponge from Japan and Kazakhstan*, Inv. Nos. 701-TA-587 and 731-TA-1385-1386 (Preliminary), USITC Pub. 4736 at 32 (Oct. 2017); 19 U.S.C. § 1677(7)(B)(i)(III) (impact analysis focuses on "domestic producers of domestic like products . . . ."). Because the respondents have otherwise cited no legal authority for their argument, we have not considered the impact of these investigations on downstream industries within our analysis of material injury by reason of subject imports.

[184] CR/PR at Table IV-13.

over the POI,[185] the domestic industry's production,[186] U.S. shipments,[187] and capacity utilization[188] declined from 2014 to 2016. End of period inventories also decreased from 2014 to 2016.[189]

Employment-related indicators for the domestic industry showed declines from 2014 to 2016. The number of production-related workers ("PRWs"), total hours worked, wages paid, hourly wages, and productivity all declined during this period, while unit labor costs increased.[190]

---

[185] The domestic industry's capacity increased from 677,489 short tons in 2014 to 678,760 short tons in 2015 to 706,243 short tons in 2016, and was higher in interim 2017 (356,139 short tons) than in interim 2016 (349,714 short tons). CR/PR at Table III-4.

[186] The domestic industry's production decreased from 493,139 short tons in 2014 to 380,954 short tons in 2015 to 364,210 short tons in 2016, and was higher in interim 2017 (228,660 short tons) than in interim 2016 (194,314 short tons). CR/PR at Table III-4.

[187] The domestic industry's U.S. shipments were 432,553 short tons in 2014, 355,924 short tons in 2015, and 318,636 short tons in 2016; they were higher in interim 2017 (190,776 short tons) than in interim 2016 (168,631 short tons). CR/PR at Table III-6. Internal consumption and transfers to related firms were *** short tons in 2014, *** short tons in 2015, *** short tons in 2016; they were higher in interim 2017 (*** short tons) than in interim 2016 (*** short tons). Calculated from CR/PR at Table III-6. Export shipments by domestic producers were 50,724 short tons in 2014, 51,422 short tons in 2015, and 52,714 short tons in 2016; they were higher in interim 2017 (34,322 short tons) than in interim 2016 (25,710 short tons). *Id*.

[188] The domestic industry's capacity utilization was 72.8 percent in 2014, 56.1 percent in 2015, and 51.6 percent in 2016; it was higher in interim 2017 (64.2 percent) than in interim 2016 (55.6 percent). CR/PR at Table III-4.

[189] The domestic industry's inventories decreased, from 72,631 short tons in 2014 to 46,239 short tons in 2015 and 39,098 short tons in 2016, and were higher in interim 2017 (46,306 short tons) than in interim 2016 (42,017 short tons). CR/PR at Table III-8. The domestic industry's ratio of inventories to total shipments also decreased, declining from 15.0 percent in 2014 to 11.4 percent in 2015 and 10.5 percent in 2016, and were lower in interim 2017 (10.3 percent) than in interim 2016 (10.8 percent). *Id*.

[190] The domestic industry's PRWs decreased from 2,022 in 2014 to 1,931 in 2015 and 1,802 in 2016, though PRWs increased slightly between interim 2017 (1,840) and interim 2016 (1,812). Total hours worked declined from 4,098 in 2014 to 3,785 in 2015 to 3,722 in 2016, and were higher in interim 2017 (2,048) than in interim 2016 (1,858). Wages paid declined from $113.7 million in 2014 to $100.7 million in 2015 and $98.0 million in 2016, and were higher in interim 2017 ($56.6 million) than in interim 2016 ($48.9 million). Hourly wages decreased from $27.74 in 2014 to $26.60 in 2015 and $26.32 in 2016, and were higher in interim 2017 ($27.63) than in interim 2016 ($26.33). Productivity decreased from 120.3 short tons per 1,000 hours in 2014 to 100.6 short tons per 1,000 hours in 2015 and 97.9 short tons per 1,000 hours in 2016, and were higher in interim 2017 (111.7 short tons per 1,000 hours) than in interim 2016 (104.6 short tons per 1,000 hours). Unit labor costs were $230.50 per short ton in 2014, $264.28 per short ton in 2015, and $269.02 per short ton in 2016, and were lower in interim 2017 ($247.48 per short ton) than in interim 2016 ($251.76 per short ton. CR/PR at Table III-9.

The domestic industry's financial indicators also declined from 2014 to 2016. Net sales,[191] unit net sales value,[192] gross profit,[193] operating income,[194] and net income[195] declined between 2014 and 2016. Operating income and net income both declined as a share of net sales from 2014 to 2016, with net and operating income also becoming losses in 2015 and 2016.[196]

Domestic producers' capital expenditures declined overall during the POI.[197] Domestic producers also reported negative effects on investment and on growth and development due to subject imports.[198]

We note that many of the domestic industry's performance and financial indicators improved from interim 2016 to interim 2017, as a result of increases in apparent U.S. consumption.[199] Even with the domestic industry's resulting increase in revenues during this time, however, all of the domestic industry's performance indicators were lower at the end of the POI than at the beginning in 2014.[200]

As discussed above, significant volumes of low-priced cumulated subject imports entered the U.S. market and significantly undersold the domestic like product, as evidenced by

---

[191] The domestic industry's total net sales declined from $895.9 million in 2014 to $735.1 million in 2015 and $618.1 million in 2016, but were higher in interim 2017 ($398.8 million) than in interim 2016 ($311.8 million). CR/PR at Table VI-1.

[192] The domestic industry's unit net sales value declined from $1,882 per short ton in 2014 to $1,783 per short ton in 2015 and $1,664 per short ton in 2016, but were slightly higher in interim 2017 ($1,647 per short ton) than in interim 2016 ($1,604 per short ton). CR/PR at Table VI-1.

[193] The domestic industry's gross profit declined from $99.1 million in 2014 to $26.0 million in 2015 and then increased to $39.2 million in 2016, and was higher in interim 2017 ($35.9 million) than in interim 2016 ($20.1 million). CR/PR at Table VI-1.

[194] The domestic industry's operating income decreased from $51.5 million in 2014 to a loss of $18.0 million in 2015 and loss of $502,000 in 2016, and operating income was higher in interim 2017 ($13.0 million) than in interim 2016 (a loss of $801,000). CR/PR at Table VI-1.

[195] The domestic industry's net income decreased from $29.4 million in 2014 to a net loss of $42.7 million in 2015 and then improved to a net loss of $21.9 million in 2016; the industry's net income was higher in interim 2017 ($2.9 million) than in interim 2016 (a loss of $8.2 million). CR/PR at Table VI-1.

[196] The domestic industry's operating income as a share of net sales decreased from 5.7 percent in 2014 to a loss of 2.4 percent in 2015 and a loss of 0.1 percent in 2016, and was higher in interim 2017 (3.3 percent) than in interim 2016 (loss of 0.3 percent). The domestic industry's net income as a share of net sales decreased from 3.3 percent in 2014 to a net loss of 5.8 percent in 2015 and a net loss of 3.5 percent in 2016, and was higher in interim 2017 (0.7 percent) than in interim 2016 (a loss of 2.6 percent). CR/PR at Table VI-1.

[197] Capital expenditures were $27.4 million in 2014, $28.7 million in 2015, and $18.0 million in 2016, and were lower in interim 2017 ($8.6 million) than in interim 2016 ($9.7 million). CR/PR at Table VI-5.

[198] CR/PR at Table VI-7. Only one firm reported research and development expenditures for the POI. CR/PR at Table VI-5.

[199] The domestic industry's shipments, market share, revenues, operating income, and net income, among others, were higher in interim 2017 than in interim 2016. CR/PR at Table C-1.

[200] CR/PR at Table C-1.

the pricing data and purchasers' lost sales/lost revenue responses to the Commission questionnaires. These large volumes of low-priced subject imports took market share from the domestic industry, causing declines in the domestic industry's output, revenues, and financial performance, which were lower at the end of the POI than in the beginning. We therefore find that subject imports had a significant adverse impact on the domestic industry.

We have considered whether there are other factors that may have had an impact on the domestic industry during the POI to ensure that we are not attributing injury from any such other factor to subject imports. As noted above, apparent U.S. consumption declined between 2014 and 2016. While these declines in consumption resulted in declining U.S. shipments for both the domestic industry and cumulated subject imports, the domestic industry's shipments declined to a greater degree than apparent U.S. consumption, as indicated by the domestic industry's declining market share.[201] Additionally, cumulated subject imports continued to gain U.S. market share between interim 2016 and interim 2017, when apparent U.S. consumption increased.[202] Although the domestic industry's market share also was slightly higher in interim 2017 than in interim 2016, it remained lower at the end of the POI than in the beginning.[203] Thus, we find that declines in the domestic industry's shipments and performance were worse than would otherwise have resulted from declines in apparent U.S. consumption.

Respondents have argued in these investigations that the domestic industry's reliance on end-use sectors with declining demand, including the agricultural and oil and gas sectors, versus subject imports' concentration in the automotive sector that experienced increasing demand, explain the declining performance of the domestic industry and increasing market share of subject imports during the POI.[204] The record of these investigations, however, does not support these arguments. As an initial matter, U.S. producers and U.S. importers of subject merchandise reported shipments of CDMT across all reported end-use sectors.[205] U.S. producers' shipments to the automotive sector also comprised the *** largest, and growing, share of all its shipments during the POI.[206] Indeed, domestically produced CDMT, not subject imports, accounted for the *** of commercial U.S. shipments in the automotive end-use sector during the POI.[207] And as summarized above, demand declined across all reported end-use sectors, including automotive, contrary to respondent arguments.[208] Accordingly, demand

---

[201] CR/PR at Table C-1.

[202] CR/PR at Table C-1.

[203] CR/PR at Table C-1.

[204] Joint Prehearing Br. at 34-37.

[205] CR/PR at Table II-2.

[206] CR/PR at Table II-2. The industrial sector accounted for the largest concentration of the domestic industry's shipments during the POI. This end-use sector also accounted for the largest share of subject import shipments during the POI. CR/PR at Table IV-16.

[207] CR/PR at Table IV-15.

[208] U.S. automotive production declined overall during the POI. CR/PR at Figure II-4. While U.S. producer, importer, and purchaser responses were mixed with respect to demand in the automotive sector, U.S. producers and U.S. importers of subject merchandise reported lower shipments for automotive end-uses in 2016 than in 2014. *Compare* CR/PR at Table II-5 *with* Table IV-15.

trends in individual market segments for CDMT do not explain the increase in market share for subject imports and the domestic industry's corresponding declining condition over the POI.[209]

We have also considered the role of nonsubject imports in these investigations. While nonsubject imports' share of apparent U.S. consumption increased between 2014 and 2016, from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; it was lower in interim 2017 (*** percent) than in interim 2016 (*** percent).[210] Nonsubject imports had a relatively small share of the U.S. market over the POI.[211] Additionally, nonsubject imports' market share increased less than that of cumulated subject imports, indicating that nonsubject imports cannot explain the magnitude of the domestic industry's loss of market share. Moreover, as apparent U.S. consumption improved between the interim periods, nonsubject market share declined.[212] Accordingly, we find that nonsubject imports cannot explain the domestic industry's deteriorating condition over the POI.

For the reasons discussed above, we find that subject imports had a significant adverse impact on the domestic industry.

---

[209] Tube Fabrication provided more than 200 alleged refusals of domestic producers to supply types of CDMT that are currently sourced from subject imports, which Tube Fabrication alleges illustrate the domestic industry's inability to supply certain types of CDMT. Joint Prehearing Br. at 38-42 & Exh. 2-2. In response, Petitioners argue that these refusals were not indicative of an inability to manufacture such products, but rather that Tube Fabrication's requests allowed inadequate time to source raw materials and arrange for manufacturing for a new customer. Hearing Tr. at 66-67 (Luberda and Hart). Petitioners further clarify that Tube Fabrication did not send requests for these products to all domestic producers (***, which specialize in such automotive products, were not contacted), and that even those domestic producers contacted by Tube Fabrication did in fact provide offers on *** of the requested products. Petitioners' Posthearing Br. at 3-4 & Exh. 1, 2-4. Similarly, purchaser responses generally do not support an inability of the domestic industry to supply CDMT. Twenty-two of 31 U.S. purchasers reported that they had not been refused supply since 2014, and those which did reported refusals from both domestic producers and U.S. importers of subject merchandise. CR at II-14; PR at II-7. While eight (of 31) purchasers reported that availability (including lead times) of the domestic like product had changed over the POI, seven (of 31) purchasers also reported that the availability of subject imports (including increased lead times) had changed. CR at II-14-15; PR at II-7-8. Further, some purchasers reported switching from subject imports to the domestic like product during the POI. CR at V-33; PR at V-17 (indicating *** moved its sales from *** to a domestic producer); Petitioners' Posthearing Br. at 7 & Exh. 4 (indicating that domestic producers had received inquiries from purchasers to switch supplies from subject imports from Germany and Switzerland). Thus, while the record supports some differences in product mix between the domestic like product and subject imports that might necessitate additional lead time for domestic producers to supply certain products, the record does not support an inability of domestic producers to manufacture and supply such products.

[210] CR/PR at Table C-1.

[211] CR/PR at Table IV-13.

[212] CR/PR at Table C-1. Average unit values for nonsubject imports were also higher than those for subject imports throughout the POI. *Id*.

VI. Critical Circumstances

A. Legal Standards

In its final countervailing duty determination concerning CDMT from China, Commerce found that critical circumstances do not exist with respect to individually examined respondents Jiangsu Hongyi Steel Pipe Co. Ltd. and Zhangjiang Huacheng Import and Export Co., Ltd., but that critical circumstances do exist with regard to subject imports from China for non-individually examined companies receiving the "all others" rate.[213]

Because we have determined that the domestic industry is materially injured by reason of subject imports subsidized by the government of China, we must further determine "whether the imports subject to the affirmative {Commerce critical circumstances} determination ... are likely to undermine seriously the remedial effect of the antidumping {and/or countervailing duty} order{s} to be issued."[214] The SAA indicates that the Commission is to determine "whether, by massively increasing imports prior to the effective date of relief, the importers have seriously undermined the remedial effect of the order" and specifically "whether the surge in imports prior to the suspension of liquidation, rather than the failure to provide retroactive relief, is likely to seriously undermine the remedial effect of the order."[215] The legislative history for the critical circumstances provision indicates that the provision was designed "to deter exporters whose merchandise is subject to an investigation from circumventing the intent of the law by increasing their exports to the United States during the period between initiation of an investigation and a preliminary determination by {Commerce}."[216] An affirmative critical circumstances determination by the Commission, in conjunction with an affirmative determination of material injury by reason of subject imports, would normally result in the retroactive imposition of duties for those imports subject to the affirmative Commerce critical circumstances determination for a period 90 days prior to the suspension of liquidation.

The statute provides that, in making this determination, the Commission shall consider, among other factors it considers relevant,

> (I) the timing and the volume of the imports,
>
> (II) a rapid increase in inventories of the imports, and

---

[213] *Countervailing Duty Investigation of Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel from the People's Republic of China: Final Affirmative Determination, and Final Affirmative Determination of Critical Circumstances, in Part*, 82 Fed. Reg. 58,175 (Dec. 11, 2017).

[214] 19 U.S.C. §§ 1671d(b)(4)(A)(ii), 1673d(b)(4)(A)(ii).

[215] SAA at 877.

[216] *ICC Industries, Inc. v United States,* 812 F.2d 694, 700 (Fed. Cir. 1987), *quoting* H.R. Rep. No. 96-317 at 63 (1979), *aff'g* 632 F. Supp. 36 (Ct. Int'l Trade 1986). *See* 19 U.S.C. §§ 1671b(e)(2), 1673b(e)(2).

(III) any other circumstances indicating that the remedial effect of the {order} will be seriously undermined.[217]

In considering the timing and volume of subject imports, the Commission's practice is to consider import quantities prior to the filing of the petition with those subsequent to the filing of the petition using monthly statistics on the record regarding those firms for which Commerce has made an affirmative critical circumstances determination.[218]

B. Analysis

1. Choice of Time Period

We first consider the appropriate period for comparison of pre-petition and post-petition levels of subject imports from China. The Commission is not required to analyze the same period that Commerce examined.[219] In previous investigations, the Commission has relied on a shorter comparison period when the timing of Commerce's preliminary countervailing duty determinations likely affected the volume of subject imports in later months.[220] That situation arises here, because Commerce issued its preliminary countervailing duty determination on September 25, 2017.[221] We have thus determined to compare the volume of

---

[217] 19 U.S.C. §§ 1671d(b)(4)(A)(ii), 1673d(b)(4)(A)(ii).

[218] *See Lined Paper School Supplies from China, India, and Indonesia,* Inv. Nos. 701-TA-442-43, 731-TA-1095-97, USITC Pub. 3884 at 46-48 (Sept. 2006); *Carbazole Violet Pigment from China and India,* Inv. Nos. 701-TA-437 and 731-TA-1060-61 (Final), USITC Pub. 3744 at 26 (Dec. 2004); *Certain Frozen Fish Fillets from Vietnam,* Inv. No. 731-TA-1012 (Final), USITC Pub. 3617 at 20-22 (Aug. 2003).

[219] *Certain Polyester Staple Fiber from China*, Inv. No. 731-TA-1104 (Final), USITC Pub. 3922 at 35 (June 2007); *Steel Concrete Reinforcing Bars from Turkey*, Inv. No. 731-TA-745 (Final), USITC Pub. 3034 at 34 (Apr. 1997).

[220] *Certain Hot-Rolled Steel Flat Products from Australia, Brazil, Japan, Korea, the Netherlands, Turkey, and the United Kingdom*, Inv. Nos. 701-TA-545-547, 731-TA-1291-1297 (Final), USITC Pub. 4638 at 49-50 (Sept. 2016); *Certain Corrosion-Resistance Steel Products from China, India, Italy, Korea, and Taiwan,* Inv. No. 701-TA-534-537 and 731-TA-1274-1278 (Final), USITC Pub. 4630 at 35-40 (July 2016); *Carbon and Certain Steel Wire Rod from China*, Inv. Nos. 701-TA-512, 731-TA-1248 (Final), USITC Pub. 4509 at 25-26 (Jan. 2015) (using five-month periods because preliminary Commerce countervailing duty determination was during the sixth month after the petition).

[221] *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel from the People's Republic of China: Preliminary Affirmative Countervailing Duty Determination*, 82 Fed. Reg. 44,562 (Sept. 25, 2017). As noted above, the petitions in these investigations were filed on April 19, 2017, and Commerce made its final determination in the countervailing duty investigation on December 11, 2017. *Countervailing Duty Investigation of Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel from the People's Republic of China: Final Affirmative Determination, and Final Affirmative Determination of Critical Circumstances, in Part*, 82 Fed. Reg. 58,175 (Dec. 11, 2017). We also note import data for October 2017 are not yet available due to Commerce not extending the timeline for its countervailing duty determination. CR at IV-20, n. 7; PR at IV-8, n.7.

subject imports five months prior to the filing of the petition (December 2016 through April 2017) with the volume of subject imports five months after the filing of the petition (May 2017 through September 2017) in our critical circumstances analysis regarding subject imports from China. We also consider end-of-period inventory levels for December 2016 and June 2017.[222]

2. Negative Critical Circumstances Determination

Based on these data, imports of subject merchandise from China subject to Commerce's affirmative critical circumstances findings increased from *** short tons for the five-month pre-petition period to *** short tons for the five-month post-petition period, an increase of *** percent.[223] We note that all U.S. shipments of subject imports from China constituted only *** percent of apparent U.S. consumption in interim 2017 and *** percent in interim 2016, making the increase in the imports an even smaller share of apparent U.S. consumption.[224] U.S. importers' inventories of subject imports from China were *** short tons in December 2016 and were *** short tons in June 2017, a decrease of *** percent.[225]

A critical circumstances finding requires a determination of whether the imports subject to the affirmative Commerce critical circumstances determination are likely "to undermine seriously" the remedial effect of Commerce's antidumping duty order.[226] The record here fails to support such a conclusion with respect to subject import levels and inventories in the post-petition period. While import levels increased in the post-petition period, this increase coincided with an increase in apparent U.S. consumption and increased U.S. shipments for subject imports from China in interim 2017.[227] Indeed, the decrease in inventory levels in the post-petition period, and the declining ratio of inventories to U.S. imports in the post-petition period, indicate that the vast majority of subject imports were commercially shipped during this period of increasing apparent U.S. consumption.[228] As noted above, the increase in subject imports from China constituted a *** percentage of apparent U.S. consumption, and U.S.

---

[222] Salem Steel, Tube Fabrication, and voestalpine argue that the Commission failed to collect inventory data corresponding to the critical circumstances period, and as a result, these parties argue that the Commission must rely on inventory data submitted by them as well as U.S. importer Borghi USA. Joint Posthearing Br. at 2-3. As noted above, however, the Commission is not required to examine any particular time period for its critical circumstances analysis, and the Commission's practice is to rely on inventory data available on record that provides a starting and ending point for inventory levels before and after the filing of the petition. Because our end-of-period inventory data for calendar year 2016 (*e.g.*, December 2016) and interim 2017 (*e.g.*, June 2017) encompass data from more parties and fall within the pre- and post-petition periods, we rely on this data for our analysis of inventory levels.

[223] CR/PR at Table IV-5 & Fig. IV-3.

[224] CR/PR at Table C-1.

[225] CR/PR at Table VII-31. End-of-period inventories were *** short tons in 2014, *** short tons in 2015, and *** short tons in June 2016. *Id*.

[226] 19 U.S.C. §1673d(b)(4)(A).

[227] CR/PR at Table C-1.

[228] CR/PR at Table VII-31. The ratio of inventory levels to U.S. imports was *** percent in 2016 and *** percent in interim 2017. *Id*.

producers experienced increases in shipments, revenues, and market share during the post-petition time period.

The record therefore indicates that the countervailing duty order on China will not be seriously undermined by the post-petition increase in subject imports. We make a negative critical circumstances determination with regard to subject imports in the countervailing duty investigation of CDMT from China.

VII. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of subject imports of CDMT that are subsidized by the governments of China and India. We also determine that critical circumstances do not exist with regard to subject imports of CDMT that are 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 ("USITC" or "Commission") by ArcelorMittal Tubular Products, Shelby, Ohio; Michigan Seamless Tube, LLC, South Lyon, Michigan; PTC Alliance Corp., Wexford, Pennsylvania; Webco Industries, Inc., Sand Springs, Oklahoma; and Zekelman Industries, Inc., Farrell, Pennsylvania, on April 19, 2017, 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 cold-drawn mechanical tubing of carbon and alloy steel ("CDMT") [1] from China, Germany, India, Italy, Korea, and Switzerland and subsidized by the Governments of China and India. The following tabulation provides information relating to the background of these investigations.[2] [3]

Effective date	Action
April 19, 2017	Petition filed with Commerce and the Commission; institution of Commission investigations (82 FR 19078, April 25, 2017)
May 9, 2017	Commerce's notice of initiation of countervailing duty investigations (82 FR 22486, May 16, 2017)
May 9, 2017	Commerce's notice of initiation of antidumping duty investigations (82 FR 22491, May 16, 2017)
June 5, 2017	Commission's preliminary determinations (82 FR 26812, June 9, 2017)
September 25, 2017	Commerce's preliminary countervailing duty determinations with respect to China and India (82 FR 44562; 82 FR 44558); scheduling of final phase of Commission investigations (82 FR 46522, October 5, 2017)
November 22, 2017	Commerce's preliminary antidumping duty determinations with respect to China (82 FR 55574), Germany (82 FR 5558), India (82 FR 55567), Italy (82 FR 55561), Korea (82 FR 55564), and Switzerland (82 FR 55571)
December 6, 2017	Commission's hearing

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

[2] Pertinent *Federal Register* notices are referenced in appendix A, and may be found at the Commission's website (www.usitc.gov). A list of witnesses appearing at the hearing is presented in appendix B of this report.

[3] Commerce did not align its final countervailing duty determinations with its final antidumping duty determinations, which impacted the scheduling of the Commission's investigations and availability of certain data.

Effective date	Action
December 11, 2017	Commerce's final countervailing duty (CVD) determinations with respect to China (82 FR 58175) and India (82 FR 58172)
January 5, 2018	Commission's vote (CVD)
January 24, 2018	Commission's views (CVD)
April 3, 2018	Scheduled date for Commerce's final antidumping duty (AD) determinations
Pending	Scheduled date for the Commission's vote (AD)
Pending	Scheduled date for Commission's views (AD)

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-—

> *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 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—[4]

(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

CDMT is a tubular product that has been cold-drawn or otherwise cold-finished in a way that changes the diameter and/or wall thickness of the tube. CDMT has a number of applications and uses based on the physical and mechanical characteristics imparted by the cold-drawing process, including the production of bushings, spacers, bearings, axles, steering columns, hydraulic cylinders, and other mechanical parts in automobiles, trucks, aircraft, and construction, as well as in agricultural and drilling equipment. As a result, CDMT serves a number of markets including the transportation (autos, trucks, buses, trains, and aircraft), construction, agriculture, and oil and gas sectors. The leading U.S. producers of CDMT are ***,

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

while leading producers of CDMT outside the United States include ***. The leading U.S. importers of CDMT from subject sources are ***. U.S. purchasers of CDMT include both OEMs and distributors in the aforementioned market sectors. The largest purchasers of CDMT are ***.

Apparent U.S. consumption[5] of CDMT totaled 445,089 short tons ($774.4 million) in 2016. Currently, ten firms are known to produce CDMT in the United States, eight of which provided a usable questionnaire response. Based on these questionnaire responses, U.S. producers' U.S. shipments of CDMT totaled 318,636 short tons ($530.8 million) in 2016, and accounted for 71.6 percent of apparent U.S. consumption by quantity and 68.5 percent by value. U.S. importers' U.S. shipments from subject sources totaled *** short tons ($***) in 2016 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. importers' U.S. shipments from nonsubject sources totaled *** short tons ($***) in 2016 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of eight firms that accounted for the vast majority of U.S. production of CDMT during 2016.[6] U.S. imports are based on questionnaire responses of 50 firms, supplemented with import data for certain HTS statistical reporting numbers provided in proprietary Customs records ("Customs supplement"). The Customs supplement adds in U.S. imports reported under the "primary HTS numbers" for those firms that did not provide a questionnaire response (i.e., excluding firms that either completed a questionnaire or certified that they had not imported CDMT since January 1, 2014).[7]

Table I-1 presents import data coverage obtained from questionnaire responses and proprietary Customs records.

---

[5] Apparent U.S. consumption for CDMT was calculated by adding U.S. producers' U.S. shipments and U.S. importers' U.S. shipments (derived from questionnaire responses) as well as U.S. imports (derived from proprietary Customs data, using the "primary HTS numbers" for those companies that did not provide a questionnaire response). Please see the next section entitled "Summary data and data sources" for a detailed explanation of data methodology.

[6] See *Part III* of this report for a more detailed discussion of U.S. industry coverage.

[7] The vast majority of subject merchandise is imported under eight HTS statistical reporting numbers ("Primary HTS numbers"): 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, and 7306.50.5030. However, in some cases subject product could enter under other HTS statistical reporting numbers than listed above. The Commission's U.S. importers' questionnaire gathered data on the quantity of such imports.

Table I-1
CDMT: U.S. imports from proprietary Customs records and importer questionnaire data, 2016

* * * * * * *

PREVIOUS AND RELATED INVESTIGATIONS

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

NATURE AND EXTENT OF SUBSIDIES AND SALES AT LTFV

Subsidies

On December 11, 2017, Commerce published a notice in the *Federal Register* of its final determination of countervailable subsidies for producers and exporters of subject merchandise from China and India. Tables I-2 and I-3 present Commerce's findings of subsidization of CDMT in China and India, respectively.

Table I-2
CDMT: Commerce's final subsidy determination with respect to imports from China

Entity	Final countervailable subsidy margin (*percent*)
Jiangsu Hongyi Steel Pipe Co., Ltd[1]	21.41
Zhangjiagang Huacheng Import & Export Co., Ltd[2]	18.27
All others	19.84

[1] Commerce found the following companies to be cross-owned with Hongyi: Hongren Precision Pipe Manufacturing Co., Ltd. and Changzhou Kemeng Mechanical Equipment Co., Ltd.
[2] Commerce found the following companies to be cross-owned with Huacheng I&E: Zhangjiagang Huacheng Industry Pipe Making Corporation, Zhangjiagang Salem Fine Tubing Co., Ltd., Zhangjiagang Huacheng Investment Holding Co., Ltd., Zhangjiagang HZB Special Material Technology Co., Ltd. and Zhangjiagang Huacheng Special Materials Corporation.

Note.—Commerce also determined that critical circumstances do not exist for individually-examined respondents Huacheng I&E and Hongyi, but that critical circumstances do exist for non-individually examined companies receiving the "all others" rate.

Source: *Countervailing Duty Investigation of Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the People's Republic of China: Final Affirmative Determination, and Final Affirmative Determination of Critical Circumstances, in Part*, 82 FR 58175, December 11, 2017.

Table I-3
CDMT: Commerce's final subsidy determination with respect to imports from India

Entity	Final countervailable subsidy margin (*percent*)
Goodluck India Limited	8.02
Tube Investments of India Limited	42.60
All others	22.41

Source: *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From India: Final Affirmative Countervailing Duty Determination*, 82 FR 58172, December 11, 2017.

Sales at LTFV

On November 22, 2017, Commerce announced its preliminary determination of sales at LTFV with respect to imports from China, Germany, India, Italy, Korea, and Switzerland.[8] Tables I-4 through I-9 present Commerce's dumping margins with respect to imports of CDMT from the subject countries.

[8] *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the People's Republic of China: Preliminary Affirmative Determination of Sales at Less-Than-Fair Value and Preliminary Affirmative Determination of Critical Circumstances, in Part, and Postponement of Final Determination,* 82 FR 55574, November 22, 2017; *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the Federal Republic of Germany: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Postponement of Final Determination*, 82 FR 5558, November 22, 2017; *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From India: Preliminary Affirmative Determination of Sales at Less Than Fair Value, in Part, Postponement of Final Determination, and Extension of Provisional Measures*, 82 FR 55567, November 22, 2017; *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From Italy: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, in Part, Postponement of Final Determination, and Extension of Provisional Measures*, 82 FR 55561, November 22, 2017; *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the Republic of Korea: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, in Part, Postponement of Final Determination, and Extension of Provisional Measures*, 82 FR 55564, November 22, 2017; and *Cold-Drawn Mechanical Tubing From Switzerland: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Postponement of Final Determination, and Extension of Provisional Measures*, 82 FR 55571, November 22, 2017.

Table I-4
CDMT: Commerce's preliminary weighted-average LTFV margins with respect to imports from China

Producer	Exporter	Preliminary dumping margin (*percent*)
Jiangsu Hongyi Steel Pipe Co., Ltd	Jiangsu Hongyi Steel Pipe Co., Ltd	186.89
Zhangjiagang Huacheng Import & Export Co., Ltd	Zhangjiagang Huacheng Import & Export Co., Ltd	61.59
Anji Pengda Steel Pipe Co., Ltd	Anji Pengda Steel Pipe Co., Ltd	61.59
Changshu Fushilai Steel Pipe Co., Ltd	Changshu Fushilai Steel Pipe Co., Ltd	61.59
Changshu Special Shaped Steel Tube Co., Ltd	Changshu Special Shaped Steel Tube Co., Ltd	61.59
Jiangsu Liwan Precision Tube Manufacturing Co., Ltd	Suzhou Foster International Co., Ltd	61.59
Zhangjiagang Precision Tube Manufacturing Co., Ltd. (Zhangjiangang Tube)	Suzhou Foster International Co., Ltd	61.59
Wuxi Dajin High-Precision Cold-Drawn Steel Tube Co., Ltd	Wuxi Huijin International Trade Co., Ltd	61.59
Zhangjiagang Shengdingyuan Pipe-Making Co., Ltd	Zhangjiagang Shengdingyuan Pipe-Making Co., Ltd	61.59
Zhejiang Minghe Steel Pipe Co., Ltd	Zhejiang Minghe Steel Pipe Co., Ltd	61.59
Zhejiang Dingxin Steel Tube Manufacturing Co., Ltd	Zhejiang Dingxin Steel Tube Manufacturing Co., Ltd	61.59
PRC-Wide Entity		186.89

Note.--Commerce preliminarily found that "critical circumstances" exist with respect to Jiangsu Hongyi Steel Pipe Co., Ltd., the producers/exporters receiving a separate rate, and the China-wide entity, but not with respect to Zhangjiagang Huacheng Import & Export Co., Ltd. Consequently, Commerce will instruct CBP to impose provisional measures retroactively on entries of cold-drawn mechanical tubing from China for Jiangsu Hongyi Steel Pipe Co., Ltd., the producers/exporters receiving a separate rate, and the China-wide entity, effective 90 days prior to publication of the preliminary determination in the *Federal Register.*

Source: *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the People's Republic of China: Preliminary Affirmative Determination of Sales at Less-Than-Fair Value and Preliminary Affirmative Determination of Critical Circumstances, in Part, and Postponement of Final Determination,* 82 FR 55574, November 22, 2017.

Table I-5
CDMT: Commerce's preliminary weighted-average LTFV margins with respect to imports from Germany

Producer/Exporter	Preliminary dumping margin (*percent*)
BENTELER Steel/Tube GmbH/BENTELER Distribution International GmbH[1]	75.39
Mubea Fahrwerksfedern GmbH	209.06
Salzgitter Mannesmann Line Pipe GmbH	209.06
All others	75.39

[1] Commerce preliminarily found that BENTELER Steel/Tube GmbH and BENTELER Distribution International GmbH are a single entity.

Source: *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the Federal Republic of Germany: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Postponement of Final Determination*, 82 FR 5558, November 22, 2017.

Table I-6
CDMT: Commerce's preliminary weighted-average LTFV margins with respect to imports from India

Producer/Exporter	Preliminary dumping margin (*percent*)
Goodluck India Limited	0.00
Tube Products of India, Ltd., a unit of Tube Investments of India Limited (collectively TPI)	7.57
All others	7.57

Source: *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From India: Preliminary Affirmative Determination of Sales at Less Than Fair Value, in Part, Postponement of Final Determination, and Extension of Provisional Measures*, 82 FR 55567, November 22, 2017.

Table I-7
CDMT: Commerce's preliminary weighted-average LTFV margins with respect to imports from Italy

Producer/Exporter	Preliminary dumping margin (*percent*)
Dalmine S.p.A	36.80
Metalfer S.p.A	31.42
All others	33.75

Note.--Commerce preliminarily found that "critical circumstances" exist with respect to Dalmine S.p.A. and Metalfer S.p.A., but not with respect to all other producers/exporters in Italy. Consequently, Commerce will instruct CBP to impose provisional measures retroactively on entries of cold-drawn mechanical tubing from Italy for Dalmine S.p.A. and Metalfer S.p.A., effective 90 days prior to publication of the preliminary determination in the *Federal Register*.

Source: *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From Italy: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, in Part, Postponement of Final Determination, and Extension of Provisional Measures*, 82 FR 55561, November 22, 2017.

Table I-8
CDMT: Commerce's preliminary weighted-average LTFV margins with respect to imports from Korea

Producer/Exporter	Preliminary dumping margin (*percent*)
Sang Shin Ind. Co., Ltd.	48.00
Yulchon Co., Ltd.	5.10
All others	5.10

Note.--Commerce preliminarily found that "critical circumstances" exist with respect to Sang Shin Ind. Co., Ltd., but not with respect to Yulchon Co., Ltd. or all other producers/exporters in Korea. Consequently, Commerce will instruct CBP to impose provisional measures retroactively on entries of cold-drawn mechanical tubing from Korea for Sang Shin Ind. Co., Ltd., effective 90 days prior to publication of the preliminary determination in the *Federal Register*.

Source: *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the Republic of Korea: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, in Part, Postponement of Final Determination, and Extension of Provisional Measures*, 82 FR 55564, November 22, 2017.

Table I-9
CDMT: Commerce's preliminary weighted-average LTFV margins with respect to imports from Switzerland

Producer/Exporter	Preliminary dumping margin (*percent*)
Benteler Rothrist AG (Benteler Rothrist)	34.15
Mubea Präzisionsstahlrohr AG (MPST)	68.59
All others	36.17

Source: *Cold-Drawn Mechanical Tubing From Switzerland: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Postponement of Final Determination, and Extension of Provisional Measures*, 82 FR 55571, November 22, 2017.

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of these investigations as follows:[9]

> The scope of this investigation covers cold-drawn mechanical tubing of carbon and alloy steel (cold-drawn mechanical tubing) of circular cross-section, 304.8 mm or more in length, in actual outside diameters less than 331mm, and regardless of wall thickness, surface finish, end finish or industry specification. The subject cold-drawn mechanical tubing is a tubular product with a circular cross-sectional shape that has been cold-drawn or otherwise cold-finished after the initial tube formation in a manner that involves a change in the diameter or wall thickness of the tubing, or both. The subject cold-drawn mechanical tubing may be produced from either welded (e.g., electric resistance welded, continuous welded, etc.) or seamless (e.g., pierced, pilgered or extruded, etc.) carbon or alloy steel tubular products. It may also be heat treated after cold working. Such heat treatments may include, but are not limited to, annealing, normalizing, quenching and tempering, stress relieving or finish annealing. Typical cold-drawing methods for subject merchandise include, but are not limited to, drawing over mandrel, rod drawing, plug drawing, sink drawing and similar processes that involve reducing the outside diameter of the tubing with a die or similar device, whether or not controlling the inside diameter of the tubing with an internal support device such as a mandrel, rod, plug or similar device. Other cold-finishing

[9] *Countervailing Duty Investigation of Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the People's Republic of China: Final Affirmative Determination, and Final Affirmative Determination of Critical Circumstances, in Part*, 82 FR 58175, December 11, 2017

operations that may be used to produce subject merchandise include cold-rolling and cold-sizing the tubing.

Subject cold-drawn mechanical tubing is typically certified to meet industry specifications for cold-drawn tubing including but not limited to: (1) American Society for Testing and Materials (ASTM) or American Society of Mechanical Engineers (ASME) specifications ASTM A-512, ASTM A-513 Type 3 (ASME SA513 Type 3), ASTM A-513 Type 4 (ASME SA513 Type 4), ASTM A-513 Type 5 (ASME SA513 Type 5), ASTM A-513 Type 6 (ASME SA513 Type 6), ASTM A-519 (cold-finished);
(2) SAE International (Society of Automotive Engineers) specifications SAE J524, SAE J525, SAE J2833, SAE J2614, SAE J2467, SAE J2435, SAE J2613;
(3) Aerospace Material Specification (AMS) AMS T-6736 (AMS 6736), AMS 6371, AMS 5050, AMS 5075, AMS 5062, AMS 6360, AMS 6361, AMS 6362, AMS 6371, AMS 6372, AMS 6374, AMS 6381, AMS 6415;
(4) United States Military Standards (MIL) MIL-T-5066 and MIL-T-6736;
(5) foreign standards equivalent to one of the previously listed ASTM, ASME, SAE, AMS or MIL specifications including but not limited to:
(a) German Institute for Standardization (DIN) specifications DIN 2391-2, DIN 2393-2, DIN 2394-2);
(b) European Standards (EN) EN 10305-1, EN 10305-2, EN 10305-4, EN 10305-6 and European national variations on those standards (e.g., British Standard (BS EN), Irish Standard (IS EN) and German Standard (DIN EN) variations, etc.);
(c) Japanese Industrial Standard (JIS) JIS G 3441 and JIS G 3445; and
(6) proprietary standards that are based on one of the above-listed standards.

The subject cold-drawn mechanical tubing may also be dual or multiple certified to more than one standard. Pipe that is multiple certified as cold-drawn mechanical tubing and to other specifications not covered by this scope, is also covered by the scope of this investigation when it meets the physical description set forth above.

Steel products included in the scope of this investigation are products in which: (1) Iron predominates, by weight, over each of the other contained elements; and (2) the carbon content is 2 percent or less by weight.

For purposes of this scope, the place of cold-drawing determines the country of origin of the subject merchandise. Subject merchandise that is subject to minor working in a third country that occurs after drawing in one of the subject countries including, but not limited to, heat treatment,

cutting to length, straightening, nondestructive testing, deburring or chamfering, remains within the scope of this investigation.

All products that meet the written physical description are within the scope of this investigation unless specifically excluded or covered by the scope of an existing order. Merchandise that meets the physical description of cold-drawn mechanical tubing above is within the scope of the investigation even if it is also dual or multiple certified to an otherwise excluded specification listed below. The following products are outside of, and/or specifically excluded from, the scope of this investigation:

(1) Cold-drawn stainless steel tubing, containing 10.5 percent or more of chromium by weight and not more than 1.2 percent of carbon by weight; (2) products certified to one or more of the ASTM, ASME or American Petroleum Institute (API) specifications listed below:

- ASTM A-53;
- ASTM A-106;
- ASTM A-179 (ASME SA 179);
- ASTM A-192 (ASME SA 192);
- ASTM A-209 (ASME SA 209);
- ASTM A-210 (ASME SA 210);
- ASTM A-213 (ASME SA 213);
- ASTM A-334 (ASME SA 334);
- ASTM A-423 (ASME SA 423);
- ASTM A-498;
- ASTM A-496 (ASME SA 496);
- ASTM A-199;
- ASTM A-500;
- ASTM A-556;
- ASTM A-565;
- API 5L; and
- API 5CT

except that any cold-drawn tubing product certified to one of the above excluded specifications will not be excluded from the scope if it is also dual- or multiple-certified to any other specification that otherwise would fall within the scope of this investigation.

The products subject to the investigation are currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) under item numbers: 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, 7306.50.5030. Subject merchandise may also enter under numbers 7306.30.1000 and

7306.50.1000. The HTSUS subheadings above are provided for convenience and customs purposes only. The written description of the scope of the investigation is dispositive.

Tariff treatment

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations is imported under the following HTS provisions: 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, 7306.50.5030. Subject merchandise may also be imported under subheadings 7306.30.10 and 7306.50.10. The column 1-general duty rate on all of these products is free. 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[10]

The merchandise covered by these investigations is certain cold-drawn mechanical tubing of carbon and alloy steel. The subject CDMT is a tubular product with a circular cross-sectional shape that has been cold-drawn or otherwise cold-finished in a manner that involves a change in the diameter, wall thickness, or both. The subject CDMT may be produced from either welded or seamless carbon or alloy steel tubular products.

It may also be heat treated after cold working (annealed, normalized, quenched and tempered, stress relieved or finish annealed). Typical cold-drawing methods for subject merchandise include, but are not limited to, drawing over mandrel, rod drawing, and sink drawing. Having been produced via cold-drawing or other cold-finished process is an essential characteristic of the subject merchandise.

The subject CDMT has unique physical characteristics imparted by the cold drawing or other cold finishing processes that differentiate it from the welded or seamless tubing products from which it is produced. Cold drawing gives the mechanical tubing close dimensional tolerances (e.g., outside diameters (OD), wall thickness and inside diameters (ID)); specific and enhanced mechanical properties such as yield strength (i.e., higher), tensile strength (i.e., higher), elongation, hardness, and increased strength to weight ratio; superior finish; superior machinability; and excellent shape (concentricity and eccentricity).

CDMT has a number of applications and uses based on these physical and mechanical characteristics. CDMT is used in the production of bushings, spacers, bearings, axles, steering columns, hydraulic cylinders, and other mechanical parts in automobiles, trucks, aircraft, and construction, as well as in agricultural and drilling equipment. As a result, CDMT serves a

[10] Unless otherwise noted, information in this section was obtained from the petition, pp. 7-8.

number of markets including transportation (autos, trucks, buses, trains, and aircraft), construction, agriculture, and oil and gas sectors.

Manufacturing processes[11]

CDMT, whether starting from welded or seamless tubing hollows for drawing, is subject to the same drawing processes on the same equipment. During the cold drawing process, the mechanical tubing goes through five distinct steps: (1) procuring the raw material; (2) preparing the raw material for drawing; (3) drawing; (4) straightening; (5) finishing and final inspection.

During the procurement process, raw material (a welded or seamless tube) is obtained based on the specifications for the mechanical tubing's chemistry and ultimate dimensions after drawing (including outside diameter, wall thickness, concentricity, and straightness). These requirements may be included in a proprietary specification or an ASTM, AMS, or MIL code or specification.

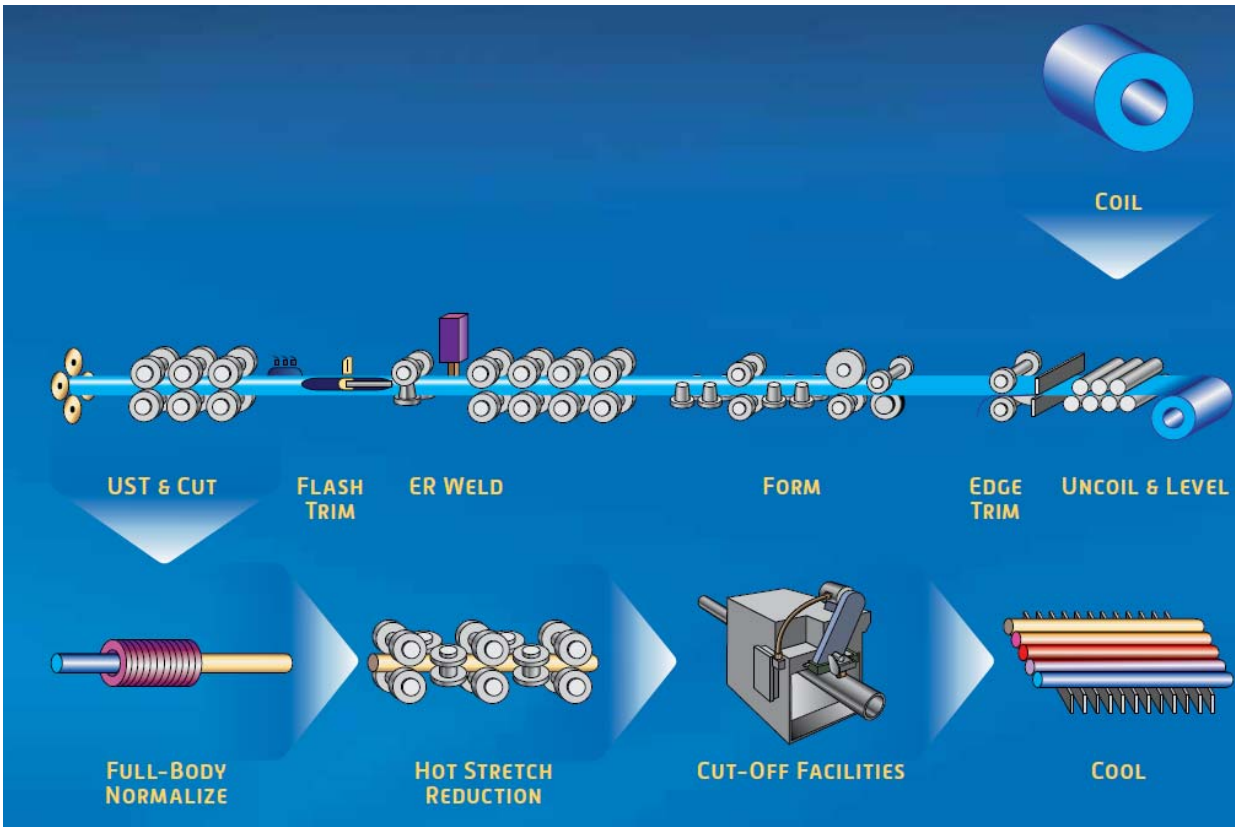
Welded pipe manufacturing process[12]

The most common method of producing welded pipe by U.S. mills is the electric resistance weld ("ERW") process. The ERW process begins with coils of hot-rolled sheet steel, which are cut by a slitting machine into strips of the precise width needed to produce a desired diameter of pipe. The slit coils are fed into the tube mills, which cold-form the flat ribbon of steel into a tubular cylinder by a series of tapered forming rolls. The product then is welded along the joint axis. The welded tube next passes under a tool that removes the outside flash resulting from the pressure during welding. Inside flash is likewise removed by cutting tools. The tube is then subjected to any required post-weld heat treatment. Such treatment may involve heat treatment of the welded seam only or of the full cross-section of the pipe. After heat treatment, sizing rolls shape the tube to specific diameter tolerances. The product is cooled and then cut to size at the end of the tube mill (figure I-1). In 2016, CDMT made from welded tube accounted for *** percent of U.S.-produced CDMT shipments in the United States by quantity (table III-7), *** percent of imports from subject sources (table IV-4), and *** percent of imports from nonsubject sources (table IV-4).

[11] Unless otherwise noted, information in this section is from the petition, pp. 8-10.

[12] Information in this section is from *Circular Welded Carbon Quality Steel Line Pipe from China Inv. No. 701-TA-455 (Final), USITC* Publication 4055, January 2009, p. I-12.

Figure I-1
ERW pipe manufacturing process



Note.—The manufacturing process presented in the figure is the process used at the U.S. Steel mill in Lone Star, Texas. The ERW process may differ somewhat at other companies but the basic ERW process is similar at all mills.

Source: U.S. Steel Tubular Products, "*Standard Pipe & Line Pipe,*" p. 14. https://usstubular.com/standard-and-line-steel-pipe/high-frequency-electric-weld-(erw)-line-pipe-and-s, retrieved November 20, 2017.

Seamless pipe manufacturing process[13]

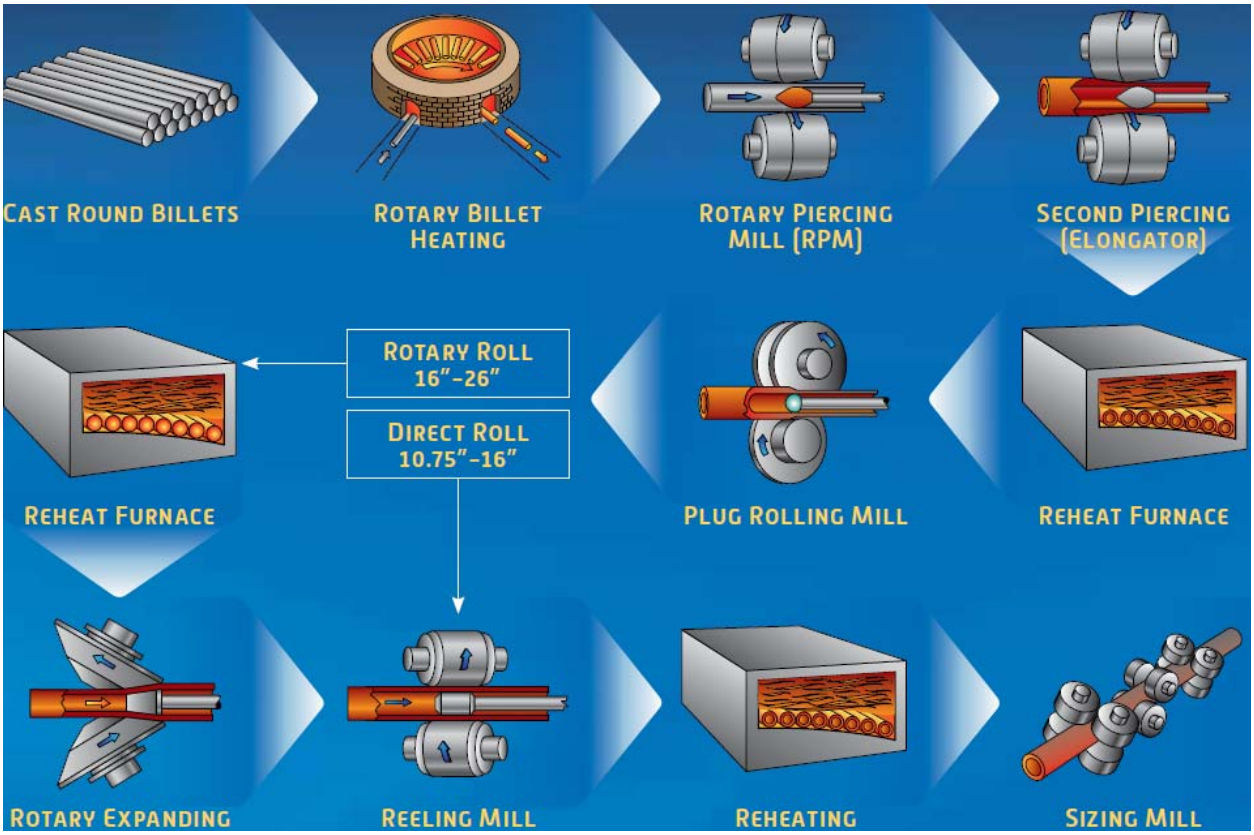
For the production of seamless pipe, molten steel is cast into round billets which are the starting materials.[14] Seamless pipe is typically manufactured by a rotary piecing process which forms a central cavity in a solid steel billet under high temperature. A heated billet is gripped by angled rolls that cause the billet to rotate and advance over a piercer point, forming a hole through the billet's length. The hollow shell produced is then rolled with either a fixed plug or a continuous mandrel inside the shell to reduce the wall thickness and increase the length. The

[13] Information in this section is from *Certain Seamless Carbon and Alloy Steel Standard, Line, and Pressure Pipe from China, Inv. Nos. 701-TA-469 and 731-TA-1168 (Review),* USITC Publication 4595, February 2016, pp. I-6-I-7.

[14] A bar may also be used as the starting material instead of a billet. Conference transcript, p. 72 (Hart).

shell is then rolled in a sizing mill or a stretch reduction mill where it is formed into a true round and sized to the specified diameter (figure I-2). In 2016, CDMT made from seamless tube accounted for *** percent of U.S.-produced CDMT shipments in the United States (table III-7), *** percent of imports from subject sources (table IV-4), and *** percent of imports from nonsubject sources (table IV-4).

Figure I-2
Seamless pipe manufacturing process



Note.—The manufacturing process presented in the figure is the process used at the U.S. Steel mill in Lorain, Ohio. The seamless pipe manufacturing process may differ somewhat at other companies but the basic process is similar at all mills.

Source: U.S. Steel, U.S. Steel Tubular Products, "*Standard Pipe & Line Pipe*," p. 18. https://usstubular.com/standard-and-line-steel-pipe/high-frequency-electric-weld-(erw)-line-pipe-and-s, retrieved November 20, 2017.

Although CDMT made from either welded or seamless tube is largely interchangeable when made to the same wall thicknesses, grades, and diameters, [15] there are applications where either CDMT from welded tube or CDMT from seamless tube is preferred. CDMT drawn from welded tube has tighter dimensional tolerances than CDMT drawn from seamless tube;

[15] Conference transcript, p. 20 (Vore).

CDMT drawn from seamless tube is preferred by some purchasers in pressure applications.[16] Also, for a CDMT of a particular dimension, a CDMT made from welded tube is typically less expensive than CDMT made from seamless tube.[17]

Cold drawing process

The tubing, whether welded or seamless, is then prepared for drawing with a process known as pointing, which involves reducing the diameter at the end of the tubing to allow the tubing to enter the drawing die. In most cases, phosphate coating or soap film is applied before drawing.

The subsequent drawing process may involve drawing over mandrel ("DOM"), hollow drawing, plug drawing, or sinking.[18] Draw benches are usually mechanical and have three components: a back bench, die head, and front section. Jaws on a trolley grip the tube and a hook on the back of the trolley engages a moving chain, pulling the tube through a die. Dies are most commonly sintered tungsten carbide inserts with a cobalt binder that have been shrunk-fit into a steel casing.

During the DOM process, the tube is pulled through the die using an inserted mandrel bar. The tube's outside and inside diameters and its resulting wall thickness undergo reduction at this stage. To enable the mandrel to then be extracted, the tube must be slightly expanded in a reeling mill. During plug drawing, the tube is drawn through a die that includes a plug that is either "stationary," i.e., fixed to a mandrel bar, or is "floating." As a result, both the inside and outside diameters of the tube are again reduced, as well as smoothed and polished. In contrast, during hollow drawing, only the outside diameter of the tube is reduced such that the wall thickness may undergo virtually no change. Depending on the starting size of the feedstock, the desired finished size of the drawn tubing, and the desired mechanical characteristics of the finished tubing, the product may need to be drawn over two or more passes.

Drawing tends to make the product harder, more brittle, and less malleable. As a result, the CDMT may undergo heat treatment after drawing. The heat treatment involves heating the drawn tubing to a particular temperature for a specified period and then cooling it at a specified rate. Heat treatment relieves stress in the tubing caused by the drawing, and imparts the final mechanical characteristics of the finished tubing.

Other cold finishing processes

There are cold finishing processes that can be used instead of cold drawing to produce merchandise within the scope of these investigations. One such process is cold sizing (a cold

[16] Conference transcript, p. 152 (Tilly).

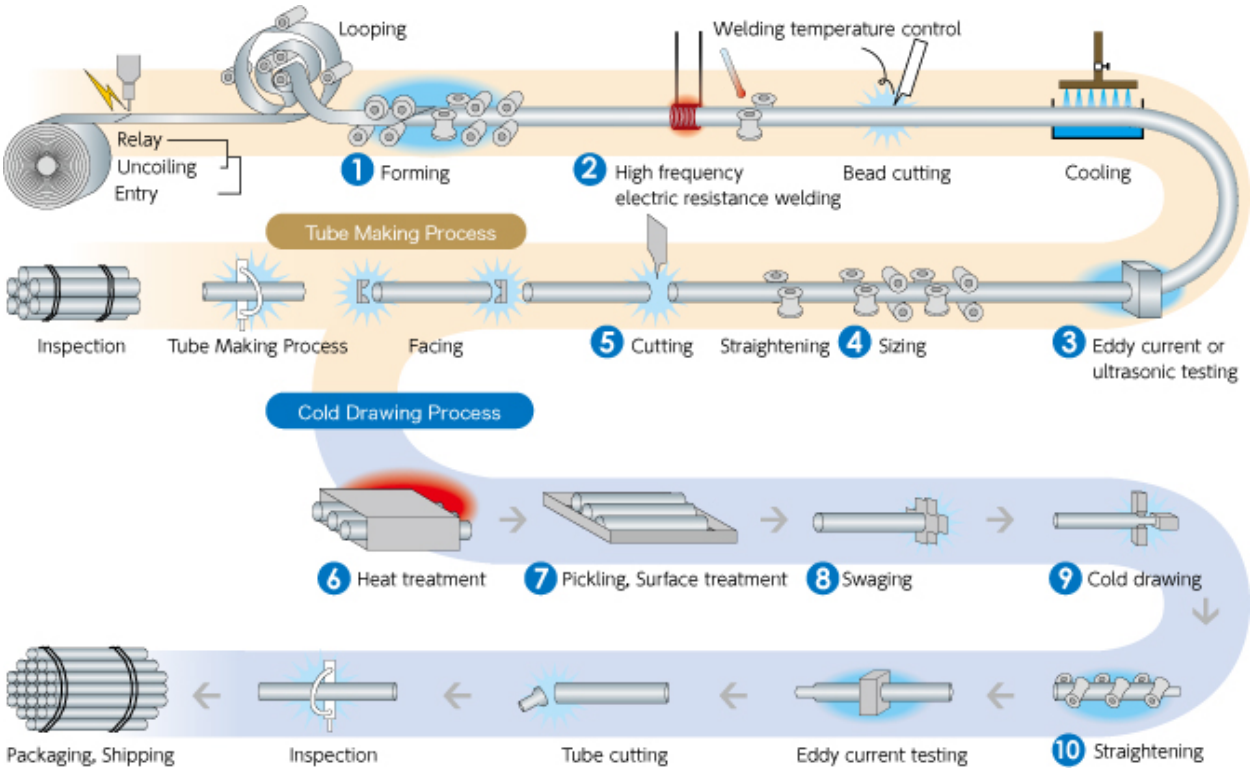
[17] Conference transcript, pp. 23, 80-81 (Vore and Hart).

[18] Sinking is the term for drawing a tube with no internal support. It is usually performed as a sizing pass after a rod draw.

rolling process), in which a welded pipe passes through a series of rolls that use compression to change the tube's dimensions. No U.S. producer uses this process to make CDMT.[19]

The tubing then undergoes straightening. This step typically involves using a rotary straightener that applies a combination of flex and pressure. Finally, the finishing step for CDMT may involve polishing, pickling, or sandblasting to improve the tube's surface finish and remove surface imperfections. The product may also be cut into specified length and have the ends deburred or chamfered (figure I-3).[20]

Figure I-3
Cold-drawn tube manufacturing process



Note.—The process illustrated in the figure is the cold drawing of a welded tube from the formation of the welded tube through the cold drawing.

Source: Nippon Steel and Sumikin Pipe Co., Ltd., "Manufacturing Process/Major Equipment," http://www.nspc.nssmc.com/en/products/process.html, retrieved November 20, 2017.

[19] Hearing transcript, p. 77, (Luberda), Petitioners' posthearing brief, exh. 1, p. 14.

[20] Deburring removes the burrs (small metal fragments) that may remain on the end of a cut tube. Chamfering is a machining process that changes the angle between the prepared edge of the end of the pipe and a plane perpendicular to the surface, i.e. removes the sharp end of a cut tube.

DOMESTIC LIKE PRODUCT ISSUES

The Commission's decision regarding the appropriate domestic product(s) that are "like" the subject imported product is based on a number of factors including: (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and (6) price. During the preliminary phase of these investigations, the Commission defined a single domestic like product consisting of all CDMT corresponding to the scope of the investigations.[21]

During these final phase investigations, petitioners maintain that the Commission should continue to find a single domestic like product encompassing all CDMT, coextensive with Commerce's scope.[22] Respondent Autoliv argues that the Commission should make a separate domestic like product finding with respect to airbag tubing, a product which petitioners and Autoliv agree is not produced in the United States.[23] Autoliv argues that the Commission has authority to define a domestic like product for which there is no domestic production, citing the statute's provisions on material retardation of the domestic industry.[24] In its posthearing brief, respondent DADCO similarly argues that the CDMT it imports is not currently produced in the United States and asks the Commission to make a separate like product finding with respect to specific EN pressure tubing that falls within the scope of CDMT.[25] No other respondents have made domestic like product arguments.

---

[21] During the preliminary phase of the investigations, the Commission examined whether hydraulic tubing should be defined as a separate domestic like product. The Commission found that the limited record of the preliminary phase of the investigations did not indicate a clear dividing line between hydraulic tubing and other types of CDMT and thus did not define hydraulic tubing as a separate domestic like product. The Commission also considered whether CDMT made from welded and seamless pipe should be defined as a separate like product, but the Commission found that the available information did not support a clear dividing line between these products. *Cold-Drawn Mechanical Tubing from China, Germany, India, Italy, Korea, and Switzerland, Inv. Nos. 701-TA-576-577 and 731-TA-1362-1367 (Preliminary),* USITC Publication 4700, June 2017, pp. 13, and 18 n.55.

[22] Petitioners' prehearing brief, pp. 4-7.

[23] Respondent Autoliv's prehearing brief, pp. 6, 13-19; and hearing transcript, pp. 61-62 (Luberda).

[24] Respondent Autoliv's posthearing brief, pp. 3-6.

[25] Respondent DADCO's posthearing brief, pp. 1-6.

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

U.S. MARKET CHARACTERISTICS

CDMT is a tubular product that has been cold-drawn or otherwise cold-finished in a way that changes the diameter and/or wall thickness of the tube, and is used in equipment that simulates movements such as pushing, pulling, lifting, and carrying.[1] CDMT is used in the production of bushings, spacers, bearings, axles, steering columns, and other mechanical parts in automobiles, trucks, aircrafts, hydraulic cylinders, and other construction, agricultural, and drilling equipment.[2] Because of the wide variety of end uses, CDMT is produced in a wide variety of dimensions and shape tolerances that are often specific to individual customers.[3] [4]

Apparent U.S. consumption of CDMT decreased by 20.3 percent during 2014-16.[5]

U.S. PURCHASERS

The Commission received 31 usable questionnaire responses from firms that bought CDMT during January 2014-June 2017.[6] Twelve responding purchasers are distributors.[7] Two purchasers are end users in the agricultural sector, nine are purchasers in the automotive sector, and five are end users in the heavy machinery/industrial sector. Four purchasers self-identified as other end users: *** is a ***, *** is an ***, *** is a manufacturer of ***, and *** is a manufacturer of ***.[8] In general, responding U.S. purchasers were located in the Midwest. The largest responding purchasers of CDMT are ***.

---

[1] Hearing transcript, p. 91 (Vore).

[2] Petition, p. 8; conference transcript, pp. 25 (Boyer) and 28 (Pursel); Petitioners' postconference brief, p. 18.

[3] Conference transcript, pp. 10-11, 39 (Luberda); Petitioners' postconference brief, p. 6. Respondent Salem Steel stated that manufacturers and end users categorize CDMT into three segments that are primarily identified by size. Prehearing brief, pp. 22-23.

[4] Because CDMT is an input to a variety of end-use products, there are often additional operations or refinement of CDMT, including cutting to length, welding, or otherwise manipulating, bending, or slotting. The value of these additional actions is largely dependent on the piece. Conference transcript, pp. 63, 67 (Vore). These additional operations are sometimes done by the producer, importer, purchaser, or a third-party firm.

[5] Apparent U.S. consumption of CDMT was 12.2 percent higher in January-June 2017 than in January-June 2016. (See Appendix C for additional information.)

[6] Three purchasers (***) submitted questionnaires but were excluded from the analysis ***. Of the 31 responding purchasers, 27 purchased the domestic CDMT, 10 purchased imports of the subject merchandise from China, 10 purchased imports from Germany, 9 purchased imports from India, 8 from Italy, 9 from Korea, 2 from Switzerland, and 8 purchased imports of CDMT from other sources.

[7] Purchaser *** reported that it is a ***. Purchaser *** reported selling to the agriculture, automotive, and industrial sectors.

[8] ***, accessed December 15, 2017.

CHANNELS OF DISTRIBUTION

U.S. producers and importers of CDMT from *** sold mainly to distributors while importers of CDMT from *** sold mainly to end users (table II-1). Importers of CDMT from *** initially sold primarily to distributors in 2014, but in 2015 and 2016 sold primarily to end users.

Table II-1
CDMT: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2014-16, January to June 2016, and January to June 2017

* * * * * * *

Most domestically produced CDMT and large shares of CDMT produced in China and India were sold through distributors to the industrial and other non-specified sectors (table II-2). In 2016, *** percent of U.S. producers' commercial shipments were directly to automotive end users.[9] U.S. commercial shipments of CDMT from Germany were largely sold to end users in the automotive, industrial, and oil and gas sectors.[10] The majority of U.S. commercial shipments of Korean CDMT was sold to automotive end users although CDMT sold through distributors to the agricultural sector increased in 2015 and 2016, and *** CDMT produced in Switzerland was sold to automotive end users. Large shares of commercial shipments of CDMT produced in Italy were sold through distributors to the industrial sector and to end users in non-specified industries.

Table II-2
CDMT: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2014-16, January to June 2016, and January to June 2017

* * * * * * *

[9] About *** percent of U.S. commercial shipments were to industrial end users and about *** percent were to the oil and gas sector.

While respondent Salem Steel stated that domestic shipments to the automotive industry are to the "commodity side of the automotive industry, such as axles," (Salem Steel Prehearing brief, p. 26), petitioners stated that the domestic industry can collectively provide a full range of tubing products for numerous automotive applications. Petitioners' posthearing brief, Exh. 1, p. 24. PTC Alliance reported that it produces smaller, lighter wall applications including shock absorber tubes, steering components, engine shafts, suspension components, and more. Hearing transcript, p. 111 (Hart); Petitioners' posthearing brief, p. 10 and Exh. 3-8.

[10] Shipments of CDMT from Germany sold to industrial end users decreased substantially, while shipments to the automotive and oil and gas sectors increased.

GEOGRAPHIC DISTRIBUTION

U.S. producers and importers reported selling CDMT to all regions in the contiguous United States (table II-3). For U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers sold *** percent within 100 miles of their U.S. point of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

Table II-3
CDMT: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	Subject U.S. importers						
		China	Germany	India	Italy	Korea	Switzer-land	All
Northeast	7	7	4	4	3	1	2	12
Midwest	7	13	5	6	5	5	2	22
Southeast	7	11	4	4	4	5	2	20
Central Southwest	7	5	5	3	3	2	2	12
Mountains	6	3	4	3	2	1	2	9
Pacific Coast	6	6	4	5	3	2	2	13
Other[1]	---	1	---	1	---	1	1	2
All regions (except Other)	6	3	3	3	1	1	2	7
Reporting firms	7	16	7	7	5	6	2	26

[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 CDMT have the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced CDMT to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, inventories, and an ability to shift shipments from alternate markets or inventories. One factor mitigating responsiveness of supply is the limited ability to shift production to or from alternate products.

Industry capacity

Overall domestic capacity utilization decreased from 72.5 percent in 2014 to 51.9 percent in 2016. The primary driver of the decline in capacity utilization was a large decrease in

production, which was accompanied by a small increase in capacity.[11] This relatively low level of capacity utilization suggests that U.S. producers may have substantial ability to increase production of CDMT in response to an increase in prices.

Alternative markets

U.S. producers' exports, as a percentage of total shipments, increased during 2014-16. U.S. producers' export shipments rose from 10.5 percent to 14.2 percent of total U.S. shipments (by quantity), indicating that U.S. producers may have some ability to shift shipments between the U.S. market and other markets in response to price changes.

Inventory levels

U.S. producers' inventories declined during 2014-16. Relative to total shipments, U.S. producers' inventory levels decreased from 15.0 percent in 2014 to 10.5 percent in 2016. Despite this decrease, these inventory levels suggest that U.S. producers may have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Six of eight responding U.S. producers stated that they could not switch production from CDMT to other products. Two producers (***) reported that they could switch production from CDMT to ***. U.S. producer *** reported that its ability to shift production is constrained by sizes of pipe and market opportunities and *** reported that since it also ***, it can use its open capacity to produce these other products.

Webco stated that even though it has tried to shift some production capacity to other products, it still has some excess capacity.[12] U.S. producer *** reported that its draw bench capabilities are limited to producing mechanical tubing. PTC Alliance stated in the preliminary phase that 95 percent of its production goes towards CDMT, but the remaining 5 percent would be used to produce out-of-scope product, using the same machinery.[13]

Subject imports[14]

Table II-4 provides a summary of supply-related data for subject countries.

---

[11] During 2014-16, the domestic industry increased its capacity by *** percent, and production of CDMT fell by *** percent.

[12] Conference transcript, p. 26 (Boyer).

[13] Conference transcript, p. 45 (Hart).

[14] For data on the number of responding foreign firms and their share of U.S. imports from China, Germany, India, Italy, Korea, and Switzerland, please refer to Part 1, "Summary Data and Data Sources."

Table II-4

CDMT: Foreign industry factors that affect ability to increase shipments to the United States

Item	Capacity (short tons)		Capacity utilization (percent)		Inventories as a ratio to total shipments (percent)		Ability to shift to alternate product (number of firms)	Home market shipments as a share of total in 2016 (percent)	Exports non-U.S. markets as a share of total in 2016 (percent)
	2014	2016	2014	2016	2014	2016			
China	***	***	***	***	***	***	2 of 5	***	***
Germany	***	***	***	***	***	***	2 of 6	***	***
India	***	***	***	***	***	***	2 of 3	***	***
Italy	***	***	***	***	***	***	2 of 4	***	***
Korea	***	***	***	***	***	***	0 of 2	***	***
Switzerland	***	***	***	***	***	***	2 of 3	***	***

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

Subject imports from China

Based on available information, producers of CDMT from China have the ability to respond to changes in demand with small-to-moderate changes in the quantity of shipments of CDMT to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, the ability to shift shipments from alternate markets and some ability to shift production between alternate products. Chinese producers reported an ability to shift to other products including auto tubes and pressure vessel tubes. Factors mitigating responsiveness of supply include relatively small overall capacity, limited inventories, and a large share of its total shipments going to its home market.

Subject imports from Germany

Based on available information, producers of CDMT from Germany have the ability to respond to changes in demand with large changes in the quantity of shipments of CDMT to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity and inventories, a substantial ability to shift shipments from alternate markets, and some ability to shift production to or from alternate products. German producers reported an ability to shift to other products including high pressure tubing, tubes for automotive, energy, and industrial applications.

Subject imports from India

Based on available information, producers of CDMT from India have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of CDMT to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, an ability to shift shipments from alternate markets, and some ability to shift production to or from alternate products including hot

finished tubes, cold drawn non-mechanical tubing, and electrically resistant welded tubes. A factor mitigating responsiveness of supply is the limited availability of inventories and a moderately large share of its total shipments going to its home market.

Subject imports from Italy

Based on available information, producers of CDMT from Italy have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of CDMT to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of inventories, a substantial ability to shift shipments from alternate markets, and some ability to shift production to or from alternate products. Some Italian producers reported an ability to shift to other products including cold-drawn products not covered by the scope of these investigations. A factor mitigating responsiveness of supply is limited unused capacity. Respondent Metalfer stated that its production capacity is constrained by *** and that it is unable to meaningfully increase production.[15]

Subject imports from Korea

Based on available information, producers of CDMT from Korea have the ability to respond to changes in demand with moderate changes in the quantity of shipments of CDMT to the U.S. market. The main contributing factor to this degree of responsiveness of supply is the ability to shift shipments from alternate markets. Factors mitigating responsiveness of supply include a limited availability of unused capacity and inventories and an inability to shift production to or from alternate products.

Subject imports from Switzerland

Based on available information from the preliminary phase of these investigations, producers of CDMT from Switzerland have the ability to respond to changes in demand with large changes in the quantity of shipments of CDMT to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, a substantial ability to shift shipments from alternate markets, and some ability to shift production to or from alternate products. Some Swiss producers reported an ability to shift to other products including tubes for automotive, energy, and industrial applications.

Nonsubject imports

Based on proprietary customs data, nonsubject imports accounted for *** percent of total U.S. imports (by quantity) in 2016. Official import statistics indicate that the largest

[15] Respondent Metalfer (Italy) postconference brief, p. 10.

sources of nonsubject imports in 2016 were Japan, Romania, Mexico, Argentina, and Taiwan (in order of size).[16]

Supply constraints

No responding U.S. producer reported being unable to supply its customers, or declining potential orders from its customers. Most importers (34 of 41) reported that they had not refused or been unable to supply their customers during January 2014-June 2017. Importer *** reported that *** mills have been running at full capacity, so for some products and size ranges, it has occasionally been unable to supply its customers and *** reported that domestic mills are unable to produce SA372 and ST52.3 that satisfy the Charpy impact test that determines the amount of energy absorbed by the material during a fracture. Importer Tube Fabrication provided approximately 200 instances in which U.S. producers would not provide quotes, particularly in regards to ***.[17]

Several importers (including ***) reported constraints in lead times. Importer *** reported that availability of CDMT after the petition filing has been impacted and lead times from domestic producers have increased from an average of 4 weeks to an average of 16 weeks.[18] Importer *** reported that it can deliver orders faster than domestic mills, according to its customers, and that recently some domestic mills have been "no quoting" its customers.[19]

Most (22 of 31) purchasers reported that they had not been refused supply since 2014. However, several purchasers reported extended lead times. Purchaser *** reported that its U.S. supplier no longer quotes for CDMT because of quality issues from a U.S. steel mill, and purchaser *** reported that Benetler Rothrist was not able to meet its higher demands (***).

Most purchasers also reported that the availability of supply had not changed since 2014. Eight (of 31) purchasers reported that availability of domestically produced CDMT had changed, again citing lead times and quality issues. Purchaser *** reported that most U.S. producers are no longer accepting orders for outside diameters of less than 0.750 inches or walls lighter than 0.109 inches, but that several producers have increased their size ranges for larger and heavier sizes, and purchaser *** reported that it is difficult to get CDMT in "Group 1."[20] Purchaser *** reported that mills changed their production schedules and produce certain

---

[16] For more information, see table IV-3.

[17] Hearing transcript, p. 128 (Ellis). Petitioners stated while TFI did not contact all U.S. producers and failed to send requests for quote ("RFQ") to the U.S. producers with expertise in producing CDMT for automotive applications, the domestic industry was able to quote a "significant portion" of TFI's RFQs. Petitioners' posthearing brief, pp. 2-3.

[18] *** importer questionnaire, III-22.

[19] *** importer questionnaire, III-22.

[20] Automotive end users sometimes refer to different categories ("Tiers" or "Groups") based on their position in the supply chain, with Tier/Group 1 closest (i.e. supplying directly) to the end user. Purchaser *** reported that demand for its end-use products had declined and that there has been an increase in imports (especially in regards to Group 1 and 2 drawn over mandrel tubing).

products only on a quarterly basis. Seven purchasers indicated that availability of CDMT from subject countries has changed, citing longer lead times and more available options.

U.S. demand

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

End uses and cost share

U.S. demand for CDMT depends on the demand for U.S.-produced downstream products. Reported end uses cover many applications including those in the automotive, agriculture, construction, energy, mining, and fluid power sectors. CDMT is further processed downstream (i.e., cut to length, cleaned, etc.) and fit for its particular end-use application.

CDMT accounts for a moderate share of the cost of the direct downstream products in which it is used, but accounts for a much smaller share of the cost of final end-use products.

Reported cost shares for some end uses were as follows (listed in order of cost share):

- Airbag inflator (15-80 percent)
- Hydraulic cylinders (10-88 percent)
- Commercial vehicle axles (60 percent)
- Automotive antivibration components (25-60 percent)
- Seatbelt pretensioner (40 percent)
- Tools (40 percent)
- High pressure parts, including nitrogen gas springs (11-30 percent)
- Drive shafts (14-20 percent)
- Water pump bearings (9 percent)
- Forklifts (5 percent)
- Poultry egg systems (2-3 percent)
- Hydraulic fracking pump (1.5 percent)
- 747 Airliner (0.1 percent)

Seven of 21 responding purchasers reported that demand for their final products incorporating CDMT increased, six purchasers reported that demand decreased, five reported that demand had fluctuated and three reported no change in demand for their final products. Most (14 of 20) responding purchasers reported that the change in demand for their final products affected their firm's demand for CDMT. Some purchasers reported that their demand for CDMT is unaffected by changes in demand for their final products. Purchaser *** reported that demand for *** increased but due to ***, it now uses non-drawn tube instead of CDMT in some applications.

Business cycles

Most U.S. producers (5 of 7), importers (29 of 40), and purchasers (21 of 29) indicated that the market was not subject to any distinctive business cycles or conditions of competition. U.S. producer *** reported that there is some seasonality in the market. Several importers reported that the CDMT market is subject to business cycles influenced by seasonality and cyclicality that is derived from business cycles in the automotive, oil and gas, and construction and mining sectors. Importer *** reported that its demand for CDMT is driven by ***.

Four purchasers reported that the CDMT market is subject to business cycles, and six purchasers reported that the CDMT market is subject to distinct conditions of competition including the cost of steel and energy, increasing demand for automotive applications, new product development, and competition in high strength steel technologies. Eight purchasers reported that there had been a change to business cycles and conditions of competition, including a consolidation of equipment manufacturers and outsourcing of component manufacturing, and purchaser *** reported that U.S. producer MetalMatic had recently qualified ***.

Demand trends

Overall, consumption of CDMT declined in all sectors.[21] U.S. producers most frequently reported that overall demand decreased and importers most frequently reported fluctuating U.S. demand for CDMT since January 1, 2014 (table II-5). Purchasers reported a variety of experiences, but most frequently reported that there had been a decrease in overall demand. Notably, a plurality of purchasers reported that demand in the automotive sector had increased while majorities or pluralities of purchasers reported decreasing demand in the agricultural, industrial, and oil and gas sectors.

[21] Petitioners prehearing brief, p. 15.

Table II-5
CDMT: 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--				
Overall	1	1	3	2
Agricultural sector	1	---	3	1
Automotive sector	2	1	1	1
Industrial sector	1	---	2	2
Oil and gas sector	1	---	3	1
Other	1	---	1	3
Importers--				
Overall	6	2	6	8
Agricultural sector	1	1	5	6
Automotive sector	11	4	1	8
Industrial sector	4	1	4	5
Oil and gas sector	1	1	7	3
Other	2	---	---	4
Purchasers--				
Overall	3	6	7	5
Agricultural sector	---	3	8	3
Automotive sector	8	4	2	3
Industrial sector	1	3	8	3
Oil and gas sector	3	3	7	2
Other	2	3	1	1
Demand outside the United States:				
U.S. producers	1	1	2	1
Importers	3	---	2	5
Purchasers	4	4	1	1
Demand for purchasers' final products:				
Purchasers	7	3	6	5

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

Demand for CDMT is driven by overall economic growth,[22] and demand in downstream sectors including the agriculture, oil and gas, and automotive sectors.[23] [24] Overall GDP growth slowed during most of the period of investigation, but increased overall (figure II-1). Demand in the agriculture sector declined and oil and gas rigs in operation dropped substantially during

[22] Petitioners stated that general GDP growth drives demand for CDMT because CDMT goes into products that "essentially amount to capital equipment." Conference transcript, p. 71 (Vore).

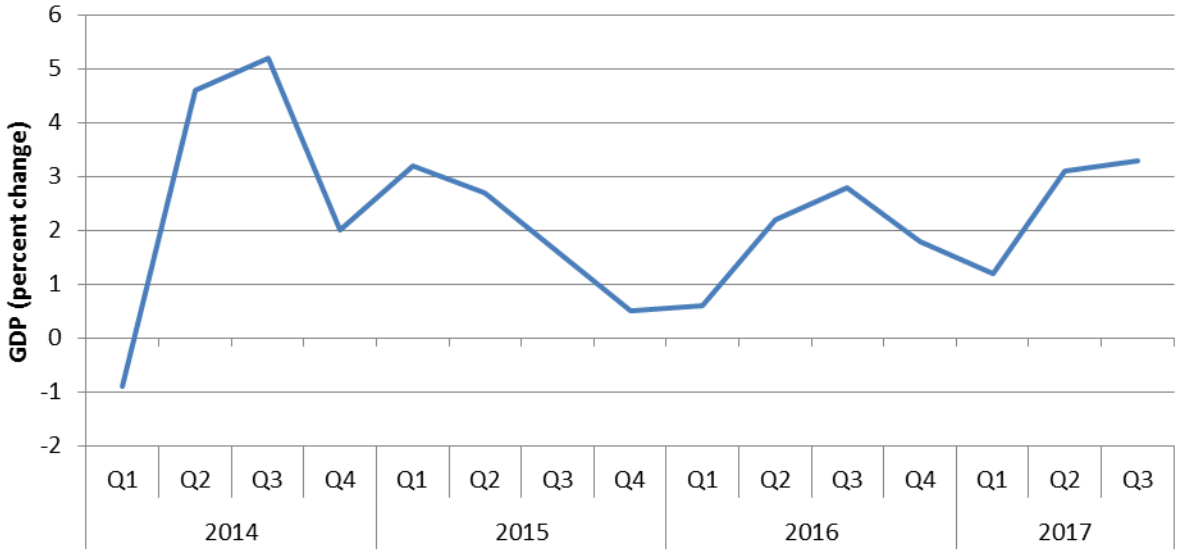
[23] Conference transcript, pp. 16 (Morgan) and 71 (Vore); respondent Salzgitter Mannesmann (Germany) postconference brief, p. 14; respondent TFI (China) postconference brief, pp. 6-8.

[24] Respondent Salzgitter Mannesman (Germany) stated that demand is also driven by the fluid power and hydraulics sector, and that hydraulic and pneumatic shipments dropped by approximately 15 percent between late 2014 and early 2016. Respondent Salzgitter Mannesmann (Germany) postconference brief, p. 14 and prehearing brief, p. 18.

late 2014 and mid-2016, showing an overall decrease of nearly 47 percent (figures II-2 through II-3). Domestic production of automobiles has declined slightly during January 2014-June 2017, although total vehicle sales increased by about 8 percent over the same period (figure II-4).[25]

Figure II-1

Real U.S. GDP growth: Percentage change from the previous quarter, quarterly, seasonally adjusted, January 2014-September 2017

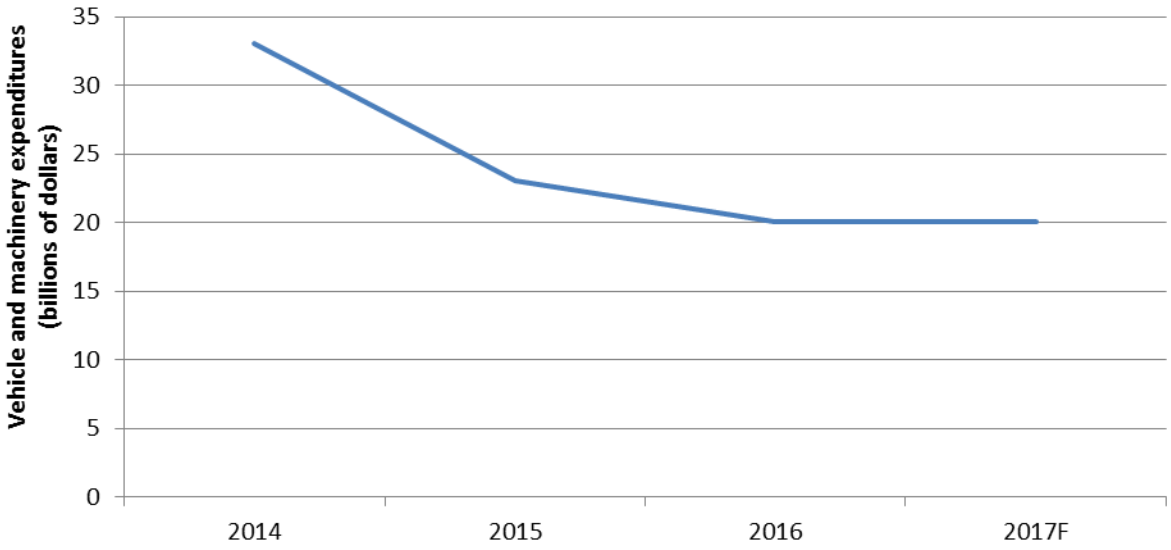


Source: National Income and Product Accounts-Table 1.1.1, Percent Change from Preceding Period in Real Gross Domestic Product, Bureau of Economic Analysis, http://www.bea.gov/iTable/index_nipa.cfm, retrieved December 5, 2017.

[25] The domestic auto unit production series captures the demand of the immediate end users of CDMT; the total vehicle sales series includes sales of vehicles assembled in the United States, Canada, and Mexico.

Figure II-2

Agricultural vehicles and machinery: Annual gross capital expenditures, current dollars, 2014-17[1]

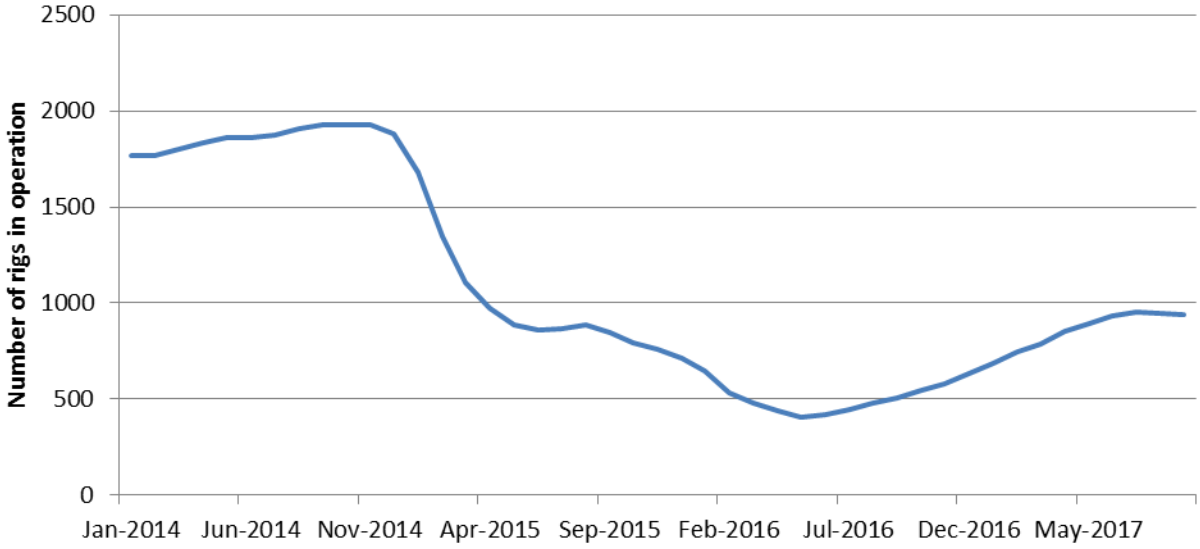


[1] Data for 2017 are forecast.

Source: U.S. Department of Agriculture, Farm Income and Wealth Statistics, "Gross Capital Expenditures," https://data.ers.usda.gov/reports.aspx?ID=17836, accessed December 5, 2017.

Figure II-3

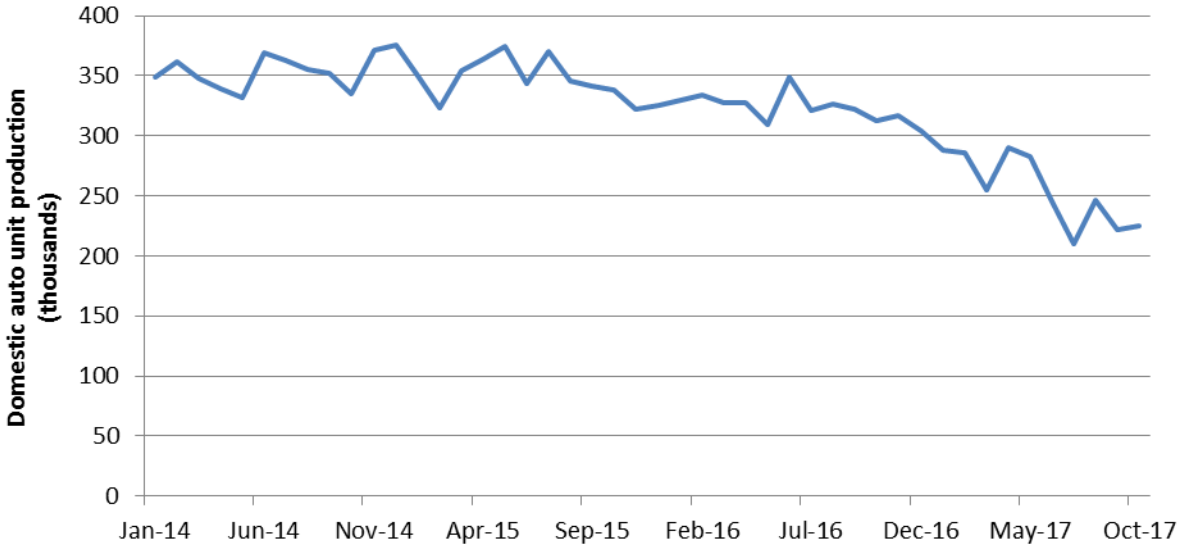
Oil and gas: U.S. crude oil and natural gas rotary rigs in operation, monthly, January 2014-September 2017



Source: Energy Information Administration, U.S. Crude Oil and Natural Gas Rotary Rigs in Operation (Count), https://www.eia.gov/dnav/ng/hist/e_ertrr0_xr0_nus_cm.htm, accessed December 5, 2017.

Figure II-4

U.S. automotive production: Thousands of units, monthly, seasonally adjusted, January 2014-October 2017



Source: BEA, Motor Vehicle Unit Retail Sales, table 7, Domestic Auto Unit Production, www.bea.gov/national/xls/gap_hist.xlsx, retrieved December 5, 2017.

Substitute products

Substitutes for CDMT are limited. All U.S. producers and most importers (32 of 40) and purchasers (23 of 29) reported that there are no substitutes. Eight importers and six purchasers reported substitutes for CDMT including wrapped tubes and cold-headed products for bushings and automotive components; deep drawn stamping for outer cans; and hot finished seamless tubes, ERW pipe, and bar for mechanical applications. Some of these substitutes were reported to affect the prices of CDMT.

Importer Borghi stated that there are no substitutes for hydraulic tubing in vehicles, because there are strict requirements for the material sources, and any changes in its purchases must go through the Production Part Approval Process ("PPAP").[26]

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported CDMT depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, reliability of supply, lead times, product services, etc.). Based on available data, staff believes that there is a high degree of substitutability between domestically produced CDMT and CDMT imported from subject sources.

[26] Hearing transcript, p. 142 (Scheuer).

Lead times

CDMT is primarily produced-to-order. U.S. producers reported that over 88 percent of their commercial shipments were produced-to-order (with lead times averaging[27] 42 days), and importers reported that almost 60 percent of their commercial shipments were produced-to-order (with lead times averaging 113 days). The remaining 11 percent of U.S. producers' commercial shipments came from inventories (with lead times averaging 8 days). U.S. importers reported that almost *** percent of their commercial shipments were from inventories (with lead times averaging 7 days), and the remaining share of their commercial shipments (*** percent) were from foreign inventories (with lead times averaging 53 days). Some importers, such as Salem, manage their inventories so they can satisfy customers' needs for short lead times (usually within one week) because importing CDMT from subject countries can take up to four months.[28]

Importers that sell CDMT primarily to the automotive sector base their orders on forecasted demand from customers. For example, importer Tube Fabrication Industries ("TFI") typically operates under scheduling agreements, and bases its imports on forecasted demand.[29] Petitioners explained that lead times have been affected by a lack of experienced and skilled labor so that they are unable to meet demand as quickly as they had in the past, and respondents stated that lead times have increased due to increased domestic demand and uncertainty in the supply chain.[30]

Supply chain and sourcing issues

Petitioners also stated that automotive customers who have worked with producers to develop a supply line will give orders for CDMT that is subsequently shipped within a couple of days, and clarified that the longer lead times that are being reported are for spot transactions and new orders. U.S. producer PTC Alliance reported that more than half of its products are delivered on a just-in-time basis.[31] Respondent voestalpine stated that Europe is also struggling to keep up with production demands, so there are constraints on inputs for the production of CDMT.[32]

In the automotive and agriculture sectors, many firms adhere to the PPAP which is an automotive requirement that defines the approval process to ensure that engineering design record and specification requirements are met.[33] According to petitioners and respondents, it can take between six months and a couple of years to get new suppliers, products, or product

---

[27] Unless otherwise stated, the average lead times are presented as weighted averages.
[28] Conference transcript, p. 163 (Saran).
[29] Conference transcript, p. 161 (Ellis).
[30] Hearing transcript, p. 100 (Vore), Respondent Salem Steel posthearing brief, p. 27.
[31] Hearing transcript, pp. 101-102 (Boyer and Hart).
[32] Hearing transcript, p. 220 (Ball).
[33] Automotive Industry Action Group, https://www.aiag.org/, accessed December 12, 2017. See also Hearing transcript, p. 129 (Ellis), Respondent Dana posthearing brief, p. 1.

changes approved.[34] CDMT distributor Dana stated that it generally takes between two to four years to validate a supplier's samples and to gain the OEM's approval before initiating a switch in sourcing.[35] Respondent voestalpine stated that it maintains the same supply base because of the long PPAP timing.[36]

CDMT distributor Dana also stated that automotive manufacturers may source CDMT from various sources, but it is rare to source the same CDMT product for a particular program or auto part from multiple sources.[37]

Knowledge of country sources

Twenty-eight purchasers indicated they had marketing/pricing knowledge of domestic CDMT, 15 of Chinese product, 12 of German product, 10 of Indian product, 7 of Italian product, 11 of Korean product, and 2 of Swiss product. Ten purchasers indicated they had marketing/pricing knowledge of CDMT from other sources, including Australia, Belgium, Brazil, Canada, Czech Republic, France, Japan, Mexico, Romania, Russia, Spain, Taiwan, and Vietnam.

As shown in table II-6, purchasers most frequently reported that they never make purchasing decisions based on the producer while most of their customers reported that they sometimes do. Purchasers reporting that they always make purchasing decisions based on the producer reported that they only purchase from reputable suppliers that meet their quality standards. Most purchasers never make their purchasing decisions based on the country of origin and their customers sometimes or never make their decisions based on the country of origin.

Table II-6
CDMT: Purchasing decisions based on producer and country of origin

Decision	Always	Usually	Sometimes	Never
Purchases based on producer:				
Purchaser's decision	6	7	7	11
Purchaser's customer's decision	---	1	13	9
Purchases based on country of origin:				
Purchaser's decision	2	7	2	19
Purchaser's customer's decision	---	---	11	12

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

Ten of 31 purchasers reported that there are certain types/grades/sizes of CDMT that are only available from one source. Purchasers *** reported that CDMT used for hydraulic fluid lines (J524) and intermediate drive shafts, respectively, is only available from Germany, and purchaser *** reported that drawn-over mandrel CDMT for prop shafts is only available from

[34] Hearing transcript, pp. 70, 129, 161 (Vore, Ellis, DeGrendel), Respondent Dana posthearing brief, p. 2.

[35] Hearing transcript, p. 161 (DeGrendel).

[36] Hearing transcript, p. 176 (Ball).

[37] Respondent Dana posthearing brief, p. 2.

Switzerland.[38] Purchasers *** reported that CDMT used for stabilizer bars and hydraulic cylinders, respectively, is only available from nonsubject country Japan and purchaser *** reported that cold-drawn seamless tubing over 12 inches for use in "multiple" applications is only available from Japan. Purchaser *** reported that CDMT used for hydraulic cylinders is only available from Italy. Importer DADCO stated that there are no domestic suppliers that can supply specific certifications for EN pressure tubing as required by the European Pressure Equipment Directive.[39]

Petitioners, however, stated that there are domestic producers that can supply *** and SAE J524 and J525 hydraulic cylinders, and that the domestic industry can produce "virtually every type of CDMT demanded by the market."[40] Importer Borghi stated that only two U.S. producers responded to its requests for quotes, and were only able to quote about 65 percent of the needed products.[41]

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for CDMT were price or overall cost (29 firms), quality (26 firms), and lead time/delivery (14 firms) as shown in table II-7. Quality was the most frequently cited first- and second-most important factor (cited by 13 firms and 11 firms, respectively), followed by price (9 firms and 8 firms, respectively). Price was the most frequently reported third-most important factor (13 firms).

[38] Petitioner Webco stated that it does produce prop shaft tubing as well as intermediate drive shaft tubing. Hearing transcript, p. 35 (Boyer).

[39] DADCO's posthearing brief, pp. 2-3. The European Pressure Equipment Directive covers a very broad range of products such as vessels, pressurised storage containers, heat exchangers, steam generators, boilers, industrial piping, safety devices and pressure accessories, and establishes particular requirements regarding inputs into these products. See https://ec.europa.eu/growth/sectors/pressure-gas/pressure-equipment/directive_en, accessed December 15, 2017.

[40] Petitioners' prehearing brief, p. 17; Hearing transcript, p. 27 (Van Pelt).

[41] Hearing transcript, p. 143-144 (Sheuer).

Table II-7
CDMT: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Item	1st	2nd	3rd	Total
	Number of firms (number)			
Price / Cost[1]	9	8	13	29
Quality[2]	13	11	2	26
Delivery / Lead times	1	5	8	14
Availability / Supply	1	3	1	5
All other factors[3]	6	3	6	NA

[1] Several purchasers indicated that total cost was important to them, including the costs of transportation, logistics, etc. Purchaser *** noted that price was second most important factor, and logistics cost was third most important.
[2] Quality characteristics include meeting specifications, low customer rejection rates, ease of machinability, dimensional tolerances and accuracy, chemistry, product consistency, and surface finish.
[3] Other factors include availability, customer support, ease of business and logistics, long-term capacity and commitment, payment terms, product range, reliability, and traditional supplier relationships.

Note.--Some purchasers provided multiple responses for some rankings, so totals may not sum to the number of purchasers.

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

The majority of purchasers (16 of 31) reported that they only sometimes purchase the lowest-priced product. When asked if they purchased CDMT from one source although a comparable product was available at a lower price from another source, eight purchasers reported that they or their customers sometimes require domestic material. Purchaser *** reported a preference for German or Swiss CDMT if dimensional and chemical tolerances are not available domestically, and purchaser *** reported that it has a preference for nonsubject ***. Respondent TFI stated that purchasers may require domestic product for customer-mandated purchases of local raw materials, short-term increases in production volumes, or emergency situations (such as strikes, weather, fire, and shipping problems).[42]

Importance of specified purchase factors

Purchasers were asked to rate the importance of 15 factors in their purchasing decisions (table II-8). The factors rated as very important by at least half of responding purchasers were product consistency and quality meets industry standards (all 31 purchasers), reliability of supply and delivery time (29), availability (28), price (27), and technical support (17), and delivery terms (16).

[42] Respondent Salem Steel posthearing brief, p. 35.

Table II-8
CDMT: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Number of firms reporting		
	Very	Somewhat	Not
Availability	28	3	---
Delivery terms	16	13	2
Delivery time	29	2	---
Discounts offered	6	21	5
Extension of credit	6	15	10
Minimum quantity requirements	10	18	3
Packaging	8	18	5
Price	27	4	---
Product consistency	31	---	---
Product range	13	15	3
Quality meets industry standards	31	---	---
Quality exceeds industry standards	13	15	2
Reliability of supply	29	2	---
Technical support/service	17	12	2
U.S. transportation costs	13	17	1

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

Supplier certification

Twenty-five of 31 responding purchasers require their suppliers to become certified or qualified to sell CDMT to their firm. Purchasers reported that the time to qualify a new supplier ranged from 2 days to almost 2 years. Nine purchasers estimated that it takes between six months to one year to qualify a new supplier, and four purchasers estimated that qualification takes two weeks or less. Qualifications processes may include mill audits, engineering and validation tests, supplier questionnaires and self-assessments, or be ISO- or TS-certified.

Respondent Autoliv stated that it takes two to four years to qualify an airbag tubing supplier.[43] Petitioners estimated that it would take between *** weeks to develop and trial a product for airbag applications.[44] Respondent Salzgitter stated that the specification for the CDMT sold to *** took over *** years to qualify[45]

Four purchasers reported that foreign suppliers had failed in its attempt to qualify CDMT, or had lost its approved status since 2014. Four purchasers reported that Chinese or Indian mills had failed certification due to quality issues or an inability to meet customer specifications.[46]

[43] Hearing transcript, pp. 150, 202 (Hadfield).
[44] Petitioners' posthearing brief, Exh. 1, p. 31.
[45] Respondent Salzgitter's posthearing brief, p. 10.
[46] Purchaser *** did not certify Yichang Zhongnan Precision Steel Tube (China) and *** did not qualify Company Victoria (India).

In addition to the PPAP (see "Supply chain and sourcing issues"), automotive OEMs may require other tests of potential suppliers as well, including financial risk assessments and quality tests.[47]

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since 2014 (table II-9). A plurality of responding purchasers reported decreasing purchases of U.S.-produced CDMT due to lower import pricing, shifting production to facilities outside of the United States, and decreasing demand. Most responding purchasers reported decreasing purchases of Chinese produced CDMT due to localization issues, fewer sources, and decreasing demand. Most responding purchasers reported increasing purchases from India and Italy due to new suppliers, better pricing, higher quality from Italy, and increased size ranges from India. Purchaser responses were mixed regarding purchasing trends of CDMT from Germany, Korea, and Switzerland.

Table II-9
CDMT: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	3	10	7	7	3
China	13	8	3	---	2
Germany	14	3	2	4	3
India	16	---	7	---	3
Italy	19	---	5	1	3
Korea	15	3	3	1	4
Switzerland	23	1	1	---	---
All other sources	16	3	1	4	1
Sources unknown	22	---	1	1	1

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

Thirteen of 31 responding purchasers reported that they had changed suppliers since January 1, 2014. Specifically, firms dropped or reduced purchases from James Steel (U.S.), voestalpine (China/India/Korea), PTC Alliance (U.S.), Benteler Rothrist (China), Salzgitter Mannesmann (Germany), and Metalfer (Italy) because of poor service, problems meeting delivery schedules, poor quality, and high prices. Firms added or increased purchases from U.S. producers Chatham Steel, Michigan Seamless, Sharon Tube, and importers/foreign producers Salem (China/India), Scot Industries (China/Italy/Korea), Tenaris (Italy), Tube Fabrication (China), and MetalMatic, OPEO, Perfect Cut Off, Transmesa, and TMK because of availability, lead time, pricing, and strategic shifts. Purchaser *** reported that Marcegaglia (China) became a new supplier, and *** reported OPEO as a new supplier since 2014.

[47] Hearing transcript, p. 219 (Ball).

Importance of purchasing domestic product

Twenty-four of 31 purchasers reported that the vast majority of their purchases (at least 95 percent) were not required to be domestic. Five reported that domestic product was required by law (for 2 to 10 percent of their purchases), nine reported it was required by their customers (for 2 to 80 percent of their purchases), and four reported other preferences for domestic product citing other reasons, such as requiring DFARS compliant[48] product.

Respondent voestalpine stated that while it would prefer to buy domestically, there is insufficient service, and only immediate increases in supply situations and a need to "fill the pipeline as quickly as possible" would lead to purchasing domestic product.[49]

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing CDMT produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 15 factors (table II-10) for which they were asked to rate the importance.

Purchasers reported that U.S.-produced CDMT with German and Italian CDMT are comparable on most factors (including price), with the exception of delivery time.[50] Chinese, Indian, and Korean CDMT are comparable to U.S.-produced on most factors with the exceptions of delivery terms and delivery time for which domestically produced CDMT is superior, and price for which domestically produced CDMT is inferior (i.e., priced higher).[51] Three purchasers provided varying comparisons for Swiss product, but for the majority of factors, reported that U.S.-produced CDMT and Swiss CDMT are comparable.

[48] Defense Federal Acquisition Regulation Supplement ("DFARS") provides requirements for Department of Defense acquisitions and contracts.

[49] Hearing transcript, pp. 185, 187 (Ball).

[50] Equal numbers of purchasers (4 each) reported that price of Italian CDMT was comparable or inferior (i.e., priced higher).

[51] Additionally, purchasers most frequently reported that U.S.-produced CDMT is superior to Chinese and Indian CDMT in regards to technical support and superior to Indian product in availability and reliability of supply.

Table II-10
CDMT: Purchasers' comparisons between U.S.-produced and imported product

Factor	Number of firms reporting								
	United States vs. China			United States vs. Germany			United States vs. India		
	S	C	I	S	C	I	S	C	I
Availability*	8	9	---	3	7	1	7	3	2
Delivery terms*	9	6	2	3	7	1	7	3	2
Delivery time*	12	4	1	7	4	---	6	3	1
Discounts offered	3	11	1	2	8	1	3	7	2
Extension of credit	3	11	2	2	8	1	3	8	1
Minimum quantity requirements	4	12	1	3	8	---	3	8	1
Packaging	4	10	3	1	10	---	3	8	1
Price[1]*	2	1	14	3	5	3	4	1	7
Product consistency*	5	11	1	---	10	1	5	7	---
Product range	3	10	4	---	8	3	4	6	2
Quality meets industry standards*	4	12	1	---	11	---	2	10	---
Quality exceeds industry standards	4	11	2	---	10	1	5	7	---
Reliability of supply*	8	9	---	1	9	1	7	3	2
Technical support/service*	9	8	---	---	9	2	8	2	2
U.S. transportation costs[1]	4	9	2	3	7	1	3	7	2

Factor	Number of firms reporting								
	United States vs. Italy			United States vs. Korea			United States vs. Switzerland		
	S	C	I	S	C	I	S	C	I
Availability*	3	4	1	4	9	---	---	2	1
Delivery terms*	2	4	2	6	6	1	---	3	---
Delivery time*	4	3	1	8	5	---	1	2	---
Discounts offered	---	6	1	2	9	1	---	2	1
Extension of credit	---	6	2	2	10	---	---	3	---
Minimum quantity requirements	1	7	---	4	8	1	---	3	---
Packaging	---	6	2	1	11	1	---	3	---
Price[1]*	---	4	4	1	1	11	1	1	1
Product consistency*	---	5	3	2	11	---	---	1	1
Product range	---	5	3	1	11	1	---	2	1
Quality meets industry standards*	---	7	1	1	12	---	---	3	---
Quality exceeds industry standards	---	6	2	3	9	---	---	1	1
Reliability of supply*	2	4	2	5	7	1	---	2	---
Technical support/service*	1	5	2	6	7	---	---	1	1
U.S. transportation costs[1]	---	6	2	3	9	---	1	1	---

Table continued.

Table II-10--Continued
CDMT: Purchasers' comparisons between U.S.-produced and imported product

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

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

Table continued.

Table II-10--Continued
CDMT: Purchasers' comparisons between U.S.-produced and imported product

Factor	Number of firms reporting								
	China vs. nonsubject			Germany vs. India			Germany vs. Italy		
	S	C	I	S	C	I	S	C	I
Availability*	---	3	2	2	2	---	---	3	---
Delivery terms*	1	3	1	2	2	---	---	3	---
Delivery time*	---	4	1	2	2	---	---	3	---
Discounts offered	---	4	1	1	2	1	---	3	---
Extension of credit	1	3	1	1	3	---	---	3	---
Minimum quantity requirements	1	4	---	---	4	---	---	3	---
Packaging	---	5	---	2	2	---	---	3	---
Price[1]*	5	---	---	---	---	4	---	2	1
Product consistency*	---	3	2	3	1	---	---	3	---
Product range	---	4	1	2	2	---	1	2	---
Quality meets industry standards*	1	2	2	1	3	---	---	3	---
Quality exceeds industry standards	---	3	2	3	1	---	---	3	---
Reliability of supply*	---	3	2	2	2	---	---	3	---
Technical support/service*	1	2	2	3	1	---	---	3	---
U.S. transportation costs[1]	1	3	1	---	4	---	---	3	---

Factor	Number of firms reporting								
	Germany vs. Korea			Germany vs. Switzerland			Germany vs. nonsubject		
	S	C	I	S	C	I	S	C	I
Availability*	1	3	---	---	1	---	---	4	---
Delivery terms*	---	4	---	---	1	---	---	4	---
Delivery time*	---	3	1	---	1	---	---	4	---
Discounts offered	1	2	1	---	1	---	---	4	---
Extension of credit	1	3	---	---	1	---	---	4	---
Minimum quantity requirements	---	4	---	---	1	---	---	4	---
Packaging	1	3	---	---	1	---	---	4	---
Price[1]*	---	---	4	---	1	---	---	4	---
Product consistency*	3	1	---	---	1	---	---	4	---
Product range	2	2	---	---	1	---	---	4	---
Quality meets industry standards*	---	4	---	---	1	---	---	4	---
Quality exceeds industry standards	3	1	---	---	1	---	---	4	---
Reliability of supply*	3	1	---	---	1	---	---	4	---
Technical support/service*	3	1	---	---	1	---	---	4	---
U.S. transportation costs[1]	---	4	---	---	1	---	---	4	---

Table continued.

Table II-10--Continued
CDMT: Purchasers' comparisons between U.S.-produced and imported product

Factor	Number of firms reporting								
	India vs. Italy			India vs. Korea			India vs. Switzerland		
	S	C	I	S	C	I	S	C	I
Availability*	---	2	1	---	7	---	---	---	---
Delivery terms*	---	3	---	---	7	---	---	---	---
Delivery time*	---	3	---	---	5	2	---	---	---
Discounts offered	1	1	1	1	6	---	---	---	---
Extension of credit	---	2	1	---	7	---	---	---	---
Minimum quantity requirements	---	3	---	---	7	---	---	---	---
Packaging	---	3	---	---	7	---	---	---	---
Price[1]*	3	---	---	3	3	1	---	---	---
Product consistency*	---	1	2	---	5	2	---	---	---
Product range	---	3	---	1	6	---	---	---	---
Quality meets industry standards*	---	3	---	---	6	1	---	---	---
Quality exceeds industry standards	---	1	2	---	5	2	---	---	---
Reliability of supply*	---	2	1	---	6	1	---	---	---
Technical support/service*	---	2	1	---	6	1	---	---	---
U.S. transportation costs[1]	---	3	---	---	6	---	---	---	---

Factor	Number of firms reporting								
	India vs. nonsubject			Italy vs. Korea			Italy vs. Switzerland		
	S	C	I	S	C	I	S	C	I
Availability*	---	2	1	1	2	---	---	---	---
Delivery terms*	---	3	---	1	2	---	---	---	---
Delivery time*	---	3	---	1	2	---	---	---	---
Discounts offered	---	3	---	---	2	1	---	---	---
Extension of credit	---	2	1	1	2	---	---	---	---
Minimum quantity requirements	---	3	---	---	3	---	---	---	---
Packaging	---	3	---	---	3	---	---	---	---
Price[1]*	1	2	---	---	---	3	---	---	---
Product consistency*	---	1	2	1	2	---	---	---	---
Product range	---	3	---	---	2	1	---	---	---
Quality meets industry standards*	---	2	1	---	3	---	---	---	---
Quality exceeds industry standards	---	1	2	1	2	---	---	---	---
Reliability of supply*	---	1	2	---	3	---	---	---	---
Technical support/service*	---	1	2	1	2	---	---	---	---
U.S. transportation costs[1]	---	3	---	---	3	---	---	---	---

Table continued.

Table II-10--Continued
CDMT: Purchasers' comparisons between U.S.-produced and imported product

Factor	Number of firms reporting					
	Italy vs. nonsubject			Korea vs. Switzerland		
	S	C	I	S	C	I
Availability*	---	2	1	---	1	---
Delivery terms*	---	3	---	---	1	---
Delivery time*	1	2	---	---	1	---
Discounts offered	---	3	---	---	1	---
Extension of credit	---	3	---	---	1	---
Minimum quantity requirements	---	3	---	---	1	---
Packaging	---	3	---	---	1	---
Price[1]*	1	2	---	---	1	---
Product consistency*	1	2	---	---	1	---
Product range	---	1	2	---	1	---
Quality meets industry standards*	---	3	---	---	1	---
Quality exceeds industry standards	---	3	---	---	1	---
Reliability of supply*	---	3	---	---	1	---
Technical support/service*	1	2	---	---	1	---
U.S. transportation costs[1]	1	2	---	---	1	---

Factor	Number of firms reporting					
	Korea vs. nonsubject			Switzerland vs. nonsubject		
	S	C	I	S	C	I
Availability*	---	4	---	---	---	---
Delivery terms*	---	4	---	---	---	---
Delivery time*	---	4	---	---	---	---
Discounts offered	---	4	---	---	---	---
Extension of credit	---	3	1	---	---	---
Minimum quantity requirements	---	4	---	---	---	---
Packaging	1	4	---	---	---	---
Price[1]*	1	3	---	---	---	---
Product consistency*	---	4	---	---	---	---
Product range	1	3	---	---	---	---
Quality meets industry standards*	---	4	---	---	---	---
Quality exceeds industry standards	---	4	---	---	---	---
Reliability of supply*	---	4	---	---	---	---
Technical support/service*	---	3	1	---	---	---
U.S. transportation costs[1]	1	3	---	---	---	---

* This factor was ranked very important in purchasing decisions (see table II-8).

[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 CDMT

To determine whether U.S.-produced CDMT can generally be used in the same applications as imports from China, Germany, India, Italy, Korea, or Switzerland, 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-11, most U.S. producers reported that CDMT is always interchangeable, regardless of source. Importers most frequently reported that domestically produced CDMT is frequently interchangeable with CDMT from China, India, Italy, and Korea,[52] but only sometimes interchangeable with CDMT from Germany and Switzerland. Purchasers most frequently reported that domestically produced CDMT is always or frequently interchangeable with CDMT from all subject countries except Switzerland, which produces CDMT that is sometimes interchangeable with U.S.-produced CDMT.

Importers *** indicated that German and Swiss producers have technologies and processes that allow them to produce CDMT with higher mechanical properties and/or tighter tolerances. *** reported that U.S. producers are able to uphold critical delivery times over German producers. Purchaser *** reported that tubing from Germany and nonsubject sources Romania and Japan is developed for specific applications, requiring extensive validation testing, and is purchased through long-term single source contracts, thereby limiting interchangeability. Other factors affecting interchangeability that were reported by importers during the preliminary phase of the investigations included availability, quality, and steel grade differences, size differences, and specification differences.[53] Respondents stated that in the automotive sector, while something may be theoretically interchangeable, PPAP and the long qualification times make switching between products difficult.[54]

[52] Equal numbers of purchasers reported that Korean CDMT is always or frequently interchangeable with U.S.-produced CDMT.

[53] Importer *** reported that nonsubject Japanese CDMT is produced under JIS specifications rather than the specifications in the United States. U.S. importer questionnaire, III-18.

[54] Hearing transcript, pp. 210, 220 (Vander Schaaf, Caplea).

Table II-11
CDMT: Interchangeability between CDMT produced in the United States and in other countries, by country pair

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. China	6	1	---	---	5	12	7	1	7	8	2	---
United States vs. Germany	6	1	---	---	5	5	9	3	4	5	4	---
United States vs. India	6	1	---	---	5	8	7	---	4	6	3	---
United States vs. Italy	6	1	---	---	4	8	5	2	4	4	1	1
United States vs. Korea	6	1	---	---	6	8	6	1	5	8	---	---
United States vs. Switzerland	6	1	---	---	3	2	6	---	---	1	3	---
China vs. Germany	6	1	---	---	4	1	9	---	4	2	1	---
China vs. India	6	1	---	---	7	4	2	---	4	3	1	---
China vs. Italy	6	1	---	---	4	3	6	---	3	3	1	---
China vs. Korea	6	1	---	---	4	9	4	---	5	3	1	---
China vs. Switzerland	6	1	---	---	3	1	6	---	---	1	---	---
Germany vs. India	6	1	---	---	4	2	7	---	3	3	1	---
Germany vs. Italy	6	1	---	---	6	7	2	---	2	4	---	---
Germany vs. Korea	6	1	---	---	4	4	5	---	4	3	---	---
Germany vs. Switzerland	6	1	---	---	5	4	2	---	---	2	1	---
India vs. Italy	6	1	---	---	5	3	4	---	2	3	1	---
India vs. Korea	6	1	---	---	6	4	3	---	4	3	1	---
India vs. Switzerland	6	1	---	---	3	1	6	---	---	1	---	---
Italy vs. Korea	6	1	---	---	5	2	4	---	2	3	---	---
Italy vs. Switzerland	6	1	---	---	4	4	3	1	---	1	---	---
Korea vs. Switzerland	6	1	---	---	3	3	3	---	---	1	---	---
United States vs. Other	6	1	---	---	4	5	4	1	1	1	4	---
China vs. Other	6	1	---	---	3	4	3	---	1	1	2	---
Germany vs. Other	6	1	---	---	3	3	5	---	1	1	4	---
India vs. Other	6	1	---	---	4	3	2	---	1	2	1	---
Italy vs. Other	6	1	---	---	4	2	3	---	1	1	2	---
Korea vs. Other	6	1	---	---	4	4	4	---	1	2	1	---
Switzerland vs. Other	6	1	---	---	3	2	4	---	---	1	---	---

Note.--A=Always, F=Frequently, S=Sometimes, N=Never.

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

Petitioners stated that both U.S. and foreign producers manufacture CDMT to the same industry standards and specifications such as the STN or the EN specifications.[55] Petitioners also stated that the raw material ("feedstock") determines the grade of CDMT, so if a grade is currently not available, U.S. producers could simply change their sourcing of feedstock.[56]

[55] Conference transcript, p. 33 (Hart).

[56] Conference transcript, p. 89 (Hart) and 90-91 (Vore). Respondent voestalpine stated that its customers will not allow a change in the supply base, and the material is not available in the United States. Conference transcript, p. 125 (Ball).

Most responding purchasers reported that domestically produced product always met minimum quality specifications (table II-12). Similarly purchasers most frequently reported that CDMT from all subject countries (with the exception of China) and nonsubject sources always met minimum quality specifications. Purchasers most frequently reported that Chinese CDMT usually met minimum quality specifications. Three purchasers, however, reported that Indian CDMT only sometimes or never met minimum quality specifications and one purchaser each reported that CDMT from the United States and from China only sometimes met minimum quality specifications.

Table II-12
CDMT: Ability to meet minimum quality specifications, by source[1]

Source	Always	Usually	Sometimes	Rarely or never
United States	16	12	1	---
China	7	8	1	---
Germany	11	2	---	---
India	6	3	2	1
Italy	6	3	---	---
Korea	7	5	---	---
Switzerland	2	1	---	---
Other	6	5	---	---

[1] Purchasers were asked how often domestically produced or imported CDMT meets minimum quality specifications for their own or their customers' uses.

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

In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of CDMT from the United States, subject, or nonsubject countries. As seen in table II-13, most U.S. producers reported that differences other than price were never significant for any country pair. Importers and purchasers most frequently reported that differences between U.S.-produced CDMT and CDMT produced in Germany and Switzerland were frequently significant, differences between U.S.-produced CDMT and Chinese, Indian, and Italian CDMT were frequently or sometimes significant, and differences between U.S.-produced and Korean CDMT were sometimes significant.

Importer *** reported that U.S. producers have not been able to meet its specifications for ***.[57] [58] Importer *** reported that there are significant differences between U.S.-

[57] Respondent Autoliv stated that there is no substitute for its airbag tubing due to proprietary safety specifications. It reported that its airbag tubing must be able to produce pressure vessels that meet the Department of Transportation's requirements for safety components in the automotive market. Autoliv's prehearing brief, pp. 3 and 5.

[58] Petitioners stated that the difficult CDMT products, such as airbag tubing, require "a serious commitment from both the producer and customer" and because of low subject import pricing, "purchasers have no incentive to work with" U.S. producers, although U.S. producers had produced airbag tubing in the past. Petitioners' prehearing brief, p. 17; Hearing transcript, pp. 28, 71 (Van Pelt and Hart). Respondent Autoliv stated that *** and that ***. Autoliv's prehearing brief, p. 6.

produced CDMT and German and Italian CDMT in regards to quality, availability, and product range, since it requires a particular finish and temperature grade for the material that it is unable to source from U.S. producers.

Table II-13
CDMT: Significance of differences other than price between CDMT produced in the United States and in other countries, by country pair

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. China	---	1	1	5	5	6	8	3	4	6	4	2
United States vs. Germany	---	1	1	5	5	9	3	1	2	4	4	2
United States vs. India	---	1	1	5	2	5	7	3	2	4	5	1
United States vs. Italy	---	1	1	5	2	5	6	2	2	3	3	1
United States vs. Korea	---	1	1	5	2	5	6	1	2	3	4	3
United States vs. Switzerland	---	1	1	5	2	6	---	1	---	3	1	---
China vs. Germany	---	1	1	5	1	4	4	2	1	1	3	1
China vs. India	---	1	1	5	1	2	2	5	3	1	3	1
China vs. Italy	---	1	1	5	---	3	5	2	1	3	3	---
China vs. Korea	---	1	1	5	1	5	6	1	3	1	4	---
China vs. Switzerland	---	1	1	5	1	5	1	1	---	---	1	---
Germany vs. India	---	1	1	5	---	4	4	2	1	1	3	1
Germany vs. Italy	---	1	1	5	---	3	6	3	1	1	2	1
Germany vs. Korea	---	1	1	5	---	3	7	1	1	1	2	1
Germany vs. Switzerland	---	1	1	5	---	3	2	3	---	---	2	---
India vs. Italy	---	1	1	5	---	3	4	3	1	1	3	---
India vs. Korea	---	1	1	5	1	4	2	2	2	1	2	2
India vs. Switzerland	---	1	1	5	1	5	---	2	---	---	1	---
Italy vs. Korea	---	1	1	5	---	2	5	1	1	1	2	---
Italy vs. Switzerland	---	1	1	5	1	3	4	1	---	---	1	---
Korea vs. Switzerland	---	1	1	5	---	4	2	1	---	---	1	---
United States vs. Other	---	1	1	5	2	5	4	1	2	1	4	---
China vs. Other	---	1	1	5	---	4	5	1	1	2	2	---
Germany vs. Other	---	1	1	5	---	5	3	1	2	1	3	---
India vs. Other	---	1	1	5	---	4	2	1	1	1	2	1
Italy vs. Other	---	1	1	5	---	3	3	1	1	2	1	---
Korea vs. Other	---	1	1	5	---	4	4	1	1	1	2	---
Switzerland vs. Other	---	1	1	5	---	4	2	1	1	---	1	---

Note.--A = Always, F = Frequently, S = Sometimes, N = Never.

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

ELASTICITY ESTIMATES

This section discusses elasticity estimates; parties were encouraged to comment on these estimates, but did not provide suggestions for other estimates.

U.S. supply elasticity

The domestic supply elasticity[59] for CDMT measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of CDMT. 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 CDMT. Analysis of these factors above indicates that the U.S. industry has the ability to greatly increase or decrease shipments to the U.S. market; an estimate in the range of 5 to 8 is suggested.[60]

U.S. demand elasticity

The U.S. demand elasticity for CDMT measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of CDMT. This estimate depends on factors discussed above such as the existence, availability, and commercial viability of substitute products, as well as the component share of the CDMT in the production of any downstream products. Based on the available information, the aggregate demand for CDMT is likely to be moderately inelastic; a range of -0.5 to -0.8 is suggested.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[61] Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, 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 CDMT and imported CDMT is likely to be in the range of 3 to 5.

---

[59] A supply function is not defined in the case of a non-competitive market.

[60] Respondent Salem Steel echoed these estimates. Hearing transcript, p. 140 (Saran).

[61] 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. PRODUCERS' 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 eight firms that accounted for the vast majority of U.S. production of CDMT during 2016.[1]

U.S. PRODUCERS

The Commission issued a U.S. producer questionnaire to ten firms based on information contained in the petition and industry research. Eight firms provided usable data on their productive operations. Staff believes that these responses represent the vast majority of U.S. production of CDMT.

Table III-1 lists U.S. producers of CDMT, their production locations, positions on the petition, and shares of total production.

[1] An additional two firms are believed to produce CDMT in the United States, Tenneco and Metal Matic. Tenneco provided an incomplete questionnaire response. Tenneco reported production capacity of *** short tons and produced *** short tons of CDMT in 2016. Staff made repeated efforts to obtain Metal Matic's U.S. producer questionnaire response, but did not receive it at the time of report issuance. Petitioner estimates that Metal Matic has an annual capacity to produce *** short tons. Petition, p. 3 and exh GEN-5. Staff estimates that Metal Matic has the capacity to produce *** short tons of CDMT. This estimate is calculated from staff correspondence with ***, November 6, 2017; and total pipe and tube capacity (137,000 short tons) provided by Simdex.

Table III-1
CDMT: U.S. producers, their positions on the petition, production locations, and shares of reported production, 2016

Firm	Position on petition	Production location(s)	Share of reported production (percent)
ArcelorMittal	Support	Shelby, Ohio	***
MS Tube	Support	South Lyon, MI	***
Plymouth	***	Warrenville, IL	***
PTC Alliance	Support	Alliance, OH Darlington, PA Chicago Heights, IL Beaver Falls, PA Fairbury, IL	***
Seymour Tubing	***	Seymour, IN	***
Sharon Tube (Zekelman Industries)	Support	Farrell, PA Niles, OH	***
Timken	***	Canton, Ohio	***
Webco	Support	Sand Springs, OK Oil City, PA Reno, PA	***
Total			100.0

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

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms.

Table III-2
CDMT: U.S. producers' ownership, related and/or affiliated firms

* * * * * * *

As indicated in table III-2, two U.S. producers, ***, are related to nonsubject foreign producers of CDMT and no U.S. producers are related to U.S. importers of the subject merchandise. In addition, as discussed in greater detail below, two U.S. producers, Seymour and Webco, directly import CDMT ***. *** also purchases nonsubject CDMT from U.S. importers.

Table III-3 presents U.S. producers' reported changes in operations since January 1, 2014. Five of eight firms reported prolonged shutdowns or production curtailments during the period of investigation, while two firms reported expansions. ArcelorMittal, ***, reported a series of temporary layoffs in 2015 and 2016. ArcelorMittal also testified that it has been unable to gain a return on a capital project that was initiated in 2014 and completed in 2016, which it attributed to low-priced subject imports.[2]

[2] Conference transcript, pp. 23-24 (Vore).

Table III-3
CDMT: U.S. producers' reported changes in operations, since January 1, 2014

* * * * * * *

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

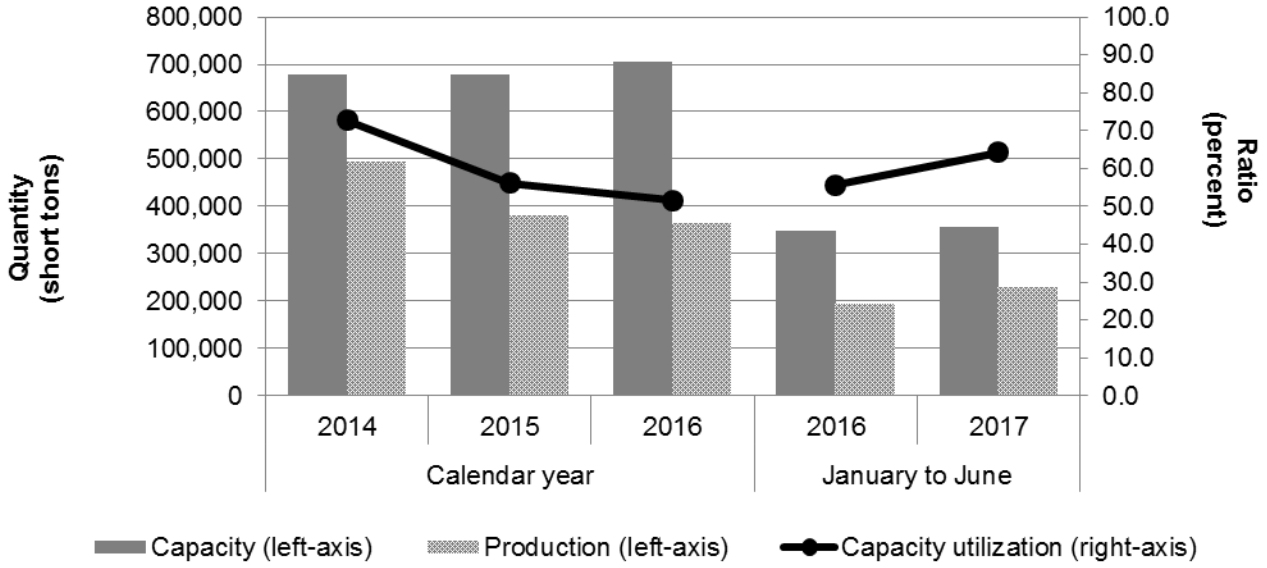
Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. Domestic producers' capacity increased by 4.2 percent from 2014 to 2016 while production decreased by 26.1 percent during the same period. Both capacity and production were higher in January-June 2017 than in January-June 2016, by 1.8 and 17.7 percent, respectively. Three producers reported increases in capacity, ***. Capacity utilization for the industry decreased during 2014-16, by 21.2 percentage points, but was 8.6 percentage points higher during January-June 2017 when compared to January-June 2016.

Table III-4
CDMT: U.S. producers' production, capacity, and capacity utilization, 2014-16, January-June 2016, and January-June 2017

Item	Calendar year			January-June	
	2014	2015	2016	2016	2017
	Capacity (short tons)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Total capacity	677,489	678,760	706,243	349,714	356,139
	Production (short tons)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Total production	493,139	380,954	364,210	194,314	228,660
	Capacity utilization (percent)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average capacity utilization	72.8	56.1	51.6	55.6	64.2

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

Figure III-1
CDMT: U.S. producers' production, capacity, and capacity utilization, 2014-16, January-June 2016, and January-June 2017



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

All eight responding U.S. producers reported constraints in the manufacturing process. Production constraints include capacity and maintenance of cold-drawing, hot mill, annealing, and finishing equipment, as well as product mix and employee turnover.

Alternative products

As shown in table III-5, *** percent to *** percent of the product produced during 2014-16 by U.S. producers was in-scope product. Production of alternative products was slightly higher in January-June 2017 than in January-June 2016. Three firms, ***, reported producing other products on the same equipment. These products included ***.

Table III-5
CDMT: U.S. producers' overall plant capacity and production on the same equipment as in-scope production, 2014-16, January-June 2016, and January-June 2017

* * * * * * *

U.S. PRODUCERS' U.S. SHIPMENTS AND EXPORTS

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. The quantity and value of U.S. producers' U.S. shipments decreased in every year, and decreased overall by 26.3 percent and 35.0 percent, respectively, between 2014 and 2016. The quantity and value of U.S. producers' U.S. shipments were 13.1 percent and 24.3 percent higher, respectively, in January-June 2017 when compared to January-June 2016. The unit values of U.S. shipments decreased by 11.7 percent between 2014 and 2016 and were 9.8 percent higher during January-June 2017 when compared to January-June 2016. U.S. producers' U.S. shipments accounted for the large majority of total shipments (85.8 percent based on quantity in 2016). Seven of eight responding firms reported exports, which increased overall by 3.9 percent based on quantity during 2014-16 and were 33.5 percent higher in January-June 2017 than in January-June 2016. *** accounted for the majority of overall internal consumption. *** described its internal consumption as "material processed further in our fabrication division to produce different products that are sold into the market that are not classified as cold drawn mechanical tubing."[3]

[3] Email correspondence with ***, May 9, 2017.

Table III-6
CDMT: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2014-16, January-June 2016, and January-June 2017

Item	Calendar year			January-June	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	432,553	355,924	318,636	168,631	190,776
Export shipments	50,724	51,422	52,714	25,710	34,322
Total shipments	483,277	407,346	371,350	194,341	225,098
	Value (1,000 dollars)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	816,211	630,059	530,805	270,962	336,714
Export shipments	93,968	91,265	90,077	40,814	62,114
Total shipments	910,179	721,324	620,882	311,776	398,828
	Unit value (dollars per short ton)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	1,887	1,770	1,666	1,607	1,765
Export shipments	1,853	1,775	1,709	1,587	1,810
Total shipments	1,883	1,771	1,672	1,604	1,772
	Share of quantity (percent)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	89.5	87.4	85.8	86.8	84.8
Export shipments	10.5	12.6	14.2	13.2	15.2
Total shipments	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
Commercial U.S. shipments	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
U.S. shipments	89.7	87.3	85.5	86.9	84.4
Export shipments	10.3	12.7	14.5	13.1	15.6
Total shipments	100.0	100.0	100.0	100.0	100.0

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

Table III-7 and figure III-2 present U.S. producers' U.S. shipments by product type. The large majority of U.S. producers' U.S. shipments were made from carbon welded inputs (*** percent based on quantity in 2016).

Table III-7
CDMT: U.S. producers' U.S. shipments by product type, 2014-16, January-June 2016, and January-June 2017

* * * * * * *

Figure III-2
CDMT: U.S. producers' U.S. shipments by product type, 2016

* * * * * * *

U.S. PRODUCERS' INVENTORIES

Table III-8 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments**.** The domestic industry's inventories of CDMT decreased by 46.2 percent during 2014-16 and were 10.2 percent higher in January-June 2017 than in January-June 2016. *** accounted for *** percent of ending inventories during each period examined. The ratio of inventories to U.S. production and U.S. shipments decreased between 2014 and 2016 and were lower in January-June 2017 than in January-June 2016.

Table III-8
CDMT: U.S. producers' inventories, 2014-16, January-June 2016, and January-June 2017

Item	Calendar year			January-June	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
U.S. producers' end-of-period inventories	72,631	46,239	39,098	42,017	46,306
	Ratio (percent)				
Ratio of inventories to.--					
U.S. production	14.7	12.1	10.7	10.8	10.1
U.S. shipments	16.8	13.0	12.3	12.5	12.1
Total shipments	15.0	11.4	10.5	10.8	10.3

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

U.S. PRODUCERS' IMPORTS AND PURCHASES

No U.S. producer directly imported subject merchandise. Two U.S. producers, Seymour and Webco, imported *** during the period for which data were collected. ***. *** also purchased nonsubject CDMT from U.S. importers (***). *** reports insufficient capacity as its reason for importing, while *** reports that its purchases were for outside diameter ("OD") and/or wall combinations they do not produce domestically but needed to compliment the AMS-T-6736 market.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-9 shows U.S. producers' employment-related data. During 2014-16, all employment-related indicators decreased overall between 2014 and 2016 with the exception of unit labor costs and hours worked per production and related worker ("PRW"). In addition, all employment-related indicators with the exception of unit labor costs were higher in January-June 2017 when compared to January-June 2016. The number of PRWs decreased by 10.9 percent during 2014-16 and was 1.5 percent higher in January-June 2017 than in January-June 2016. Hours worked and wages paid similarly decreased during 2014-16, by 9.2 percent and 13.8 percent, respectively, and were higher in January-June 2017 than in January-June 2016, by 10.2 percent and 15.7 percent, respectively. Conversely, hours worked per PRW increased by 1.9 percent between 2014 and 2016, while unit labor costs increased by 16.7 percent during the same period. Hours worked per PRW and unit labor costs were 8.6 percent higher and 1.7 percent lower in January-June 2017 than in January-June 2016, respectively.

Table III-9
CDMT: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2014-16, January-June 2016, and January-June 2017

Item	Calendar year			January-June	
	2014	2015	2016	2016	2017
Production and related workers (PRWs) (number)	2,022	1,931	1,802	1,812	1,840
Total hours worked (1,000 hours)	4,098	3,785	3,722	1,858	2,048
Hours worked per PRW (hours)	2,027	1,960	2,065	1,025	1,113
Wages paid ($1,000)	113,670	100,679	97,978	48,921	56,589
Hourly wages (dollars per hour)	$27.74	$26.60	$26.32	$26.33	$27.63
Productivity (short tons per 1,000 hours)	120.3	100.6	97.9	104.6	111.7
Unit labor costs (dollars per short tons)	$230.50	$264.28	$269.02	$251.76	$247.48

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

PART IV: U.S. IMPORTS, APPARENT U.S. CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

The Commission issued importer questionnaires to 228 firms believed to be importers of subject CDMT, as well as to all known U.S. producers of CDMT.[1] [2] Usable questionnaire responses were received from 50 companies, representing *** percent of total U.S. imports and *** percent of total subject imports during 2016.

Firms responding to the Commission's questionnaire accounted for the following shares of individual subject country's imports (as a share of adjusted import statistics, by quantity) during 2016.

- *** percent of subject imports from China;
- *** percent of subject imports from Germany;
- *** percent of subject imports from India;
- *** percent of subject imports from Italy;
- *** percent of subject imports from Korea; and
- *** percent of subject imports from Switzerland

Unless otherwise specified, U.S. imports are based on data submitted in response to Commission questionnaires, with additional data included from proprietary Customs records. The Customs supplement adds in U.S. imports reported under the primary HTS numbers for those firms that did not provide a questionnaire response (i.e., excluding firms that either

[1] The Commission issued questionnaires to those firms identified in the petition, along with firms identified by data provided by U.S. Customs and Border Protection ("Customs") under HTS statistical reporting numbers 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, 7306.50.5030, 7306.30.1000 and 7306.50.1000. The vast majority of subject merchandise is imported under eight HTS statistical reporting numbers ("Primary HTS numbers"): 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, 7306.50.5030. However, subject product could enter under other HTS statistical reporting numbers. The Commission's U.S. importers' questionnaire gathered data on the quantity of such imports. Questionnaire responses were designed to capture the total amount of CDMT imports regardless of how they were classified under the HTS for Customs purposes.

[2] Petitioners identified 320 possible importers of CDMT. Petition, exh. GEN-13. Staff identified 58 firms based on a review of proprietary Customs data believed to account for the majority of total U.S. imports of CDMT. Staff issued questionnaires to all importers identified through proprietary Customs data, to all importers that provided a questionnaire response during the preliminary phase of the investigations, as well as to all importers identified in the petition for which an email address was provided.

completed a questionnaire or certified that they were not an importer of CDMT since January 1, 2014).[3]

Table IV-1 lists all responding U.S. importers of CDMT from China, Germany, India, Italy, Korea, and Switzerland, and nonsubject sources, their locations, and their shares of U.S. imports, in 2016.

Table IV-1
CDMT: U.S. importers by source, 2016

Firm	Headquarters	Share of imports by source (percent)							
		China	Germany	India	Italy	Korea	Switzer-land	All other sources	All Sources
Aaris	Dayton, OH	***	***	***	***	***	***	***	***
Alcoa	Pittsburgh, PA	***	***	***	***	***	***	***	***
AM Castle	Oak Brook, IL	***	***	***	***	***	***	***	***
Angstrom	Taylor, MI	***	***	***	***	***	***	***	***
Autoliv	Ogden, UT	***	***	***	***	***	***	***	***
AVM	Marion, SC	***	***	***	***	***	***	***	***
Benteler	Houston, TX	***	***	***	***	***	***	***	***
Big Dutchman	Holland, MI	***	***	***	***	***	***	***	***
Borghi USA	West Burlington, IA	***	***	***	***	***	***	***	***
Bush Hog	Selma, AL	***	***	***	***	***	***	***	***
Commercial Fluid Power	Dover, OH	***	***	***	***	***	***	***	***
Comprinox	Petaluma, CA	***	***	***	***	***	***	***	***
Dadco	Plymouth, MI	***	***	***	***	***	***	***	***
Emerald	Houston, TX	***	***	***	***	***	***	***	***
Felss Rotaform	New Berlin, WI	***	***	***	***	***	***	***	***
Foley Tube	Bloomfield Hills, MI	***	***	***	***	***	***	***	***
Fortis Alliance	Houston, TX	***	***	***	***	***	***	***	***
GEO Dynamics	Millsap, TX	***	***	***	***	***	***	***	***
Golden Beam	Indianapolis, IN	***	***	***	***	***	***	***	***
Gullwing	Essex, MA	***	***	***	***	***	***	***	***
Karay	Woodstock, NY	***	***	***	***	***	***	***	***
Koch Heat	Houston, TX	***	***	***	***	***	***	***	***
Koide	Rockford, TN	***	***	***	***	***	***	***	***
Magneti	Pulaski, TN	***	***	***	***	***	***	***	***
Marimba	Belleville, MI	***	***	***	***	***	***	***	***
Metal One	Rosemont, IL	***	***	***	***	***	***	***	***
Metalfer	Roe` Volciano - Italy, IT	***	***	***	***	***	***	***	***
Mohawk	Houston, TX	***	***	***	***	***	***	***	***
MS Precision	Webberville, MI	***	***	***	***	***	***	***	***

Table continued on next page.

[3] "Responding firms" include the 50 firms which provided usable questionnaire responses and the 55 firms which provided certification that they have not imported CDMT into the U.S. since January 1, 2014.

Table IV-1--Continued
CDMT: U.S. importers by source, 2016

Firm	Headquarters	Share of imports by source (percent)							
		China	Germany	India	Italy	Korea	Switz-erland	All other sources	All Sources
Mubea	Florence, KY	***	***	***	***	***	***	***	***
National Tube	University Park, IL	***	***	***	***	***	***	***	***
Ovako	Fort Mill, SC	***	***	***	***	***	***	***	***
Primrose	Burlingame, CA	***	***	***	***	***	***	***	***
Salem	Paramus, NJ	***	***	***	***	***	***	***	***
Salzgitter Mannesmann	Houston, TX	***	***	***	***	***	***	***	***
Scot Industries	Lone Star, TX	***	***	***	***	***	***	***	***
Seymour	Seymour, IN	***	***	***	***	***	***	***	***
SourceCut	Osseo, WI	***	***	***	***	***	***	***	***
Spahr Metric	Winchester, VA	***	***	***	***	***	***	***	***
Sumitomo	Rosemont, IL	***	***	***	***	***	***	***	***
Ten Square	West Des Moines, IA	***	***	***	***	***	***	***	***
Tenaris	Houston, TX	***	***	***	***	***	***	***	***
The Federal Group	Southfield, MI	***	***	***	***	***	***	***	***
Toyota Tsusho	Georgetown, KY	***	***	***	***	***	***	***	***
Tube Fabrication Industries	Logansport, IN	***	***	***	***	***	***	***	***
Tubos Reunidos America	Houston, TX	***	***	***	***	***	***	***	***
Usui	Plymouth, MI	***	***	***	***	***	***	***	***
Voestalpine	Lafayette, IN	***	***	***	***	***	***	***	***
Webco	Sand Springs, OK	***	***	***	***	***	***	***	***
ZF Gainesville	Gainesville, GA	***	***	***	***	***	***	***	***
Coverage		***	***	***	***	***	***	***	***
All other firms	,	***	***	***	***	***	***	***	***
Total		***	***	***	***	***	***	***	***

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.
Note.—***.

Source: Compiled from data submitted in response to Commission questionnaires and proprietary Customs records using HTS statistical reporting numbers 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, and 7306.50.5030, accessed November 11, 2017.

U.S. IMPORTS

Tables IV-2 and IV-3 and figure IV-1 present data for U.S. imports of CDMT from China, Germany, India, Italy, Korea, and Switzerland and all other sources. During 2014-16, total U.S. imports decreased overall by 6.7 percent and 21.8 percent, based on quantity and value respectively. Total U.S. imports were higher in January-June 2017 than in January-June 2016, by 7.8 percent and 2.0 percent based on quantity and value, respectively. Similarly, the quantity and value of subject imports decreased by *** percent and *** percent, respectively, during 2014-16, and were *** percent and *** percent higher in partial year 2017 when compared to partial year 2016, respectively. Imports from subject countries, with the exception of India and Italy, decreased overall between 2014 and 2016.[4] Average unit values from subject sources decreased between 2014 and 2016, by *** percent, while average unit values from nonsubject sources increased during the same period, by *** percent. Average unit values from both subject and nonsubject sources were lower during January-June 2017 when compared to January-June 2016, by *** percent and *** percent, respectively. The ratio of subject imports to U.S. production increased during 2014-16, and subject imports were equivalent to *** percent of U.S. production in 2016. U.S. import trends since 2014 were affected by decreased demand in certain key sectors for which CDMT is used, such as agriculture, mining, and the oil and gas sectors.

[4] Petitioners contend that imported product from China consist mostly of hydraulic pressure cylinders, which are used in sectors that have experienced reduced demand during 2014-16, such as agriculture, construction, and mining. Conference transcript, pp. 51-52 (Hart).

Table IV-2
CDMT: U.S. imports by source, 2014-16, January-June 2016, and January-June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
U.S. imports from.--China	***	***	***	***	***
Germany	***	***	***	***	***
India	***	***	***	***	***
Italy	***	***	***	***	***
Korea	***	***	***	***	***
Switzerland	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	133,768	129,688	124,758	58,612	63,200
	Value (1,000 dollars)				
U.S. imports from.--China	***	***	***	***	***
Germany	***	***	***	***	***
India	***	***	***	***	***
Italy	***	***	***	***	***
Korea	***	***	***	***	***
Switzerland	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	294,395	260,344	230,140	110,724	112,942
	Unit value (dollars per short ton)				
U.S. imports from.--China	***	***	***	***	***
Germany	***	***	***	***	***
India	***	***	***	***	***
Italy	***	***	***	***	***
Korea	***	***	***	***	***
Switzerland	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	2,201	2,007	1,845	1,889	1,787

Table continued on next page.

Table IV-2--Continued
CDMT: U.S. imports by source, 2014-16, January-June 2016, and January-June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
	Share of quantity (percent)				
U.S. imports from.--					
China	***	***	***	***	***
Germany	***	***	***	***	***
India	***	***	***	***	***
Italy	***	***	***	***	***
Korea	***	***	***	***	***
Switzerland	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.--					
China	***	***	***	***	***
Germany	***	***	***	***	***
India	***	***	***	***	***
Italy	***	***	***	***	***
Korea	***	***	***	***	***
Switzerland	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	100.0	100.0	100.0	100.0	100.0
	Ratio to U.S. production				
U.S. imports from.--					
China	***	***	***	***	***
Germany	***	***	***	***	***
India	***	***	***	***	***
Italy	***	***	***	***	***
Korea	***	***	***	***	***
Switzerland	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	27.1	34.0	34.3	30.2	27.6

Source: Compiled from data submitted in response to Commission questionnaires with a supplement for nonresponding U.S. importers from proprietary Customs records using HTS statistical reporting numbers 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, and 7306.50.5030, accessed November 11, 2017.

Figure IV-1
CDMT: U.S. import volumes and average unit values, 2014-16, January-June 2016, and January-June 2017

* * * * * * *

The leading nonsubject sources of imports, as presented in table IV-3, were Japan and Romania, accounting for *** percent and *** percent of nonsubject imports by quantity in 2016, respectively. As a share of total imports, Japan and Romania accounted for *** percent and *** percent in 2016, respectively.

Table IV-3
CDMT: Nonsubject U.S. imports, by source, 2014-16, January-June 2016, and January-June 2017

* * * * * * *

Table IV-4 and figure IV-2 present U.S. importers' U.S. shipments by product type during the period examined. The majority of U.S. importers' U.S. shipments of CDMT from India, Italy, Korea, and Switzerland were made from carbon welded inputs, while the majority of U.S. importers' U.S. shipments of CDMT from China were made from carbon seamless inputs. The majority of U.S. importers' U.S. shipments of CDMT from Germany were made from alloy welded inputs. Overall, *** percent of importers' U.S. shipments of CDMT from subject sources were made from carbon welded inputs, while importers' U.S. shipments of CDMT from nonsubject sources were made from carbon seamless inputs (*** percent).

Table IV-4
CDMT: U.S. importers' U.S. shipments by product type, 2014-16, January-June 2016, and January-June 2017

* * * * * * *

Figure IV-2
CDMT: U.S. importers' U.S. shipments by product type, 2016

* * * * * * *

CRITICAL CIRCUMSTANCES

On December 11, 2017, Commerce issued its final CVD determination that "critical circumstances" do not exist for individually-examined respondents Jiangsu Hongyi Steel Pipe Co., Ltd. ("Hongyi") and Zhangjiagang Huacheng Import & Export Co., Ltd. ("Huacheng I&E"), but that critical circumstances do exist with regard to imports from China of CDMT for non-individually examined companies receiving the "all others" rate.[5]

On November 22, 2017, Commerce issued its preliminary AD determination that "critical circumstances" exist with regard to imports from China of CDMT from Hongyi, the producers/exporters receiving a separate rate, and the China-wide entity, but not with respect to Huacheng I&E. Commerce also preliminarily determined that "critical circumstances" exist with regard to imports from Italy of CDMT from Dalmine S.p.A. and Metalfer S.p.A., but not with respect to all other producers/exporters in Italy. Commerce also preliminarily found that "critical circumstances" exist with respect to Sang Shin Ind. Co., Ltd., but not with respect to Yulchon Co., Ltd. or all other producers/exporters in Korea.[6] In this investigation, if both Commerce and the Commission make affirmative final critical circumstances determinations, certain subject imports may be subject to antidumping duties retroactive by 90 days from the effective date of Commerce's preliminary affirmative LTFV determination.

Tables IV-5 to IV-8 and figures IV-3 to IV-6 present these data.[7]

---

[5] *Countervailing Duty Investigation of Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the People's Republic of China: Final Affirmative Determination, and Final Affirmative Determination of Critical Circumstances, in Part*, 82 FR 58175, December 11, 2017.

[6] *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the People's Republic of China: Preliminary Affirmative Determination of Sales at Less-Than-Fair Value and Preliminary Affirmative Determination of Critical Circumstances, in Part, and Postponement of Final Determination,* 82 FR 55574, November 22, 2017; *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From Italy: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, in Part, Postponement of Final Determination, and Extension of Provisional Measures*, 82 FR 55561, November 22, 2017; and *Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the Republic of Korea: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, in Part, Postponement of Final Determination, and Extension of Provisional Measures*, 82 FR 55564, November 22, 2017. When petitioners file timely allegations of critical circumstances, Commerce examines whether there is a reasonable basis to believe or suspect that (1) either there is a history of dumping and material injury by reason of dumped imports in the United States or elsewhere of the subject merchandise, or the person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the subject merchandise at LTFV and that there was likely to be material injury by reason of such sales; and (2) there have been massive imports of the subject merchandise over a relatively short period.

[7] Commerce did not align its final countervailing duty determinations with its final antidumping duty determinations. Given the compressed schedule for this proceeding, certain data are unavailable as of the issue date of the Commission's staff report.

Table IV-5

CDMT: U.S. importers' U.S. imports from China subject to Commerce's final CVD critical circumstance findings, November 2016 through October 2017

* * * * * * *

Figure IV-3

CDMT: U.S. importers' U.S. imports from China subject to Commerce's final CVD critical circumstance findings, November 2016 through October 2017

* * * * * * *

Table IV-6

CDMT: U.S. importers' U.S. imports from China subject to Commerce's preliminary AD critical circumstance findings, November 2016 through October 2017

* * * * * * *

Figure IV-4

CDMT: U.S. importers' U.S. imports from China subject to Commerce's preliminary AD critical circumstance findings, November 2016 through October 2017

* * * * * * *

Table IV-7

CDMT: U.S. importers' U.S. imports from Italy subject to Commerce's preliminary AD critical circumstance findings, November 2016 through October 2017

* * * * * * *

Figure IV-5

CDMT: U.S. importers' U.S. imports from Italy subject to Commerce's preliminary AD critical circumstance findings, November 2016 through October 2017

* * * * * * *

Table IV-8

CDMT: U.S. importers' U.S. imports from Korea subject to Commerce's preliminary AD critical circumstance findings, November 2016 through October 2017

* * * * * * *

Figure IV-6

CDMT: U.S. importers' U.S. imports from Korea subject to Commerce's preliminary AD critical circumstance findings, November 2016 through October 2017

* * * * * * *

NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[8] Negligible imports are generally defined in the Act, 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.[9] [10] Table IV-9 presents the individual shares of total imports accounted by subject countries by quantity during the most recent 12-month period.

Table IV-9

CDMT: U.S. imports in the twelve-month period preceding the filing of the petition, April 2016 through March 2017

* * * * * * *

CUMULATION CONSIDERATIONS

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 market. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

[8] 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)).

[9] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

[10] Section 771 (24)(B) of the Act (19 U.S.C § 1677(24)(B)). India qualifies as a developing country and is eligible for the 4 percent and 9 percent negligibility thresholds in CVD investigations. 15 C.F.R. § 2013.1.

Fungibility

CDMT by sector

Figure IV-7 presents U.S. producers' and U.S. importers' U.S. shipments by sector. CDMT was sold in a variety of sectors, including agriculture, automotive, industrial machinery, and oil and gas. See part II for more information on fungibility regarding CDMT by sector.

Figure IV-7
CDMT: U.S. producers' and U.S. importers' commercial U.S. shipments by sector and by source, 2016

* * * * * * *

CDMT by type

The Commission collected data on U.S. producers' and U.S. importers' U.S. shipments by type of input, whether from carbon or alloy steel and whether from seamless or welded pipe, as presented in figure IV-8. The vast majority of CDMT sold by U.S. producers in the United States is made from carbon welded pipe (*** percent based on quantity in 2016). *** percent of U.S. importers' subject U.S. shipments were also from carbon welded pipe.

Figure IV-8
CDMT: U.S. producers' and U.S. importers' U.S. shipments by type and source, 2016

* * * * * * *

Presence in the market

CDMT produced in the United States was present in the market throughout the period for which data were collected. Table IV-10 and figures IV-9 and IV-10 present the current monthly data for U.S. subject and nonsubject imports of CDMT between January 2014 and September 2017. Based on official import statistics, subject U.S. imports of CDMT from China, Germany, India, Italy, Korea, and Switzerland were present in each month during January 2014-September 2017.

Table IV-10
CDMT: Monthly U.S. imports, January 2014-September 2017

Month	Year			
	2014	2015	2016	2017
	Quantity (short tons)			
U.S. imports: China.--				
January	2,813	2,660	2,013	2,032
February	2,602	1,801	2,087	1,710
March	1,785	2,508	1,471	1,977
April	2,360	2,465	1,547	2,309
May	2,781	2,393	1,672	2,862
June	2,573	2,774	1,679	3,485
July	2,281	2,508	1,975	3,483
August	2,739	2,946	1,961	4,329
September	2,181	1,962	2,410	1,651
October	2,454	1,542	2,252	
November	1,435	1,561	2,149	
December	2,669	1,749	2,049	
	Quantity (short tons)			
U.S. imports: Germany.--				
January	1,405	1,915	1,208	2,448
February	653	1,321	1,397	2,276
March	764	2,092	1,304	1,620
April	903	1,799	1,364	2,572
May	907	1,314	2,360	2,404
June	607	1,709	1,458	1,983
July	1,050	2,009	1,586	2,131
August	1,102	2,068	2,433	2,499
September	1,311	2,126	1,986	2,111
October	1,732	1,967	1,766	
November	1,581	2,038	2,711	
December	1,771	1,734	1,837	
	Quantity (short tons)			
U.S. imports: India.--				
January	1,565	2,071	1,198	2,832
February	1,777	2,051	1,106	2,590
March	2,578	2,517	1,126	2,511
April	1,669	2,593	1,564	2,176
May	1,797	1,881	2,031	2,945
June	2,011	1,849	2,546	3,411
July	2,076	1,516	2,570	3,507
August	2,082	1,274	2,672	1,653
September	2,033	1,485	2,711	2,633
October	2,321	1,300	2,314	
November	1,647	1,891	2,602	
December	1,794	1,252	2,560	

Table continued on next page.

Table IV-10--Continued
CDMT: Monthly U.S. imports, January 2014-September 2017

Month	Year			
	2014	2015	2016	2017
	Quantity (short tons)			
U.S. imports: Italy.--				
January	460	782	459	588
February	324	443	555	322
March	466	748	701	640
April	559	732	684	308
May	316	1,214	283	610
June	199	1,198	489	872
July	384	592	422	650
August	122	1,077	945	760
September	237	471	553	453
October	353	746	600	
November	676	625	709	
December	720	751	753	
	Quantity (short tons)			
U.S. imports: Korea.--				
January	858	646	865	850
February	600	845	896	785
March	742	935	1,074	1,005
April	1,019	957	935	1,134
May	1,012	664	1,005	1,244
June	1,146	983	978	935
July	979	1,102	756	1,097
August	987	1,059	954	1,246
September	889	810	975	990
October	941	805	888	
November	606	845	980	
December	432	1,028	794	
	Quantity (short tons)			
U.S. imports: Switzerland.--				
January	578	722	945	839
February	920	479	727	740
March	1,154	683	1,079	695
April	858	850	749	1,112
May	809	958	1,004	1,021
June	1,001	759	980	925
July	664	813	930	939
August	517	904	838	952
September	745	746	1,014	833
October	676	1,068	924	
November	893	994	933	
December	399	845	874	

Table continued on next page.

Table IV-10--Continued

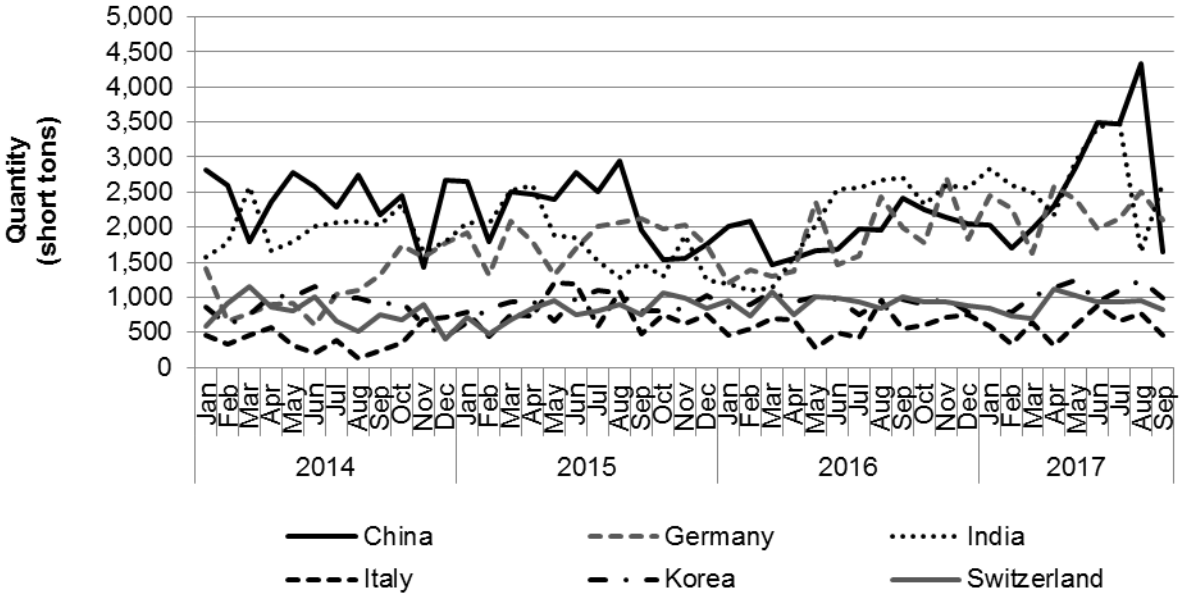
CDMT: Monthly U.S. imports, January 2014-September 2017

Month	Year			
	2014	2015	2016	2017
	Quantity (short tons)			
U.S. imports: Subject sources.--				
January	7,678	8,796	6,689	9,588
February	6,876	6,940	6,767	8,422
March	7,489	9,484	6,755	8,449
April	7,368	9,398	6,845	9,612
May	7,622	8,424	8,355	11,086
June	7,537	9,272	8,130	11,612
July	7,434	8,540	8,239	11,807
August	7,550	9,328	9,803	11,439
September	7,395	7,601	9,648	8,671
October	8,477	7,428	8,745	
November	6,838	7,954	10,085	
December	7,784	7,358	8,867	
	Quantity (short tons)			
U.S. imports: Nonsubject sources.--				
January	3,072	3,175	2,403	3,474
February	2,563	2,692	2,889	2,894
March	3,024	3,199	3,168	3,326
April	4,102	3,439	2,453	2,735
May	3,548	3,674	2,773	2,946
June	4,312	4,655	2,565	2,513
July	4,173	4,116	2,887	2,574
August	4,513	2,964	3,260	3,093
September	4,588	3,207	3,133	2,660
October	4,744	3,597	3,580	
November	3,163	2,890	3,612	
December	3,205	3,203	3,398	
	Quantity (short tons)			
U.S. imports: All import sources.--				
January	10,750	11,972	9,092	13,062
February	9,439	9,632	9,656	11,317
March	10,514	12,683	9,922	11,775
April	11,470	12,837	9,298	12,347
May	11,169	12,099	11,128	14,032
June	11,850	13,928	10,694	14,124
July	11,607	12,656	11,126	14,381
August	12,063	12,292	13,063	14,533
September	11,983	10,808	12,782	11,331
October	13,221	11,025	12,325	
November	10,001	10,844	13,697	
December	10,989	10,561	12,264	

Source: Official U.S. import statistics using HTS statistical reporting numbers 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, and 7306.50.5030, accessed November 11, 2017.

Figure IV-9

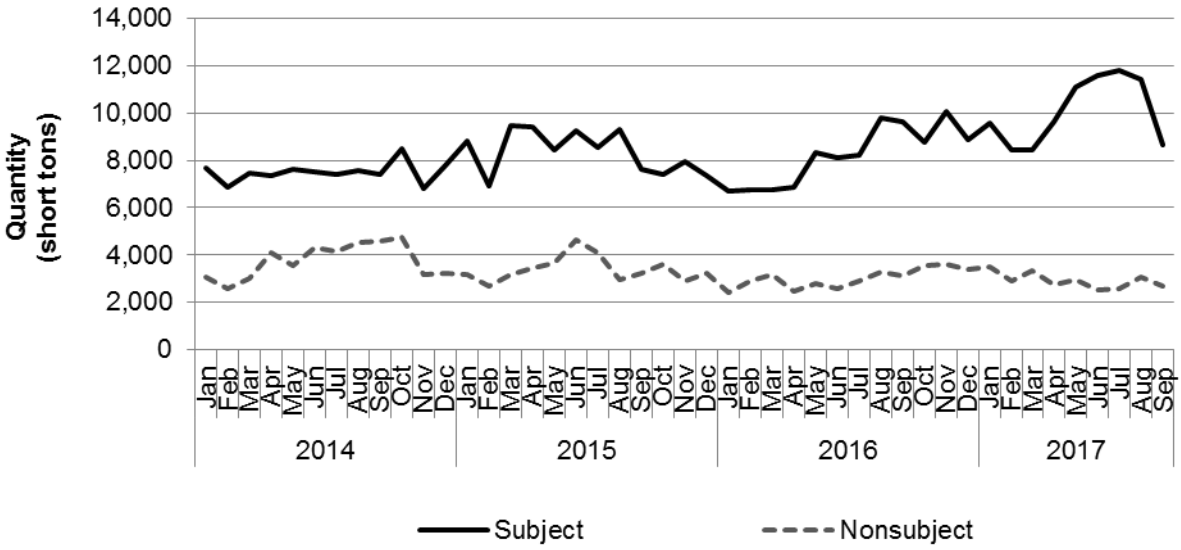
CDMT: Subject U.S. imports by source, January 2014-September 2017



Source: Official U.S. import statistics using HTS statistical reporting numbers 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, and 7306.50.5030, accessed November 11, 2017.

Figure IV-10

CDMT: U.S. imports by source, January 2014-September 2017



Source: Official U.S. import statistics using HTS statistical reporting numbers 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, and 7306.50.5030, accessed November 11, 2017.

Geographical markets

CDMT produced in the United States is shipped nationwide (see part II for more information on geographic markets). U.S. imports of subject merchandise from China, Germany, India, Italy, Korea, and Switzerland entered multiple U.S. ports of entry across the nation. Table IV-11 presents U.S. import quantities of CDMT, by source and border of entry in 2016, based on official import statistics. The majority of subject imports from China, Germany, and India entered via the North, while the majority of subject imports from Switzerland entered via Eastern customs districts. Subject imports from Italy and Korea were more evenly dispersed. The majority of subject imports from Italy entered via both Western and Northern customs districts (37.1 percent and 27.7 percent, respectively). The majority of subject imports from Korea entered via both Northern and Eastern customs districts (45.1 percent and 37.9 percent, respectively).

Table IV-11
CDMT: U.S. imports by border of entry, 2016

Item	Border of entry				
	East	North	South	West	Total
	Quantity (short tons)				
U.S. imports from.--					
China	5,154	15,689	1,704	2,350	24,897
Germany	5,370	15,207	2,265	529	23,371
India	2,625	19,967	504	2,032	25,128
Italy	1,387	2,128	1,316	2,853	7,684
Korea	4,530	5,391	1,044	981	11,947
Switzerland	9,768	2,073	3	---	11,843
Subject sources	28,834	60,456	6,836	8,745	104,870
Nonsubject sources	14,815	28,906	34,315	3,082	81,117
All import sources	43,649	89,361	41,151	11,827	185,987
	Share across (percent)				
U.S. imports from.--					
China	20.7	63.0	6.8	9.4	100.0
Germany	23.0	65.1	9.7	2.3	100.0
India	10.4	79.5	2.0	8.1	100.0
Italy	18.1	27.7	17.1	37.1	100.0
Korea	37.9	45.1	8.7	8.2	100.0
Switzerland	82.5	17.5	0.0	---	100.0
Subject sources	27.5	57.6	6.5	8.3	100.0
Nonsubject sources	18.3	35.6	42.3	3.8	100.0
All import sources	23.5	48.0	22.1	6.4	100.0
	Share down (percent)				
U.S. imports from.--					
China	11.8	17.6	4.1	19.9	13.4
Germany	12.3	17.0	5.5	4.5	12.6
India	6.0	22.3	1.2	17.2	13.5
Italy	3.2	2.4	3.2	24.1	4.1
Korea	10.4	6.0	2.5	8.3	6.4
Switzerland	22.4	2.3	0.0	---	6.4
Subject sources	66.1	67.7	16.6	73.9	56.4
Nonsubject sources	33.9	32.3	83.4	26.1	43.6
All import sources	100.0	100.0	100.0	100.0	100.0

Source: Official U.S. import statistics using HTS statistical reporting numbers 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, and 7306.50.5030, accessed November 11, 2017.

APPARENT U.S. CONSUMPTION AND MARKET SHARES

Table IV-12 presents data on apparent U.S. consumption for CDMT. Apparent consumption decreased by 20.3 percent and 30.5 percent from 2014 to 2016 based on quantity and value, respectively. Apparent U.S. consumption was higher in January-June 2017 when compared to January-June 2016, based on quantity and value.

Table IV-12
CDMT: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2014-16, January-June 2016, and January-June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
U.S. producers' U.S. shipments	432,553	355,924	318,636	168,631	190,776
U.S. importers' U.S. shipments[1] from.--China	***	***	***	***	***
Germany	***	***	***	***	***
India	***	***	***	***	***
Italy	***	***	***	***	***
Korea	***	***	***	***	***
Switzerland	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	126,020	117,999	126,453	58,982	64,582
Apparent U.S. consumption	558,573	473,923	445,089	227,613	255,358
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	816,211	630,059	530,805	270,962	336,714
U.S. importers' U.S. shipments[1] from.--China	***	***	***	***	***
Germany	***	***	***	***	***
India	***	***	***	***	***
Italy	***	***	***	***	***
Korea	***	***	***	***	***
Switzerland	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	297,697	260,724	243,638	121,982	126,678
Apparent U.S. consumption	1,113,908	890,783	774,443	392,944	463,392

Note.-- Apparent U.S. consumption was calculated by adding U.S. producers' U.S. shipments and U.S. importers' U.S. shipments (derived from questionnaire responses) as well as U.S. imports (derived from proprietary Customs data, using the primary HTS numbers for those companies that did not provide a questionnaire response.

Source: Compiled from data submitted in response to Commission questionnaires with a supplement for nonresponding U.S. importers from proprietary Customs records using HTS statistical reporting numbers 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, and 7306.50.5030, accessed November 11, 2017.

U.S. market share data are presented in table IV-13 and figure IV-11. The U.S. producers' market share decreased by 5.8 percentage points from 2014 to 2016 and was 0.6 percentage points higher in January-June 2017 than in January-June 2016. The market share held by subject imports increased by *** percentage points from 2014 to 2016, while the market share of nonsubject imports increased by *** percentage points during the same period. Subject import market share was *** percentage points higher in partial year 2017 than in partial year 2016, while nonsubject import market share was *** percentage points lower. Overall, U.S. importers' shipments of imports accounted for 28.4 percent of U.S. market share in 2016, while U.S. producers' U.S. shipments accounted for 71.6 percent.

Table IV-13

CDMT: Market shares, 2014-16, January-June 2016, and January-June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
Apparent U.S. consumption	558,573	473,923	445,089	227,613	255,358
	Share of quantity (percent)				
U.S. producers' U.S. shipments	77.4	75.1	71.6	74.1	74.7
U.S. importers' U.S. shipments from.--					
China	***	***	***	***	***
Germany	***	***	***	***	***
India	***	***	***	***	***
Italy	***	***	***	***	***
Korea	***	***	***	***	***
Switzerland	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	22.6	24.9	28.4	25.9	25.3
	Value (1,000 dollars)				
Apparent U.S. consumption	1,113,908	890,783	774,443	392,944	463,392
	Share of value (percent)				
U.S. producers' U.S. shipments	73.3	70.7	68.5	69.0	72.7
U.S. importers' U.S. shipments from.--					
China	***	***	***	***	***
Germany	***	***	***	***	***
India	***	***	***	***	***
Italy	***	***	***	***	***
Korea	***	***	***	***	***
Switzerland	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	26.7	29.3	31.5	31.0	27.3

Note.-- Apparent U.S. consumption was calculated by adding U.S. producers' U.S. shipments and U.S. importers' U.S. shipments (derived from questionnaire responses) as well as U.S. imports (derived from proprietary Customs data, using the primary HTS numbers for those companies that did not provide a questionnaire response.

Source: Compiled from data submitted in response to Commission questionnaires with a supplement for nonresponding U.S. importers from proprietary Customs records using HTS statistical reporting numbers 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, and 7306.50.5030, accessed November 11, 2017.

Figure IV-11

CDMT: Apparent U.S. consumption, 2014-16, January-June 2016, and January-June 2017

* * * * * * *

Tables IV-14 to IV-18 present apparent U.S. consumption by end use market sectors: agriculture, automotive, oil and gas, industrial, and other or unknown.

Table IV-14

CDMT: Apparent U.S. merchant market consumption by agriculture end uses, 2014-16, January to June 2016, and January to June 2017

* * * * * * *

Table IV-15

CDMT: Apparent U.S. merchant market consumption by automotive end uses, 2014-16, January to June 2016, and January to June 2017

* * * * * * *

Table IV-16

CDMT: Apparent U.S. merchant market consumption by industrial end uses, 2014-16, January to June 2016, and January to June 2017

* * * * * * *

Table IV-17

CDMT: Apparent U.S. merchant market consumption by oil and gas end uses, 2014-16, January to June 2016, and January to June 2017

* * * * * * *

Table IV-18

CDMT: Apparent U.S. merchant market consumption by other and unknown end uses, 2014-16, January to June 2016, and January to June 2017

* * * * * * *

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The feedstock for CDMT may be from a mother tube or redraw hollow, which is an unfinished carbon and alloy steel hollow profile, which could be an as-welded tube or a hot-finished seamless tube. These tubes are produced from hot-rolled steel sheet, bar, or billet.[1] [2] During January 2014-June 2017, hot-rolled steel prices fluctuated, first declining through the end of 2015, and increasing thereafter (figure V-1). U.S. producers use domestic and imported feedstock for production of CDMT.[3] U.S. producers reported that raw materials as a share of cost of goods sold decreased from 55.8 percent in 2014 to 48.1 percent in 2016. Six of eight U.S. producers and 15 of 42 responding importers[4] reported that raw material costs had fluctuated since 2014, citing primarily changes in steel and scrap metal prices as a major determinant.

Petitioners stated that raw material prices and prices for CDMT are directly correlated, and that the industry generally moves closely with the price of steel, scrap or alloy surcharges, or hot-rolled coil prices.[5]

Figure V-1
Hot-rolled coil: Hot-rolled coil prices, monthly, January 2014-June 2017

* * * * * * *

U.S. inland transportation costs

Most responding U.S. producers (5 of 7)[6] reported that their customers typically arrange transportation and importers (17 of 31) reported that they typically arrange for transportation.

---

[1] Conference transcript, p. 19 (Vore).

[2] Conference transcript, pp. 72 (Hart), and 175 (Saran). Respondent Salzgitter Mannesmann (Germany) stated that hot-rolled steel is the raw material used to produce welded tubes that are subsequently converted into CDMT. While Europe has historically been a producer of seamless tubes, U.S. producers of CDMT use mostly welded tubes as their raw material and are thus affected by price changes in hot-rolled steel. Respondent Salzgitter Mannesmann (Germany) postconference brief, p. 17 and prehearing brief, p. 21.

[3] Conference transcript, p. 72 (Hart).

[4] Thirteen importers reported that raw material prices had increased, twelve importers reported that prices had decreased, and three reported no change.

[5] Hearing transcript, p. 115 (Hart).

[6] U.S. producer *** reported that both it, and its customers, typically arrange transportation.

Most U.S. producers reported that their U.S. inland transportation costs ranged from 2 to 10 percent (averaging 5 percent) while most importers reported costs of 1 to 25 percent (averaging 7 percent).[7]

PRICING PRACTICES

Pricing methods

As presented in table V-1, U.S. producers and importers sell mainly through transaction-by-transaction negotiations or on a contractual basis. Some importers use set price lists and importer *** reported having customer-specific price lists for about 5 percent of its customers.

Table V-1
CDMT: U.S. producers' and importers' reported price setting methods, by number of responding firms

Method	U.S. producers	U.S. importers
Transaction-by-transaction	6	20
Contract	7	16
Set price list	---	6
Other	---	5
Responding firms	7	35

Note.-- The sum of responses shown may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

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

As shown in table V-2, the majority of U.S. commercial sales of U.S.-produced CDMT were made pursuant to annual contracts, while more than half of subject importers' sales were through spot sales. Subject importers reported that most of their contract sales were through long-term contracts. Short-term contracts with U.S. producers ranged from 60 to 91 days, while most short-term contracts with importers ranged from 60 to 280 days. *** reported offering long-term contracts for the duration of 3 years, while long-term contracts offered by importers ranged from 3 to 5 years.

Most U.S. producers reported that their contracts fix price and/or quantity and do not include meet-or-release provisions. Most responding producers and importers reported that their short-term contracts do not allow for price renegotiation, while at least half of responding producers and importers reported that their annual and long-term contracts do.

[7] Several importers reported 100 percent and were excluded from this calculation.

Table V-2
CDMT: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2016

* * * * * * *

Most purchasers (27 of 31) reported that their purchases usually involve negotiations. Two purchasers reported that they negotiate prices annually, and one reported that most of its pricing is negotiated in advance although certain orders may be negotiated separately due to significant quantities. Two purchasers reported a competitive bidding process in which competing prices are quoted, and three purchasers specifically reported that they do not quote competing prices during their negotiations.

Respondent Salzgitter stated that all of its sales of German CDMT to automotive applications are extensions of frame contracts that have been negotiated outside of the United States by the European parent companies of its automotive customers, and that for these sales do not compete on the open market. Rather, these frame contracts provide pricing for identical sales terms regardless of the shipment destination[8] Petitioners highlighted that *** of German imports are sold under frame contracts, and argued that these frame contracts do not differ fundamentally from other supplier agreements and are still driven by price.[9]

No responding U.S. producers or importers reported selling to U.S. purchasers under contracts that were negotiated outside of the United States. Purchaser ***.

Petitioners stated that for long-term contracts, pricing is generally tied to raw material price indices such as hot rolled steel for welded product, and scrap or alloy surcharges for seamless product.[10] Respondent voestalpine stated that it tracks raw material indices and has pricing agreements with both its domestic and foreign suppliers that link CDMT prices to raw material prices.[11]

[8] Hearing transcript, pp. 156-157 (Moore), and Respondent Salzgitter's prehearing brief, pp. 16 and 19, and posthering brief, p. 6.

[9] Petitioners' posthearing brief, Exh. 1, pp. 26, 28.

[10] Hearing transcript, p. 114 (Hart).

[11] voestalpine uses whichever index is most applicable to the marketplace and then takes exchange rates and conversion margins into account. Some pricing agreements are tied to quarterly indices, while others are tied to monthly indices. Hearing transcript, pp. 191, 194 (Ball), respondent Salem Steel posthearing brief, p. 38.

Sales terms and discounts

All responding U.S. producers and most importers (20 of 34)[12] typically quote prices on an f.o.b. basis. Most U.S. producers (5 of 8) reported offering quantity discounts and half of responding producers reported offering total volume discounts. U.S. producer *** reported that it offers quantity discounts based on *** ton increments and annual total volume discounts are negotiated on a customer-specific basis, and U.S. producer *** reported that its discounts do not apply to all products or customers. U.S. producer *** also reported offering early payment discounts. Most importers reported having no discount policy.[13] Importer *** reported annual pre-set price reductions with some customers for a set term and importer *** reported using weight bracket pricing or steel market based pricing.

Most U.S. producers (5 of 7) and importers (19 of 32) reported sales terms of net 30 days. Two U.S. producers and three importers reported variations of 1/10 net 30 sales terms. Other importers reported prepaid or progressive scheduled payments, sales terms of net 45 days, and customer-specific sales terms. Importer *** reported that its sales terms for subject imports from *** and for subject imports from ***, and importer *** reported a range of sales terms from net 30 to net 90 days.

Eleven purchasers reported that they purchase CDMT weekly, nine purchasers each reported that they purchase product daily, seven purchase monthly, and one purchases quarterly. Three purchasers reported purchasing CDMT as needed. Purchaser *** reported that it either purchases on a weekly or monthly basis, depending on the product. Twenty-four of 28 responding purchasers reported that their purchasing frequency had not changed since 2014. Most (25 of 29) purchasers contact one to five suppliers before making a purchase.

Price leadership

Purchasers reported that U.S. producers ArcelorMittal (11 purchasers), PTC Alliance (4), Webco (2), and Sharon Tube (2) and Michigan Seamless and MetalMatic (1 each) are price leaders. Some purchasers reported that importers Tenaris (2 purchasers), MarmonKeystone, Koide, and Benetler (1 each) were price leaders as well.

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 CDMT products shipped to unrelated U.S. customers during January 2014-June 2017.

---

[12] Three importers reported quote prices on both delivered or f.o.b. bases, depending on the customer.

[13] Four importers reported offering quantity discounts, three reported offering total volume discounts, and three reported other discounts.

Product 1.--ASTM A519 (or equivalent specification) Cold-Drawn Seamless Tube, Grade 1010-1026, outside diameter 5.000 inches, wall thickness 0.990 - 1.010 inch, length 17-24 feet, not honed, deburred ends.

Product 2.--ASTM A519 (or equivalent specification) Cold-Drawn Seamless Tube, Grade 1010-1026, outside diameter 4.500 inches, wall thickness 0.990 - 1.010 inch, length 17- 24 feet, not honed, deburred ends.

Product 3.--ASTM A513-5 (or equivalent specification) Cold-Drawn Over Mandrel Welded Tube, Grade 1010-1026, outside diameter 2.500 inches, wall thickness 0.240 - 0.260 inch, length 17 - 24 feet, not honed, deburred ends.

Product 4.--ASTM A513-5 (or equivalent specification) Cold-Drawn Over Mandrel Welded Tube, Grade 1010-1026, outside diameter 3.000 inches, wall thickness 0.178 - 0.198 inch, length 17 - 24 feet, not honed, deburred ends.

Product 5.--ASTM A513-5 (or equivalent specification) Cold-Drawn Over Mandrel Welded Tube, Grade ST52.3, outside diameter 3.750 inches, wall thickness 0.245 - 0.265 inch, length 17 - 24 feet, not honed, deburred ends.

Product 6.--ASTM A513-5 (or equivalent specification) Cold-Drawn Over Mandrel Welded Tube, Grade ST52.3, outside diameter 4.000 inches, wall thickness 0.245 - 0.265 inch, length 17 - 24 feet, not honed, deburred ends.

Product 7.-- ASTM A519 Cold Drawn Seamless Tube, Grade 4140/4142, outside diameter 8.000 inches, wall thickness 0.875 inch, length 17.35 feet and 21.68 feet, not honed, deburred ends.

Product 8.-- ASTM A519 Cold Drawn Seamless Tube, Grade 4140, outside diameter 9.625 inches, wall thickness 0.875 inch, length 218.25 inches, not honed, deburred ends.

Five U.S. producers[14] and 11 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[15] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' shipments of CDMT in, *** percent of CDMT imported from China, *** percent of CDMT imported from Germany,[16] *** percent of CDMT imported from India, and *** percent

[14] Respondent Tube Fabricators stated that prices for CDMT from U.S. producer Metal Matic (which did not submit a questionnaire) are substantially lower than prices for CDMT from the other U.S. producers. Hearing transcript, p. 168 (Ellis), Respondent Salem Steel prehearing brief, p. 4.

[15] 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.

[16] Importer *** reported purchase cost data for pricing products 1, 3, 4, and 6. These data were not included in the analysis as they were not commercial shipments to unrelated customers. Such data were not requested in the questionnaires. Petitioners contend that these data should be included. Petitioners' posthearing brief, pp. 11, 20.

of CDMT imported from Italy during January 2014-June 2017. No pricing data were provided for CDMT imported from Switzerland or from nonsubject sources. [17] [18]

Price data for products 1-8 are presented in tables V-3 to V-10 and figures V-2 to V-9. The Commission received pricing data for U.S.-produced CDMT for pricing products 1-6, but did not receive pricing data for pricing products 7 or 8. Data for subject imports were sporadic, often only covering one to four quarters of the 14 quarters of the investigation. Pricing data were reported for products 1, 2, 3, and 6 imported from China; for products 7 and 8 imported from Germany; for products 1-6 from India; and for products 3, 5, 6, and 7 from Italy.

Table V-3
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 1[1] and margins of underselling/(overselling), by quarters, January 2014 - June 2017

* * * * * * *

Table V-4
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 2[1] and margins of underselling/(overselling), by quarters, January 2014 - June 2017

* * * * * * *

[17] CDMT is produced in "thousands" of combinations of dimensional and grade options that limit the coverage of any particular pricing product. Petitioners' posthearing brief, Exh. 1, p. 18. Petitioners selected pricing products with a defined length of 17 to 24 feet because these are the standard length ranges that would be shipped by subject producers and domestic producers. Conference transcript, p. 65 (Luberda).

[18] During the preliminary phase of these investigations, importers *** reported pricing data for Japan. See staff emails to ***, November 9, 2017.

Importer *** reported that it had incorrectly reported data during the preliminary phase for a product that fell outside of the product definition. (See email from ***, November 9, 2017.)

Table V-5
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 3[1] and margins of underselling/(overselling), by quarters, January 2014 - June 2017

Period	United States		China			India		
	Price (dollars per short ton)	Quantity (short tons)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)
2014:								
Jan.-Mar.	1,626	431	--	0	--	***	***	***
Apr.-Jun.	1,548	331	--	0	--	***	***	***
Jul.-Sep.	1,656	299	--	0	--	***	***	***
Oct.-Dec.	1,586	281	--	0	--	***	***	***
2015:								
Jan.-Mar.	1,579	339	--	0	--	***	***	***
Apr.-Jun.	1,420	264	--	0	--	***	***	***
Jul.-Sep.	1,401	272	--	0	--	***	***	***
Oct.-Dec.	1,389	172	--	0	--	***	***	***
2016:								
Jan.-Mar.	1,261	240	--	0	--	***	***	***
Apr.-Jun.	1,295	359	--	0	--	***	***	***
Jul.-Sep.	1,512	244	***	***	***	1,440	58	4.8
Oct.-Dec.	1,537	172	--	0	--	***	***	***
2017:								
Jan.-Mar.	1,443	292	--	0	--	***	***	***
Apr.-Jun.	1,476	231	--	0	--	1,452	130	1.6

Table continued.

Table V-5--Continued
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 3[1] and margins of underselling/(overselling), by quarters, January 2014 - June 2017

Period	United States		Italy			Korea		
	Price (dollars per short ton)	Quantity (short tons)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)
2014:								
Jan.-Mar.	1,626	431	--	0	--	--	0	--
Apr.-Jun.	1,548	331	--	0	--	--	0	--
Jul.-Sep.	1,656	299	--	0	--	--	0	--
Oct.-Dec.	1,586	281	--	0	--	--	0	--
2015:								
Jan.-Mar.	1,579	339	--	0	--	--	0	--
Apr.-Jun.	1,420	264	***	***	***	--	0	--
Jul.-Sep.	1,401	272	***	***	***	--	0	--
Oct.-Dec.	1,389	172	***	***	***	--	0	--
2016:								
Jan.-Mar.	1,261	240	***	***	***	--	0	--
Apr.-Jun.	1,295	359	--	0	--	--	0	--
Jul.-Sep.	1,512	244	***	***	***	***	***	***
Oct.-Dec.	1,537	172	***	***	***	***	***	***
2017:								
Jan.-Mar.	1,443	292	--	0	--	--	0	--
Apr.-Jun.	1,476	231	--	0	--	--	0	--

[1] Product 3: ASTM A513-5 (or equivalent specification) Cold-Drawn Over Mandrel Welded Tube, Grade 1010-1026, outside diameter 2.500 inches, wall thickness 0.240 - 0.260 inch, length 17 - 24 feet, not honed, deburred ends.

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

Table V-6
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 4[1] and margins of underselling/(overselling), by quarters, January 2014 - June 2017

Period	United States		India			Korea		
	Price (dollars per short ton)	Quantity (short tons)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)
2014:								
Jan.-Mar.	1,674	90	***	***	***	--	0	--
Apr.-Jun.	1,625	106	***	***	***	--	0	--
Jul.-Sep.	***	***	***	***	***	--	0	--
Oct.-Dec.	1,763	30	***	***	***	--	0	--
2015:								
Jan.-Mar.	1,658	104	***	***	***	--	0	--
Apr.-Jun.	1,578	49	***	***	***	--	0	--
Jul.-Sep.	1,435	84	***	***	***	--	0	--
Oct.-Dec.	1,368	136	***	***	***	--	0	--
2016:								
Jan.-Mar.	1,246	145	***	***	***	--	0	--
Apr.-Jun.	1,315	178	***	***	***	--	0	--
Jul.-Sep.	1,581	105	***	***	***	***	***	***
Oct.-Dec.	1,454	74	***	***	***	--	0	--
2017:								
Jan.-Mar.	1,442	114	***	***	***	--	0	--
Apr.-Jun.	1,524	93	***	***	***	--	0	--

[1] Product 4: ASTM A513-5 (or equivalent specification) Cold-Drawn Over Mandrel Welded Tube, Grade 1010-1026, outside diameter 3.000 inches, wall thickness 0.178 - 0.198 inch, length 17 - 24 feet, not honed, deburred ends.

Note.-- Staff excluded data reported by importer *** for *** during Q1 2016 for an extremely small quantity.

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

Table V-7
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 5[1] and margins of underselling/(overselling), by quarters, January 2014 - June 2017

Period	United States		India			Italy		
	Price (dollars per short ton)	Quantity (short tons)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)
2014:								
Jan.-Mar.	1,655	266	--	0	--	***	***	***
Apr.-Jun.	1,516	318	--	0	--	***	***	***
Jul.-Sep.	1,530	198	--	0	--	***	***	***
Oct.-Dec.	1,555	256	--	0	--	***	***	***
2015:								
Jan.-Mar.	***	***	--	0	--	***	***	***
Apr.-Jun.	1,404	231	--	0	--	***	***	***
Jul.-Sep.	***	***	--	0	--	***	***	***
Oct.-Dec.	1,257	135	--	0	--	***	***	***
2016:								
Jan.-Mar.	1,191	277	--	0	--	***	***	***
Apr.-Jun.	1,243	141	--	0	--	***	***	***
Jul.-Sep.	***	***	--	0	--	***	***	***
Oct.-Dec.	1,383	197	--	0	--	***	***	***
2017:								
Jan.-Mar.	1,353	158	***	***	***	***	***	***
Apr.-Jun.	1,399	163	***	***	***	***	***	***

[1] Product 5: ASTM A513-5 (or equivalent specification) Cold-Drawn Over Mandrel Welded Tube, Grade ST52.3, outside diameter 3.750 inches, wall thickness 0.245 - 0.265 inch, length 17 - 24 feet, not honed, deburred ends.

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

Table V-8
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 6[1] and margins of underselling/(overselling), by quarters, January 2014 - June 2017

Period	United States		China			India		
	Price (dollars per short ton)	Quantity (short tons)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)
2014:								
Jan.-Mar.	1,503	1,086	--	0	--	--	0	--
Apr.-Jun.	1,359	1,316	--	0	--	--	0	--
Jul.-Sep.	1,517	1,427	--	0	--	--	0	--
Oct.-Dec.	1,512	818	--	0	--	--	0	--
2015:								
Jan.-Mar.	1,480	1,225	--	0	--	***	***	***
Apr.-Jun.	1,335	819	--	0	--	***	***	***
Jul.-Sep.	1,284	1,028	--	0	--	***	***	***
Oct.-Dec.	1,299	533	--	0	--	--	0	--
2016:								
Jan.-Mar.	1,158	425	--	0	--	--	0	--
Apr.-Jun.	1,214	580	--	0	--	***	***	***
Jul.-Sep.	1,355	571	--	0	--	***	***	***
Oct.-Dec.	1,341	506	--	0	--	***	***	***
2017:								
Jan.-Mar.	1,364	686	***	***	***	***	***	***
Apr.-Jun.	1,359	1,062	--	0	--	***	***	***

Table continued.

Table V-8 -- Continued
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 6[1] and margins of underselling/(overselling), by quarters, January 2014 - June 2017

Period	United States		Italy		
	Price (dollars per short ton)	Quantity (short tons)	Price (dollars per short ton)	Quantity (short tons)	Margin (percent)
2014:					
Jan.-Mar.	1,503	1,086	--	0	--
Apr.-Jun.	1,359	1,316	--	0	--
Jul.-Sep.	1,517	1,427	***	***	***
Oct.-Dec.	1,512	818	***	***	***
2015:					
Jan.-Mar.	1,480	1,225	***	***	***
Apr.-Jun.	1,335	819	***	***	***
Jul.-Sep.	1,284	1,028	***	***	***
Oct.-Dec.	1,299	533	***	***	***
2016:					
Jan.-Mar.	1,158	425	***	***	***
Apr.-Jun.	1,214	580	***	***	***
Jul.-Sep.	1,355	571	***	***	***
Oct.-Dec.	1,341	506	***	***	***
2017:					
Jan.-Mar.	1,364	686	***	***	***
Apr.-Jun.	1,359	1,062	--	0	--

[1] Product 6: ASTM A513-5 (or equivalent specification) Cold-Drawn Over Mandrel Welded Tube, Grade ST52.3, outside diameter 4.000 inches, wall thickness 0.245 - 0.265 inch, length 17 - 24 feet, not honed, deburred ends.

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

Table V-9
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 7[1] and margins of underselling/(overselling), by quarters, January 2014 - June 2017

* * * * * * *

Table V-10
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 8[1] and margins of underselling/(overselling), by quarters, January 2014 - June 2017

* * * * * * *

Figure V-2
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 1[1] and margins of underselling/(overselling), by quarters, January 2014-June 2017

* * * * * * *

Figure V-3
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 2[1] and margins of underselling/(overselling), by quarters, January 2014-June 2017

* * * * * * *

Figure V-4
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 3[1] and margins of underselling/(overselling), by quarters, January 2014-June 2017

* * * * * * *

Figure V-5
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 4[1] and margins of underselling/(overselling), by quarters, January 2014-June 2017

* * * * * * *

Figure V-6
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 5[1] and margins of underselling/(overselling), by quarters, January 2014-June 2017

* * * * * * *

Figure V-7
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 6[1] and margins of underselling/(overselling), by quarters, January 2014-June 2017

* * * * * * *

Figure V-8
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 7[1] and margins of underselling/(overselling), by quarters, January 2014-June 2017

* * * * * * *

Figure V-9
CDMT: Weighted-average f.o.b. prices and quantities of domestic and imported product 8[1] and margins of underselling/(overselling), by quarters, January 2014-June 2017

* * * * * * *

Price trends

Prices decreased during January 2014-June 2017. Table V-11 summarizes the price trends, by country and by product. As shown in the table, domestic price decreases ranged from *** percent to *** percent during January 2014-June 2017 while import price decreases ranged from *** percent to *** percent.

Table V-11
CDMT: Summary of weighted-average f.o.b. prices for products 1-8 from the United States and China, India, Italy, and Korea, January 2014-June 2017

Item	Number of quarters	Low price (dollars per short ton)	High price (dollars per short ton)	Change in price over period[1] (percent)
Product 1:				
United States	14	***	***	***
China	12	***	***	***
India	2	***	***	--
Product 2:				
United States	14	***	***	***
China	13	***	***	***
India	4	***	***	***
Product 3:				
United States	14	***	***	***
China	1	***	***	--
India	14	***	***	***
Italy	6	***	***	--
Korea	2	***	***	--
Product 4:				
United States	14	***	***	***
India	14	***	***	***
Korea	1	***	***	--
Product 5:				
United States	14	***	***	***
India	2	***	***	--
Italy	14	***	***	***
Product 6:				
United States	14	***	***	***
China	1	***	***	--
India	8	***	***	--
Italy	11	***	***	***
Product 7:				
Germany	3	***	***	--
Italy	3	***	***	--
Product 8:				
Germany	1	***	***	--

[1] Percentage change from the first quarter in 2014 in which data were available to the last four quarters in the period of investigation in which price data were available.

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

Price comparisons

As shown in table V-12, prices for CDMT imported from subject countries were below those for U.S.-produced CDMT in 61 of 105 instances and for about 88 percent of the quantity sold (*** short tons); margins of underselling ranged from *** percent to *** percent. In the

remaining 44 instances (*** short tons), prices for CDMT from subject countries were between *** percent to *** percent above prices for the domestic product. There were no price comparisons for CDMT from Germany or Switzerland.

Table V-12
CDMT: Instances of underselling/overselling and the range and average of margins, by country, January 2014-June 2017

Source	Underselling				
	Number of quarters	Quantity (short tons)	Average margin (percent)	Margin range (percent)	
				Min	Max
China	19	***	***	***	***
India	16	***	***	***	***
Italy	23	***	***	***	***
Korea	3	***	***	***	***
Total, underselling	61	***	***	***	***
Source	**(Overselling)**				
	Number of quarters	**Quantity (short tons)**	**Average margin (percent)**	**Margin range (percent)**	
				Min	**Max**
China	8	***	***	***	***
India	28	***	***	***	***
Italy	8	***	***	***	***
Total, overselling	44	***	***	***	***

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.

Instances of underselling fluctuated during January 2014-June 2017, while instances of overselling peaked during 2015 and 2016. The greatest numbers of instances of underselling were for seamless pricing products 1, 2, and welded pricing product 5 while welded pricing products 3 and 4 mostly oversold domestic CDMT. Instances of overselling (***) and underselling (***) were evenly split for welded pricing product 6. There were no price comparisons for seamless products 7 and 8.

LOST SALES AND LOST REVENUE

In the preliminary phase of the investigations, the Commission requested that U.S. producers of CDMT report purchasers where they experienced instances of lost sales or revenue due to competition from imports of CDMT from China, Germany, India, Italy, Korea, and/or Switzerland since January 2014. The petitioners submitted lost sales and lost revenue allegations that identified 57 firms where they lost sales or revenue (25 consisting lost sales allegations, 7 consisting of lost revenue allegations, and 24 consisting of both types of allegations). The vast majority of allegations involved China and/or India and covered 2014-16. No allegations involved imports from Switzerland. The allegations covered a variety of products, and a variety of methods of sale, including contract negotiations, individual sales, and RFQ bids.

In the final phase of the investigations, of the eight responding U.S. producers, six reported that they had to reduce prices and three reported that they had to roll back announced price increases. Six firms reported that they had lost sales.

Staff contacted 109 purchasers and received responses from 31 purchasers. Responding purchasers reported purchasing *** short tons in 2016 (table V-13).[19] Ten of 27 purchasers reported decreasing purchases of domestically produced CDMT, and overall purchases reported by responding purchasers decreased by *** percent during 2014-16.

Table V-13
CDMT: Purchasers' responses to purchasing patterns

* * * * * * *

Of the 31 responding purchasers, 19 reported that they had purchased imported CDMT from subject countries instead of U.S.-produced product since 2014. Sixteen of those purchasers reported that subject import prices were lower than those of U.S.-produced product and all but one of these purchasers reported that price was a primary reason for the decision to purchase subject imports rather than U.S.-produced CDMT. Fifteen purchasers estimated they had purchased *** short tons of CDMT from subject sources instead of domestic CDMT since 2014; quantities imported product purchased instead of domestic product ranged from *** short tons to *** short tons (tables V-14 and V-15).

Table V-14
CDMT: Purchasers' responses to purchasing subject imports instead of domestic product, by country

Source	Count of purchasers reporting subject instead of domestic	Count of purchasers reported that imports were priced lower	Count of purchasers reporting that price was a primary reason for purchasing imports instead of domestic	Quantity subject purchased (short tons)	Other reasons for purchasing imports instead of domestic
China	11	10	10	***	2
Germany	6	2	3	***	4
India	9	9	8	***	3
Italy	8	5	5	***	5
Korea	7	7	6	***	3
Switzerland	2	1	---	***	3
All subject sources	19	16	15	***	5

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

[19] Responding purchasers reported purchasing *** short tons of CDMT during 2014-16.

Five of 19 purchasers reported purchasing CDMT produced in subject countries instead of domestically produced CDMT for reasons such as size ranges and CDMT with certain material specifications is not available domestically. Purchaser *** reported that imported products offered a strategic advantage in product development and that domestically produced CDMT did not meet OEM requirements. Purchaser *** reported that the "total cost of ownership" of imported *** CDMT was less than domestic suppliers could offer, and that U.S. producers cannot meet product specifications and tolerances.

Purchaser *** reported that all of its purchases since 2014 have been from the same sources, with the exception of one part that it moved from *** to U.S. supplier ***. Purchaser *** reported that its suppliers of CDMT for *** were selected prior to 2014 and have not changed because they continue to meet firm requirements.

Table V-15
CDMT: Purchasers' responses to purchasing subject imports instead of domestic product, by purchaser

* * * * * * *

Of the 31 responding purchasers, six reported that U.S. producers had reduced prices in order to compete with lower-priced imports from subject countries (tables V-16 and V-17; 12 reported that U.S. producers had not reduced their prices, and 11 reported that they did not know).[20] The reported estimated price reduction ranged from 10 to 40 percent.

Table V-16
CDMT: Purchasers' responses to U.S. producer price reductions, by country

Source	Count of purchasers reporting U.S. producers reduced prices	Simple average of estimated U.S. price reduction (percent)	Range of estimated U.S. price reductions (percent)
China	5	***	15.0 to 40.0
Germany	1	***	--
India	5	***	10.0 to 32.0
Italy	1	***	--
Korea	2	***	15.0 to 30.0
Switzerland	---	---	--
All subject sources	6	***	10.0 to 40.0

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

[20] If a purchaser indicated "yes" for any subject country, it is included in the "yes" count; of the purchasers that did not report "yes," but reported "do not know" for any subject country are included in the "do not know" count.

Table V-17
CDMT: Purchasers' responses to U.S. producer price reductions

* * * * * * *

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

The financial results of eight U.S. producers of CDMT are presented in this section of the report. With the exception of ***, which reported on the basis of International Financial Reporting Standards ("IFRS"), the responding U.S. producers reported their financial results on the basis of Generally Accepted Accounting Principles ("GAAP"). The majority of annual financial results were reported on a calendar-year basis. The exceptions were ***.[1]

Staff verified the results of *** with its company records. The verification adjustments were incorporated into this report.[2] ***.

OPERATIONS ON CDMT

Table VI-1 presents aggregated data on U.S. producers' operations in relation to CDMT over the period examined. Table VI-2 presents changes in average unit value data between periods and table VI-3 presents selected company-specific financial data.

[1] ***.

[2] Staff verification report, ***.

Table VI-1
CDMT: Results of operations of U.S. producers, 2014-16, January-June 2016, and January-June 2017

Item	Fiscal year			January to June	
	2014	2015	2016	2016	2017
	Quantity (short tons)				
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
Total net sales	476,053	412,367	371,474	194,341	242,098
	Value (1,000 dollars)				
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
Total net sales	895,860	735,109	618,119	311,777	398,828
Cost of goods sold.-- Raw materials	444,273	351,417	278,428	134,461	189,242
Direct labor	151,352	144,305	128,937	66,103	79,319
Other factory costs	201,142	213,436	171,542	91,134	94,319
Total COGS	796,767	709,158	578,907	291,698	362,880
Gross profit	99,093	25,951	39,212	20,079	35,948
SG&A expense	47,641	43,929	39,714	20,880	22,982
Operating income or (loss)	51,452	(17,978)	(502)	(801)	12,966
Interest expense	***	***	***	***	***
All other expenses	***	***	***	***	***
All other income	***	***	***	***	***
Net income or (loss)	29,357	(42,651)	(21,893)	(8,154)	2,877
Depreciation/amortization	36,671	36,561	35,699	18,193	19,081
Cash flow	66,028	(6,090)	13,806	10,039	21,958
	Ratio to net sales (percent)				
Cost of goods sold.-- Raw materials	49.6	47.8	45.0	43.1	47.4
Direct labor	16.9	19.6	20.9	21.2	19.9
Other factory costs	22.5	29.0	27.8	29.2	23.6
Average COGS	88.9	96.5	93.7	93.6	91.0
Gross profit	11.1	3.5	6.3	6.4	9.0
SG&A expense	5.3	6.0	6.4	6.7	5.8
Operating income or (loss)	5.7	(2.4)	(0.1)	(0.3)	3.3
Net income or (loss)	3.3	(5.8)	(3.5)	(2.6)	0.7

Table continued on next page.

Table VI-1—Continued
CDMT: Results of operations of U.S. producers, 2014-16, January-June 2016, and January-June 2017

Item	Fiscal year			January to June	
	2014	2015	2016	2016	2017
	Ratio to total COGS (percent)				
Cost of goods sold.-- Raw materials	55.8	49.6	48.1	46.1	52.2
Direct labor	19.0	20.3	22.3	22.7	21.9
Other factory costs	25.2	30.1	29.6	31.2	26.0
Average COGS	100.0	100.0	100.0	100.0	100.0
	Unit value (dollars per short ton)				
Commercial sales	***	***	***	***	***
Internal consumption	***	***	***	***	***
Transfers to related firms	***	***	***	***	***
Total net sales	1,882	1,783	1,664	1,604	1,647
Cost of goods sold.-- Raw materials	933	852	750	692	782
Direct labor	318	350	347	340	328
Other factory costs	423	518	462	469	390
Average COGS	1,674	1,720	1,558	1,501	1,499
Gross profit	208	63	106	103	148
SG&A expense	100	107	107	107	95
Operating income or (loss)	108	(44)	(1)	(4)	54
Net income or (loss)	62	(103)	(59)	(42)	12
	Number of firms reporting				
Operating losses	***	***	***	***	***
Net losses	***	***	***	***	***
Data	8	8	8	8	8

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

Table VI-2
CDMT: Changes in AUVs between fiscal years and between partial year periods

Item	Between fiscal years			Between partial year periods
	2014-16	2014-15	2015-16	2016-17
	Changes in AUVs (dollars per short ton)			
Commercial sales	***	***	***	***
Internal consumption	***	***	***	***
Transfers to related firms	***	***	***	***
Total net sales	(218)	(99)	(119)	43
Cost of goods sold.-- Raw materials	(184)	(81)	(103)	90
Direct labor	29	32	(3)	(13)
Other factory costs	39	95	(56)	(79)
Average COGS	(115)	46	(161)	(2)
Gross profit	(103)	(145)	43	45
SG&A expense	7	6	0	(13)
Operating income or (loss)	(109)	(152)	42	58
Net income or (loss)	(121)	(165)	44	54

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

Table VI-3
CDMT: Results of operations of U.S. producers, by firm, 2014-16, January-June 2016, and January-June 2017

Item	Fiscal year			January to June	
	2014	2015	2016	2016	2017
	Total net sales (short tons)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Total net sales quantity	476,053	412,367	371,474	194,341	242,098
	Total net sales (1,000 dollars)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Total net sales value	895,860	735,109	618,119	311,777	398,828
	Cost of goods sold (1,000 dollars)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Total COGS	796,767	709,158	578,907	291,698	362,880

Table continued on next page.

Table VI-3—Continued
CDMT: Results of operations of U.S. producers, by firm, 2014-16, January-June 2016, and January-June 2017

Item	Fiscal year			January to June	
	2014	2015	2016	2016	2017
	Gross profit or (loss) (1,000 dollars)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Total gross profit or (loss)	99,093	25,951	39,212	20,079	35,948
	SG&A expenses (1,000 dollars)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Total SG&A expenses	47,641	43,929	39,714	20,880	22,982
	Operating income or (loss) (1,000 dollars)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Total operating income or (loss)	51,452	(17,978)	(502)	(801)	12,966

Table continued on next page.

Table VI-3—Continued
CDMT: Results of operations of U.S. producers, by firm, 2014-16, January-June 2016, and January-June 2017

Item	Fiscal year			January to June	
	2014	2015	2016	2016	2017
	Net income or (loss) (1,000 dollars)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Total net income or (loss)	29,357	(42,651)	(21,893)	(8,154)	2,877
	COGS to net sales ratio (percent)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average COGS to net sales ratio	88.9	96.5	93.7	93.6	91.0
	Gross profit or (loss) to net sales ratio (percent)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average gross profit or (loss) to net sales ratio	11.1	3.5	6.3	6.4	9.0

Table continued on next page.

Table VI-3—Continued
CDMT: Results of operations of U.S. producers, by firm, 2014-16, January-June 2016, and January-June 2017

Item	Fiscal year			January to June	
	2014	2015	2016	2016	2017
	SG&A expense to net sales ratio (percent)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average SG&A expense to net sales ratio	5.3	6.0	6.4	6.7	5.8
	Operating income or (loss) to net sales ratio (percent)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average operating income or (loss) to net sales ratio	5.7	(2.4)	(0.1)	(0.3)	3.3
	Net income or (loss) to net sales ratio (percent)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average net income or (loss) to net sales ratio	3.3	(5.8)	(3.5)	(2.6)	0.7

Table continued on next page.

Table VI-3—Continued
CDMT: Results of operations of U.S. producers, by firm, 2014-16, January-June 2016, and January-June 2017

Item	Fiscal year			January to June	
	2014	2015	2016	2016	2017
	Unit net sales value (dollars per short ton)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average unit net sales value	1,882	1,783	1,664	1,604	1,647
	Unit raw materials (dollars per short ton)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average unit raw materials	933	852	750	692	782
	Unit direct labor (dollars per short ton)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average unit direct labor	318	350	347	340	328

Table continued on next page.

Table VI-3—Continued
CDMT: Results of operations of U.S. producers, by firm, 2014-16, January-June 2016, and January-June 2017

Item	Fiscal year			January to June	
	2014	2015	2016	2016	2017
	Unit other factory costs (dollars per short ton)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average unit other factory costs	423	518	462	469	390
	Unit COGS (dollars per short ton)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average COGS	1,674	1,720	1,558	1,501	1,499
	Unit gross profit or (loss) (dollars per short ton)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average unit gross profit or (loss)	208	63	106	103	148

Table continued on next page.

Table VI-3—Continued
CDMT: Results of operations of U.S. producers, by firm, 2014-16, January-June 2016, and January-June 2017

Item	Fiscal year			January to June	
	2014	2015	2016	2016	2017
	Unit SG&A expenses (dollars per short ton)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average unit SG&A	100	107	107	107	95
	Unit operating income or (loss) (dollars per short ton)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average unit operating income or (loss)	108	(44)	(1)	(4)	54
	Unit net income or (loss) (dollars per short ton)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Average unit net income or (loss)	62	(103)	(59)	(42)	12

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

Net sales quantity and value

As shown in table VI-1, net sales of CDMT consist of commercial sales and a small amount of internal consumption and transfers to related firms.[3] Commercial sales accounted for *** percent of net sales by volume and *** percent by value during the period examined. From 2014 to 2016, net sales volume decreased by 22.0 percent and net sales revenue decreased by 31.0 percent, however both sales value and volume were higher in the first half of 2017 than in the same period in 2016. The average net sales unit values (per-short ton) decreased from $1,882 in 2014 to $1,664 in 2016, but were higher in interim 2017 than interim 2016. On a company-specific basis, *** companies reported lower net sales AUVs in 2016 than in 2014.[4] [5]

Cost of goods sold and gross profit or (loss)

Raw material costs represent the largest component of overall COGS. The total cost of raw materials as a share of COGS ranged from 46.1 percent (interim 2016) to 55.8 percent (2014). On a unit basis (per-short ton), raw material costs decreased from $933 in 2014 to $750 in 2016, but were higher in January-June 2017 ($782) than in the same period in 2016 ($692). With the exception of ***, all U.S. producers reported lower per-short ton raw material costs in 2016 compared to 2014, while *** of eight producers reported higher per-short ton raw material costs in the first half of 2017 compared to the first half of 2016. With respect to their U.S. operations, several producers reported that they purchase inputs from related parties: ***.[6]

The second largest component of COGS during the period examined was other factory costs, which represented between 25.2 percent (2014) and 31.2 percent (interim 2016) of overall COGS. On a per-short ton basis, other factory costs increased from $423 in 2014 to $518 in 2015, before decreasing to $462 in 2016, and was lower in interim 2017 when compared to interim 2016.

Direct labor, the last component of COGS, accounted for between 19.0 percent (2014) and 22.7 percent (interim 2016) of overall COGS. On a per-short ton basis, direct labor increased from $318 in 2014 to $350 in 2015 before decreasing to $347 in 2016, but was lower in interim 2017 compared to the same period in 2016.[7]

On an overall basis, the CDMT industry's gross profit decreased from $99.1 million in 2014 to $39.2 million in 2016, but was higher in the first half of 2017 ($35.9 million) than in the

---

[3] Internal consumption (which represented *** percent of net sales by volume during the period examined) was reported by ***. ***. Transfers to related firms (which represented *** percent of net sales by volume during the period examined) were reported by ***.

[4] ***.

[5] *** had noticeably higher net sales AUVs than the industry average for much of the period examined. In response to questions by staff, ***.

[6] All of these producers reported valuing purchases of inputs from related parties at ***.

[7] ***. U.S. producers' questionnaire responses, section III-10.

first half of 2016 ($20.1 million). The decline from 2014 to 2016 was due to a declining gross profit margin, coupled with decreasing net sales volume, while the opposite is true when comparing the interim periods (gross profit margin and sales were both higher in January-June 2017 than in the same period of 2016). ***.

SG&A expenses and operating income or (loss)

As shown in table VI-1, the industry's SG&A expense ratio (i.e., total SG&A expenses divided by total revenue) moved within a relatively narrow range, from 5.3 percent in 2014 to 6.7 percent in interim 2016. Table VI-3 shows that from 2014 to 2016 the pattern of company-specific SG&A expense ratios was mostly uniform in terms of directional trend, with *** companies reporting a higher SG&A expense ratio in 2016 than in 2014 and *** companies reporting a lower SG&A expense ratio in interim 2017 compared to interim 2016.[8] Operating income followed the same trend as gross profit and decreased from $51.5 million in 2014 to a loss of $502,000 in 2016, but earned a profit of $13.0 million in interim 2017 compared to a loss of $801,000 in interim 2016.

Other expenses and net income or (loss)

Classified below the operating income level are interest expense, other expenses, and other income, which are usually allocated to the product line from high levels in the corporation. Interest expense, the largest of these line items, increased in 2015 and decreased in 2016, but was higher in the first half of 2017 than the first half of 2016. By definition, items classified at this level in the income statement only affect net income or (loss). Overall net income for CDMT decreased from $29.4 million in 2014 to a loss of $42.7 million in 2015 and increased to a lesser loss of $21.9 million in 2016. However, in the first half of 2017 net income was $2.9 million, compared to a loss of $8.2 million in the same period in 2016.[9]

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-5 presents capital expenditures and research and development ("R&D") expenses by firm. Six firms provided capital expenditure data, and *** provided data on R&D expenses. *** accounted for the largest company-specific amounts of capital expenditures in 2014, 2015, and 2016, and interim 2016, whereas *** accounted for the largest company specific amount in interim 2017.[10] Total reported capital expenditures for the industry decreased from $27.4 million in 2014 to $18.0 million in 2016, and was $8.6 million in interim 2017, compared to $9.7 million in interim 2016. *** to report R&D expenses, ***."[11]

---

[8] ***. U.S. producers' questionnaire responses, section III-10.

[9] ***. U.S. producers' questionnaire responses, section III-10.

[10] ***. *** U.S. producer questionnaire response, section III-13. *** U.S. producer questionnaire response, section III-13.

[11] *** questionnaire response, section III-13.

Table VI-5
CDMT: Capital expenditures and research and development expenses of U.S. producers, 2014-16, January-June 2016, and January-June 2017

Item	Fiscal year			January to June	
	2014	2015	2016	2016	2017
	Capital expenditures (1,000 dollars)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Total capital expenditures	27,449	28,675	18,004	9,666	8,588
	Research and development expenses (1,000 dollars)				
ArcelorMittal	***	***	***	***	***
MS Tube	***	***	***	***	***
Plymouth	***	***	***	***	***
PTC Alliance	***	***	***	***	***
Seymour Tubing	***	***	***	***	***
Sharon Tube	***	***	***	***	***
Timken	***	***	***	***	***
Webco	***	***	***	***	***
Total research and development expenses	***	***	***	***	***

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

ASSETS AND RETURN ON ASSETS

Table VI-6 presents data on the U.S. producers' total assets and their return on assets ("ROA").[12] Total net assets for the CDMT industry decreased from $794.0 million in 2014 to $718.3 million in 2016. ROA declined continually throughout the period from 6.5 percent in 2014 to 0.1 percent in 2016.

[12] With respect to a company's overall operations, staff notes that a total asset value (i.e., the bottom line number on the asset side of a company's balance sheet) reflects an aggregation of a number of assets which are generally not product specific. Accordingly, high-level allocation factors were required in order to report a total asset value for CDMT.

Table VI-6
CDMT: U.S. producers' total assets and return on assets, 2014-16, January-June 2016, and January-June 2017

Firm	Fiscal years		
	2014	2015	2016
	Total net assets (1,000 dollars)		
ArcelorMittal	***	***	***
MS Tube	***	***	***
Plymouth	***	***	***
PTC Alliance	***	***	***
Seymour Tubing	***	***	***
Sharon Tube	***	***	***
Timken	***	***	***
Webco	***	***	***
Total net assets	793,961	706,927	718,305
	Operating return on assets (percent)		
ArcelorMittal	***	***	***
MS Tube	***	***	***
Plymouth	***	***	***
PTC Alliance	***	***	***
Seymour Tubing	***	***	***
Sharon Tube	***	***	***
Timken	***	***	***
Webco	***	***	***
Average operating return on assets	6.5	(2.5)	(0.1)

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

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of CDMT to describe any actual or potential negative effects of imports of CDMT from China, Germany, India, Italy, Korea, and Switzerland on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-7 presents the number of firms reporting an impact in each category and table VI-8 provides the U.S. producers' narrative responses.[13]

[13] ***. ***.

Table VI-7
CDMT: Actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2014

Item	No	Yes
Negative effects on investment	1	6
Cancellation, postponement, or rejection of expansion projects		2
Denial or rejection of investment proposal		0
Reduction in the size of capital investments		4
Return on specific investments negatively impacted		3
Other		1
Negative effects on growth and development	1	6
Rejection of bank loans		2
Lowering of credit rating		2
Problem related to the issue of stocks or bonds		1
Ability to service debt		1
Other		4
Anticipated negative effects of imports	0	7

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

Table VI-8
CDMT: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2014

* * * * * * *

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,*

---

[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 alleged 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 CHINA

The Commission issued foreign producers' or exporters' questionnaires to 90 firms believed to produce and/or export CDMT from China.[3] Useable responses to the Commission's questionnaire were received from five firms: Changshu Fushilai Steel Pipe Co., Ltd. ("Fushilai Steel"), Changshu Special Shaped Steel Tube Co., Ltd. ("Special Shaped Steel"), Marcegaglia (China) Co., Ltd. ("Marcegaglia China"), Wuxi Huijin International Trade Co., Ltd. ("Wuxi Huijin"), and Zhejiang Dingxin Steel Tube Manufacturing Co., Ltd. ("Dingxin"). These firms' exports to the United States accounted for approximately *** percent of U.S. imports of CDMT from China in 2016. According to estimates requested of the responding Chinese producers, these firms account for approximately *** percent of overall production of CDMT in China. Table VII-1 presents information on the CDMT operations of the responding producers and exporters in China.

Table VII-1
CDMT: Summary data for producers in China, 2016

Firm	Production (short tons)	Share of reported production (percent)	Exports to the United States (short tons)	Share of reported exports to the United States (percent)	Total shipments (short tons)	Share of firm's total shipments exported to the United States (percent)
Dingxin	***	***	***	***	***	***
Fushilai Steel	***	***	***	***	***	***
Marcegaglia China	***	***	***	***	***	***
Special Shaped Steel	***	***	***	***	***	***
Wuxi Huijin	***	***	***	***	***	***
Total	45,490	100.0	***	100.0	46,187	***

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

Changes in operations

Two Chinese producers reported changes in operations since January 1, 2014. ***.

Operations on CDMT

Table VII-2 presents data on the CDMT operations of the responding producers and exporters in China. Capacity increased by 5.0 percent from 2014-16, while production decreased by 3.6 percent during the same period. Capacity and production were higher in January-June 2017 than in January-June 2016. Capacity and production in 2017 and 2018 are projected to increase from 2016 levels. Exports to the United States as a share of total

[3] These firms were identified through a review of information submitted in the petition and contained in *** records.

shipments increased by *** percentage points, from *** percent to *** percent, and are projected to decrease to *** percent in 2017 and *** percent in 2018.

Table VII-2
CDMT: Data on industry in China, 2014-16, January-June 2016, and January-June 2017 and projected calendar years 2017 and 2018

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2014	2015	2016	2016	2017	2017	2018
	Quantity (short tons)						
Capacity	77,424	81,537	81,289	40,942	41,260	81,680	81,680
Production	47,200	46,800	45,490	24,488	26,009	46,280	49,850
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	36,459	30,989	33,815	17,108	20,233	37,519	42,800
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	10,846	17,158	12,372	8,070	6,000	7,401	6,350
Total shipments	47,305	48,147	46,187	25,178	26,233	44,920	49,150
	Ratios and shares (percent)						
Capacity utilization	61.0	57.4	56.0	59.8	63.0	56.7	61.0
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	77.1	64.4	73.2	67.9	77.1	83.5	87.1
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	22.9	35.6	26.8	32.1	22.9	16.5	12.9
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.

The Commission asked Chinese producers to identify any production constraints. Responding producers noted that their production is constrained by a limited number of cold draw machines, low equipment capacity, and the amount of time needed to complete

production processes such as pickling. Responding producers did not report any anticipated changes in the character of their operations.

Alternative products

As shown in table VII-3, three Chinese firms produced other products on the same equipment and machinery used to produce CDMT. Responding producers reported production of cylinder honed tube, ERW tube, and auto parts on the same equipment and machinery.

Table VII-3
CDMT: Chinese producers' overall capacity and production on the same equipment as in-scope production, 2014-16, January-June 2016, and January-June 2017

* * * * * * *

Exports

Table VII-4 presents Global Trade Atlas ("GTA") data on Chinese exports for HS subheadings 7304.31 and 7304.51, seamless cold drawn or cold-reduced tubes of circular cross-section of alloy (except stainless) or nonalloy steel ("certain cold-drawn tubes"). According to GTA, the leading export markets for certain cold-drawn tubes from China are Korea, India, and the United States. During 2016, Korea was the largest export market, accounting for 19.4 percent of exports, followed by India, which accounted for 13.4 percent. The United States was the third largest export market for certain cold-drawn tubes from China, accounting for 9.1 percent of exports.

Table VII-4
Certain cold-drawn tubes: China exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
China exports to the United States	25,041	21,216	20,306
China exports to other major destination markets.--			
Korea	69,950	57,586	43,305
India	57,400	61,137	30,054
Iran	7,602	11,661	14,225
Pakistan	5,056	5,075	10,623
Vietnam	9,784	11,216	8,780
Indonesia	7,621	6,676	8,572
Thailand	3,182	4,039	7,400
North Korea	5,259	6,325	6,777
All other destination markets	110,122	92,402	73,731
Total China exports	301,016	277,333	223,774
	Value (1,000 dollars)		
China exports to the United States	32,930	27,534	22,309
China exports to other major destination markets.--			
Korea	72,234	56,976	37,241
India	76,380	74,666	33,096
Iran	8,775	11,258	11,465
Pakistan	7,448	5,663	10,131
Vietnam	13,228	14,040	15,785
Indonesia	13,334	8,712	10,911
Thailand	6,171	4,990	8,329
North Korea	3,636	3,400	3,488
All other destination markets	159,647	116,713	87,673
Total China exports	393,783	323,954	240,428

Table continued on the next page

Table VII-4--Continued
Certain cold-drawn tubes: China exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per short ton)		
China exports to the United States	1,315	1,298	1,099
China exports to other major destination markets.--			
Korea	1,033	989	860
India	1,331	1,221	1,101
Iran	1,154	965	806
Pakistan	1,473	1,116	954
Vietnam	1,352	1,252	1,798
Indonesia	1,750	1,305	1,273
Thailand	1,939	1,236	1,126
North Korea	691	538	515
All other destination markets	1,450	1,263	1,189
Total China exports	1,308	1,168	1,074
	Share of quantity (percent)		
China exports to the United States	8.3	7.6	9.1
China exports to other major destination markets.--			
Korea	23.2	20.8	19.4
India	19.1	22.0	13.4
Iran	2.5	4.2	6.4
Pakistan	1.7	1.8	4.7
Vietnam	3.3	4.0	3.9
Indonesia	2.5	2.4	3.8
Thailand	1.1	1.5	3.3
North Korea	1.7	2.3	3.0
All other destination markets	36.6	33.3	32.9
Total China exports	100.0	100.0	100.0

Note.--Exports are understated to the extent that CDMT drawn from welded tube is not included. Data may be overstated to the extent that product outside the product scope of these investigations (for example, seamless cold-drawn tubing suitable for high-pressure applications) may be included.

Source: Official export statistics under HS subheading 7304.31 and 7304.51 as reported by China Customs in the IHS/GTA database, accessed October 16, 2017.

THE INDUSTRY IN GERMANY

The Commission issued foreign producers' or exporters' questionnaires to eight firms believed to produce and/or export CDMT from Germany.[4] Useable responses to the Commission's questionnaire were received from five firms: Benteler Steel / Tube GmbH ("Benteler"), Jansen GmbH ("Jansen"), Mannesmann Precision Tubes GmbH ("Mannesmann"),[5] Poppe + Potthoff Prazisionsstahlrohre GmbH ("Poppe + Potthoff"), and Vincenz Wiederholt GmbH ("Wiederholt"). An additional firm, Thiel & Hoche GmbH & Co. KG, reported being only an exporter of CDMT from Germany. These firms' exports to the United States accounted for approximately *** percent of U.S. imports of CDMT from Germany over the period being examined. According to estimates requested of the responding German producers, these firms accounted for approximately *** percent of overall production of CDMT in Germany. Table VII-5 presents information on the CDMT operations of the responding producers and exporters in Germany.

Table VII-5
CDMT: Summary data for producers in Germany, 2016

Firm	Production (short tons)	Share of reported production (percent)	Exports to the United States (short tons)	Share of reported exports to the United States (percent)	Total shipments (short tons)	Share of firm's total shipments exported to the United States (percent)
Benteler	***	***	***	***	***	***
Jansen	***	***	***	***	***	***
Mannesmann	***	***	***	***	***	***
Poppe + Potthoff	***	***	***	***	***	***
Wiederholt	***	***	***	***	***	***
Total	346,105	100.0	***	100.0	346,293	***

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

Changes in operations

Table VII-6 presents German producers' reported changes in operations since January 1, 2014.

Table VII-6
CDMT: German producers' reported changes in operations, since January 1, 2014

* * * * * * *

[4] These firms were identified through a review of information submitted in the petition and contained in *** records.

[5] Formerly Salzgitter Mannesmann Precision GmbH.

Operations on CDMT

Table VII-7 presents data on the CDMT operations of the responding producers and exporters in Germany. Capacity remained unchanged during the period examined, while production increased by 2.9 percent from 2014-16 and was higher in January-June 2017 than in January-June 2016. Capacity is projected to remain unchanged in 2017 and 2018, while production is projected to increase by 3.6 percent and 4.7 percent in 2017 and 2018, respectively, when compared to 2016 levels. A majority of German producers' total shipments was to the home market, accounting for between 64.7 to 67.3 percent during the period examined. Exports to the United States as a share of total shipments decreased by *** percentage points, from *** percent to *** percent during 2014-16 and were unchanged in January-June 2017 when compared to January-June 2016.

Table VII-7
CDMT: Data on industry in Germany, 2014-16, January-June 2016, and January-June 2017 and projected calendar years 2017 and 2018

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2014	2015	2016	2016	2017	2017	2018
	Quantity (short tons)						
Capacity	444,137	444,137	444,137	222,485	222,485	444,137	444,137
Production	336,323	337,528	346,105	175,514	179,583	358,465	362,420
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	32,615	32,839	33,864	16,968	17,217	34,971	35,989
Commercial home market shipments	194,760	193,285	190,237	97,380	99,622	197,096	198,871
Total home market shipments	227,375	226,124	224,101	114,348	116,839	232,067	234,860
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	110,363	110,420	122,192	61,216	63,441	126,398	127,559
Total shipments	337,738	336,544	346,293	175,564	180,280	358,465	362,419
	Ratios and shares (percent)						
Capacity utilization	75.7	76.0	77.9	78.9	80.7	80.7	81.6
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	9.7	9.8	9.8	9.7	9.6	9.8	9.9
Commercial home market shipments	57.7	57.4	54.9	55.5	55.3	55.0	54.9
Total home market shipments	67.3	67.2	64.7	65.1	64.8	64.7	64.8
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	32.7	32.8	35.3	34.9	35.2	35.3	35.2
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.

All responding German producers reported constraints in their CDMT production, which included employee limitations; machine capacity, such as annealing and heat treatment capacity, and product mix. Responding German producers did not report any anticipated changes in the character of their operations.

Alternative products

As shown in table VII-8, four of the five responding firms produced other products on the same equipment and machinery used to produce CDMT. Alternative products included high pressure tubing, tube for automotive and OCTG applications, other shapes such as rectangular, CDMT less than 12 inches in length, and out-of-scope CDMT with outside diameter greater than 331mm.

Table VII-8
CDMT: German producers' overall capacity and production on the same equipment as in-scope production, 2014-16, January-June 2016, and January-June 2017

* * * * * * *

Exports

Table VII-9 presents data on German exports of certain cold-drawn tubes. According to GTA, the leading export markets for certain cold-drawn tubes from Germany are Italy, the United States, and the Netherlands. During 2016, Italy was the largest export market, accounting for 12.1 percent. The United States was the second largest export market for certain cold-drawn tubes from Germany, accounting for 9.3 percent, while the Netherlands was the third largest, accounting for 8.1 percent. Out of the eight largest non-U.S. markets, only one country (China) is outside of Europe.

Table VII-9
Certain cold-drawn tubes: Germany exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
German exports to the United States	15,121	13,473	14,564
German exports to other major destination markets.--			
Italy	18,510	17,411	19,055
Netherlands	7,965	8,858	12,694
Slovakia	11,893	11,870	11,312
France	8,635	10,151	11,284
China	11,960	9,674	10,438
Austria	7,935	8,537	8,455
United Kingdom	7,196	7,765	7,955
Sweden	6,073	6,099	5,752
All other destination markets	57,836	55,949	55,621
Total German exports	153,123	149,785	157,131
	Value (1,000 dollars)		
German exports to the United States	49,154	37,191	38,986
German exports to other major destination markets.--			
Italy	42,913	33,211	33,203
Netherlands	19,365	17,317	20,445
Slovakia	29,636	24,986	23,265
France	21,213	18,426	21,218
China	44,924	39,615	26,700
Austria	25,375	20,607	19,239
United Kingdom	17,412	14,333	12,877
Sweden	15,424	12,342	10,859
All other destination markets	187,732	151,973	158,091
Total China exports	453,148	370,002	364,882

Table continued on the next page.

Table IV-9--Continued
Certain cold-drawn tubes: Germany exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per short ton)		
German exports to the United States	3,251	2,761	2,677
German exports to other major destination markets.--			
Italy	2,318	1,908	1,742
Netherlands	2,431	1,955	1,611
Slovakia	2,492	2,105	2,057
France	2,457	1,815	1,880
China	3,756	4,095	2,558
Austria	3,198	2,414	2,275
United Kingdom	2,420	1,846	1,619
Sweden	2,540	2,024	1,888
All other destination markets	3,246	2,716	2,842
Total China exports	2,959	2,470	2,322
	Share of quantity (percent)		
German exports to the United States	9.9	9.0	9.3
German exports to other major destination markets.--			
Italy	12.1	11.6	12.1
Netherlands	5.2	5.9	8.1
Slovakia	7.8	7.9	7.2
France	5.6	6.8	7.2
China	7.8	6.5	6.6
Austria	5.2	5.7	5.4
United Kingdom	4.7	5.2	5.1
Sweden	4.0	4.1	3.7
All other destination markets	37.8	37.4	35.4
Total China exports	100.0	100.0	100.0

Note.--Exports are understated to the extent that CDMT drawn from welded tube is not included. Data may be overstated to the extent that product outside the product scope of these investigations (for example, seamless cold-drawn tubing suitable for high-pressure applications) may be included.

Source: Official export statistics under HS subheading 7304.31 and 7304.51 as reported by Eurostat in the IHS/GTA database, assessed October 16, 2017.

THE INDUSTRY IN INDIA

The Commission issued foreign producers' or exporters' questionnaires to 39 firms believed to produce and/or export CDMT from India.[6] Useable responses to the Commission's questionnaire were received from three firms: Goodluck India Limited ("Goodluck India"), ISMT Limited ("ISMT"), and Tube Products of India.[7] These firms' exports to the United States accounted for approximately *** percent of U.S. imports of CDMT from India in 2016. According to estimates requested of the responding Indian producers, these firms accounted for approximately *** percent of overall production of CDMT in India. Table VII-10 presents information on the CDMT operations of the responding producers and exporters in India.

Table VII-10
CDMT: Summary data for producers in India, 2016

Firm	Production (short tons)	Share of reported production (percent)	Exports to the United States (short tons)	Share of reported exports to the United States (percent)	Total shipments (short tons)	Share of firm's total shipments exported to the United States (percent)
Goodluck India	***	***	***	***	***	***
ISMT	***	***	***	***	***	***
Tube Products of India	***	***	***	***	***	***
Total	172,956	100.0	***	***	172,818	***

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

Changes in operations

Table VII-11 presents Indian producers' reported changes in operations since January 1, 2014.

Table VII-11
CDMT: Indian producers' reported changes in operations, since January 1, 2014

* * * * * * *

[6] These firms were identified through a review of information submitted in the petition and contained in *** records.

[7] Two of the four firms that provided the Commission with a usable questionnaire response during the preliminary-phase investigations did not provide a questionnaire response in these final-phase investigations: Innoventive Industries Limited ("Innoventive") and KLT Automotive & Tubular Products Ltd. ("KLT Automotive"). In its preliminary-phase questionnaire response, Innoventive reported production of *** short tons and exports to the United States of *** short tons in 2016. KLT Automotive reported 2016 production of *** short tons and exports to the United States of *** short tons.

Operations on CDMT

Table VII-12 presents data on the CDMT operations of responding Indian producers. Capacity and production increased by 19.5 percent and 13.9 percent, respectively, between 2014 and 2016, and were higher in January-June 2017 than in January-June 2016. Capacity and production are projected to increase from 2016 levels in 2017 and 2018. Exports to the United States as a share of total shipments increased by *** percentage points during 2014-16, from *** percent to *** percent, and were higher in January-June 2017 than in January-June 2016.

Table VII-12
CDMT: Data on industry in India, 2014-16, January-June 2016, and January-June 2017 and projected calendar years 2017 and 2018

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2014	2015	2016	2016	2017	2017	2018
	Quantity (short tons)						
Capacity	210,144	251,200	251,200	124,143	129,234	***	***
Production	151,900	151,727	172,956	81,235	91,574	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	151,942	151,332	172,818	81,248	91,713	***	***
	Ratios and shares (percent)						
Capacity utilization	72.3	60.4	68.9	65.4	70.9	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

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

The Commission asked Indian producers to identify any anticipated changes in the character of their operations or the organization of their future CDMT production. Tube Products of India reported that ***. All three responding Indian producers reported production

constraints, which included product mix and equipment capacity (tube mill, furnace, and drawing capacity).

Alternative products

As shown in table VII-13, two of the three responding Indian firms produced other products on the same equipment and machinery used to produce CDMT. Alternative products included hot finished seamless tubes, cold-drawn non mechanical tubing, and ERW tubes.

Table VII-13
CDMT: Indian producers' overall capacity and production on the same equipment as in-scope production, 2014-16, January-June 2016, and January-June 2017

* * * * * * *

Exports

Table VII-14 presents data for Indian exports of certain cold-drawn tubes. According to GTA, the leading export markets for certain cold-drawn tubes from India are the United States, Sweden, and Italy, accounting for 26.1 percent, 19.9 percent, and 16.1 percent, during 2016, respectively.

Table VII-14
Certain cold-drawn tubes: India exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
India exports to the United States	10,065	7,313	2,978
India exports to other major destination markets.--			
Sweden	2,049	2,846	2,270
Italy	3,092	1,776	1,840
France	877	1,290	1,002
United Arab Emirates	749	704	557
Saudi Arabia	19	513	326
Iraq	491	9	306
China	6	30	298
Canada	233	180	263
All other destination markets	4,755	5,555	1,556
Total India exports	22,334	20,215	11,396
	Value (1,000 dollars)		
India exports to the United States	12,219	8,008	3,888
India exports to other major destination markets.--			
Sweden	2,915	2,786	2,065
Italy	4,034	3,958	2,018
France	1,537	2,831	1,405
United Arab Emirates	1,109	1,420	661
Saudi Arabia	56	1,417	537
Iraq	571	60	183
China	7	362	553
Canada	368	321	433
All other destination markets	6,715	16,762	3,049
Total India exports	29,531	37,926	14,793

Table continued on the next page.

Table VII-14--Continued
Certain cold-drawn tubes: India exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per short ton)		
India exports to the United States	1,214	1,095	1,305
India exports to other major destination markets.--			
Sweden	1,423	979	910
Italy	1,305	2,229	1,096
France	1,753	2,195	1,402
United Arab Emirates	1,481	2,019	1,187
Saudi Arabia	2,971	2,763	1,649
Iraq	1,164	6,828	599
China	1,124	12,154	1,854
Canada	1,579	1,780	1,649
All other destination markets	1,412	3,017	1,959
Total India exports	1,322	1,876	1,298
	Share of quantity (percent)		
India exports to the United States	45.1	36.2	26.1
India exports to other major destination markets.--			
Sweden	9.2	14.1	19.9
Italy	13.8	8.8	16.1
France	3.9	6.4	8.8
United Arab Emirates	3.4	3.5	4.9
Saudi Arabia	0.1	2.5	2.9
Iraq	2.2	0.0	2.7
China	0.0	0.1	2.6
Canada	1.0	0.9	2.3
All other destination markets	21.3	27.5	13.7
Total India exports	100.0	100.0	100.0

Note.--Exports are understated to the extent that CDMT drawn from welded tube is not included. Data may be overstated to the extent that product outside the product scope of these investigations (for example, seamless cold-drawn tubing suitable for high-pressure applications) may be included.

Source: Official export statistics under HS subheading 7304.31 and 7304.51 as reported by India's Ministry of Commerce in the IHS/GTA database, accessed October 16, 2017.

THE INDUSTRY IN ITALY

The Commission issued foreign producers' or exporters' questionnaires to 12 firms believed to produce and/or export CDMT from Italy.[8] Useable responses to the Commission's questionnaire were received from four firms: Dalmine S.p.A. ("Dalmine"), Marcegaglia Carbon Steel S.p.A. ("Marcegaglia"), Metalfer S.p.A. ("Metalfer"), and Trafiltubi SRL ("Trafiltubi"). These firms' exports to the United States accounted for approximately *** percent of U.S. imports of CDMT from Italy in 2016. According to estimates requested of the responding Italian producers, these firms accounted for *** production of CDMT in Italy. Table VII-15 presents information on the CDMT operations of the responding producers and exporters in Italy.

Table VII-15
CDMT: Summary data for producers in Italy, 2016

Firm	Production (short tons)	Share of reported production (percent)	Exports to the United States (short tons)	Share of reported exports to the United States (percent)	Total shipments (short tons)	Share of firm's total shipments exported to the United States (percent)
Dalmine	***	***	***	***	***	***
Marcegaglia	***	***	***	***	***	***
Metalfer	***	***	***	***	***	***
Trafiltubi	***	***	***	***	***	***
Total	164,388	***	***	***	***	***

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

Changes in operations

Table VII-16 presents Italian producers' reported changes in operations since January 1, 2014.

Table VII-16
CDMT: Italian producers' reported changes in operations, since January 1, 2014

* * * * * * *

Operations on CDMT

Table VII-17 presents data on the CDMT operations of the responding Italian producers. Capacity decreased slightly during 2014-16, while production increased, and both were higher in January-June 2017 than in January-June 2016. Exports to the United States fluctuated during the period, but increased by *** percentage points between 2014 and 2016, from *** percent

[8] These firms were identified through a review of information submitted in the petition and contained in *** records.

to *** percent, and were lower in January-June 2017 than in January-June 2016. Capacity and production are projected to increase from 2016 levels in 2017 and 2018.

Table VII-17
CDMT: Data on industry in Italy, 2014-16, January-June 2016, and January-June 2017 and projected calendar years 2017 and 2018

Item	Actual experience					Projections	
	Calendar year			January to June		Calendar year	
	2014	2015	2016	2016	2017	2017	2018
	Quantity (short tons)						
Capacity	178,303	178,103	178,133	95,656	95,685	178,213	178,800
Production	151,757	161,554	164,388	87,507	89,296	169,184	172,634
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	93,767	98,680	99,698	53,823	54,854	102,395	105,831
Total shipments	***	***	***	***	***	***	***
	Ratios and shares (percent)						
Capacity utilization	85.1	90.7	92.3	91.5	93.3	94.9	96.6
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	***	***	***	***	***	***	***
Commercial home market shipments	***	***	***	***	***	***	***
Total home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	***	***	***	***	***	***	***

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

All responding Italian firms reported production constraints. Dalmine reported that its main constraint ***. Marcegaglia reported *** as a production constraint, while Metalfer noted that its production capacity is constrained by ***

***. Trafiltubi reported that *** limits its production capacity. Responding Italian producers did not report any anticipated changes to the character of their operations.

Alternative products

As shown in table VII-18, two of the four responding firms produced other products on the same equipment and machinery used to produce CDMT. Alternative products included cold drawn tubes and products with outside diameter greater than 330mm.

Table VII-18
CDMT: Italian producers' overall capacity and production on the same equipment as in-scope production, 2014-16, January-June 2016, and January-June 2017

* * * * * * *

Exports

Table VII-19 presents data for Italian exports of certain cold-drawn tubes. According to GTA, the leading export markets for certain cold-drawn tubes from Italy are Germany, Spain, and Bulgaria. During 2016, Germany was the largest export market, accounting for 24.8 percent, followed by Spain and Bulgaria, accounting for 6.7 percent and 6.6 percent, respectively. The United States accounted for 3.9 percent of Italian exports.

Table VII-19
Certain cold-drawn tubes: Italy exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
Italy exports to the United States	6,936	5,914	2,315
Italy exports to other major destination markets.--			
Germany	10,952	9,783	14,734
Spain	2,576	2,512	3,991
Bulgaria	1,103	1,874	3,889
Finland	3,321	2,698	3,841
Romania	4,031	2,763	3,536
Sweden	1,978	2,568	3,125
France	2,707	2,643	2,983
Turkey	986	1,405	1,944
All other destination markets	23,450	15,162	18,990
Total Italy exports	58,041	47,321	59,347
	Value (1,000 dollars)		
Italy exports to the United States	16,776	14,909	5,817
Italy exports to other major destination markets.--			
Germany	26,087	18,861	25,418
Spain	8,023	4,170	6,291
Bulgaria	2,339	2,896	5,428
Finland	7,411	4,583	6,165
Romania	9,330	5,583	7,536
Sweden	4,686	4,522	5,226
France	7,141	6,263	6,721
Turkey	10,363	8,123	4,035
All other destination markets	64,061	36,669	49,867
Total Italy exports	156,217	106,580	122,503

Table continued on the next page.

Table VII-19--Continued
Certain cold-drawn tubes: Italy exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per short ton)		
Italy exports to the United States	2,419	2,521	2,513
Italy exports to other major destination markets.--			
Germany	2,382	1,928	1,725
Spain	3,114	1,660	1,576
Bulgaria	2,121	1,545	1,396
Finland	2,232	1,699	1,605
Romania	2,314	2,021	2,131
Sweden	2,369	1,761	1,672
France	2,638	2,370	2,253
Turkey	10,509	5,783	2,076
All other destination markets	2,732	2,418	2,626
Total Italy exports	2,691	2,252	2,064
	Share of quantity (percent)		
Italy exports to the United States	11.9	12.5	3.9
Italy exports to other major destination markets.--			
Germany	18.9	20.7	24.8
Spain	4.4	5.3	6.7
Bulgaria	1.9	4.0	6.6
Finland	5.7	5.7	6.5
Romania	6.9	5.8	6.0
Sweden	3.4	5.4	5.3
France	4.7	5.6	5.0
Turkey	1.7	3.0	3.3
All other destination markets	40.4	32.0	32.0
Total Italy exports	100.0	100.0	100.0

Note.--Exports are understated to the extent that CDMT drawn from welded tube is not included. Data may be overstated to the extent that product outside the product scope of these investigations (for example, seamless cold-drawn tubing suitable for high-pressure applications) may be included.

Source: Official export statistics under HS subheading 7304.31 and 7304.51 as reported by Italy Customs in the IHS/GTA database, accessed October 16, 2017.

THE INDUSTRY IN KOREA

The Commission issued foreign producers' or exporters' questionnaires to 17 firms believed to produce and/or export CDMT from Korea.[9] Useable responses to the Commission's questionnaire were received from two firms: Sangshin Industrial Co. Ltd. ("SIC Tube"), and Yulchon Co. Ltd. ("Yulchon"). These firms' exports to the United States accounted for approximately *** percent of U.S. imports of CDMT from Korea in 2016. According to estimates requested of the responding Korean producers, these firms accounted for *** production of CDMT in Korea. Table VII-20 presents information on the CDMT operations of the responding producers and exporters in Korea.

Table VII-20
CDMT: Summary data for producers in Korea, 2016

* * * * * * *

Changes in operations

As presented in table VII-21, producers in Korea reported several operational and organizational changes since January 1, 2014.

Table VII-21
CDMT: Korean producers' reported changes in operations, since January 1, 2014

* * * * * * *

Operations on CDMT

Table VII-22 presents data on the CDMT operations of the responding Korean producers. Capacity remained unchanged during the period examined, while production increased by *** percent between 2014 and 2016 and was higher in January-June 2017 than in January-June 2016. Capacity is projected to remain unchanged in 2017 and increase in 2018, while production is projected to increase above 2016 levels in 2017 and 2018. Exports to the United States as a share of total shipments decreased slightly during 2014-16, from *** percent to *** percent, and were slightly higher in January-June 2017 than in January-June 2016.

Table VII-22
CDMT: Data on industry in Korea, 2014-16, January-June 2016, and January-June 2017 and projected calendar years 2017 and 2018

* * * * * * *

[9] These firms were identified through a review of information submitted in the petition and contained in *** records.

When asked about capacity constraints, Yulchon reported that its production capacity can be limited ***. Responding producers did not report any anticipated changes in the character of their operations.

Alternative products

Responding Korean producers did not produce other products on the same equipment and machinery used to produce CDMT.

Exports

Table VII-23 presents data for Korean exports on certain cold-drawn tubes. According to GTA, the leading export markets for certain cold-drawn tubes from Korea are Romania, Indonesia, and Italy. During 2016, Romania was the largest export market for certain cold-drawn tubes from Korea, accounting for 24.1 percent, followed by Indonesia and Italy, accounting for 15.4 percent and 11.0 percent, respectively. The United States accounted for 1.7 percent of Korean exports.

Table VII-23
Certain cold-drawn tubes: Korea exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
Korea exports to the United States	1,963	981	658
Korea exports to other major destination markets.--			
Romania	8,382	8,034	9,113
Indonesia	4,951	4,019	5,848
Italy	1,734	1,719	4,152
Iran	3,083	1,908	3,552
Canada	1,388	1,174	3,108
China	2,611	2,233	2,725
Thailand	2,009	1,584	1,747
United Arab Emirates	2,287	665	1,269
All other destination markets	7,028	6,745	5,696
Total Korea exports	35,435	29,063	37,867
	Value (1,000 dollars)		
Korea exports to the United States	3,378	2,601	1,342
Korea exports to other major destination markets.--			
Romania	10,687	8,365	8,468
Indonesia	8,184	5,587	6,750
Italy	2,351	1,957	4,201
Iran	5,534	3,632	5,927
Canada	2,935	2,067	4,943
China	4,975	3,029	3,697
Thailand	3,585	2,470	2,288
United Arab Emirates	3,784	1,018	1,513
All other destination markets	20,131	16,976	8,915
Total Korea exports	65,544	47,701	48,043

Table continued on the next page.

Table VII-23--Continued
Certain cold-drawn tubes: Korea exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per short ton)		
Korea exports to the United States	1,720	2,651	2,040
Korea exports to other major destination markets.--			
Romania	1,275	1,041	929
Indonesia	1,653	1,390	1,154
Italy	1,355	1,138	1,012
Iran	1,795	1,904	1,668
Canada	2,115	1,760	1,591
China	1,906	1,356	1,357
Thailand	1,785	1,559	1,310
United Arab Emirates	1,654	1,531	1,193
All other destination markets	2,865	2,517	1,565
Total Korea exports	1,850	1,641	1,269
	Share of quantity (percent)		
Korea exports to the United States	5.5	3.4	1.7
Korea exports to other major destination markets.--			
Romania	23.7	27.6	24.1
Indonesia	14.0	13.8	15.4
Italy	4.9	5.9	11.0
Iran	8.7	6.6	9.4
Canada	3.9	4.0	8.2
China	7.4	7.7	7.2
Thailand	5.7	5.5	4.6
United Arab Emirates	6.5	2.3	3.4
All other destination markets	19.8	23.2	15.0
Total Korea exports	100.0	100.0	100.0

Note.--Exports are understated to the extent that CDMT drawn from welded tube is not included. Data may be overstated to the extent that product outside the product scope of these investigations (for example, seamless cold-drawn tubing suitable for high-pressure applications) may be included.

Source: Official export statistics under HS subheadings 7304.31 and 7304.51 as reported by Korea's Customs and Trade Development Institution in the IHS/GTA database, accessed October 16, 2017.

THE INDUSTRY IN SWITZERLAND

The Commission issued foreign producers' or exporters' questionnaires to three firms believed to produce and/or export CDMT from Switzerland.[10] Useable responses to the Commission's questionnaire were received from all three firms: Benteler Rothrist AG ("Benteler Rothrist"),[11] Jansen AG, and Mubea Prazisionstahlrohr AG ("Mubea").[12] These firms' exports to the United States accounted for approximately *** percent of U.S. imports of CDMT from Switzerland in 2016. According to estimates requested of the responding Swiss producers, these firms accounted for *** production of CDMT in Switzerland. Table VII-24 presents information on the CDMT operations of the responding producers and exporters in Switzerland.

Table VII-24
CDMT: Summary data for producers in Switzerland, 2016

* * * * * * *

Changes in operations

Table VII-25 presents Swiss producers' reported changes in operations since January 1, 2014.

Table VII-25
CDMT: Swiss producers' reported changes in operations, since January 1, 2014

* * * * * * *

Operations on CDMT

Table VII-26 presents data the CDMT operations of the responding Swiss producers. Capacity and production increased between 2014 and 2016, by *** percent and *** percent respectively, and were higher in January-June 2017 than in January-June 2016. Capacity and production are projected to increase above 2016 levels in 2017 and 2018. Swiss producers' exports accounted for the vast majority of shipments, ranging from *** percent in 2014 to *** percent in 2016. Exports to the United States decreased by *** percentage points between 2014 and 2016, from *** percent to *** percent, and were slightly higher in January-June 2017 than in January-June 2016.

[10] These firms were identified through a review of information submitted in the petition and contained in *** records.

[11] Benteler Rothrist reported that CDMT represented *** percent of its total sales in its most recent fiscal year.

[12] Mubea reported that CDMT represented *** percent of its total sales in its most recent fiscal year.

Table VII-26
CDMT: Data on industry in Switzerland, 2014-16, January-June 2016, and January-June 2017 and projected calendar years 2017 and 2018

* * * * * * *

All three responding firms reported production constraints. Benteler Rothrist noted that *** constrains production. Jansen AG reported its heat treatment operations as a production constraint. Mubea reported that its production is limited by ***. Responding producers did not report any anticipated changes in the character of their operations.

Alternative products

As shown in table VII-27, all three responding Swiss firms produced other products on the same equipment and machinery used to produce CDMT. Alternative products included welded tubes, profiles and tailor roller tubes, cold-drawn tubes less than 12 inches in length, and other shapes, such as rectangular, etc.

Table VII-27
CDMT: Swiss producers' overall capacity and production on the same equipment as in-scope production, 2014-16, January-June 2016, and January-June 2017

* * * * * * *

Exports

Table VII-28 presents data for Swiss exports of certain cold-drawn tubes. During 2016, Germany was the top export market for certain cold-drawn tubes from Switzerland, accounting for 73.6 percent. The United States was the second largest export market, accounting for 7.2 percent, followed by Italy, accounting for 4.3 percent.

Table VII-28
Certain cold-drawn tubes: Switzerland exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
Switzerland exports to the United States	49	59	48
Switzerland exports to other major destination markets.--			
Germany	377	423	488
Italy	521	1	29
Bosnia & Herzegovina	---	0	21
Czech Republic	4	21	20
Austria	20	16	17
Bulgaria	6	4	10
France	1	7	5
Slovakia	3	5	4
All other destination markets	17	13	22
Total Switzerland exports	998	551	663
	Value (1,000 dollars)		
Switzerland exports to the United States	532	306	217
Switzerland exports to other major destination markets.--			
Germany	5,710	5,344	3,850
Italy	692	174	268
Bosnia & Herzegovina	---	0	11
Czech Republic	5	131	20
Austria	76	89	123
Bulgaria	8	3	7
France	27	48	108
Slovakia	49	16	33
All other destination markets	906	235	289
Total Switzerland exports	8,006	6,346	4,926

Table continued on the next page.

Table IV-28--Continued
Certain cold-drawn tubes: Switzerland exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per short ton)		
Switzerland exports to the United States	10,781	5,207	4,532
Switzerland exports to other major destination markets.--			
Germany	15,158	12,627	7,894
Italy	1,329	247,704	9,313
Bosnia & Herzegovina	---	314	516
Czech Republic	1,517	6,120	1,034
Austria	3,724	5,592	7,034
Bulgaria	1,484	731	739
France	28,603	6,405	21,555
Slovakia	15,005	2,876	9,123
All other destination markets	52,585	17,485	13,231
Total Switzerland exports	8,022	11,526	7,431
	Share of quantity (percent)		
Switzerland exports to the United States	4.9	10.7	7.2
Switzerland exports to other major destination markets.--			
Germany	37.7	76.9	73.6
Italy	52.2	0.1	4.3
Bosnia & Herzegovina	---	0.0	3.2
Czech Republic	0.4	3.9	3.0
Austria	2.0	2.9	2.6
Bulgaria	0.6	0.7	1.5
France	0.1	1.4	0.8
Slovakia	0.3	1.0	0.5
All other destination markets	1.7	2.4	3.3
Total Switzerland exports	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.
Note.--Exports are understated to the extent that CDMT drawn from welded tube is not included. Data may be overstated to the extent that product outside the product scope of these investigations (for example, seamless cold-drawn tubing suitable for high-pressure applications) may be included.

Source: Official export statistics under HS subheadings 7304.31 and 7304.51 as reported by Swiss Customs in the IHS/GTA database, accessed April 25, 2017.

SUBJECT COUNTRIES COMBINED

Tables VII-29 and VII-30 present summary data on the CDMT operations of the reporting subject producers.

Table VII-29
CDMT: Data on industry in subject countries, 2014-16, January-June 2016, and January-June 2017 and projected calendar years 2017 and 2018

* * * * * * *

Table VII-30
CDMT: Overall capacity and production on the same equipment as in-scope production by producers in subject countries, 2014-16, January-June 2016, and January-June 2017

* * * * * * *

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-31 presents data on U.S. importers' reported inventories of CDMT.

Table VII-31
CDMT: U.S. importers' end-of-period inventories of imports by source, 2014-16, January-June 2016, and January-June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
	Inventories (short tons); Ratios (percent)				
Imports from China					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Germany					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from India					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Italy					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Korea					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Switzerland					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***

Table continued on the next page.

Table VII-31--Continued
CDMT: U.S. importers' end-of-period inventories of imports by source, 2014-16, January-June 2016, and January-June 2017

Item	Calendar year			January to June	
	2014	2015	2016	2016	2017
	Inventories (short tons); Ratios (percent)				
Imports from subject sources					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from all other sources:					
Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from all import sources:					
Inventories	27,953	37,620	34,162	37,449	31,979
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***

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

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of CDMT after June 30, 2017. Table VII-32 presents U.S. import shipments of CDMT arranged for importation after June 30, 2017.

Table VII-32
CDMT: Arranged imports, July 2017 through June 2018

* * * * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS[13]

In February 2017, India issued final antidumping duties ranging from $961.33 and $1,610.67 per metric ton on seamless tubular products from China that include the subject CDMT. In August 2016, Turkey issued an antidumping duty order on seamless cold drawn steel pipe and tube products from China, with duties ranging from $100 to $120 per ton. In November 2016, Thailand issued preliminary duties on certain iron steel pipe and tube products from China and Korea, which appear to include subject CDMT. The final determination has not been made by the Thai government. In July 2016, Brazil issued an antidumping duty order on

[13] Unless otherwise noted, information in this section is based on Petitioner's postconference brief, "Responses to ITC Staff Questions", pp. 15-16.

seamless carbon steel tubes, including subject merchandise, from China, with duties ranging from $1,009.29 to $1,356.90 per metric ton.

INFORMATION ON NONSUBJECT COUNTRIES[14]

There is limited nonsubject country information available that is specific to CDMT. The top three nonsubject sources of U.S. imports in 2016 were Japan (accounting for *** percent of nonsubject imports), Romania (*** percent), and Mexico (*** percent) (table IV-3). According to proprietary Customs records, imports from Japan are predominately from ***. Virtually all U.S. imports from Romania were produced by ***.[15] Imports from Mexico are predominately from ***.[16]

Table VII-33 presents information on global exports of certain cold-drawn tubes. Global exports of certain cold-drawn tubes remained relatively stable during 2014-16 with a four percent decrease, by quantity, during this period. The two largest global exporters, China and Germany, accounted for 23 and 16 percent, respectively, of global exports, and together they constitute over a third of total exports. The next largest exporter is Oman for which exports increased from a minimal amount during 2014-15 to eight percent of global exports in 2016. Oman was one of the exporters experiencing the largest change in terms of export quantity during this period; its exports increased by nearly 78,000 short tons from three short tons in 2014. Exports from China decreased by more than 77,000 short tons during this period. No other exporting country of the top ten exporters experienced such a large change in the quantity of exports during this period.

[14] Unless otherwise indicated, information in this section was obtained from proprietary Customs records using HTS statistical reporting numbers 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, and 7306.50.5030, accessed May 19, 2017.

[15] ***.

[16] ***.

Table VII-33

Certain cold-drawn tubes: Global exports by exporter, 2014-16

Exporter	Calendar year		
	2014	2015	2016
	Quantity (short tons)		
United States	45,321	26,294	21,307
China	301,016	277,333	223,774
Germany	153,123	149,785	157,131
India	22,334	20,215	11,396
Italy	58,041	47,321	59,347
Korea	35,435	29,063	37,867
Switzerland	998	551	663
All other major reporting exporters.-- Oman	3	6	77,899
France	57,496	58,258	58,318
Japan	58,783	57,786	54,526
Romania	42,839	47,093	51,595
Slovakia	51,136	51,543	47,226
Spain	22,517	23,072	23,734
Austria	20,368	22,270	20,952
Ukraine	26,669	15,178	19,034
Netherlands	17,226	16,480	16,455
Russia	21,467	19,667	16,297
All other exporters	78,769	67,936	70,894
Total global exports	1,013,542	929,851	968,416
	Value (1,000 dollars)		
United States	164,016	133,375	107,127
China	393,783	323,954	240,428
Germany	453,148	370,002	364,882
India	29,531	37,926	14,793
Italy	156,217	106,580	122,503
Korea	65,544	47,701	48,043
Switzerland	8,006	6,346	4,926
All other major reporting exporters.-- Oman	2	16	43,868
France	154,904	128,103	125,582
Japan	157,130	143,076	144,224
Romania	90,603	85,190	93,636
Slovakia	93,186	76,661	69,199
Spain	76,375	73,144	73,443
Austria	61,521	54,609	50,267
Ukraine	31,549	14,844	16,228
Netherlands	44,671	35,337	42,513
Russia	42,856	28,496	20,421
All other exporters	261,569	198,668	181,556
Total global exports	2,284,612	1,864,028	1,763,640

Table continued on next page.

Table VII-33--Continued
Certain cold-drawn tubes: Global exports by exporter, 2014-16

Exporter	Calendar year		
	2014	2015	2016
	Unit value (dollars per short ton)		
United States	3,619	5,072	5,028
China	1,308	1,168	1,074
Germany	2,959	2,470	2,322
India	1,322	1,876	1,298
Italy	2,691	2,252	2,064
Korea	1,850	1,641	1,269
Switzerland	8,022	11,526	7,431
All other major reporting exporters.--Oman	708	2,525	563
France	2,694	2,199	2,153
Japan	2,673	2,476	2,645
Romania	2,115	1,809	1,815
Slovakia	1,822	1,487	1,465
Spain	3,392	3,170	3,094
Austria	3,020	2,452	2,399
Ukraine	1,183	978	853
Netherlands	2,593	2,144	2,584
Russia	1,996	1,449	1,253
All other exporters	3,321	2,924	2,561
Total global exports	2,254	2,005	1,821
	Share of quantity (percent)		
United States	4.5	2.8	2.2
China	29.7	29.8	23.1
Germany	15.1	16.1	16.2
India	2.2	2.2	1.2
Italy	5.7	5.1	6.1
Korea	3.5	3.1	3.9
Switzerland	0.1	0.1	0.1
All other major reporting exporters.--Oman	0.0	0.0	8.0
France	5.7	6.3	6.0
Japan	5.8	6.2	5.6
Romania	4.2	5.1	5.3
Slovakia	5.0	5.5	4.9
Spain	2.2	2.5	2.5
Austria	2.0	2.4	2.2
Ukraine	2.6	1.6	2.0
Netherlands	1.7	1.8	1.7
Russia	2.1	2.1	1.7
All other exporters	7.8	7.3	7.3
Total global exports	100.0	100.0	100.0

Note.--Exports are understated to the extent that CDMT drawn from welded tube is not included. Data may be overstated to the extent that product outside the product scope of these investigations (for example, seamless cold-drawn tubing suitable for high-pressure applications) may be included.
Source: Official exports statistics under HS subheadings 7304.31 and 7304.51 as reported by various national statistical authorities in the IHS/GTA database, accessed October 16, 2017.

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
82 FR 19078, April 25, 2017	*Cold-Drawn Mechanical Tubing From China, Germany, India, Italy, Korea, and Switzerland; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2017-04-25/pdf/2017-08361.pdf
82 FR 22486, May 16, 2017	*Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From India and the People's Republic of China: Initiation of Countervailing Duty Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2017-05-16/pdf/2017-09869.pdf
82 FR 22491, May 16, 2017	*Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the Federal Republic of Germany, India, Italy, the Republic of Korea, the People's Republic of China, and Switzerland: Initiation of Less-Than-Fair-Value Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2017-05-16/pdf/2017-09870.pdf
82 FR 44562, September 25, 2017	*Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the People's Republic of China: Preliminary Affirmative Countervailing Duty Determination*	https://www.gpo.gov/fdsys/pkg/FR-2017-09-25/pdf/2017-20413.pdf
82 FR 44558, September 25, 2017	*Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From India: Preliminary Affirmative Countervailing Duty Determination*	https://www.gpo.gov/fdsys/pkg/FR-2017-09-25/pdf/2017-20412.pdf
82 FR 46522, October 5, 2017	*Cold-Drawn Mechanical Tubing From China, Germany, India, Italy, Korea, and Switzerland; Scheduling of the Final Phase of Countervailing Duty and Antidumping Duty Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2017-10-05/pdf/2017-21428.pdf
82 FR 55574, November 22, 2017	*Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the People's Republic of China: Preliminary Affirmative Determination of Sales at Less-Than-Fair Value and Preliminary Affirmative Determination of Critical Circumstances, in Part, and Postponement of Final Determination*	https://www.gpo.gov/fdsys/pkg/FR-2017-11-22/pdf/2017-25294.pdf

Tabulation continued on next page.

Citation	Title	Link
82 FR 55567, November 22, 2017	*Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From India: Preliminary Affirmative Determination of Sales at Less Than Fair Value, in Part, Postponement of Final Determination, and Extension of Provisional Measures*	https://www.gpo.gov/fdsys/pkg/FR-2017-11-22/pdf/2017-25292.pdf
82 FR 5558, November 22, 2017	*Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the Federal Republic of Germany: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Postponement of Final Determination*	https://www.gpo.gov/fdsys/pkg/FR-2017-11-22/pdf/2017-25291.pdf
82 FR 55561, November 22, 2017	*Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From Italy: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, in Part, Postponement of Final Determination, and Extension of Provisional Measures*	https://www.gpo.gov/fdsys/pkg/FR-2017-11-22/pdf/2017-25289.pdf
82 FR 55564, November 22, 2017	*Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the Republic of Korea: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Preliminary Affirmative Determination of Critical Circumstances, in Part, Postponement of Final Determination, and Extension of Provisional Measures*	https://www.gpo.gov/fdsys/pkg/FR-2017-11-22/pdf/2017-25290.pdf
82 FR 55571, November 22, 2017	*Cold-Drawn Mechanical Tubing From Switzerland: Preliminary Affirmative Determination of Sales at Less Than Fair Value and Postponement of Final Determination, and Extension of Provisional Measures*	https://www.gpo.gov/fdsys/pkg/FR-2017-11-22/pdf/2017-25293.pdf
82 FR 58175, December 11, 2017	*Countervailing Duty Investigation of Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From the People's Republic of China: Final Affirmative Determination, and Final Affirmative Determination of Critical Circumstances, in Part*	https://www.gpo.gov/fdsys/pkg/FR-2017-12-11/pdf/2017-26608.pdf
82 FR 58172, December 11, 2017	*Certain Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel From India: Final Affirmative Countervailing Duty Determination*	https://www.gpo.gov/fdsys/pkg/FR-2017-12-11/pdf/2017-26609.pdf

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: Cold-Drawn Mechanical Tubing from China, Germany, India, Italy, Korea, and Switzerland

Inv. Nos.: 701-TA-576-577 and 731-TA-1362-1367 (Final)

Date and Time: December 6, 2017 - 9:30 am

Sessions were held in connection with these investigations in the Main Hearing Room (Room 101), 500 E Street, SW, Washington, DC.

OPENING REMARKS:

Petitioners (**R. Alan Luberda**, Kelley Drye & Warren LLP)
Respondents (**William E. Perry**, Harris Bricken; and **Gregory J. Spak**, White & Case LLP)

In Support of the Imposition of
Antidumping and Countervailing Duty Orders:

Kelley Drye & Warren LLP
Washington DC
on behalf of

ArcelorMittal Tubular Products
Michigan Seamless Tube LLC
Plymouth Tube Co. USA
PTC Alliance Corp.
Webco Industries, Inc.
Sharon Tube Company (a division of Zekelman Industries, Inc.)

Edward S. Vore, Chief Executive Officer, ArcelorMittal Tubular Products

Mike Caporini, Chief Commercial Officer, Mechanical-Automotive North America, ArcelorMittal Tubular Products

Ted Fairley, Vice President, Michigan Seamless Tube, LLC

In Support of the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Donald Van Pelt, President, CEO, and Chairman, Plymouth Tube Co. USA

Ed Goettl, National Sales Manager, Plymouth Tube Co. USA

Cary Hart, President and Chief Executive Officer, PTC Alliance Corp.

David Boyer, Chief Operating Officer, Senior Vice President – Tubing Operations, Webco Industries, Inc.

Ken Pursel, President, Sharon Tube Company, a division of Zekelman Industries, Inc.

Roy Houseman, Legislative Representative, United Steelworkers Union

Michael T. Kerwin, Director, Georgetown Economic Services

R. Alan Luberda)
Paul C. Rosenthal)
) – OF COUNSEL
Kathleen W. Cannon)
Grace W. Kim)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:

deKieffer & Horgan, PLLC
Washington, DC
on behalf of

Mannesmann Precision Tubes GmbH
(formerly Salzgitter Mannesmann Precision GmbH)
Salzgitter Mannesmann International (USA) Inc.

Bob Moore, Vice President, Salzgitter Mannesmann International (USA) Inc.

Joerg Tilly, Manager OCTG, Salzgitter Mannesmann International (USA) Inc.

Kevin Horgan)
) – OF COUNSEL
Judith L. Holdsworth)

Alston & Bird
Washington, DC
on behalf of

Autoliv ASP, Inc. ("Autoliv")

Gary Hadfield, Autoliv Global Purchasing, Commodity Manager – Metals, Global Tubes Segment Leader, Autoliv ASP, Inc.

Kenneth G. Weigel)
) – OF COUNSEL
Chunlian (Lain) Yang)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Harris Bricken
Seattle, WA
on behalf of

Salem Steel NA, LLC
Tube Fabrication Industries, Inc.
voestalpine Rotec Inc.

Sidd Saran, President and CEO, Salem Steel NA, LLC

Julie Ellis, President, Tube Fabrication Industries, Inc.

Andrew Ball, President, voestalpine Rotec Inc.

Paul Scheuer, North American Products Manager, Borghi USA

Kenneth John "Casey" Caplea, Vice President, Supply Chain Management BV, Vibracoustic Chassis USA Inc.

William E. Perry) – OF COUNSEL

Brinks Gilson & Lione
Washington, DC
on behalf of

Dana Incorporated

Brandon DeGrendel, Senior Buyer, Dana International

Lyle Vander Schaaf) – OF COUNSEL

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):

White & Case LLP
Washington, DC
on behalf of

Benteler Steel/Tube GmbH
Benteler Rothrist AG

Gregory J. Spak)
) – OF COUNSEL
Jessica E. Lynd)

REBUTTAL/CLOSING REMARKS:

Petitioners (**R. Alan Luberda** and **Paul C. Rosenthal**, Kelley Drye & Warren LLP)
Respondents (**William R. Perry**, Harris Bricken)

-END-

APPENDIX C

SUMMARY DATA

Table C-1
CDMT: Summary data concerning the U.S. market, 2014-16, January to June 2016, and January to June 201
(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to June		Calendar year			Jan-Jun
	2014	2015	2016	2016	2017	2014-16	2014-15	2015-16	2016-17
U.S. consumption quantity:									
Amount	558,573	473,923	445,089	227,613	255,358	(20.3)	(15.2)	(6.1)	12.2
Producers' share (fn1)	77.4	75.1	71.6	74.1	74.7	(5.8)	(2.3)	(3.5)	0.6
Importers' share (fn1):									
China	***	***	***	***	***	***	***	***	***
Germany	***	***	***	***	***	***	***	***	***
India	***	***	***	***	***	***	***	***	***
Italy	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***
Switzerland	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	22.6	24.9	28.4	25.9	25.3	5.8	2.3	3.5	(0.6)
U.S. consumption value:									
Amount	1,113,908	890,783	774,443	392,944	463,392	(30.5)	(20.0)	(13.1)	17.9
Producers' share (fn1)	73.3	70.7	68.5	69.0	72.7	(4.7)	(2.5)	(2.2)	3.7
Importers' share (fn1):									
China	***	***	***	***	***	***	***	***	***
Germany	***	***	***	***	***	***	***	***	***
India	***	***	***	***	***	***	***	***	***
Italy	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***
Switzerland	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	26.7	29.3	31.5	31.0	27.3	4.7	2.5	2.2	(3.7)
U.S. importers' U.S. shipments of imports from.--									
China:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Germany:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
India:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Italy:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Korea:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Switzerland:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Subject sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Nonsubject sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity	126,020	117,999	126,453	58,982	64,582	0.3	(6.4)	7.2	9.5
Value	297,697	260,724	243,638	121,982	126,678	(18.2)	(12.4)	(6.6)	3.8
Unit value	$2,362	$2,210	$1,927	$2,068	$1,962	(18.4)	(6.5)	(12.8)	(5.2)
Ending inventory quantity	27,953	37,620	34,162	37,449	31,979	22.2	34.6	(9.2)	(14.6)
U.S. producers':									
Average capacity quantity	677,489	678,760	706,243	349,714	356,139	4.2	0.2	4.0	1.8
Production quantity	493,139	380,954	364,210	194,314	228,660	(26.1)	(22.7)	(4.4)	17.7
Capacity utilization (fn1)	72.8	56.1	51.6	55.6	64.2	(21.2)	(16.7)	(4.6)	8.6
U.S. shipments:									
Quantity	432,553	355,924	318,636	168,631	190,776	(26.3)	(17.7)	(10.5)	13.1
Value	816,211	630,059	530,805	270,962	336,714	(35.0)	(22.8)	(15.8)	24.3
Unit value	$1,887	$1,770	$1,666	$1,607	$1,765	(11.7)	(6.2)	(5.9)	9.8
Export shipments:									
Quantity	50,724	51,422	52,714	25,710	34,322	3.9	1.4	2.5	33.5
Value	93,968	91,265	90,077	40,814	62,114	(4.1)	(2.9)	(1.3)	52.2
Unit value	$1,853	$1,775	$1,709	$1,587	$1,810	(7.8)	(4.2)	(3.7)	14.0
Ending inventory quantity	72,631	46,239	39,098	42,017	46,306	(46.2)	(36.3)	(15.4)	10.2
Inventories/total shipments (fn1)	15.0	11.4	10.5	10.8	10.3	(4.5)	(3.7)	(0.8)	(0.5)
Production workers	2,022	1,931	1,802	1,812	1,840	(10.9)	(4.5)	(6.7)	1.5
Hours worked (1,000s)	4,098	3,785	3,722	1,858	2,048	(9.2)	(7.6)	(1.7)	10.2
Wages paid ($1,000)	113,670	100,679	97,978	48,921	56,589	(13.8)	(11.4)	(2.7)	15.7
Hourly wages (dollars per hour)	$27.74	$26.60	$26.32	$26.33	$27.63	(5.1)	(4.1)	(1.0)	4.9
Productivity (short tons per 1,000 hours)	120.3	100.6	97.9	104.6	111.7	(18.7)	(16.4)	(2.8)	6.8
Unit labor costs	$230.50	$264.28	$269.02	$251.76	$247.48	16.7	14.7	1.8	(1.7)

Table continued on next page.

Table C-1--Continuec
CDMT: Summary data concerning the U.S. market, 2014-16, January to June 2016, and January to June 201
(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to June		Calendar year			Jan-Jun
	2014	2015	2016	2016	2017	2014-16	2014-15	2015-16	2016-17
U.S. producers':									
Net sales:									
Quantity	476,053	412,367	371,474	194,341	242,098	(22.0)	(13.4)	(9.9)	24.6
Value	895,860	735,109	618,119	311,777	398,828	(31.0)	(17.9)	(15.9)	27.9
Unit value	$1,882	$1,783	$1,664	$1,604	$1,647	(11.6)	(5.3)	(6.7)	2.7
Cost of goods sold (COGS)	796,767	709,158	578,907	291,698	362,880	(27.3)	(11.0)	(18.4)	24.4
Gross profit or (loss)	99,093	25,951	39,212	20,079	35,948	(60.4)	(73.8)	51.1	79.0
SG&A expenses	47,641	43,929	39,714	20,880	22,982	(16.6)	(7.8)	(9.6)	10.1
Operating income or (loss)	51,452	(17,978)	(502)	(801)	12,966	(101.0)	(134.9)	(97.2)	fn2
Net income or (loss)	29,357	(42,651)	(21,893)	(8,154)	2,877	fn2	fn2	(48.7)	fn2
Capital expenditures	27,449	28,675	18,004	9,666	8,588	(34.4)	4.5	(37.2)	(11.2)
Unit COGS	$1,674	$1,720	$1,558	$1,501	$1,499	(6.9)	2.8	(9.4)	(0.1)
Unit SG&A expenses	$100	$107	$107	$107	$95	6.8	6.4	0.4	(11.6)
Unit operating income or (loss)	$108	$(44)	$(1)	$(4)	$54	(101.3)	(140.3)	(96.9)	fn2
Unit net income or (loss)	$62	$(103)	$(59)	$(42)	$12	fn2	fn2	(43.0)	fn2
COGS/sales (fn1)	88.9	96.5	93.7	93.6	91.0	4.7	7.5	(2.8)	(2.6)
Operating income or (loss)/sales (fn1)	5.7	(2.4)	(0.1)	(0.3)	3.3	(5.8)	(8.2)	2.4	3.5
Net income or (loss)/sales (fn1)	3.3	(5.8)	(3.5)	(2.6)	0.7	(6.8)	(9.1)	2.3	3.3

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.

Source: Compiled from data submitted in response to Commission questionnaires and proprietary Customs records using HTS statistical reporting numbers 7304.31.3000, 7304.31.6050, 7304.51.1000, 7304.51.5005, 7304.51.5060, 7306.30.5015, 7306.30.5020, and 7306.50.5030, accessed November 11, 2017.