Prestressed Concrete Steel Rail Tie Wire from China and Mexico

Investigation Nos. 731-TA-1207-1208 (Final)
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Note.—Information that would reveal confidential operations of individual concerns may not
be published and therefore has been deleted.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. 731-TA-1207-1208 (Final)

PRESTRESSED CONCRETE STEEL RAIL TIE WIRE FROM CHINA AND MEXICO

DETERMINATIONS

On the basis of the record\(^1\) developed in the subject investigations, the United States International Trade Commission (Commission) determines, pursuant to section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)) (the Act), that an industry in the United States is materially injured by reason of imports from China and Mexico of prestressed concrete steel rail tie wire, provided for in subheading 7217.10.80 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce (Commerce) to be sold in the United States at less than fair value (LTFV).

BACKGROUND

The Commission instituted these investigations effective April 23, 2013, following receipt of petitions filed with the Commission and Commerce by Davis Wire Corp., Kent, Washington and Insteel Wire Products Co., Mount Airy, North Carolina. The final phase of the investigations were scheduled by the Commission following notification of a preliminary determination by Commerce that imports of prestressed concrete steel rail tie wire from China and Mexico were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. § 1673b(b)).\(^2\) 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 of January 15, 2014 (79 FR 2693). The hearing was held in Washington, DC, on May 6, 2014, 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)).

\(^2\) Commerce made a preliminary determination of sales at not less than fair value with respect to imports from Thailand, 78 FR 75547, December 12, 2013. Subsequently, Commerce made a final determination of sales at not less than fair value with respect to imports from Thailand, 79 FR 25574, May 5, 2014. Effective May 5, 2014 the Commission terminated its investigation with respect to imports from Thailand, 79 FR 26775, May 9, 2014.
Views of the Commission

Based on the record in the final phase of these investigations, we find that an industry in the United States is materially injured by reason of imports of prestressed concrete steel rail tie wire (“PC tie wire”) from China and Mexico found by the U.S. Department of Commerce (“Commerce”) to be sold in the United States at less than fair value.

I. Background

The petitions in the PC tire wire investigations were filed on April 23, 2013, by Davis Wire Group (“Davis”) and Insteel Wire Products Co. (“Insteel”), U.S. producers of PC tie wire (collectively “Petitioners”). Petitioners appeared at the hearing and submitted prehearing and posthearing briefs as well as final comments.

Aceros Camesa S.A. de C.V. (“Camesa”), a producer of subject merchandise from Mexico, and WireCo WorldGroup, Inc. (“WireCo”), an importer of subject merchandise from Mexico (collectively “Mexican Respondents”), appeared at the hearing and submitted prehearing and posthearing briefs.1

Unless otherwise noted, U.S. industry data cited herein are based on the questionnaire responses of Davis and Insteel, accounting for 100 percent of U.S. production of PC tie wire during calendar years 2011 through 2013,2 the period of investigation (“POI”). Data for subject imports from China and Mexico, as well as those for nonsubject imports from Thailand, are based on questionnaire responses from three U.S. importers, reportedly accounting for 100 percent of total imports of PC tie wire from all sources during the POI.3 The Commission received usable responses to its questionnaires from two producers/exporters of subject merchandise from China, Silvery Dragon and Shanxi New-Mile International Trade Co., Ltd. (“New-Mile”), accounting for approximately *** percent of exports of subject merchandise from China to the United States during the POI.4 The Commission received a usable foreign producer questionnaire response from Camesa, which accounted for approximately *** percent of exports of PC tie wire from Mexico in 2013.5 The Commission also received a response from the producer of nonsubject PC tie wire in Thailand, The Siam Industrial Wire Co., Ltd. (“SIW”), accounting for *** percent of exports of PC tie wire from Thailand in 2013.6

1 No exporters or importers of subject merchandise from China appeared or filed briefs in these investigations.
3 CR/PR at IV-1.
4 CR at VII-3, PR at VII-3. New-Mile is a trading company that *** by ***. New-Mile estimates that it accounted for *** percent of total exports of PC tie wire from China in 2013. Id. Silvery Dragon estimated that it accounted for approximately *** percent of PC tie wire production in China in 2013. CR at VII-4, PR at VII-3. The low coverage for subject imports from China for the POI overall results in part from the absence of a questionnaire response from Wuxi, ***. CR at VII-3 n.4, PR at VII-3 n.4.
5 CR at VII-5-6, PR at VII-4. Camesa estimated that it accounted for *** percent of PC tie wire production in Mexico in 2013. Id.
6 CR at VII-11-12, PR at VII-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.”\textsuperscript{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.”\textsuperscript{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.”\textsuperscript{9}

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

\textsuperscript{7} 19 U.S.C. § 1677(4)(A).
\textsuperscript{8} 19 U.S.C. § 1677(4)(A).
\textsuperscript{9} 19 U.S.C. § 1677(10).
\textsuperscript{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).

\textsuperscript{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.”).

\textsuperscript{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. (Continued...)
B. **Product Description**

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

The product covered by these investigations is high carbon steel wire; stress relieved or low relaxation; indented or otherwise deformed; meeting at a minimum the physical, mechanical, and chemical requirements of the American Society for Testing Materials (ASTM) A881/A881M specification; regardless of shape, size, or other alloy element levels; suitable for use as prestressed tendons in concrete railroad ties ("PC tie wire"). High carbon steel is defined as steel that contains 0.6 percent or more of carbon by weight.\(^\text{15}\)

PC tie wire is used as prestressed tendons in the construction of concrete railroad ties to impart compression into the ties, thus improving the tensile resistance supporting the flexural forces of trains traveling on the rails.\(^\text{16}\) Concrete rail ties are primarily used in the United States on track for Class I freight railroads, commuter and high speed railroads, with the vast majority going to Class I freight railroads.\(^\text{17}\) PC tie wire in the U.S. market is manufactured to conform to the test standards of the American Society for Testing and Materials ("ASTM") International A881/A881M specification, "Steel Wire, Deformed, Stress-relieved or Low-Relaxation for Prestressed Concrete Railroad Ties," or any commercial proprietary standard that meets, at a minimum, that ASTM specification.\(^\text{18}\)

\(\text{(...Continued)}\)


\(^\text{14}\) *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).


\(^\text{16}\) CR at l-9, PR at l-7. Flexural force refers to the force placed on a concrete tie as a train travels along the rails that causes the concrete tie to bend, which can lead to the cracking and failure of the concrete tie. PC tie wire within the concrete tie improves the tie’s ability to withstand this bending.

\(^\text{17}\) CR at l-10-11, PR at l-8.

\(^\text{18}\) CR at l-9, PR at l-7.
C. Domestic Like Product Analysis

In its preliminary determinations, the Commission defined a single domestic like product that was coextensive with Commerce’s scope. The Commission found that all PC tie wire shares the same basic physical characteristics and end uses. It is made from hot-rolled, high-carbon steel wire rod and conforms to the ASTM A881/A881M specification or a proprietary standard that meets or exceeds the ASTM specification. The Commission explained that all PC tie wire is used as prestressed tendons to impart compressive force to concrete rail ties and, thus, is generally interchangeable whether produced to proprietary standards or the ASTM specification only. The Commission observed that *** of the domestic industry’s U.S. shipments of PC tie wire were made directly to end users, which are concrete rail tie manufacturers, and the record indicated that market participants perceive PC tie wire as a single discrete product. It also stated that all PC tie wire is manufactured using the same production process. Finally, the Commission explained that all domestically produced PC tie wire is priced similarly, although PC tie wire produced to a proprietary specification could be priced higher than PC tie wire produced to the ASTM specification only.19

The record in the final phase of these investigations concerning the domestic like product factors is not materially different from that in the preliminary phase,20 and there is no argument that the Commission should adopt a definition of the domestic like product different from that in the preliminary determinations.21 Therefore, for the reasons set forth in the preliminary determinations, we find one domestic like product that is coextensive with the scope definition.

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.”22 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.

In its preliminary determinations, the Commission defined the domestic industry as consisting of Davis and Insteel, the two producers of PC tie wire in the United States.23 In the

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19 Prestressed Concrete Steel Rail Tie Wire from China, Mexico, and Thailand, Inv. Nos. 731-TA-1207-1209 (Preliminary), USITC Pub. 4397 (June 2013) at 6-8.
20 See generally CR at I-9-13, PR at I-7-10.
21 Petitioners argue that the Commission should define the domestic like product to be PC tie wire, coextensive with the definition of the scope of the subject merchandise, as it did in its preliminary determinations. Petitioners’ Prehearing Brief at 3-5. Mexican Respondents did not address domestic like product in their final phase submissions.
23 Preliminary Determination, USITC Pub. 4397 at 8.
final phase of these investigations, Davis and Insteel remain the sole domestic producers of PC tie wire.⁴⁴ Accordingly, we again define the domestic industry as consisting of Davis and Insteel.

IV. **Cumulation**⁴⁵

For purposes of evaluating the volume and price 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.⁴⁶

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⁴⁴ CR/PR at Table III-1. Parties have not raised any arguments regarding the definition of the domestic industry. There are no related party issues in these investigations.

⁴⁵ 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), 1677(24)(B); see also 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)). Negligibility is not an issue in these investigations. Based on questionnaire response data, subject imports from China and Mexico each exceeded the requisite 3 percent statutory negligibility threshold for the most recent 12-month period preceding the filing of the petition for which data are available. From April 2012 to March 2013, U.S. imports from China accounted for *** percent of total U.S. imports of PC tie wire by quantity, and U.S. imports from Mexico accounted for *** percent of total U.S. imports. CR at IV-6-7, PR at IV-4.

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.\textsuperscript{27} Only a “reasonable overlap” of competition is required.\textsuperscript{28}

The threshold requirement for cumulation is satisfied because petitioners filed the petitions on PC tie wire from China and Mexico on the same day, April 23, 2013.\textsuperscript{29} As discussed below, we find there to be a reasonable overlap of competition between subject imports from both countries, and between subject imports from each source and the domestic like product.

\textit{Fungibility.} The record indicates that PC tie wire, when produced to a particular specification, is generally fungible. PC tie wire from all sources is manufactured to meet, at a minimum, the ASTM standard, and PC tie wire from all sources is used in the same general application as reinforcing tendons for concrete rail ties.\textsuperscript{30} Both of the responding U.S. producers reported that subject imports from China and Mexico are *** interchangeable with each other and with the domestic like product.\textsuperscript{31} The responding importers reported that imports from subject countries are *** interchangeable with the domestic like product and with each other.\textsuperscript{32} The responding purchasers reported that imports from subject countries are *** interchangeable with the domestic like product and are *** interchangeable with each other.\textsuperscript{33} The single purchaser that compared PC tie wire from the United States and China found the products to be comparable in 12 of 18 product characteristics.\textsuperscript{34} Two purchasers compared PC tie wire from the United States and Mexico; one or both found the products comparable in 16 of 18 product characteristics.\textsuperscript{35} The single purchaser that compared PC tie wire from China and Mexico found the products comparable in 16 of 18 product characteristics.\textsuperscript{36}

The record includes additional indications of fungibility between and among the domestic like product and subject imports from China and Mexico. For instance, even though

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\item \textsuperscript{27} See, e.g., \\textit{Wieland Werke, AG v. United States}, 718 F. Supp. 50 (Ct. Int’l Trade 1989).
\item \textsuperscript{28} The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), expressly states that “the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition.” H.R. Rep. No. 103-316, Vol. I at 848 (1994) (\textit{citing Fundacao Tupy, S.A. v. United States}, 768 F. Supp. at 902; \textit{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”); \textit{Wieland Werke, AG}, 718 F. Supp. at 52 (“Completely overlapping markets are not required.”)).
\item \textsuperscript{29} None of the statutory exceptions to cumulation applies. \textit{See 19 U.S.C. § 1677(7)(G)(ii).}
\item \textsuperscript{30} CR at I-9, PR at I-7.
\item \textsuperscript{31} CR/PR at Table II-10.
\item \textsuperscript{32} CR/PR at Table II-10.
\item \textsuperscript{33} CR/PR at Table II-10.
\item \textsuperscript{34} CR/PR at Table II-9. The exceptions were ***.
\item \textsuperscript{35} CR/PR at Table II-9. The exceptions were ***.
\item \textsuperscript{36} CR/PR at Table II-9. The exceptions were ***.
\end{itemize}
fungibility within *** is indicated by ***. The record indicates, moreover, that ***. Fungibility within the ASTM grade is further indicated by ***.

Channels of Distribution. U.S. producers and importers reported that *** percent of PC tie wire was shipped directly to end users. Contrary to Mexican Respondents’ claim, the fact that ***, does not alter the fact that the domestic like product and subject imports were *** shipped to end users, without the participation of intervening distributors. Indeed, *** and the three U.S. purchasers all use PC tie wire for the same purpose: production of concrete rail ties.

Geographic Overlap. The record indicates the presence of sales or offers to sell the domestic like product and subject imports in the same geographic markets in the United States. Regardless of source, the vast majority of purchases of PC tie wire were shipped to the railroad tie manufacturing facilities of CXT, located in Washington and Arizona, and those of Rocla, located in Texas, Delaware, and Colorado.

Simultaneous Presence in Market. PC tie wire from all sources was simultaneously present in the U.S. market. PC tie wire produced in the United States and Mexico was sold in the United States in each of the 12 quarters between January 2011 and December 2013 and PC tie wire from China was sold in the United States in eight of those quarters.

Conclusion. The record indicates that there is a reasonable overlap of competition between and among the subject imports from China and Mexico and the domestic like product. In particular, notwithstanding Mexican Respondents’ assertions, the record indicates fungibility. Domestic producers report that the domestic like product and imports from both subject countries are *** interchangeable and importers and purchasers report that they are *** interchangeable. Purchasers also found products from the United States, China, and Mexico comparable in most product characteristics. Indeed, ***. Additionally, *** U.S. sales are to end users, each of which is a producer of concrete rail ties. The criteria concerning geographic overlap and simultaneous presence are also met. We accordingly cumulate subject imports from China and Mexico for our analysis of material injury by reason of subject imports.

37 See also CR at II-22, PR at 10.
38 CR/PR at Table II-1, CR/PR at Diagram F-1. Consequently, Mexican Respondents’ contention that only subject imports from China were made to CXT’s proprietary specification (Mexican Respondents’ Posthearing Brief at 6-8) is not supported by the record.
39 CR/PR at Table II-1, Petitioners’ Prehearing Brief at 11.
40 CR/PR at Table II-1, CR/PR at Diagram F-1.
41 CR at II-7, PR at II-3.
42 CR/PR at Table II-1 n.1 (**).
43 CR at II-4-7, PR at II-2-3.
44 Domestic producers reported selling PC tie wire to the ***, *** and imports from Mexico were reported to be sold in the ***. CR/PR at Table II-2.
45 CR/PR at Tables G-1, G-2.
46 CR/PR at Tables V-5, V-6. While there were ***. See CR/PR at Table D-1.
V. Material Injury by Reason of Subject Imports

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.\(^\text{47}\) In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.\(^\text{48}\) The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”\(^\text{49}\) 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.\(^\text{50}\) 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.”\(^\text{51}\)

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,\(^\text{52}\) 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.\(^\text{53}\) 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.\(^\text{54}\)

\(^{47}\) 19 U.S.C. §§ 1671d(b), 1673d(b).
\(^{48}\) 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).
\(^{50}\) 19 U.S.C. § 1677(7)(C)(iii).
\(^{52}\) 19 U.S.C. §§ 1671d(a), 1673d(a).
\(^{54}\) 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.” Niijin 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 (Continued...)}
In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold. In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports. 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. It is clear

(...Continued)

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).

55 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.

56 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.”).

57 S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.
that the existence of injury caused by other factors does not compel a negative determination.58

Assessment of whether material injury to the domestic industry is “by reason of” subject imports “does not require the Commission to address the causation issue in any particular way” as long as “the injury to the domestic industry can reasonably be attributed to the subject imports” and the Commission “ensure[s] that it is not attributing injury from other sources to the subject imports.”59 60 Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”61

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.62 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.

58 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.”).

59 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.

60 Commissioner Pinkert does not join this paragraph or the following three paragraphs. He points out that the Federal Circuit, in Bratsk, 444 F.3d 1369, and Mittal Steel, held that the Commission is required, in certain circumstances when considering present material injury, to undertake a particular kind of analysis of non-subject imports, albeit without reliance upon presumptions or rigid formulas. Mittal Steel explains as follows:

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

542 F.3d at 878.

61 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.”).

62 Mittal Steel, 542 F.3d at 875-79.
*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.  

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.  

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

**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**

The sole application for PC tie wire is as reinforcing tendons in concrete rail ties used primarily in Class I freight railways, but also in commuter railways and high speed rail lines. Thus, the demand for PC tie wire is derived from the demand for concrete railroad ties, which accounted for approximately 3.2 percent of the estimated 18.1 million railroad ties installed in

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63 *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).

64 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 final phase investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject merchandise (if, in fact, there were large nonsubject import suppliers). In order to provide a more complete record for the Commission’s causation analysis, these requests typically seek information on capacity, production, and shipments of the product under investigation in the major source countries that export to the United States. The Commission plans to continue utilizing published or requested information in final phase investigations in which there are substantial levels of nonsubject imports.

65 *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.”).

66 CR at I-10, II-1; PR at I-8, II-1.
the United States in 2013.\textsuperscript{67} Three producers of concrete rail ties in the United States account for all purchases of PC tie wire.\textsuperscript{68} The two principal domestic producers of concrete rail ties, CXT and Rocla, accounted for *** percent of PC tie wire purchases in the United States during the POI and the third, Voestalpine Nortrak (“VAE Nortrak”), accounted for the remaining *** percent.\textsuperscript{69}

Questionnaire responses regarding demand for PC tie wire in the United States varied. Both U.S. producers reported that demand for PC tie wire has *** since 2011. Importer *** reported that demand has *** due to ***, and importer *** reported that demand ***. Purchasers *** reported that demand has ***, and purchaser *** reported that demand has *** due to ***. Two purchasers reported that demand for the final product, concrete rail ties, has *** since 2011, and one purchaser reported that demand for the final product *** due to ***.\textsuperscript{70}

Demand, as measured by apparent U.S. consumption, increased from *** pounds in 2011 to *** pounds in 2012, before declining to *** pounds in 2013, resulting in an overall decrease of *** percent from 2011 to 2013.\textsuperscript{71}

2. Supply Considerations

Sources of supply to the U.S. market during the POI included the domestic industry, subject imports, and nonsubject imports from Thailand. Only a small number of domestic and foreign producers supply the PC tie wire market in the United States.

As previously stated, there are two domestic producers of PC tie wire: Davis and Insteel. The domestic industry’s reported annual capacity was constant throughout the POI at *** pounds.\textsuperscript{72} The domestic industry’s capacity exceeded apparent U.S. consumption throughout the POI.\textsuperscript{73}

Historically, Davis was the sole U.S. producer of PC tie wire and supplier of PC tie wire to both Rocla and CXT.\textsuperscript{74} Insteel, already a producer of other wire products, began production of PC tie wire in 2009 in ***.\textsuperscript{75}

During the POI, Rocla purchased ***.\textsuperscript{76} CXT ***. CXT ***.\textsuperscript{77} All PC tie wire purchased by VAE Nortrak was ***.\textsuperscript{78}

\textsuperscript{67} CR at I-4 n.5, PR at I-4 n.5. The large majority of railroad ties installed in the United States are wood.

\textsuperscript{68} KSA LP, another U.S. producer of concrete rail ties, ***. CR at II-26 n.69, PR at II-12 n.69, CR/PR at VI-1 n.4.

\textsuperscript{69} CR at I-4-5, PR at I-4.

\textsuperscript{70} CR at II-24-25, PR at II-12; CR/PR at Table II-3.

\textsuperscript{71} CR/PR at Tables IV-4, C-1.

\textsuperscript{72} CR/PR at Tables III-3 & C-1. Since 2010, ***. CR at III-5 n.15, PR at III-3 n.15.

\textsuperscript{73} CR/PR at Table C-1. (apparent U.S. consumption was less than *** pounds in each year of the POI). CR/PR at Table IV-3.

\textsuperscript{74} CR at III-3, PR at III-2.

\textsuperscript{75} CR at III-4, PR at III-2. Insteel began supplying PC tie wire to *** and to ***. CR at III-4-5, PR at III-2. During the POI, Insteel supplied ***. Id.
The domestic industry’s share of the U.S. market declined from *** percent in 2011 to *** percent in 2012, then increased to *** percent in 2013.\textsuperscript{79} The market share of cumulated subject imports, the largest source of PC tie wire during the POI, increased from *** percent in 2011 to *** percent in 2012, then declined to *** percent in 2013.\textsuperscript{80} The market share of nonsubject imports from Thailand, the only source of nonsubject imports during the POI, increased from *** percent in 2011 to *** percent in 2012 and *** percent in 2013.\textsuperscript{81}

3. \textbf{Substitutability}

We find that, when producers have qualified to produce to the same specification for the same concrete rail tie manufacturers, there is a moderate to high degree of substitutability between the domestic like product and subject imports from China and Mexico and that price is an important consideration in purchasing decisions.\textsuperscript{82} As explained above, U.S. producers reported that subject imports from each subject country are *** interchangeable with each other and with the domestic like product, and responding importers and purchasers generally reported that imports from subject countries are *** interchangeable with the domestic like product and with each other.\textsuperscript{83} Purchasers found products from the United States, China, and Mexico comparable across most product characteristics.\textsuperscript{84} Moreover, CXT and Rocla each purchased from multiple sources of supply during the POI, including domestic, subject, or nonsubject suppliers, and both were able to use product from these sources interchangeably within certain specifications. All domestic producers reported that differences other than price were *** significant in purchasing decisions, while importers and purchasers variously reported that such factors were *** a significant factor in PC tie wire sales.\textsuperscript{85}

Mexican Respondents claim that U.S. purchasers’ increasing reliance upon subject imports resulted from issues unrelated to price. They contend, first, that Davis’s reputation was damaged when Union Pacific Railroad filed warranty claims against CXT in 2011 for

(...Continued)

\textsuperscript{76} CR/PR at II-1.
\textsuperscript{77} CR at II-6-7, II-14; PR at II-2, II-6; CR/PR at Diagram F-1. Wuxi ***. CR at II-14 n.37, PR at II-6 n.37. New-Mile, a trading company, is the exporter of the PC tie wire produced by ***. CR at II-14, PR at II-6.
\textsuperscript{78} CR at II-7, PR at II-3.
\textsuperscript{79} CR/PR at Table IV-4.
\textsuperscript{80} CR/PR at Table IV-4.
\textsuperscript{81} CR/PR at Table IV-4. Imports of PC tie wire from Thailand, subject merchandise in the Commission’s preliminary determinations, became nonsubject when Commerce issued a negative final dumping determination with respect to PC tie wire from Thailand. 79 Fed. Reg. 25574 (May 5, 2014). There are reportedly producers of PC tie wire in other nonsubject countries, including Brazil, Colombia, Portugal, Spain, and the Netherlands. CR at VII-15, PR at VII-7.
\textsuperscript{82} See, e.g., CR at II-26, PR at II-13; CR/PR at Table II-6.
\textsuperscript{83} CR/PR at Table II-10.
\textsuperscript{84} CR/PR at Table II-9.
\textsuperscript{85} CR/PR at Table II-12.
allegedly defective concrete rail ties it had purchased from CXT between 2006 and 2010, and CXT, in turn, filed claims against Davis. CXT’s claims against Davis alleged that the PC tie wire produced by Davis that was incorporated into the allegedly defective rail ties was defective. Mexican Respondents argue that this caused *** and caused Rocla to ***.86

Mexican Respondents argue that there are several other non-price reasons for Rocla’s and CXT’s increased reliance on imports. Specifically, they assert that the domestic like product is more prone to breakage in production of rail ties, is made from a lower quality steel rod, and is packaged in a manner that is not as well suited to rail tie production.87

We find the record does not support Mexican respondents’ arguments. We have considered the questions regarding the reputation of one of the domestic producers, but find that it does not alter our findings with respect to substitutability between the domestic like product and the subject imports. Davis was removed from CXT’s list of certified suppliers in 2009.88 However, in that same year Insteel began production of PC tie wire and was ***.89 By ***, Insteel had scaled up production to *** pounds.90 During 2011-13, Insteel and Davis both sold ***.91 Moreover, Davis sold ***,92 and ***.93 Thus, Mexican Respondents’ arguments concerning Davis’s reputation do not rebut our finding of moderate to high substitutability among domestic and subject producers that have qualified to produce to the same specification.

Mexican Respondents made no arguments regarding the quality of Insteel’s PC tie wire. Davis and Insteel both reported receiving very few notifications from purchasers during the POI regarding breakage, and ***.94 In addition, the record does not support the claim that the domestic like product produced by Davis is of lower quality because it is made of steel wire rod produced in mini mills from steel scrap rather than in a continuous process using iron ore. No evidence was provided that these methods for producing steel wire rod affect its quality or the quality of PC tie wire made from the rod, and neither the ASTM standard for PC tie wire nor the proprietary specifications of individual purchasers refers to the method by which the steel wire rod input must be produced.95 Nor is there any indication on the record that any U.S. purchaser ever communicated to domestic producers a preference for PC tie wire produced from steel wire rod inputs produced in a particular process.96

86 Mexican Respondents’ Prehearing Brief at 3-4. See CR at III-3-4, PR at III-2 for a discussion of the Union Pacific/CXT/Davis claims, which were settled in confidence with no public determination of liability.
87 Mexican Respondents’ Prehearing Brief at 13-17.
88 CR at III-3, PR at III-2.
89 CR at III-4, PR at III-2.
90 CR at III-5 n.14, PR at III-3 n.14.
91 CR/PR at Table G-1.
92 CR/PR at Table G-1.
93 CR at III-3, PR at III-2.
94 CR at II-31, PR at II-15
95 CR at I-11 n.22, PR at I-9 n.22; CR/PR at V-1.
96 ***. Staff telephone interview notes (May 15, 2013), EDIS Doc. 509293.
Regarding packaging, Davis reported that its standard packaging is in 5,000 to 7,000 pound coils, with the product banded in several places to prevent collapse during transit. Davis explains, however, that it also sells PC tie wire in large diameter hoops/baskets, similar to packaging of the PC tie wire from Mexico, and that it is able to produce multiple package sizes to accommodate purchasers’ specific packaging requests. Insteel reported that it is set up for one package type, **97**. The record of these investigations indicates that any concerns purchasers may have expressed to the Commission concerning the domestic producers’ packaging were either not meaningfully communicated to the domestic producers or were being addressed, **98** supporting an inference that they were not considered a barrier to acceptance of the domestic like product. Thus, we have considered the parties’ packaging claims and conclude that they do not detract from our overall findings on substitutability within PC tie wire types.

Finally, the record indicates that, although there was a broad range of domestic transportation costs depending on where the producer and customer were located, **99** domestic producers sold PC tie wire to purchasers that were not geographically proximate. **100**

### 4. Other Conditions

All three purchasers reported that they *******. The qualification process can include the producer’s submitting samples for evaluation by the purchaser, and the purchaser’s visiting the producer’s plant, and sampling runs of concrete rail ties using the producer’s product. The qualification process can address the suitability of the producer’s prices as well as the characteristics of the PC tie wire. The process can take *****. **101** Davis *****; **102** Davis, *****; **103**

The primary raw material used to manufacture PC tie wire is high-carbon steel wire rod. Overall, the average monthly price of high carbon steel rod decreased by 19.6 percent during January 2011 to December 2013. **104**

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**97 CR at II-32-35, PR at II-15-17; Petitioners’ Posthearing Brief, Ex. 1 at 17-18.**

**98 CR at II-32-35, PR at II-15-17.**

**99 CR/PR at Tables V-1, V-2, V-3. CR/PR at Tables V-1, V-2, V-3. For example, U.S. inland transportation costs from ***. CR at V-4, PR at V-3; CR/PR at Table V-1. Cf. Hearing Transcript at 170 (Barrios) (noting comparability of freight costs in general for domestic product and subject imports from Mexico).**

**100 For example, ***. CR/PR at Table G-1.**

**101 CR at II-37-41, CR at II-18-19.**

**102 CR at II-40-41, III-3; PR at II-19, III-2.**

**103 CR at II-4-7, II-40-43, III-3-5, IV-2-4; PR at II-2-3, II-19-20, III-2, IV-2-3.**

**104 CR/PR at Figure V-1, American Metal Market (May 11, 2014) (prices for high carbon wire rod) EDIS Doc. 534356.**
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.”

The volume of cumulated subject imports was *** pounds in 2011, *** pounds in 2012, and *** pounds in 2013, increasing over the POI by *** percent. As noted above, demand as measured by apparent U.S. consumption increased from *** pounds in 2011 to *** pounds in 2012 then declined to *** pounds in 2013, an overall decline of *** percent from 2011 to 2013. U.S. shipments of cumulated subject imports of PC tie wire rose at a greater rate in 2012, increasing by *** percent, than did apparent U.S. consumption, which increased only *** percent.

The share of apparent U.S. consumption held by cumulated subject imports, by quantity, increased from *** percent in 2011 to *** percent in 2012 and then declined to *** percent in 2013, for an overall decline of *** percentage point. The domestic industry’s market share, by quantity, declined from *** percent in 2011 to *** percent in 2012 before increasing to *** percent in 2013, for an overall decline of *** percentage points. Nonsubject imports’ share of apparent U.S. consumption, by quantity, increased from *** percent in 2011 to *** percent in 2012 before increasing further to *** percent in 2013. The ratio of cumulated subject imports to domestic production was very large: equivalent to *** percent of U.S. production in 2011, *** percent in 2012, and *** percent in 2013.

We find that the volume of cumulated subject imports during the POI, particularly the increase in that volume from 2011 to 2012, which as discussed below corresponded to the ***, was significant both in absolute terms and relative to consumption and production in the United States.

D. Price Effects of the Subject Imports

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

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106 CR/PR at Table IV-2.
107 CR/PR at Table C-1.
108 CR/PR at Table C-1. The bulk of the increase in subject imports was in 2012, which was the year that the domestic industry incurred its greatest loss in market share. In 2012, ***. CR/PR at Table II-1.
109 CR/PR at Tables IV-4 & C-1.
110 CR/PR at Tables IV-4 & C-1.
111 CR/PR at Tables IV-4 & C-1. Nonsubject imports, by quantity, were *** pounds in 2011, *** pounds in 2012, and *** pounds in 2013. CR/PR at Tables IV-2 & C-1.
112 CR/PR at Table IV-5.
(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.113

As discussed above, we find that there is a moderate-to-high degree of substitutability between subject imports from China and Mexico and the domestic like product meeting the same specification and that price is an important consideration in purchasing decisions.114

The Commission collected quarterly pricing data for two types of PC tie wire.115 Cumulated subject imports undersold the domestic like product in *** of *** quarterly comparisons, by margins ranging from *** percent, and oversold it in the remaining four comparisons, with margins ranging *** percent.116 In light of the importance of price in purchasing decisions, we find the underselling by subject imports to be significant.

As discussed above, we do not find support on the record for Mexican Respondents’ argument that, because purchases of the subject imports were motivated primarily by non-price factors, price differences were not important to purchasing decisions. CXT’s removal of Davis from its list of suppliers occurred in *** and thus predated the POI in these investigations, and it concerned only Davis, not Insteel, which is ***.117 This is particularly pertinent because declines in the domestic industry’s U.S. shipments from 2011 to 2012 were solely a function of ***. By contrast, Insteel’s U.S. shipments declined by *** percent between 2011 and 2012 and by *** percent over the full POI.118 Moreover, as explained above, price was an important focus for purchasers in their negotiations with domestic producers, and the record suggests

114 See also CR at II-27, PR at II-13; CR/PR at Table II-6.
115 CR at V-9-10; PR at V-5. The pricing products consisted of: (1) Rail Tie Wire/Lo Relaxation/Indented, diameter between 0.195 inch (4.95 mm) and 0.236 inch (6.0 mm), bright finish, produced to ASTM A881/A881M specification; (2) Rail Tie Wire/Lo Relaxation/Indented, diameter between 0.195 inch (4.95 mm) and 0.236 inch (6.0 mm), bright finish, produced to proprietary standards based on ASTM A881/A881M specifications. Id. The Commission received usable data from two U.S. producers and two importers of PC tie wire, although not all responding firms reported for all quarters. Id. Pricing data reported by these firms accounted for *** percent of the domestic industry’s commercial shipments of PC tie wire, *** percent of U.S. commercial shipments of subject imports from China, and *** percent of U.S. commercial shipments of subject imports from Mexico. CR at V-10, PR at V-5.
116 CR/PR at Tables V-5, V-6, V-8 (**Instances of overselling occurred in 2013 when the domestic industry regained a small amount of the market share it lost in 2012).
117 See Section V.B.4. above.
118 CR/PR at Table III-5.
that price was a reason for switching sources, and that variations among suppliers’ transportation costs did not reflect a serious disadvantage to the domestic industry.\textsuperscript{119}

As previously stated, we find that price is an important factor in purchasing decisions. Purchasers were responsive to price considerations, as shown by the extent to which they switched among suppliers.\textsuperscript{120} The lost sales data reflect the focus purchasers gave to pricing issues. Although *** it had accepted offers to purchase subject imports of PC tie wire, ***, at prices that were lower than the prices offered by domestic producers.\textsuperscript{121} The vast majority of these lost sales occurred during 2011 and 2012, while the domestic industry was losing market share.\textsuperscript{122}

Based on this evidence, we find that significant underselling by subject imports allowed those imports to gain a substantial quantity of sales at the expense of the domestic industry. The instances of underselling that occurred resulted in a significant loss of market share by the domestic industry, particularly from 2011 to 2012. As discussed above, U.S. producers’ U.S. shipments of the domestic like product declined as a share of apparent U.S. consumption from *** percent in 2011 to *** percent in 2012, and was *** percent in 2013, well below the 2011 level.\textsuperscript{123}

We do not find that subject imports depressed prices to a significant degree.\textsuperscript{124} From the first quarter of 2011 to the final quarter of 2013, the price for the domestically produced Product 1 (produced to the ASTM specification) increased overall by *** percent, while the price for domestically produced Product 2 (produced to a proprietary specification) decreased by *** percent. We observe, however, that the price declines that occurred for Product 2 were largely coincident with declines in raw material costs. Specifically, the price of steel wire rod, the main raw material used in the production of PC tie wire, peaked in mid-to-late 2011 then declined irregularly through November 2013.\textsuperscript{125} Prices for domestically produced Product 2 followed a similar trend.\textsuperscript{126}

\textsuperscript{119} See Section V.B.4. above; CR at V-22-23, PR at V-9; CR/PR at Table G-1; Petitioners’ Prehearing Brief at 12-19.
\textsuperscript{120} \textit{E.g.}, CR at IV-2-4, PR at IV-2-3; CR/PR at Table II-1, IV-2. For instance, ***. CR/PR at Table II-1.
\textsuperscript{121} CR/PR at Table V-9; CR at V-23, PR at V-9. Thus, although ***. \textit{Id.}
\textsuperscript{122} As previously stated, the domestic industry lost *** percentage points of market share between 2011 and 2012. CR/PR at Table C-1.
\textsuperscript{123} CR/PR at Table IV-4.
\textsuperscript{124} Commissioner Pinkert finds that subject imports, especially subject imports from China, depressed domestic prices in 2012. At that time, the domestic like product competed against subject imports from Mexico with respect to Product 1 and against subject imports from China with respect to Product 2. U.S. prices for Product 1 fell by *** percent over the four quarters of 2012. U.S. prices for Product 2 fell by *** percent over the first three quarters of 2012, and there were no U.S. prices available for comparison purposes in the final quarter of 2012. Calculated from CR/PR at Tables V-5-V-6. \textit{See also} Figures V-3-4. Commissioner Pinkert finds it most notable for these purposes that, from 2011 to 2012, subject imports from China increased by *** percent. CR/PR at Table IV-2.
\textsuperscript{125} CR/PR at V-1, Figure V-1.
\textsuperscript{126} CR/PR at Table V-6.
We have also examined whether subject imports have prevented price increases, which otherwise would have occurred, to a significant degree during the POI. The domestic industry’s net sales value per pound decreased from $*** in 2011 to $*** in 2013.\(^{127}\) Similarly, the domestic industry’s unit COGS decreased from $*** in 2011 to $*** in 2013.\(^{128}\) The domestic industry’s COGS as a ratio to net sales declined overall during the POI, from *** percent in 2011 to *** percent in 2013.\(^{129}\) Given the overall declines in both unit COGS and the COGS/net sales ratio, we do not find that the domestic industry could have increased prices despite its COGS/net sales ratio ***, and thus we do not find that subject imports prevented price increases, which otherwise would have occurred, to a significant degree.

In sum, subject imports significantly undersold the domestic like product. The relatively high degree of substitutability between the subject imports and domestically produced PC tie wire and the importance of price to purchasers in the U.S. market further underscore the significance of the underselling. Confirmed lost sales allegations and evidence of purchasers switching from the domestic like product to subject imports on the basis of price also indicate that the domestic industry lost sales to lower-priced subject imports. For the foregoing reasons, we find significant price effects because the underselling by the subject imports caused serious losses in sales volume and in market share for the domestic industry.

E. Impact of the Subject Imports\(^{130}\)

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.”\(^{131}\) These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, 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.”

\(^{127}\) CR/PR at Tables VI-1, C-1.

\(^{128}\) CR/PR at Tables VI-1, C-1.

\(^{129}\) CR/PR at Tables VI-1, C-1.

\(^{130}\) The statute instructs the Commission to consider the “magnitude of the dumping margin” in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determinations of sales at less than fair value regarding PC tie wire from China and Mexico, Commerce found antidumping duty margins for subject imports from China of 31.40 percent for Silvery Dragon and 35.41 percent for all others, and antidumping duty margins for subject imports from Mexico of 9.99 percent for Camesa and all others. CR/PR at Tables I-1, I-2 (citing 79 Fed. Reg. 25572 (May 5, 2014) 79 Fed. Reg. 25571 (May 5, 2014)).

\(^{131}\) 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.”).
The domestic industry's output, employment, and financial performance all declined over the POI, with particularly steep declines in output from 2011 to 2012. The domestic industry's market share fell from *** percent in 2011 to *** percent in 2012, then increased to *** percent in 2013. The domestic industry's production of PC tie wire declined from *** pounds in 2011 to *** pounds in 2012, then increased to *** pounds in 2013, remaining well below 2011 levels. Because annual capacity remained stable at *** pounds, falling production caused capacity utilization to decline from *** percent in 2011 to *** percent in 2012, before it increased *** percent in 2013. The domestic industry's U.S. shipments declined from *** pounds in 2011 to *** pounds in 2012, then increased to *** pounds in 2013. Inventories rose from *** pounds in 2011 to *** pounds in 2012, then decreased *** pounds in 2013.

The number of production related workers declined overall from *** in 2011 to *** in 2013. Total hours worked, hours worked per worker, and wages paid also declined overall from 2011 to 2013. Hourly wages and productivity increased overall from 2011 to 2013. In 2011, the domestic industry experienced *** and its operating margin was *** percent. Operating losses and negative margins continued in 2012 and 2013, at $*** and *** percent, and $*** and *** percent, respectively. Capital expenditures declined during the POI; the industry also was *** research and development expenditures during the POI.

As previously stated, the subject imports took market share from the domestic industry during the POI, causing the domestic industry's production and shipments to decline. These declines in turn had a negative impact on the industry's employment and financial performance. As we have previously discussed, subject import volume increased *** from 2011 to 2012, and in 2013 maintained a high market penetration and very high levels relative to domestic production. Moreover, the increasing subject imports significantly undersold the domestic like product during the POI. We accordingly find that the significant volume of subject imports, which caused serious losses in sales and market share for the domestic industry, had a significant adverse impact on the domestic industry.

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132 CR/PR at Table IV-4.
133 CR/PR at Table III-3.
134 CR/PR at Table III-3. The domestic industry's capacity exceeded apparent U.S. consumption throughout the POI and thus we do not rely to a great extent on the capacity utilization data.
135 CR/PR at Table III-5. The domestic industry reported *** export shipments. Id.
136 CR/PR at Table III-6.
137 CR/PR at Table III-7.
138 CR/PR at Table III-7. Total hours worked declined from *** in 2011 to *** in 2013, hours worked per production and related worker (PRW) declined from *** in 2011 to *** in 2013, and wages paid declined from $*** in 2011 to $*** in 2013. Id.
139 CR/PR at Table III-7. Hourly wages increased overall from $*** in 2011 to $*** in 2013, productivity increased overall from *** pounds per hour in 2011 to *** pounds per hour in 2013. Id.
140 CR/PR at Table VI-1.
141 CR/PR at Table VI-1.
142 CR/PR at Table VI-5. Capital expenditures declined from $*** in 2011 to $*** in 2012 and then increased to $*** in 2013.
We have considered whether there are other factors that may have had an adverse impact on the domestic industry to ensure that we are not attributing injury from such other factors to the subject imports. We addressed above the various non-price factors that Mexican Respondents contend drove purchasing decisions, such as the Union Pacific/CXT/Davis dispute; alleged domestic product breakage, production input differences, and packaging concerns. For the reasons previously discussed, we find that these arguments are insufficient to explain the industry’s loss of sales and subject imports’ market penetration, particularly from 2011 to 2012, when the most severe declines in industry performance occurred.\textsuperscript{143} In particular, there was no reason provided on the record that any effect of the Union Pacific/CXT/Davis disputes on Davis’s reputation would have affected Insteel’s sales. Insteel, however, saw ***. Davis’s net sales increased overall during the POI from *** pounds in 2011 to *** pounds in 2013, while Insteel’s net sales declined overall from *** pounds in 2011 to *** pounds in 2013.\textsuperscript{144}

We have also considered the role of nonsubject imports in this investigation. As previously observed, nonsubject imports from Thailand were subject merchandise in the preliminary phase of these investigations but became nonsubject when Commerce issued a negative final dumping determination with respect to PC tie wire from Thailand.\textsuperscript{145} Thailand was the only source of nonsubject imports during the POI.\textsuperscript{146} The volume of these nonsubject imports was substantially less than the volume of cumulated subject imports throughout the period and in nearly all comparisons nonsubject imports were priced higher than the subject imports.\textsuperscript{147} Moreover, as previously discussed, the domestic industry had period lows in market share, production, shipments, capacity utilization, and operating margin in 2012, when subject imports surged but nonsubject imports increased only modestly. By contrast, in 2013, when nonsubject imports increased and subject imports declined, there were some increases in the domestic industry’s production, shipments, and capacity utilization, although these indicators remained well below 2011 levels and the industry’s financial performance remained poor.\textsuperscript{148} We cannot conclude, therefore, that the subject imports were only a minimal or tangential cause of injury to the domestic industry.\textsuperscript{149}

Mexican Respondents argue that negative determinations are warranted in these investigations because nonsubject imports would have replaced the subject imports without a benefit to the domestic industry. Even assuming arguendo that there would have been replacement of subject imports by nonsubject imports, and that this is legally pertinent to our

\begin{footnotesize}
\begin{enumerate}
\item CR/PR at Table VI-2.
\item Id.
\item CR/PR at Table IV-2.
\item CR/PR at E-3.
\item CR/PR at Table C-1.
\item Commissioner Pinkert acknowledges that nonsubject imports were a significant factor in the U.S. market during the POI. Regardless of whether PC tie wire is a commodity product for purposes of a Bratsk/Mittal Steel analysis, however, he finds that nonsubject imports would not have replaced the subject imports without benefit to the domestic industry if the subject imports had exited the U.S. market during the POI. This is because the prices of nonsubject imports were generally higher than the prices of the subject imports. CR/PR at E-3.
\end{enumerate}
\end{footnotesize}
analysis, we find that the domestic industry would have benefitted because the nonsubject imports were sold in the U.S. market at generally higher prices than the subject imports and consequently would not have caused the same magnitude of market displacement. Also, the fact that the domestic industry obtained additional sales in 2014 – because Rocla switched purchasing patterns due to imposition of provisional duties – rebuts the notion that the domestic industry would not have benefitted in the absence of subject imports.150

VI. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of subject imports of China and Mexico that are sold in the United States at less than fair value.

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150 Rocla indicated that in 2014 it dropped *** following imposition of provisional duties due to significant price increases. CR at II-42, PR at II-19. Rocla also indicated that in 2014, it would ***. CR at II-42 n.118, PR at II-19 n.118. ***. CR at II-43 n.120, II-20 n.120. Moreover, Insteel’s U.S. shipments during the first four months of 2014 were greater than its ***. Compare CR/PR at Table III-5 with CR at III- 9 n.17, PR at III-4 n.17. Similarly, total domestic shipments for the first four months of 2014 exceeded ***. Id.
PART I: INTRODUCTION

BACKGROUND

These investigations result from a petition filed with the U.S. Department of Commerce (“Commerce”) and the U.S. International Trade Commission (“USITC” or “Commission”) by Davis Wire Corp. (“Davis”) of Kent, Washington and Insteel Wire Products Co. (“Insteel”) of Mount Airy, North Carolina on April 23, 2013, 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 prestressed concrete steel rail tie wire (“PC tie wire”) from China, Mexico, and Thailand. The following tabulation provides information relating to the background of these investigations.

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

2 On May 5, 2014, Commerce published notice that it determined imports of PC tie wire from Thailand are not being, nor are likely to be, sold in the United States at less than fair value. Final Determination of Sales at Not Less Than Fair Value: Prestressed Concrete Steel Rail Tie Wire from Thailand, 79 FR 25574, May 5, 2014. Effective May 5, 2014, the Commission terminated its investigation on PC tie wire from Thailand. Prestressed Concrete Steel Rail Tie Wire from Thailand; Termination of Investigation, 79 FR 26775, May 9, 2014.

3 Pertinent Federal Register notices are referenced in app. A, and may be found at the Commission’s website (www.usitc.gov).

4 Appendix B presents the witnesses appearing at the Commission’s hearing.
<table>
<thead>
<tr>
<th>Effective date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 23, 2013</td>
<td>Petition filed with Commerce and the Commission; institution of the Commission's investigations (78 FR 25303, April 30, 2013).</td>
</tr>
<tr>
<td>May 20, 2013</td>
<td>Commerce’s notice of initiation (78 FR 29325).</td>
</tr>
<tr>
<td>June 20, 2013</td>
<td>Commission’s preliminary determination (78 FR 37236).</td>
</tr>
<tr>
<td>December 12, 2013</td>
<td>Commerce’s preliminary determinations with respect to China (78 FR 75545), Mexico (78 FR 75544), and Thailand (78 FR 75547); scheduling of final phase of the Commission’s investigations (79 FR 2693, January 15, 2014).</td>
</tr>
<tr>
<td>May 5, 2014</td>
<td>Commerce’s final affirmative determinations with respect to China (79 FR 25572) and Mexico (79 FR 25571). Commerce’s final negative determination with respect to Thailand (79 FR 25574).</td>
</tr>
<tr>
<td>May 5, 2014</td>
<td>Commission’s termination with respect to Thailand (79 FR 26775, May 9, 2014).</td>
</tr>
<tr>
<td>May 6, 2014</td>
<td>Commission’s hearing.</td>
</tr>
<tr>
<td>June 3, 2014</td>
<td>Commission’s vote.</td>
</tr>
<tr>
<td>June 17, 2014</td>
<td>Commission’s views.</td>
</tr>
</tbody>
</table>

**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, profits, productivity, return on investments, 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.

Organization of report

Part I of this report presents information on the subject merchandise, 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

PC tie wire is generally used in the manufacture of concrete railroad ties to strengthen and support the concrete used in their production. The U.S. market for PC tie wire totaled approximately *** pounds valued at $*** in 2013. The Commission received responses from Petitioners, Davis and Insteel, the two producers that accounted for all production of PC tie wire in the United States between 2011 and 2013. CXT, Inc., a division of L.B. Foster, (“CXT”), Tata Steel International (Americas), Inc. (“Tata”), and WireCo WorldGroup, Inc. (“WireCo”), reported importing PC tie wire from the subject countries since 2011. These firms accounted for all U.S. imports from the subject countries. In addition, Tata accounted for all imports of PC tie wire from Thailand, the sole nonsubject country. Three firms were identified as purchasers of PC tie wire, and all three firms provided responses to the Commission’s purchaser questionnaire. The two principal purchasers of PC tie wire are concrete rail tie manufacturers: CXT and Rocla Concrete Tie (“Rocla”). Together these two purchasers accounted for approximately *** percent of reported PC tie wire purchases between 2011 and 2013. Purchaser Voestalpine Nortrak (“VAE Nortrak”) accounted for the remaining *** percent of PC tie wire purchases. All three purchasers utilize PC tie wire in their production of concrete rail ties.

U.S. producers’ U.S. shipments of PC tie wire totaled *** pounds valued at $*** in 2013, and accounted for *** percent of apparent U.S. consumption by quantity (*** percent by value). U.S. shipments of imports of PC tie wire from China totaled *** pounds valued at $*** in 2013, and accounted for *** percent of apparent U.S. consumption by quantity (*** percent by value). U.S. shipments of imports of PC tie wire from Mexico totaled *** pounds valued at $*** in 2013, and accounted for *** percent of apparent U.S. consumption by quantity (*** percent by value). U.S. shipments of imports of PC tie wire from nonsubject source Thailand totaled *** pounds valued at $*** in 2013, and accounted for *** percent of apparent U.S. consumption by quantity (*** percent by value). There were no reported U.S. shipments of imports from any other nonsubject country.

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 two firms that accounted for all U.S. production of PC tie wire during 2011-13. Data for U.S. imports from China, Mexico, and Thailand are compiled based on responses to the Commission’s U.S.

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5 Concrete railroad ties accounted for approximately 3.2 percent of the estimated 18.1 million railroad ties installed in 2013. The vast majority of railroad ties are manufactured using wood. Railway Tie Association, “Cross ties,” September/October 2013, p. 10.
6 CXT is an importer and purchaser of PC tie wire. All PC tie wire imported by CXT is ***.
7 Conference transcript, p. 9 (Lebow) and hearing transcript, p. 120 (Barrios).
8 Hearing transcript, p. 18 (Quirk).
importers’ questionnaire. Foreign industry data are based on responses to the Commission’s foreign producers’ questionnaires.

PREVIOUS AND RELATED INVESTIGATIONS

There have been no previous antidumping or countervailing duty investigations on PC tie wire. However, the Commission has conducted several investigations and reviews concerning prestressed concrete steel wire strand (“PC strand”). At this time antidumping and/or countervailing duty orders are in effect in the United States covering PC strand from Brazil, China, India, Japan, Korea, Mexico, and Thailand.9

NATURE AND EXTENT OF SALES AT LTFV

On May 5, 2014, Commerce published a notice in the Federal Register of its final determinations of sales at LTFV with respect to U.S. imports of PC tie wire from China10 and Mexico.11 Also on May 5, 2014, Commerce published a notice in the Federal Register of its final determination of sales at not LTFV with respect to U.S. imports of PC tie wire from Thailand.12 Tables I-1 and I-2 present Commerce’s dumping margins with respect to imports of PC tie wire from China and Mexico.

Table I-1
PC tie wire: Commerce’s final weighted-average LTFV margins with respect to imports from China

<table>
<thead>
<tr>
<th>Exporter/manufacturer</th>
<th>Final dumping margin (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silvery Dragon Group Technology and Trading Co., Ltd. Tianjin</td>
<td>31.40</td>
</tr>
<tr>
<td>All others</td>
<td>35.31</td>
</tr>
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</table>


9 See generally Prestressed Concrete Steel Wire Strand from China, Investigation Nos. 701-TA-464 and 731-TA-1160 (Final), USITC Publication 4162, June 2010.
Table I-2
PC tie wire: Commerce’s final weighted-average LTFV margins with respect to imports from Mexico

<table>
<thead>
<tr>
<th>Exporter/manufacturer</th>
<th>Final dumping margin (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aceros Camesa S.A. de C.V.</td>
<td>9.99</td>
</tr>
<tr>
<td>All others</td>
<td>9.99</td>
</tr>
</tbody>
</table>


THE SUBJECT MERCHANDISE

Commerce’s scope

Commerce has defined the scope of these investigations as follows:\(^{13}\)

The product covered by this investigation is high carbon steel wire; stress relieved or low relaxation; indented or otherwise deformed; meeting at a minimum the physical, mechanical, and chemical requirements of the American Society of Testing Materials (“ASTM”) A881/A881M specification; regardless of shape, size or alloy element levels; suitable for use as prestressed tendons in concrete railroad ties (“PC tie wire”). High carbon steel is defined as steel that contains 0.6 percent or more of carbon by weight.

PC tie wire is classified under the Harmonized Tariff Schedule of the United States (“HTSUS”) subheading 7217.10.8045, but may also be classified under subheadings 7217.10.7000, 7217.10.8025, 7217.10.8030, 7217.10.8090, 7217.10.9000, 7229.90.1000, 7229.90.5016, 7229.90.5031, 7229.90.5051, 7229.90.9000, and 7312.10.3012. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of the investigation is dispositive.

Tariff treatment

PC tie wire is classified under HTS subheading 7217.10.80 and imported under statistical reporting number 7217.10.8045, which covers for round wire of iron or nonalloy steel, not plated or coated, whether or not polished, containing by weight more than 0.6 percent of carbon.

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carbon, heat treated, with a diameter of 1.5 mm or more.\textsuperscript{14} HTS statistical reporting number 7217.10.8045 encompasses other wire products in addition to the subject PC tie wire. The 2014 general rate of duty for subheading 7217.10.80 is free.

Petitioners contend that some U.S. imports of PC tie wire might be imported into the United States under other HTS subheadings.\textsuperscript{15} Data collected in the final phase of these investigations indicate that such PC tie wire may have been imported into the United States under HTS statistical reporting numbers 7217.10.8090 (larger diameter wire that is not heat treated), 7229.90.5051 (larger diameter round wire of other alloy steel), or subheading 7229.90.9000 (a residual provision for other wire of other alloy steel not named in any other provision of chapter 72).

THE PRODUCT

Description and applications

PC tie wire is specifically designed to be used as prestressed tendons in the construction of concrete railroad ties, as it introduces compression into the concrete and strengthens the tie. Prestressed tendons in the concrete ties help improve the tensile resistance to support the flexural forces imparted by trains that travel along the rails.

PC tie wire in the U.S. market is manufactured to conform to the test standards of the American Society for Testing and Materials ("ASTM") International A881/A881M specification, "Steel Wire, Deformed, Stress-Relieved or Low-Relaxation for Prestressed Concrete Railroad Ties,"\textsuperscript{16} or any equivalent commercial proprietary standard that meets at a minimum the ASTM A881 specification. ASTM A881 specifies for each wire grade the nominal unit weight and dimensions, breaking (tensile) strength, elongation and relaxation tolerances, bend testing requirements,\textsuperscript{17} deformation requirements (dimension, depth, and spacing of deformations), finish, and appearance, among other characteristics and testing requirements. PC tie wire also can be produced to proprietary standards that typically exceed the performance requirements of ASTM A881 with respect to break strength, depth of deformations, and bend testing.\textsuperscript{18} PC wire that is crimped (bent) instead of indented does not meet the deformation requirements of

\textsuperscript{14} Petition, exh. Gen-2 (Ruling letter from U.S. Customs declaring HTS 7217.10.8045 the proper HTS statistical reporting number under which to classify PC tie wire).

\textsuperscript{15} Petition, pp. 3-4.


\textsuperscript{17} Bend testing measures the ability of the PC tie wire to withstand being bent through 90 degrees without cracking on the outside of the bent portion of the wire when bent around a pin.

\textsuperscript{18} Concrete tie manufacturer CXT requires that PC tie wire be produced to its own specification that exceeds certain performance requirements of ASTM A881. ***.
the ASTM A881 specification, and therefore does not conform to the ASTM A881 specification.¹⁹

PC tie wire is tensioned (pulled tightly and slightly elongated) to the point of elastic limit (the greatest stress that can be applied without causing permanent deformation to the wire) using a wire tensioning device. Concrete is then poured over the wires in a mold; after the concrete has cured, the tension in the PC tie wire is released. As the wire attempts to contract to its original shape, the concrete adheres to the wire, particularly the indentations, causing a compressive force in the concrete. The compressive force makes the concrete rail tie stronger and more durable. In the United States, concrete rail ties are commonly produced end to end in a line of concrete forms with continuous strands of PC tie wire running through the entire length of the forms (referred to as the “long-line method”). Casting beds containing the concrete forms are stationary and equipment moves along the length of each bed. Once the concrete in the casting beds is cured, the concrete is cut to length, producing individual concrete ties.

Concrete rail ties are primarily used in Class I railroads, commuter railroads, and high speed railroads, with the vast majority going to Class I railroads. All concrete ties use the same type of PC tie wire, although the amounts of PC tie wire incorporated into the ties vary depending on the type of rail application. Concrete ties intended for use in Class I rail lines can incorporate up to 20 PC tie wires per tie. In comparison, concrete ties intended for use in light rail applications such as light rails or rapid transit systems may incorporate 8, 10, or 12 PC tie wires per tie.²⁰

The American Railway Engineering and Maintenance-of-Way Association (AREMA) is the governing body for railroads in the United States, and serves a similar function for railways as the American Association of State Highway and Transportation Officials (AASHTO) serves for the U.S. highway system. Guidelines for the design of concrete railroad ties are provided by AREMA’s “Manual for Railway Engineering,” which provides concrete tie producers a foundation for their own design standards.

**Manufacturing processes**

PC tie wire is produced from high-carbon steel wire rod,²¹ the primary material input, typically from grades 1075–1080 carbon steel containing between 0.76 percent and 0.84 percent carbon.

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¹⁹ See e.g., Commerce memorandum, *Home Market Sales Reporting of The Siam Industrial Wire Co., Ltd. (SIW)*, October 28, 2013 (PC crimped wire produced by SIW (Thailand) and sold in its home market did not meet the indentation requirements under the ASTM A881 specification).

²⁰ Conference transcript, p. 43 (Quirk) and 59 (Meiser).

²¹ Wire rod is a hot-rolled intermediate steel product of circular or approximately circular cross section that typically is produced in nominal fractional diameters from 7/32 inch (5.6 mm) to 47/64 inch (18.7 mm) and sold in irregularly wound coils, primarily for subsequent drawing and finishing by wire drawers. In the United States, the nonintegrated (or minimill) production process in which ferrous scrap and other alloying agents are melted in an electric arc furnace (EAF) to produce molten steel accounts for virtually all steel produced for wire rod production. Ten firms account for all U.S. production of wire (continued...)
percent of carbon by weight. According to Petitioners, other high-carbon steel wire rod may also be used to produce PC tie wire, depending on the requirements of the customer. The manufacturing process that transforms wire rod into PC tie wire consists of several stages: (1) cleaning and descaling of the wire rod, the principal input of PC tie wire, (2) cold-drawing and indenting the wire from wire rod, (3) heat treating the wire under tensioning, and (4) coiling or spooling.

Wire rod is first cleaned and descaled to remove any dirt or mill scale. Cleaning and descaling are accomplished chemically using a strong acid, or mechanically using abrasive methods. The cleaned and descaled wire rod is then coated with zinc phosphate, a lubricant to aid in the drawing process, and cold-drawn through a series of drawing dies to reduce the cross-sectional area, typically to a nominal diameter of 5–6 mm. At the end of the drawing process, negative deformations (indentations) are rolled onto the surface of the wire at precise depths and dimensions in two or more lines spaced uniformly around the wire. The indentations create adherence of the PC tie wire to the concrete, reduce the longitudinal movement of the wire in the concrete, and provide the necessary compressive forces after the concrete has cured and the tension in the wire is released.

After the wire is drawn and indented, it is threaded onto the first of two capstans (a machine that turns so the wire can wind around it) and placed through a thermo-mechanical process in which the wire is continuously heated while under tension while being wounded around a second capstan. The different rotational speeds of the capstans impart the tension during the heat treatment, which relieves residual drawing stresses (reduce brittleness) caused

(...continued)


22 Petition, p. 5; Petitioners’ preliminary postconference brief, p.3. According to Petitioners, the inclusion of greater amounts of carbon creates the necessary mechanical properties, including specified tensile strength, load at extension, elongation, end-test requirements, and relaxation loss requirements specified in ASTM A881. ASTM A881 does not specify the carbon content of the steel wire rod to produce PC tie wire. Rather, ASTM A510 specifies the ranges or limits for carbon and other elements for each steel grade of carbon steel wire rod. Grades 1075–1080 contain 0.70–0.88 percent carbon by weight. The steel’s chemistry is fixed at the steelmaking stage. Under ASTM A510, there is no requirement that steel be produced by the basic oxygen (integrated) process. Rather, ASTM A510 specifies that the steel for wire rod be made by the EAF, basic oxygen, or other commercially accepted steel-making process. Similarly, ASTM A881 specifies that steel for PC rail tie wire be made by the basic oxygen, open hearth, or EAF process.

23 Petition, p. 5.

24 Petition, pp. 5–6.

25 The indentations may be in various shapes, including ovals and chevrons, or other types of indentations agreed to between the producer and purchaser, provided that the wire is comparable with the accepted types of mechanical properties and bond with concrete articulated in ASTM A881 or proprietary specification. Proprietary specifications may require greater deformation depths with more stringent permissible variable in dimensions.
by the cold-drawing process. This thermo-mechanical treatment also helps to permanently elongate the wire, increase the wire’s yield strength, and reduce relaxation losses, or the tendency for the wire to stretch permanently while under load for a length of time.\textsuperscript{26}

Finally, the product is inspected and tested, then banded to a reel-less coil or wound onto a wooden reel, and readied for shipment.\textsuperscript{27}

**DOMESTIC LIKE PRODUCT ISSUES**

No issues with respect to the definition of the domestic like product were raised during the preliminary or final phase of these investigations.\textsuperscript{28} Petitioners argued that the definition of the domestic like product should be co-extensive with the definition of the scope in these investigations.\textsuperscript{29} They stated that the physical characteristics and uses of all PC tie wire are the same, namely a high carbon steel wire that has been stress-relieved with indentations for use as a prestressed tendon in a concrete railroad tie. Petitioners further stated that virtually all PC tie wire is sold through the same channel of distribution, directly to the end user, and that all PC tie wire is manufactured using the same manufacturing process. They contended that all PC tie wire is interchangeable, but that PC tie wire is not interchangeable with other forms of wire.\textsuperscript{30} They further contended that all end users share this perception.\textsuperscript{31} No party requested that the Commission collect data concerning other possible domestic like products in their comments on the Commission’s draft questionnaires.

\textsuperscript{26} Petition, p. 6; Preliminary conference transcript, p. 56 (Woltz).
\textsuperscript{27} The ASTM A881 specification requires that the wire be furnished in firmly tied coils, each of one continuous length. The specification does not address coil weight or other dimensional characteristics. According to Davis, packaging of tie wire coils has evolved over the years, with several different packages developed to lower costs and improve the productivity of their customers’ facilities. Davis currently produces 5,000–7,000 pound tie wire coils. Hearing transcript, p. 46 (Quirk).
\textsuperscript{28} During the preliminary phase of these investigations, Respondents stated that they had no issues to raise with regard to the definition of the domestic like product, but reserved the right to raise this issue in any final phase investigations. Conference transcript, p. 18 (Levinson, Lebow).
\textsuperscript{29} Petition, pp. 41-42; Petitioners’ postconference brief, pp. 2-5.
\textsuperscript{30} Petitioners’ postconference brief, p. 4; Petitioners’ prehearing brief, pp. 3-5. (Petitioners stated that they and the foreign producers agree that there are no substitutes for PC tie wire). ***.
\textsuperscript{31} Petition, p. 42.
PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET CHARACTERISTICS

PC tie wire is manufactured from high carbon steel wire rod and is used as a prestressed tendon to strengthen concrete railroad ties. Demand for PC tie wire follows the demand for concrete rail ties, which are used in Class 1 railways, commuter railways, and high speed rail lines.1 The U.S. market for PC tie wire is small and highly concentrated, consisting of two domestic producers, three import sources, and three purchasers (two of which account for the *** of PC tie wire purchases) during 2011-13.

The U.S. producers of PC tie wire are Davis and Insteel. The importers are CXT (***)2 Tata (China and Thailand),3 and WireCo (Mexico),4 and the purchasers are CXT, Rocla, and VAE Norttrak. Together, CXT and Rocla accounted for *** percent of reported PC tie wire purchases during 2011-13, and VAE Norttrak accounted for the remaining *** percent. Davis sells PC tie wire produced to the ASTM A881/A881M specification *** and PC tie wire produced to a proprietary specification to VAE Norttrak.5 Insteel sells PC tie wire produced to the ASTM specification *** and PC tie wire produced to a proprietary standard ***.6 Rocla also purchases ***. CXT also purchases ***.

Concrete railroad ties are typically used for new construction rather than for replacement in tracks currently using wooden rail ties. Purchasers reported that concrete railroad ties cannot be interspersed with wooden railroad ties. Petitioners and purchasers also reported several advantages that concrete railroad ties have over wooden rail ties, which include: fuel savings, better gauge holding power, reduced track maintenance, increased railroad tie life span, and less rolling resistance.7 8

Product standards and specifications

PC tie wire is produced to the ASTM A881/A881M specification or to a proprietary standard based on the ASTM specification, which articulates the additional physical and

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1 Petition, p. 7.
2 ***.
3 ***.
4 ***.
5 Hearing transcript, pp. 18 and 45-46 (Quirk).
6 Hearing transcript, pp. 22-23 and 46 (Wagner).
7 Hearing transcript, p. 48 (Plitt) and purchaser questionnaire responses, section III-6.
8 Purchasers responses regarding the demand for wooden railroad ties since 2011 varied. Purchaser *** reported that demand for wooden railroad ties ***. Purchaser *** reported that demand for wooden railroad ties *** and added that wooden railroad ties ***. Purchaser *** reported that demand for wooden railroad ties ***.
mechanical properties of the PC tie wire required by the purchaser.9 Two purchasers, VAE Nortrak and CXT, have proprietary specifications for the PC tie wire they purchase.10

VAE Nortrak reported that ***.11 12
Both U.S. producers reported that ***. U.S. producer Davis reported that ***. U.S. producer Insteel reported that ***.
One foreign producer, ***, reported ***. ***. Foreign producer *** noted that ***.

Purchasers
The three purchasers of PC tie wire are CXT, Rocla,14 and VAE Nortrak.15 Purchasers reported sourcing *** percent of their PC tie wire from ***, *** percent from ***, and the remaining *** percent from *** during 2011-13. Data reported by each firm are presented in table II-1.

Table II-1
PC tie wire: Purchases (*** by source and product specification, 2011-13

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CXT has two U.S. concrete tie production facilities: Spokane, Washington, and Tuscon, Arizona.16 CXT also had a concrete tie production facility in Grand Island, Nebraska, which was active until early 2011.17 CXT reported purchasing ***.18 CXT also ***. CXT *** during 2011-13.

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9 Petition, pp. 4-5, and conference transcript, p. 15 (Woltz). See also, conference transcript, p. 41 (Quirk).
10 Conference transcript, p. 123 (Levinson), hearing transcript, pp. 45-46 (Quirk), and VAE Nortrak’s U.S. purchaser questionnaire response, sections III-25 and III-27. See also, conference transcript, p. 65 (Quirk). ***. Staff telephone interview with ***.
11 Staff telephone interview with ***. Petitioners stated that proprietary specifications have been in the PC tie wire market for five to six years. Conference transcript, p. 75 (Quirk).
12 ***. Email from ***.
13 VAE Nortrak’s U.S. purchaser questionnaire response, section III-25.
14 Conference transcript, p. 9 (Lebow) and hearing transcript, p. 120 (Barrios).
15 Hearing transcript, p. 18 (Quirk) and p. 185 (Cannon).
17 L.B. Foster, 2012 Annual Report, p. 75. At the staff conference, Respondents testified that CXT was forced to close its concrete tie plant in Grand Island, Nebraska, due to warranty claims from Union Pacific over the failure of CXT concrete rail ties. Conference transcript, p. 103 (Barrios).
18 CXT qualified Camesa as a supplier of PC tie wire produced to its proprietary specifications in early 2013. Hearing transcript, p. 122 (Barrios).
Rocla’s U.S. concrete tie production facilities are in Amarillo, Texas; Bear, Delaware; and Pueblo, Colorado. Rocla reported purchasing **. Rocla reported that **. Purchaser VAE Nortrak has **. VAE Nortrak reported purchasing **.

CHANNELS OF DISTRIBUTION

Petitioners reported that all PC tie wire is sold through the same channel of distribution, direct to end users. U.S. producers and importers of PC tie wire reported that ** percent of PC tie wire was shipped directly to end users.

GEOGRAPHIC DISTRIBUTION

Table II-2 presents information provided by U.S. producers and importers on the specific markets served by their firm based on their reported 2013 U.S. shipments. U.S. producers reported selling PC tie wire in the ** regions with the highest concentration of shipments to the ** region. PC tie wire imported from China is consumed in the ** regions, with the highest concentration in the ** region. PC tie wire imported from Mexico is sold in the ** regions, with the highest concentration of sales to the ** region. PC tie wire imported from Thailand is sold in the ** regions, with the highest concentration of sales to the ** region.

Table II-2
PC tie wire: Geographic market areas in the United States served by U.S. producers and importers, 2013

* * * * * * *

Both U.S. producers and one importer reported that a supplier’s U.S. geographic location ** a constraint on its ability to competitively supply PC tie wire purchasers across all

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20 Rocla opened a new concrete tie production facility in Guanajuato, Mexico **. Hearing transcript, p. 13 (Levinson), email from **, and Petitioners’ posthearing brief, exhibit 8.
21 Staff telephone with **.
22 Email from **.
23 Conference transcript, p. 30 (Cannon).
24 The Northeast, Midwest, and other U.S. market regions were omitted from the table as no firm reported shipments to those regions during 2013. CXT’s Grand Island Nebraska facility, which was active until early 2011, was located in the Midwest region.
25 U.S. producer Davis reported selling PC tie wire in the ** regions, and U.S. producer Insteel reported selling PC tie wire in the ** regions during 2013. U.S. producer Insteel added that **. Attachment to Insteel’s U.S. producer questionnaire response.
26 **.
regions of the United States. However, two importers (***), and all three purchasers reported that a supplier’s U.S. geographic location *** a constraint on the supplier’s ability to competitively serve PC tie wire purchasers across all regions of the United States. These importers and purchasers all cited ***. *** added that there is a ***.27 Purchaser VAE Nortrak added that ***.

For U.S. producers, *** percent of 2013 sales were *** miles of their production facility and *** percent were *** miles. Davis reported that *** percent of its 2013 sales of PC tie wire were shipped *** miles from its production facility and *** percent were shipped *** miles from its production facility. Insteel reported that *** percent of its sales of PC tie wire were shipped *** miles from its production facility and *** percent were shipped *** miles from its production facility.

Importer WireCo reported that *** percent of its 2013 PC tie wire imports from *** were shipped between 101 and 1,000 miles from its U.S. point of shipment, and *** percent were shipped more than 1,000 miles from its U.S. point of shipment. Importer Tata reported that *** percent of its 2013 PC tie wire imports from *** were shipped within 100 miles of its U.S. point of shipment and *** percent were shipped between 101 and 1,000 miles from its U.S. point of shipment.28

**SUPPLY AND DEMAND CONSIDERATIONS**

**U.S. supply**

**Domestic production**

Based on available information, U.S. PC tie wire producers have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of U.S.-produced PC tie wire to the U.S. market. The main contributing factor to this degree of responsiveness of supply is the availability of substantial unused capacity to increase shipments; supply responsiveness is somewhat constrained due to a limited ability to use inventories, a limited ability to ship to alternate markets, and a limited ability to produce alternate products.

Both U.S. producers reported that there have been *** in the product range, product mix, or marketing of PC tie wire since 2011. Petitioners stated that virtually all PC tie wire is produced to the same basic specification, other than the proprietary specification, which has slightly different tolerance specifications.29

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27 ***. Email from ***. For additional information on transportation costs, see Part V of this report.
28 Tata reported ***.
29 Conference transcript, p. 79 (Cannon).
Industry capacity

U.S. producers have substantial unused capacity with which they could increase production of PC tie wire in the event of a price change. U.S. producers’ capacity utilization decreased from *** percent in 2011 to *** percent in 2013. During 2011-13, production of PC tie wire decreased by *** percent from *** pounds in 2011 to *** pounds in 2013, while capacity remained constant at *** pounds.

Alternative markets

U.S. producers have very limited ability to divert shipments to or from alternative markets in response to changes in the price of PC tie wire. U.S. producers reported *** export shipments during 2011-13.

Inventory levels

U.S. producers have somewhat limited ability to use inventories as a means of increasing shipments of PC tie wire to the U.S. market. The ratio of end-of-period inventories to total shipments for U.S. producers increased from *** percent in 2011 to *** percent in 2013. U.S. producers reported that *** percent of their U.S. commercial shipments of PC tie wire are produced to order in 2013.

Production alternatives

Davis reported that it has two lines in Kent, Washington that are dedicated to the production of PC tie wire, and that no other products are produced on these two lines.\(^{30}\) Davis reported that it *** on the same equipment and machinery used in the production of PC tie wire since 2011, and it *** producing other products on the same equipment and machinery in the future.

Insteel reported *** on the same equipment and machinery used in the production of PC tie wire since 2011. Insteel reported that ***. Insteel also reported production constraints such as ***.

Supply constraints

Both U.S. producers indicated that they *** refused, declined, or been unable to supply PC tie wire since January 1, 2011.

All three purchasers reported that they *** been refused, declined, or unable to purchase PC tie wire since January 1, 2011. However, U.S. purchaser CXT reported that in 2009 it decertified Davis as a qualified supplier ***.\(^{31}\) CXT also reported that ***.\(^{32}\) Petitioners assert

\(^{30}\) Conference transcript, pp. 20 and 61 (Quirk) and hearing transcript, p. 14 (Hillebrandt). Since 2010, ***. Petitioners’ postconference brief, Exhibit 1, p. 5, email from *** and email from ***.

\(^{31}\) Thai Respondents’ postconference brief, Attachment 1, p. 2, and ***.
that changes in purchasing patterns between CXT and Davis that arose from the incident “predate the POI.” Davis reported that ***.

Subject imports from China

The Commission received a questionnaire response from one Chinese producer, Silvery Dragon, and one Chinese exporter, New Mile. New Mile reported that ***. Based on available information, Chinese producers have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of PC tie wire to the U.S. market. Supply responsiveness is increased by the availability of production alternatives and existence of alternative markets, but is constrained by limited availability of inventories.

CXT and Tata, importers of PC tie wire from China, reported that there have been *** in the product range, product mix, or marketing of PC tie wire since 2011.

Industry capacity

Silvery Dragon has unused capacity with which it could increase production of PC tie wire in the event of a price change. Silvery Dragon’s capacity utilization decreased from *** percent in 2011 to *** percent in 2013. Silvery Dragon’s production of PC tie wire decreased by *** percent from *** pounds in 2011 to *** pounds in 2013, while capacity increased by *** percent from *** pounds in 2011 to *** pounds in 2013.

Alternative markets

Chinese firms’ reported that exports as a share of total shipments increased from *** percent in 2011 to *** percent in 2013, while shipments to the home market decreased from *** percent to *** percent of total shipments. Silvery Dragon reported shipping approximately *** of its total shipments to *** during 2011-13. Silvery Dragon reported that exports to ***

33 Petitioners’ postconference brief, p. 30. See also, hearing transcript, p. 16 (Hillebrandt).
34 Petitioners’ postconference brief, Exhibit 3, p. 2.
35 Silvery Dragon reported that it accounted for *** percent of 2013 total production of PC tie wire in China. Silvery Dragon accounted for approximately *** percent of 2013 exports of PC tie wire from China to the United States.
36 New Mile *** in 2012 and 2013. New Mile did not report ***, but did estimate that its exports to the United States accounted for approximately *** percent of total exports of PC tie wire from China in 2013. Based on questionnaire coverage, staff estimates that New Mile’s exports to the United States accounted for approximately *** percent of total exports from China of PC tie wire in 2013.
37 Petitioners reported that known foreign producers and exporters of PC tie wire from China included Silvery Dragon, Wuxi, and New Mile. Petition, p. 8. Wuxi ***. Staff telephone interview with ***, January 30, 2014 and email from ***, April 3, 2014.
38 ***, Email from ***, May 12, 2014.
39 Silvery Dragon reported that ***, Email from ***, May 12, 2014.
40 Silvery Dragon reported a ***, Email from ***, May 12, 2014.
accounted for *** percent or less of its total shipments during 2011-13, and the remainder of its shipments were to ***.\(^41\) New Mile reported that *** percent and *** percent of its 2012 and 2013 total shipments, respectively, were exports to ***.\(^42\) The remainder of New Mile’s shipments for both of these years was exported ***.\(^43\)

**Inventory levels**

The ratio of end-of-period inventories to total shipments for Chinese producer Silvery Dragon increased from *** percent in 2011 to *** percent in 2013. New Mile reported *** in 2011, 2012, or 2013.

**Production alternatives**

Silvery Dragon reported that it *** able to switch production between PC tie wire and other products in response to a relative price change in the price of PC tie wire.

**Subject imports from Mexico**

The Commission received one questionnaire response from Mexican producer, Aceros Camesa S.A. de C.V. (“Camesa”).\(^44\) Based on available information, Camesa has the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of PC tie wire to the U.S. market. Supply responsiveness is increased by the availability of unused capacity and the availability of production alternatives, but is constrained by limited availability of inventories. Camesa has a limited ability to divert shipments of PC tie wire from other markets to the United States.

WireCo, the importer of PC tie wire from Mexico, reported that there have been *** in the product range, product mix, or marketing of PC tie wire since 2011.

**Industry capacity**

Camesa has unused capacity with which it could increase production of PC tie wire in the event of a price change. Camesa’s capacity utilization increased from *** percent in 2011 to *** percent in 2013. Camesa’s production of PC tie wire increased by *** percent from *** pounds in 2011 to *** pounds in 2013, while capacity remained constant at *** pounds.\(^45\)

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\(^41\) Silvery Dragon reported that ***.
\(^42\) New Mile projected that ***.
\(^43\) New Mile reported that ***.
\(^44\) Camesa is the sole exporter of PC tie wire from Mexico and estimated that it accounted for *** percent of 2013 total production of PC tie wire in Mexico. Hearing transcript, p. 11 (Levinson) and p. 18 (Quirk), and email from ***.
\(^45\) Mexican Respondents assert that Camesa will operate at 100 percent of its stress relieving capacity due to its contract with Rocla’s new concrete tie plant in Mexico. Therefore, it will have no excess

(continued...)
**Alternative markets**

*** of Camesa’s exports of PC tie wire were shipped to the United States during 2011-13. Exports to the United States as a share of total shipments accounted for *** and *** percent of Camesa’s total shipments during 2011 and 2012, respectively, while exports to all other markets accounted for *** percent of Camesa’s total shipments during 2011-12.46 Camesa reported that *** percent of its total shipments during 2013 were shipped to the ***.47

**Inventory levels**

Camesa reported *** during 2011-13.

**Production alternatives**

Camesa reported that it *** able to switch production between PC tie wire and other products in response to a relative price change in the price of PC tie wire. Camesa reported that ***. Camesa reported that the ***.

**Imports from nonsubject country Thailand**48

The Commission received one questionnaire response from Thai producer, SIW.49 Based on available information, SIW has the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of PC tie wire to the U.S. market. Supply responsiveness is increased by the availability of unused capacity, some ability to divert shipments of PC tie wire from other markets to the United States, and the availability of production alternatives, but is constrained by limited availability of inventories.

(...continued)

46 Camesa reported that its principal other export markets were ***.
47 Camesa reported *** shipments of PC tie wire to its home market during 2011-13, and projects that it will export *** percent of its total shipments to the United States in 2014 and 2015. Camesa reported that ***. Camesa’s foreign producer questionnaire response, section II-12. ***. Email from ***.
48 During the preliminary phase of these investigations, Thailand was a subject country. Commerce published its final negative determination with respect to Thailand on May 5, 2014. During 2011-13, the only nonsubject imports present in the U.S. market were from Thailand. Hearing testimony indicated that purchaser Rocla obtained PC tie wire from Spanish producer TYCSA in 2014. Hearing transcript, p. 124 (Barrios). ***. Staff telephone interview with *** and email from ***. Respondents reported that other potential sources of nonsubject supply include Belgo Mineira in Brazil and Emcocable in Colombia. Hearing transcript, p. 124 (Barrios).
49 SIW reported that it accounted for *** percent of PC tie wire exports from Thailand to the United States in 2013 and *** percent of 2013 total production of PC tie wire in Thailand.
CXT and Tata, importers of PC tie wire from Thailand, reported that there have been *** in the product range, product mix, or marketing of PC tie wire since 2011.

**Industry capacity**

SIW has unused capacity with which it could increase production of PC tie wire in the event of a price change. SIW’s capacity utilization increased from *** percent in 2011 to *** percent in 2013. SIW’s production of PC tie wire increased by *** percent during 2011-13, and capacity increased by *** percent.\(^{50}\)

**Alternative markets**

SIW’s exports to the United States increased from *** percent of total shipments in 2011 to *** percent of total shipments in 2013. SIW’s remaining export shipments were to ***. SIW’s principal export markets (other than the United States) are ***.

**Inventory levels**

The ratio of end-of-period inventories to total shipments for SIW fluctuated during 2011-13, increasing from *** percent in 2011 to *** percent in 2012, then decreasing to *** percent in 2013.

**Production alternatives**

SIW reported that it *** able to switch production between PC tie wire and other products,\(^{51}\) but that ***. SIW reported that ***.\(^{52}\)

**Supply constraints**

One importer, Tata, reported that it *** refused, declined, or been unable to supply PC tie wire since January 1, 2011. Tata reported that ***.\(^{53}\) No purchaser reported *** imported PC tie wire from any source since January 1, 2011.

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\(^{50}\) SIW allocated *** of capacity to PC tie wire of its total shared capacity of ***. In 2013, SIW’s overall capacity utilization on its shared equipment was *** percent.

\(^{51}\) SIW reported that ***.

\(^{52}\) SIW allocated approximately *** percent of its overall production capacity to PC tie wire production during 2013. SIW’s capacity utilization of its shared capacity was at least *** percent during 2011-13.

\(^{53}\) ***. Email from ***.
New suppliers

One of three purchasers indicated that new suppliers entered the U.S. market since January 2011. Purchaser *** cited Chinese supplier New Mile as a new supplier of PC tie wire. ***

U.S. demand

U.S. demand for PC tie wire depends on the demand for concrete railroad ties. Petitioners and Respondents both indicated that they rely on their customers for information on the demand for PC tie wire. The Railway Tie Association Annual Survey estimated that 530,000 concrete rail ties were laid in the United States in 2013, and projects that approximately 580,000 concrete ties will be laid in 2014 and in 2015.

Based on available information, it is likely that changes in the price level of PC tie wire will result in a small change in the quantity of PC tie wire demanded. The main contributing factor is the lack of products that can be substituted for PC tie wire.

End uses

PC tie wire is used as a prestressed tendon in concrete rail ties that are primarily used in Class 1 railways, commuter rail lines, and high speed rail lines. Petitioners reported that concrete ties used in each type of rail line contain the same PC tie wire, but the number of wires used in the rail tie will vary depending on the end use rail application.

Both U.S. producers and one purchaser (***') reported that PC tie wire produced to the ASTM A881/A881M specification and PC tie wire produced to a proprietary standard ***. Two importers (***') and one purchaser (***') reported that PC tie wire produced to the ASTM A881/A881M specification and PC tie wire produced to a proprietary standard ***. *** noted that ***.

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54 ***. Email from ***.
55 Petitioners’ postconference brief, p. 6.
56 Conference transcript, p. 53 (Quirk), p. 126 (Bhandari and Barrios).
58 Petitioners reported that a concrete rail tie contains approximately 20 pounds of PC tie wire.

Petitioners’ posthearing brief, exhibit 1, p. 29 and exhibit 4, p. 2.
59 Petition, pp. 6-7.
60 Conference transcript, p. 43 (Quirk) and hearing transcript, p. 56 (Quirk).
61 A Class 1 rail tie may incorporate as many as 20 PC tie wires per tie while concrete rail ties for light rail applications may incorporate 8, 10, or 12 PC tie wires per tie. Petitioners’ posthearing brief, exhibit 1, p. 3. See Part I for more information.
Cost share

U.S. producers and importers generally reported a moderate-to-large cost share for PC tie wire as a percentage of the price of concrete rail ties. U.S. producers reported that PC tie wire accounted for *** to *** percent of the price of concrete rail ties used in commuter rail lines and *** to *** percent of the price of concrete rail ties used in Class 1 railways and high speed rail lines. U.S. importers and purchasers reported that PC tie wire accounted for *** to *** percent of the price of concrete rail ties used in Class 1 railways, *** to *** percent of the price of concrete rail ties used in commuter rail lines, and *** percent of the price of concrete rail ties used in high speed rail lines.

Business cycles

Both U.S. producers and all three importers reported that the PC tie wire market is *** to business cycles or conditions of competition distinctive to PC tie wire.62 Two of three purchasers reported that the PC tie wire market is subject to distinct conditions of competition. One purchaser (*** reported that end users of PC tie wire in the U.S. market are very limited, and if the volume of PC tie wire imports increases significantly, there will be pressure on U.S. producers of PC tie wire to lower prices or exit the market. Another purchaser (*** cited global and domestic market demand as a condition of competition distinct to the PC tie wire market.

Apparent consumption

Apparent U.S. consumption of PC tie wire, by quantity, decreased from *** pounds in 2011 to *** pounds in 2013, a net decline of *** percent.

Demand trends

Questionnaire responses regarding demand for PC tie wire in the United States varied (table II-3). Both U.S. producers reported that demand for PC tie wire has *** since 2011. Importer *** reported that demand has *** due to ***, and importer *** reported that demand *** and cited ***. *** added that it ***. Two purchasers (*** reported that demand has ***. *** added that ***. Purchaser *** reported that demand for PC tie wire has *** due to ***. 

Table II-3
PC tie wire: Firms’ responses regarding U.S. demand since January 1, 2011

* * * * * * * *

62 Petitioners reported that there is no seasonality to the PC tie wire market, and that plants most often run year round. Conference transcript, p. 82 (Quirk and Wagner).
Two purchasers reported that demand for their final products has *** since 2011 and cited ***. One purchaser reported that demand for its final products *** and stated that ***. Most responding firms reported that demand outside of the United States has *** since 2011. One firm added that some areas outside of the United States are increasing concrete rail tie consumption.

Petitioners stated that the likelihood of continued private rail investments, light rail development, and high speed rail development are factors that affect the future demand of PC tie wire, and Petitioners expect a slow moderate growth in the demand for PC tie wire.63 Potential light rail projects include a major line in California which would run between San Francisco and Los Angeles and a line in Florida. Petitioners also note that light rail projects are dependent on federal government funding. A Class A line from Cleveland to Chicago for hauling coal has also been proposed. Class A railroad expansions are funded by Class A railroad companies, such as Burlington Northern, Union Pacific, and CSX.64 Petitioners also noted that demand for concrete ties in the private (Class A) market is easier to project than in the light rail market.65

**Substitute products**

Both U.S. producers and two of three importers reported that there are *** for PC tie wire. At the staff conference, Petitioners testified that concrete rail tie producers are set up to use either one wire product or another wire product and cannot switch between different types of wire.66 Respondents also stated that there are no substitutes for PC tie wire.67

All three responding purchasers reported that there are substitutes for PC tie wire.68 Purchaser *** reported that ASTM A421 seven-wire 270ksi smooth strand could be used as a substitute in Class 1 railway ties and certain commuter railway ties.69 Purchaser *** reported that spiral wire, PC bar, and PC strand could also be used in the production of concrete ties. Purchaser *** also reported PC strand as a substitute. Firms that reported substitutes for PC tie wire reported that changes in the prices for these substitutes has not affected the price for PC tie wire.

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63 Conference transcript, p. 44 (Woltz) and hearing transcript, p. 50 (Quirk).
64 Hearing transcript, pp. 52-55 (Quirk).
65 Hearing transcript, p. 56 (Quirk).
66 Conference transcript, p. 57 (Woltz).
67 Conference transcript, p. 125 (Barrios and Bhandari).
68 ***. Petitioners’ prehearing brief, p. 5.
69 Petitioners stated that there is no substitutability between PC tie wire and seven-wire PC strand. Conference transcript, p. 57 (Woltz). Respondents reported that PC tie wire and PC strand have some similar properties, but they are not the same. Hearing transcript, p. 177 (Barrios). ***. ***.
SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported PC tie wire depends upon such factors as relative prices, quality (e.g., reliability of supply, defect rates), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, payment terms, product services). Based on available data, staff believes that there is a moderate-to-high degree of substitutability between domestically produced PC tie wire and PC tie wire imported from subject sources.

Lead times

PC tie wire is primarily produced-to-order. U.S. producers reported that *** percent of their 2013 PC tie wire sales were produced-to-order with a lead time of *** days, and the remaining *** percent were from inventories. Tata reported that *** percent of its 2013 sales of PC tie wire imported from Thailand were produced-to-order, with lead times of *** to *** days. WireCo reported that *** percent of its 2013 sales of PC tie wire imported from Mexico were produced-to-order, with lead times of *** to *** days.

Knowledge of country sources

Three purchasers indicated that they had marketing/pricing knowledge of U.S.-produced PC tie wire, one of PC tie wire from China, and one of PC tie wire from Mexico. One purchaser (*** reported that it had marketing/pricing knowledge of PC tie wire from nonsubject country Thailand, and one purchaser (***) reported that it had marketing/pricing knowledge of PC tie wire from nonsubject country Austria.  

As shown in table II-4, purchasers’ responses regarding their own purchasing decisions based on the producer were mixed, but all purchasers reported that their customers never base purchasing decisions on the producer of the PC tie wire. Most purchasers sometimes make purchasing decisions based on the country of origin of the PC tie wire, and most purchasers’ customers never make purchasing decisions based on the country of origin.

Table II-4
PC tie wire: Purchasing decisions based on producer and country of origin, by number of reporting firms

* * * * * * * *

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70 Although no purchasers reported knowledge of PC tie wire from ***. Staff telephone interview with ***.
Factors affecting purchasing decisions

All three purchasers reported that *** was their first most important purchase factor (table II-5). Two purchasers reported *** and one firm reported *** as their second most important purchase factor. All three purchasers reported that *** was their third most important purchase factor. Two purchasers reported considering additional factors when making purchasing decisions: ***.

Table II-5
PC tie wire: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by number of reporting firms

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Petitioners contend that the bottom line to purchasers is price, and that low prices drive purchasers’ decisions to buy imported PC tie wire.  

In contrast, Respondents assert that PC tie wire purchasers’ prioritize quality in their purchasing decisions. Mexican Respondents reported that purchasers also require multiple sources of reliable suppliers. Purchaser Rocla reported that when determining quality of PC tie wire, it ***. Purchaser CXT reported considering the following characteristics to determine the quality of PC tie wire: ***. Purchaser VAE Norttrak reported that it defines the quality of PC tie wire by ***.

Two purchasers reported that they sometimes purchase the lowest-priced product for their PC tie wire purchases, and one purchaser reported that it usually purchases the lowest-priced product. Two of three purchasers reported purchasing PC tie wire from one source although a comparable product was available at a lower price from another source. Purchaser *** reported that it sometimes purchases higher priced PC tie wire because other factors, such as quality, product reliability, and delivery terms, outweigh price differences. Purchaser *** reported that it prefers *** product due to its overall quality consistency and ease of use at *** production facilities. No purchasers reported that certain types or grade of PC tie wire were only available from a single source, however, all three purchasers reported that they sometimes specifically order PC tie wire from one country in particular over other possible

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71 Conference transcript, p. 26 (Wagner). Petitioners’ prehearing brief, p. 2; Petitioners’ posthearing brief, pp. 1-2; and hearing transcript, p. 19 (Quirk) and pp. 24 and 41 (Wagner). See also Petitioners’ prehearing brief, pp. 14-17.

72 At the staff conference, Petitioners stated that the most important factor in the purchasing decisions of PC tie wire purchasers is price. Conference transcript, p. 26 (Wagner).

73 Davis asserts that price, not quality, has always been the focus of its discussions with Rocla. Respondents assert that attributes other than price, such as superior packaging and less breakage drove Rocla’s purchasing decisions. Hearing transcript, p. 12 (Levinson) and p. 16 (Hillebrandt).

74 Mexican Respondents’ prehearing brief, p. 5.
sources of supply. Two purchasers (*** noted purchasing U.S.-produced PC tie wire for their “Buy America” requirements, 75 and *** stated that it preferred PC tie wire from Mexico.

Wire breaks

*** reported that during the production of concrete rail ties ***. ***. ***. 76 ***. 77 ***. 78

Petitioners assert that wire breaks are most likely to occur in the concrete tie producers manufacturing facility. Petitioners reported that two types of breaks, bad welding during processing of the steel rod and rod defects, are usually discovered at the PC tie wire producer’s facility. Another type of break, mechanical damage, is not usually evident until the PC tie wire is at the purchaser’s facility. Mechanical damage may occur during manufacturing of the PC tie wire, loading for transport, or during handling by the purchaser. 81 Davis reported that it has a formal complaint policy in which a formal complaint is written when it receives notice of product issues. 82 Petitioners reported that ***. 83

Packaging

The packaging of PC tie wire affects the relaxation of the wire and how well the PC tie wire works with purchasers’ concrete tie production equipment. 84 There is no industry standard for packaging PC tie wire. Petitioners stated that purchasers have requirements for the size of the internal diameter of the coil that would reduce tangling issues. 85

U.S. producer Davis reported that all of its customers currently use one package, a 5,000 to 7,000 pound coil, which is steel banded in several places to prevent it from collapsing during transit. 86 Davis noted that it is able to produce multiple package sizes to accommodate

75 Purchasers reported that approximately *** percent of their 2013 purchases were required by law to be U.S.-produced PC tie wire.
76 Emails from ***.
77 Emails from ***. ***.
78 ***. Emails from ***.
79 Email from ***.
80 Email from ***.
81 Hearing transcript, pp. 75-78 (Hillebrandt and Plitt).
82 Hearing transcript, pp. 92-93 (Quirk).
83 Petitioners’ posthearing brief, exhibit 4, attachment 2 and exhibit 6, attachment.
84 Respondents assert that packaging of the PC tie wire is important to purchasers. Conference transcript, p. 98 (Bhandari) and p. 162 (Levinson). Mexican Respondents assert that Davis’ packaging places greater stress on Rocla’s production equipment resulting in more wire breaks and increased downtime. Mexican Respondents’ prehearing brief, p. 4.
85 Conference transcript, p. 84 (Plitt).
86 Davis stated that this packaging ***. In its U.S. producer questionnaire response, Davis reported that the ***. Davis added that ***. Davis’ U.S. producer questionnaire response, section IV-21;
purchasers’ specific packaging requests.\textsuperscript{87} Davis reported that it also sells PC tie wire in large diameter hoops/baskets, similar to packaging of PC tie wire sold by Camesa/Wireco.\textsuperscript{88} Insteel reported that it is only set up for one package type, \textit{***}.\textsuperscript{89} Both U.S. producers reported that their customers \textit{***} reported problems or difficulties with their packaging and coiling during 2011-13. Davis and Insteel stated that they have been able to comply with purchasers’ packaging requirements without issue.\textsuperscript{90} Davis added that, prior to these investigations, neither Rocla nor CXT reported problems with Davis’ packaging of PC tie wire.\textsuperscript{91} Importer Tata reported that it packages PC tie wire \textit{***}.\textsuperscript{92} Tata reported that \textit{***}. Importer WireCo reported that it packages PC tie wire \textit{***}.\textsuperscript{93} WireCo reported that its purchasers \textit{***} reported problems or difficulties with its packaging and coiling since January 1, 2011. Mexican Respondents assert that purchaser Rocla has described Camesa’s packaging as “user-friendly” and prefers Camesa’s packaging because of the way that it uncurls and feeds into the customer’s production line.\textsuperscript{94} \textit{***}.\textsuperscript{95} In its purchaser questionnaire response, \textit{***} reported that \textit{***}.\textsuperscript{96} However in the preliminary phase of the investigations, \textit{***}.\textsuperscript{97, 98} Purchaser \textit{***} reported that the optimal

\textit{(...continued)}

Petitioners’ posthearing brief, exhibit 1, p. 17; and hearing transcript, p. 46 (Quirk). See also Petitioners’ posthearing brief, pp. 9-10 and exhibit 4, p. 3.

\textit{87} Hearing transcript, p. 72 (Quirk). See also Petitioners’ posthearing brief, pp. 9-10.

\textit{88} Davis reported that its large diameter hoops/baskets contain reels that \textit{***}. Petitioners’ posthearing brief, exhibit 1, p. 17 and exhibit 4, p. 3.

\textit{89} Hearing transcript, p. 72 (Wagner). Insteel’s \textit{***}. Insteel’s U.S. producer questionnaire response, section IV-21.

\textit{90} Conference transcript, p. 84 (Plitt) and p. 85 (Quirk); and hearing transcript, pp. 24 and 47 (Wagner).

\textit{91} Hearing transcript, p. 21 (Quirk).

\textit{92} Tata reported that \textit{***}.

\textit{93} WireCo reported that \textit{***}.

\textit{94} Mexican Respondents’ prehearing brief, p. 4; conference transcript, p. 114 (Barrios); and hearing transcript, pp. 122 and 139 (Barrios).

\textit{95} In the preliminary phase of the investigations, \textit{***}. Staff telephone interview with \textit{***}.

\textit{96} Mexican Respondents assert that Rocla reported that Davis’ packaging was “obsolete and tight.” Hearing transcript, p. 140 (Torline).

\textit{97} \textit{***}. In their postconference brief, Petitioners stated that \textit{***}. Petitioners’ postconference brief, p. 11, and Exhibit 1, p. 4. See also hearing transcript, p. 21 (Quirk).

\textit{98} Davis reported it re-packaged PC tie wire from Mexico at Rocla’s request. Davis also reported that CXT requested Davis to re-package material from China, but it declined the request because it was full at the time. In their posthearing brief, Petitioners contend that \textit{***}. Hearing transcript p. 78 (Hillebrandt) and Petitioners’ posthearing brief, exhibit 1, p. 18. See also, Petitioners’ prehearing brief, exhibit 4, p. 7 and \textit{***}. Mexican respondents testified that they have received information from one of their customers indicating that Mexican respondents’ packaging is more convenient. Hearing transcript, pp. 139-140 (Barrios and Torline).
packaging for PC tie wire it purchases is ***. Petitioners assert that concrete rail tie manufacturers are set up to use different PC tie wire packaging methods interchangeably.

Two purchasers (***), reported that they ***. *** reported that **. *** stated that **. *** reported that **, and that it **.

**Purchaser-supplier relationships**

All three purchasers reported that purchaser-supplier relationships are *** in their purchasing decisions. Firms stated that ***. Importers also reported that purchaser-supplier relationships play a key role in the supply process of PC tie wire. Importer *** reported that it is **. Importer *** reported that **. On the other hand, U.S. producers reported that **.

**Supplier reputation**

All three purchasers reported that a supplier’s reputation and historical product performance/quality were very important factors in their purchasing decisions. Purchaser *** reported that PC tie wire is a critical material in the concrete rail ties that it produces therefore it must be manufactured to very high standards. *** added that it is very costly if a problem arises in its production process due to lower quality PC tie wire. Lower quality PC tie wire creates safety issues because it could cause wire breaks. Purchaser *** stated that purchasing a high quality product allows it to establish trusting relationships with its suppliers, and *** reported that the quality of PC tie wire is the most important factor and it will not purchase from a supplier if the quality of their product does not meet its standard and is not consistent.

Two of three purchasers reported that a supplier’s quality related reputation or merchandise quality history has affected their firm’s purchasing decisions since January 2011. Purchasers *** reported issues with PC tie wire from ***. As previously discussed, *** reported that **. *** reported experiencing quality issues with PC tie wire from ***, which resulted in the disqualification of this supplier. *** was re-qualified as a supplier for ** in early 2013 for ***.

**Importance of specified purchase factors**

Purchasers were asked to rate the importance of 21 factors in their purchasing decisions (table II-6). The factors rated as “very important” by at least two-thirds of responding purchasers were availability, delivery terms, delivery time, historical product performance/quality, packaging, price, product consistency, product defect rates, quality meets and exceeds industry standards, relationship with supplier, reliability of supply, supplier certification/qualification, supplier reputation, and technical support/service.

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99 ***
100 Hearing transcript, p. 74 (Plitt).
101 ***. *** purchaser questionnaire response, section III-19.
102 ***. Emails from ***.
Table II-6
PC tie wire: Importance of purchase factors, as reported by U.S. purchasers, by number of responding firms

* * * * * * *

Supplier certification

All three purchasers reported that they ***. Purchaser *** reported that ***. *** reported that it will consider purchasing from a supplier once the supplier has met the testing requirements. Purchaser *** reported ***.103 ***.104 ***.105 Purchaser ***.106 ***.107

Petitioners stated that during negotiations with their customers, price was agreed upon first, and only after establishing an agreement on price would their customers visit their PC tie wire production facilities, request sample product, and begin to test the PC tie wire.108 U.S. producers described the qualification as ***.109 Both U.S. producers reported that ***.

Respondents testified that price and quality are often examined simultaneously and that purchasers will ask for the price and samples at the same time.110 Importer Tata reported a qualification process ***. Importer WireCo reported that ***.

Respondents stated that one purchaser had to waive its quality specifications to use U.S.-produced PC tie wire for a concrete rail tie contract subject to Buy America restrictions.111 Insteel reported that when it began producing PC tie wire for one customer, which used the “spec within the spec” (proprietary specification), it was granted a waiver for a brief period of time until it was able to get the correct rod.112 ***.113

103 Staff telephone interview with ***.
104 ***.
105 CXT requires qualified suppliers to send samples from each individual coil for testing, and will not approve a coil to be shipped until tested. Conference transcript, p. 96 (Bhandari).
106 Staff telephone interview with ***.
107 In its final phase questionnaire response, *** reported that ***. *** U.S. purchaser questionnaire response, section III-20. However, in a staff interview during the preliminary phase, ***. Staff telephone interview with ***.
108 Conference transcript, p. 38 (Woltz), p. 40 (Quirk), p. 73 (Wagner), and p. 89 (Quirk); and hearing transcript, pp. 69-70 (Quirk and Wagner).
109 U.S. producer Davis reported that the qualification process takes ***, and Insteel reported that the qualification process can be completed ***.
110 Conference transcript, p. 107 (Barrios).
111 Conference transcript, p. 10 (Lebow). Mr. Quirk of Davis stated that he was not aware of this issue. Conference transcript, p. 87 (Quirk).
112 Conference transcript, p. 87 (Wagner).
113 ***. Staff telephone interview with ***.
*** purchasers reported that a supplier failed to qualify. Purchaser *** reported that ***. \(^{114}\) ***. **Purchaser *** reported that ***. In addition, ***. \(^{116}\)

**Changes in purchasing patterns**

Purchasers' responses regarding their purchases of U.S.-produced PC tie wire varied (table II-7). Purchaser *** reported that its purchases of U.S.-produced PC tie wire were constant because it only has one approved supplier in the United States. Purchaser *** reported that its purchases of U.S.-produced PC tie wire have increased because it has increased purchases with “Buy America” requirements, and purchaser *** reported decreasing purchases of U.S.-produced PC tie wire but did not provide an explanation. One purchaser reported decreasing purchases of Chinese PC tie wire,\(^{117}\) two purchasers reported increasing purchases of Mexican PC tie wire,\(^{118}\) and one purchaser reported that its purchases of Thai PC tie wire increased.

**Table II-7**

PC tie wire: Changes in purchase patterns from U.S., subject, and nonsubject countries

<table>
<thead>
<tr>
<th>Source of purchases</th>
<th>Did not purchase</th>
<th>Decreased</th>
<th>Increased</th>
<th>Constant</th>
<th>Fluctuated</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>0</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>0</td>
</tr>
<tr>
<td>China</td>
<td>2</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>0</td>
</tr>
<tr>
<td>Mexico</td>
<td>1</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>0</td>
</tr>
<tr>
<td>Thailand</td>
<td>2</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>0</td>
</tr>
<tr>
<td>Other nonsubject</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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

One purchaser, ***, reported purchasing from only one country (United States). *** stated that many of its customers required U.S.-produced PC tie wire for “Buy America,” and that it only purchased domestic PC tie wire because of price, quality, and consistency of supply. Two of three purchasers reported changing or adding suppliers since January 2011. Purchaser *** reported adding Chinese supplier New Mile and Mexican supplier WireCo in 2013 to mitigate supply shortages (risk of sole-sourcing), and purchaser *** reported that it dropped Davis due to price and availability.\(^{119}\) *** also reported that it dropped *** following the preliminary antidumping ruling because of significant price increases. However, *** added ***

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\(^{114}\) ***. *** purchaser questionnaire response, section III-21.

\(^{115}\) Staff telephone interview with ***.

\(^{116}\) Email from ***.

\(^{117}\) Purchaser *** reported that ***.

\(^{118}\) In response to staff questions regarding ***. Email from ***. See also hearing transcript, p. 13 (Levinson).

\(^{119}\) ***. Email from ***.
as a supplier again in *** because *** demand for PC tie wire increased and *** had a reputation for meeting supply requirements when needed. *** also reported adding ***.

**Importance of purchasing domestic product**

Purchasers reported that approximately *** percent of their 2013 PC tie wire purchases did not require domestically produced PC tie wire, and that the remaining *** percent were required by law to be U.S.-produced PC tie wire. Data for each purchaser regarding purchases requiring U.S. produced PC tie wire is presented in table II-8.

**Table II-8**
**PC tie wire: Purchases requiring U.S.-produced PC tie wire, by purchaser, 2013**

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|

Petitioners stated that Buy America policies affect a small portion of the PC tie wire industry. Two purchasers (*** reported purchasing PC tie wire produced to the ASTM specification for their purchases that require domestic product, and one purchaser (*** purchases PC tie wire produced to a proprietary standard for its purchases that required domestic product. All three purchasers reported that commuter rail lines and high speed rail lines have Buy America requirements. One purchaser, ***, reported that Class 1 railways have Buy America requirements, and one purchaser, ***, reported that public transit agencies with light rail systems also have Buy America requirements. ***.

**Comparisons of domestic products, subject imports, and nonsubject imports**

Purchasers were asked a number of questions comparing PC tie wire produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on 18 factors (table II-9).

One purchaser (*** compared product from the United States and China and reported that the products were comparable on most factors. *** reported that product from the United States was superior to product from China on *** and that product from the United States was inferior on ***.

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120 ***. Petitioners’ prehearing brief, p. 9.
121 U.S. producers’ market share was *** percent in 2013. Petitioners contend that ***. Petitioners’ prehearing brief, p. 10.
122 Conference transcript, p. 63 (Quirk) and hearing transcript, p. 59 (Quirk).
123 ***. Staff telephone interview with ***.
124 Only one purchaser, ***, compared product from ***. *** reported that product from ***. *** reported that product from ***.
Table II-9
PC tie wire: Purchasers’ comparisons between U.S.-produced and imported product

Two purchasers (***), compared product from the United States and Mexico and reported that the products were comparable on most factors. One purchaser reported that product from the United States was superior on ***, and one purchaser reported that product from the United States was inferior on ***. Two purchasers reported that product from the United States was inferior to product from Mexico on ***.

One purchaser, ***, compared product from the United States and product from nonsubject country Thailand. *** rated product from the United States as superior to product from Thailand on ***. *** rated product from the United States as inferior to product from Thailand on ***.

Comparison of U.S.-produced and imported PC tie wire

To determine whether U.S.-produced PC tie wire can generally be used in the same applications as PC tie wire imported from China, Mexico, and Thailand, 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-10, U.S. producers reported that U.S.-produced PC tie wire can *** be used interchangeably with PC tie wire imported from China, Mexico, and Thailand.125 and importers reported that U.S.-produced PC tie wire can *** be used interchangeably with PC tie wire imported from China, Mexico, and Thailand.126 Most purchasers reported that U.S.-produced PC tie wire can *** be used interchangeably with PC tie wire imported from China, Mexico, and Thailand.127 ***.128 129

Table II-10
PC tie wire: Interchangeability between PC tie wire produced in the United States and in other countries, by country pairs

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125 U.S. producers reported *** with product imported from nonsubject countries other than Thailand.
126 One importer, ***, reported that U.S.-produced PC tie wire, PC tie wire produced in subject countries China and Mexico, and nonsubject country Thailand can *** be used interchangeably with PC tie wire imported from nonsubject countries Portugal and Malaysia.
127 One purchaser, ***, reported that U.S.-produced PC tie wire can *** be used interchangeably with PC tie wire from nonsubject country ***.
128 Staff telephone interview with ***.
129 ***.
Purchasers reported that PC tie wire from the United States *** meets minimum quality standards, and that PC tie wire from China, Mexico, and Thailand *** meets minimum quality standards (table II-11).

**Table II-11**  
PC tie wire: Ability to meet minimum quality specifications, by source and number of reporting firms

* * * * * * * * *

In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of PC tie wire from the United States, subject, and nonsubject countries. As seen in table II-12, U.S. producers reported that differences other than price were *** significant between U.S.-produced PC tie wire and PC tie wire imported from China, Mexico, and Thailand,\(^{130}\) and most importers reported that differences other than price were *** significant.\(^{131}\) Purchasers reported that differences other than price were *** significant between U.S.-produced PC tie wire and PC tie wire imported from China, Mexico, and Thailand. One purchaser, ***, reported that differences other than price were *** significant between U.S.-produced PC tie wire and PC tie wire imported from Mexico.

**Table II-12**  
PC tie wire: Significance of differences other than price between PC tie wire produced in the United States and in other countries, by country pairs

* * * * * * * * *

**ELASTICITY ESTIMATES**

This section discusses elasticity estimates; there were no comments on the elasticity estimates in prehearing or posthearing briefs.

\(^{130}\) U.S. producers reported *** with the significance of factors other than price for PC tie wire imported from nonsubject countries other than Thailand.

\(^{131}\) One importer, ***, reported that difference other than price were *** significant between U.S.-produced PC tie wire, PC tie wire produced in subject countries China and Mexico, and PC tie wire produced in nonsubject country Thailand and PC tie wire produced in nonsubject countries Portugal and Malaysia.
**U.S. supply elasticity**

The domestic supply elasticity for PC tie wire measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of PC tie wire. 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 PC tie wire. Analysis of these factors earlier indicates that the U.S. industry has a moderate-to-large ability to increase or decrease shipments to the U.S. market; an estimate in the range of 4 to 6 is suggested.

**U.S. demand elasticity**

The U.S. demand elasticity for PC tie wire measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of PC tie wire. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, as well as the component share of the PC tie wire in the production of any downstream products. Based on the available information, the aggregate demand for PC tie wire is likely to be inelastic; a range of -0.3 to -0.6 is suggested.

**Substitution elasticity**

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products. 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 PC tie wire and imported PC tie wire is likely to be in the range of 3 to 5.

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132 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 dumping margins is 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 two firms that accounted for 100 percent of U.S. production of PC tie wire.

U.S. PRODUCERS

The Petitioners, Davis and Insteel, are the only known U.S. producers of PC tie wire.1 The Commission issued U.S. producers’ questionnaires to the two firms based on information contained in the petition. Both firms provided useable data on their PC tie wire operations. These responses represent 100 percent of U.S. production of PC tie wire during 2011-13.

Table III-1 lists U.S. producers of PC tie wire, their production locations, positions on the petition, and shares of total production in 2013.

Table III-1
PC tie wire: U.S. producers of PC tie wire, their positions on the petition, production locations, production, and shares of reported 2013 production

<table>
<thead>
<tr>
<th>Firm</th>
<th>Position on petition</th>
<th>Production location(s)</th>
<th>Share of 2013 production (percent)</th>
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<tbody>
<tr>
<td>Davis Wire Corp.1</td>
<td>Support</td>
<td>Kent, WA</td>
<td>***</td>
</tr>
<tr>
<td>Insteel Wire Products Co.2</td>
<td>Support</td>
<td>Jacksonville, FL</td>
<td>***</td>
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<tr>
<td>Total</td>
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1 Davis is a wholly owned subsidiary of Heico Holding, Inc. of Downers Grove, Illinois.
2 Insteel is a wholly owned subsidiary of Insteel Industries, Inc. of Mount Airy, North Carolina.

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

Table III-2 presents information on U.S. producers’ changes in operations. Both U.S. producers reported ***.

Table III-2
PC tie wire: U.S. producers’ changes in operations, since 2011

* * * * * * *

1 Petition, pp. 2-3.
Davis

Davis commenced production of PC tie wire at its Kent, Washington manufacturing facility in 1987. From 1987 until approximately 2009, Davis was the sole U.S. producer of PC tie wire. During this time period, Davis supplied the two largest U.S. concrete railroad tie manufacturers, CXT and Rocla.

In 2009, Union Pacific Railroad (“UPRR”) notified CXT that it was experiencing large scale concrete railroad tie failures with ties purchased from CXT. UPRR submitted a warranty claim against CXT for $22 million and replaced 1.6 million rail ties. CXT closed its Grand Island, Nebraska facility. As a result of this claim, CXT conducted an investigation seeking the cause of the tie failure. CXT found that the quality issues were caused by the loss of bond between the tie wire and the concrete. CXT removed Davis from its approved supplier list. CXT reported that ***. However, Rocla reported that ***. Rocla added ***. Rocla stated that it is likely to increase purchases from Insteel.

Insteel

Insteel had tried for ***. Insteel commenced U.S. production of PC tie wire in 2009. CXT ***. CXT ***. Rocla reported ***. Rocla added ***. Rocla stated that it is likely to increase purchases from Insteel.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION


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2 Conference transcript, pp. 19-20 (Quirk).
4 Hearing transcript, pp. 120-121 (Barrios).
5 CXT reported that ***. CXT’s U.S. purchaser questionnaire response.
6 Mexican Respondents’ postconference brief, exh. 2, pp. 1-2.
7 Rocla’s U.S. purchaser questionnaire response and email from ***, March 19, 2014.
8 Insteel’s supplemental questionnaire response.
9 During 2011-13, Insteel supplied ***.
10 “ASTM+” is CXT’s more stringent proprietary specification created after the warranty claim from UPRR. CXT ***. Petitioners’ postconference brief, p. 13.
11 CXT’s U.S. purchaser questionnaire response. For additional information on transportation costs, see Part V.
12 Rocla’s U.S. purchaser questionnaire response.
13 Email from ***, May 12, 2014.
capacity utilization rates for PC tie wire production declined from *** percent in 2011 to *** percent in 2013.\textsuperscript{14} \textsuperscript{15}

Table III-3  
PC tie wire: U.S. producers’ production, capacity, and capacity utilization, 2011-13

\begin{tabular}{*{10}{c}}
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\end{tabular}

Figure III-1  
PC tie wire: U.S. producers’ production, capacity, and capacity utilization, 2011-13

\begin{tabular}{*{10}{c}}
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\end{tabular}

Table III-4 presents U.S. producers’ overall production, capacity, and capacity utilization. Figure III-2 presents U.S. producers’ production shifting. Davis ***. Davis reported that its ***. Davis explained that the ***.

Insteel ***. Insteel explained that the ***.

Both Davis and Insteel reported capacity is constrained by ***. Davis reported a ***. Insteel reported a ***.\textsuperscript{16}

Table III-4  
PC tie wire: U.S. producers’ overall production, capacity, and capacity utilization, 2011-13

\begin{tabular}{*{10}{c}}
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\end{tabular}

Figure III-2  
PC tie wire: U.S. producers’ production shifting, 2011-13

\begin{tabular}{*{10}{c}}
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\end{tabular}

U.S. PRODUCERS’ U.S. SHIPMENTS AND EXPORTS

Table III-5 presents U.S. producers’ U.S. shipments, export shipments, and total shipments. The quantity of U.S. producers’ U.S. shipments of PC tie wire decreased by *** percent from 2011 to 2013. The value of U.S. shipments decreased even more rapidly, by *** percent, from 2011 to 2013. As a result, the average unit value of U.S. shipments declined in 2012 and in 2013, falling overall from $*** per pound in 2011 to $*** in 2013. The domestic

\begin{itemize}
\item[\textsuperscript{14}] In the last 10 years, ***. Email from ***, April 8, 2014.
\item[\textsuperscript{15}] Since 2010, ***. Petitioners’ post conference brief, exh. 1, p. 5; email from ***, April 8, 2014; and email from ***, April 9, 2014.
\item[\textsuperscript{16}] Emails from ***, May 12, 2014.
\end{itemize}
industry does not ***. Davis’ U.S. shipments increased by *** percent from 2011 to 2013, while Insteel’s U.S. shipments decreased by *** percent from 2011 to 2013.17

Table III-5

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U.S. PRODUCERS’ INVENTORIES

Table III-6 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.

Table III-6
PC tie wire: U.S. producers’ inventories, 2011-13

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U.S. PRODUCERS’ IMPORTS AND PURCHASES

*** U.S. producers reported that *** during 2011-13.18

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-7 shows U.S. producers’ employment-related data. On May 12, 2012, employees at Davis’ Kent, Washington manufacturing facility represented by the International Brotherhood of Teamsters voted to strike. On May 15, 2012, Davis announced the layoff of 27 employees, nearly a third of its union workforce employed at the Kent facility (which also produces products other than PC tie wire). Davis stated that the labor dispute ***.19

There are *** production related workers employed in the PC tie wire industry because ***. Indeed, with respect to Davis, the number of production related workers ***.20 21

________________________________________

17 For January-April 2014, ***. Emails from ***, May 12, 2014.
18 Petition, p. 42 (Petitioner argued that no related parties issues are present in these investigations) and U.S. producers’ final phase questionnaire responses.
19 Petitioners’ postconference brief, exh. 1, p. 6.
20 Staff telephone interview with ***, May 12, 2014.
21 The Commission collects data on the number of production related workers based on the number of employees, both full-time and part-time, for the 12 pay periods ending closest to the 15th of the month, divided by 12.
Table III-7
PC tie wire: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2011-13

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

U.S. IMPORTERS

The Commission issued importer questionnaires to four firms potentially importing PC tie wire, as well as to both U.S. producers of PC tie wire. Three firms provided usable questionnaire responses; these firms reportedly account for all U.S. imports of PC tie wire during 2011-13. No firms reported imports of PC tie wire from countries other than China, Mexico, and Thailand during 2011-13. Table IV-1 lists all responding U.S. importers of PC tie wire from China, Mexico, and Thailand, their locations, and their shares of U.S. imports, in 2013.

1 Prior to issuing questionnaires in the final phase of these investigations, staff contacted the leading importers of product reported under HTS statistical reporting numbers 7217.10.8045 and 7217.10.8090. Based on these contacts staff confirmed that the largest importers not identified in the petition were importing product other than PC tie wire.

2 During the preliminary phase of the investigations, Petitioners submitted a ***. Petitioners’ postconference brief, p. 18 n. 19. In the final phase of the investigations, the Commission has again received complete questionnaire responses from each of these U.S. importers of PC tie wire. The fourth potential importer, ***, certified it had not imported PC tie wire since January 1, 2011.

3 The petition provided a ***. Petition, exh. Gen-3, p. 1.
Table IV-1
PC tie wire: U.S. importers by source, 2013

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<tr>
<th>Firm</th>
<th>Headquarters</th>
<th>Share of 2013 imports by source (percent)</th>
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<tr>
<td></td>
<td></td>
<td>China</td>
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<tr>
<td>CXT Incorporated, A Division of LB Foster Company¹</td>
<td>Pittsburgh, PA</td>
<td>***</td>
</tr>
<tr>
<td>Tata Steel International (Americas) Inc. (TSIA)²</td>
<td>Schaumburg, IL</td>
<td>***</td>
</tr>
<tr>
<td>WireCo WorldGroup Inc.³</td>
<td>Kansas City, MO</td>
<td>***</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100.0</td>
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¹ CXT is a wholly owned subsidiary of L.B. Foster Co. of Pittsburgh, Pennsylvania.
² Tata is a wholly owned subsidiary of Tata Steel Ltd. of Mumbai, India and affiliated with The Siam Industrial Wire Co., Ltd. of Bangkok, Thailand, a producer of PC tie wire in Thailand, and formerly Wuxi Jinyang Metal Products Co., Ltd. ("Wuxi"), a producer of PC tie wire in China which closed its production facility and ceased production of PC tie wire in 2012. While Tata was the *** importer of PC tie wire from China in 2011 and 2012, the company reported *** imports of PC tie wire from China in 2013.
³ WireCo is a wholly owned subsidiary of WireCo WorldGroup U.S. Holdings, Inc. and is affiliated with Aceros Camesa, S.A. de C.V. of Cuautitlan, Mexico, a producer of PC tie wire in Mexico.

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

CXT

CXT is a division of L.B. Foster, a manufacturing company that supplies products and services to the rail, construction, energy, and utility markets, which reported $598.0 million in global sales in 2013.⁴ CXT reported that it began importing PC tie wire in ***. CXT ***.⁵ CXT reported that ***.⁶ CXT ***.⁷ CXT reported ***.⁸

Tata

Tata is a wholly owned subsidiary of the Tata Steel Group of Mumbai, India, and the sole U.S. importer for imports of PC tie wire from SIW, which is an affiliate of Tata Steel Group and a producer of PC tie wire in Thailand. Tata also imported PC tie wire from Wuxi Jinyang Metal Products Co., Ltd. ("Wuxi") in China. Wuxi was an affiliate of the Tata Steel Group that

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⁵ Thai Respondents’ postconference brief, attachment 1, pp. 1-3.
⁶ Tata’s U.S. importer questionnaire response.
⁷ Thai Respondents’ postconference brief, attachment 1, pp. 1-3; Mexican Respondents’ postconference brief, exh. 4 (An example of CXT’s “Supplier Audit & Scoring Process”).
⁸ Staff telephone interview with ***, March 13, 2014.
manufactured PC tie wire in China. Tata reported that ***. Tata’s reported U.S. imports from China increased from 2011 to 2012 then ***. The PC tie wire imported from ***.  

**WireCo**

WireCo is affiliated with Camesa, a producer of PC tie wire in Mexico, and is the sole U.S. importer of record for U.S. imports from Mexico. The PC tie wire imported from Mexico during the period of investigation was purchased primarily by Rocla. Camesa became a qualified supplier for CXT in early 2013. Rocla reported that it began purchasing PC tie wire from WireCo in 2006, **. Camesa reported that Rocla shifted a significant portion of its supply from Davis to Camesa in order to avoid similar quality problems experienced by CXT. Camesa’s U.S. sales doubled between 2010 and 2011.

**U.S. IMPORTS**

Table IV-2 presents data for U.S. imports of PC tie wire from China, Mexico, and Thailand. There were no reported U.S. imports of PC tie wire from any other source during 2011-13. U.S. imports of PC tie wire from China increased by *** percent from 2011 to 2012 before decreasing by *** percent from 2012 to 2013. U.S. imports of PC tie wire from Mexico decreased by *** percent from 2011 to 2012 before increasing by *** percent from 2012 to 2013. U.S. imports of PC tie wire from Thailand increased by *** percent from 2011 to 2012 before more than *** (an increase of *** percent) from 2012 to 2013. The decrease in U.S. imports of PC tie wire from China is consistent with the ***, while the increase in U.S. imports of PC tie wire from Thailand is consistent with ***.

**Table IV-2**

PC tie wire: U.S. imports by source, 2011-13

|  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |

* Staff telephone interview with ***, January 30, 2014 and email from ***, April 3, 2014.
10 Rocla did not purchase PC tie wire from SIW (Tata).
11 Thai Respondents’ postconference brief, attachment 1, pp. 1-2.
12 Hearing transcript, p. 120 (Barrios).
13 Hearing transcript, p. 122 (Barrios).
14 Hearing transcript, p. 121 (Barrios) and Mexican Respondents’ postconference brief, exh. 2, p. 1.
15 Hearing transcript, p. 121 (Barrios).
16 Ibid.
NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.\(^{17}\) Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.\(^{18}\) From April 2012 to March 2013, U.S. imports from China accounted for *** percent of total U.S. imports of PC tie wire by quantity and U.S. imports from Mexico accounted for *** percent of total U.S. imports.\(^{19}\)

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. Issues concerning fungibility and channels of distribution are addressed in Part II of this report. With regard to geographical markets and presence in the market, the Petitioners argue that imported PC tie wire from the subject countries compete without regard to geographical location in the United States and that these imports have been simultaneously present in the U.S. market.\(^{20}\) The vast majority of purchases of PC tie wire are shipped to the five railroad tie manufacturing facilities of CXT and Rocla. These locations are: (1) Spokane, Washington; (2) Tucson, Arizona (CXT’s facilities);\(^{21}\) (3) Amarillo, Texas; (4) Bear, Delaware; and (5) Pueblo, Colorado (Rocla’s facilities). U.S. imports and U.S. shipments of imports of PC tie wire from each of the subject countries were reported

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\(^{17}\) 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)).

\(^{18}\) Section 771 (24) of the Act (19 U.S.C § 1677(24)).

\(^{19}\) U.S. imports from Thailand accounted for the remaining *** percent of total U.S. imports.

Prestressed Concrete Steel Rail Tie Wire from China, Mexico, and Thailand, Staff Report, Inv. Nos. 731-TA-1207-1209 (Preliminary), p. IV-6.

\(^{20}\) Petition, pp. 43-44; Petitioners’ postconference brief, p. 17.

\(^{21}\) CXT operated another concrete railroad tie production facility at Grand Island, Nebraska until its closure in early 2011.
in 2011, 2012, and 2013. As discussed in Part V of this report, PC tie wire produced in the United States and Mexico was sold in each quarter between January 2011 and December 2013, while PC tie wire produced in China was sold in 8 quarters.\(^{22}\) During the hearing, Petitioners argued that Respondents had conceded cumulation of subject imports.\(^{23}\) Respondents’ posthearing brief argued that imports from Mexico should not be cumulated with imports from China because there is insufficient overlap with respect to fungibility and channels of distribution. Imports from China were all made to *** and almost all imports from Mexico were made to ***.\(^{24}\) In addition, imports from Mexico were purchased through WireCo and imports from China ***.\(^{25}\) Petitioners argue that there is a reasonable overlap of competition to support cumulation because all suppliers (U.S. producers and U.S. importers) compete with each other for sales to all U.S. purchasers.\(^{26}\)

**APPARENT U.S. CONSUMPTION**

Table IV-3 presents data on apparent U.S. consumption for PC tie wire. From 2011 to 2013, the quantity of apparent U.S. consumption of PC tie wire remained relatively stable, decreasing by *** percent overall. The value of apparent U.S. consumption decreased by *** percent from 2011 to 2013. U.S. shipments of PC tie wire from U.S. producers and from China\(^{27}\) decreased between 2011 and 2013, while U.S. shipments of PC tie wire from Mexico and Thailand increased. Apparent U.S. consumption of PC tie wire in 2013 was equivalent to *** percent of reported U.S. capacity.

Table IV-3

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Figure IV-1 presents data on U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption.

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\(^{22}\) In 2013, ***.
\(^{23}\) Hearing transcript, p. 85 (Rosenthal).
\(^{24}\) Mexican Respondents’ posthearing brief, pp. 6-7.
\(^{25}\) Id., pp. 7-8.
\(^{26}\) Petitioners’ posthearing brief, pp. 13-15.
\(^{27}\) In 2012, CXT reported ***. In 2013, CXT reported ***.
Figure IV-1

U.S. MARKET SHARES

Table IV-4 presents U.S. market share data. From 2011 to 2013, U.S. producers’ market share decreased by *** percentage points based on quantity and *** percentage points based on value (declining *** in 2012 then increasing *** in 2013). The market share held by U.S. imports from China declined by *** percentage points from 2011 to 2013 based on quantity and *** percentage points based on value (rising *** in 2012 but declining *** in 2013). The market share held by of U.S. imports from Mexico increased by *** percentage points from 2011 to 2013 based on quantity and *** percentage points based on value (decreasing *** in 2012 then increasing *** in 2013). The market share held by U.S. imports from Thailand increased by *** percentage points from 2011 to 2013 based on quantity and *** percentage points based on value (increasing *** in 2012 then increasing sharply in 2013). There were no imports from countries other than China, Mexico, and Thailand during 2011-13.

Table IV-4
PC tie wire: U.S. consumption and market shares, 2011-13

RATIO OF IMPORTS TO U.S. PRODUCTION


Table IV-5
PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The principal raw material used in the production of PC tie wire is high carbon steel wire rod. U.S. producer Insteel reported that raw material costs ***. Petitioners stated that ***.¹

Raw materials constitute a substantial portion of the final costs of PC tie wire. Raw materials costs reported by both U.S. producers consisted ***.² U.S. producers’ raw materials costs as a share of cost of goods sold increased from *** percent in 2011 to *** percent in 2013.

ASTM A881 does not specify the carbon content of steel wire rod used to produce PC tie wire. Typically, the wire rod is from grade 1080 carbon steel and has a carbon content between 0.76 and 0.84 percent by weight, although other high carbon wire rod may be used depending on the requirements of the customer.³ According to data from American Metal Market, the average monthly price of high carbon steel rod peaked in mid-to-late 2011 then declined through November 2013 (figure V-1). Prices began to rise in December 2013 and have continued to increase through March 2014. Overall, the average monthly price of high carbon steel rod decreased by 17.2 percent during January 2011-March 2014.

Figure V-1
High carbon steel rod: Average monthly prices, January 2011-March 2014


¹ Petitioners’ postconference brief, Exhibit 1, p. 6.
² Petitioners’ postconference brief, Exhibit 1, p. 6.
³ Petition, p. 5.
Petitioners stated that wire rod represents the largest element of production costs, but that electricity and rod preparation are also factors in the cost of producing PC tie wire. As shown in figure V-2, electricity prices are seasonal and peaked in the summer months during January 2011-March 2014, with the highest price at 7.40 cents per kilowatt hour in August 2011. Overall, electricity prices increased by 3.7 percent from January 2011 to March 2014.

Figure V-2


U.S. inland transportation costs

Both U.S. producers and both importers reported that ***. Petitioners assert that transportation costs accounted for only a minor portion of the total price of PC tie wire during 2011-13.

---

4 Conference transcript, p. 26 and p. 51 (Wagner), and hearing transcript, p. 24 (Wagner).
5 However, ***. Email from ***. ***. Email from ***.
6 Petitioners’ posthearing brief, p. 7. At the hearing, Mexican Respondents testified that U.S. inland transportation costs are similar for U.S. producers and importers. Hearing transcript, p. 170 (Barrios).
U.S. producers’ transportation costs for PC tie wire shipped to each customer by location on a dollar-per-pound basis and as a share of the total delivered cost are presented in table V-1. *7* *8*

Table V-1
PC tie wire: U.S. producers’ U.S. inland transportation costs by customer location, 2011-13

```
*    *    *    *    *    *    *    *
```

U.S. importer WireCo reported transportation costs for its shipments to *** during April 1, 2012 to March 31, 2013 (table V-2). *9* WireCo stated that ***. *10*

Table V-2
PC tie wire: WireCo’s U.S. inland transportation costs by customer location, April 1, 2012-March 31, 2013

```
*    *    *    *    *    *    *    *
```

U.S. importer Tata reported transportation costs for its imports from subject country China and nonsubject country Thailand to *** during 2011-13 (table V-3). Tata reported that its sales to ***. *11* ***. *12*

Table V-3
PC tie wire: Tata’s U.S. inland transportation costs by product origin and *** location, 2011-13

```
*    *    *    *    *    *    *    *
```

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7 Insteel stated that ***. Email from ***.
8 Email from ***.
9 ***. Email from ***.
10 Email from ***.
11 Emails from ***.
12 Email from ***.
PRICING PRACTICES

Pricing methods

Price determination

Both U.S. producers and one importer *** reported using *** to determine prices for their sales of PC tie wire (table V-4). *** reported using *** for its sales of imported PC tie wire.

Table V-4
PC tie wire: U.S. producers and importers reported price setting methods, by number of responding firms

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Contract and spot sales

U.S. producers and importers of PC tie wire from Mexico and Thailand reported that *** percent of 2013 PC tie wire sales were sold ***.\(^{13}\) Petitioners reported that most agreements are for multiple truckloads of PC tie wire over a time period (typically three to four months).\(^{14}\) Both U.S. producers and both importers reported that their ***. U.S. producer Davis and importer Tata reported that their *** are ***. U.S. producer Insteel reported that its *** are ***, and importer WireCo reported that its *** are ***.

Negotiations

All three purchasers reported purchasing PC tie wire on a *** basis. Purchaser *** also reported that it purchases ***. Only one purchaser, ***, reported that ***.

Purchaser *** reported that it contacts *** suppliers before making a purchase, and purchaser *** reported that it contacts *** suppliers. Purchaser *** reported *** for its PC tie wire purchases. Two purchasers, *** reported ***, and both purchasers reported ***. *** reported that ***.\(^{15}\) *** reported that ***. *** also reported that it ***.\(^{16}\) *** added that ***.

---

\(^{13}\) ***.

\(^{14}\) Hearing transcript, pp. 109-110 (Wagner and Quirk).

\(^{15}\) ***. Petitioners' prehearing brief, p. 14 and Exhibit 5.

\(^{16}\) Petitioners assert that purchasers know the prices of all import sources and use them to force domestic prices down. Petitioners added that, beginning in 2010-11, their customers began advising U.S. producers that import prices were significantly lower in order to gain price concessions from Petitioners. Hearing transcript, pp. 18-19 (Quirk) and p. 25 (Wagner).
Sales terms and discounts

One U.S. producer (***), and both importers reported quoting prices on *** basis. U.S. producer *** reported ***.
U.S. producer *** and both importers reported offering *** discounts, and U.S. producer *** reported offering ***.
U.S. producers reported differing sales terms for their sales of PC tie wire. Davis reported sales terms of ***;17 and Insteel reported sales terms of ***. Importer Tata reported sales terms of ***; and WireCo reported sales terms of ***.

Price leadership

Purchasers did not identify any price leaders.18 Purchaser *** reported that ***. Purchasers *** reported that ***.

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 PC tie wire products shipped to unrelated U.S. customers during January 2011-December 2013.19

Product 1.-- Rail Tie Wire/Lo Relaxation/Indented, diameter between 0.195 inch (4.95 mm) and 0.236 inch (6.0 mm), bright finish, produced to ASTM A881/A881M specification

Product 2.-- Rail Tie Wire/Lo Relaxation/Indented, diameter between 0.195 inch (4.95 mm) and 0.236 inch (6.0 mm), bright finish, produced to proprietary standards based on ASTM A881/A881M specifications

Two U.S. producers and two importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for *** percent of U.S. producers’ U.S.

17 Davis ***. Email from ***, April 15, 2014.
18 Petitioners characterized the Chinese and Mexican producers as price leaders in the U.S. market as they led prices down. Hearing transcript, p. 87 (Quirk).
19 Petitioners provided one price product in the petition which combined PC tie wire produced to both ASTM and proprietary specifications. Petition, p. 47. Information obtained during the preliminary phase of the investigations indicated that there were price differences between PC tie wire produced to the ASTM specification and proprietary specifications. Conference transcript, pp. 48-49 (Quirk and Levinson). Therefore, data were requested for two price products in the final phase.
commercial shipments of PC tie wire, *** percent of U.S. commercial shipments of subject
imports from Mexico during January 2011-December 2013, and *** percent of U.S. commercial
shipments of subject imports from China during January 2011-2012. 20 Price data for products 1-2
are presented in tables V-5 to V-6 and figures V-3 to V-4. Price data for nonsubject country
Thailand are presented in Appendix E.

Table V-5
PC tie wire: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and
margins of underselling/(overselling), by quarters, January 2011-December 2013

* * * * * * *

Table V-6
PC tie wire: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and
margins of underselling/(overselling), by quarters, January 2011-December 2013

* * * * * * *

Figure V-3
PC tie wire: Weighted-average prices and quantities of domestic and imported product 1, by
quarters, January 2011-December 2013

* * * * * * *

Figure V-4
PC tie wire: Weighted-average prices and quantities of domestic and imported product 2, by
quarters, January 2011-December 2013

* * * * * * *

Price trends

Prices for U.S.-produced PC tie wire made to proprietary specifications (product 2) were
higher than prices for U.S.-produced PC tie wire produced to the ASTM specification (product
1). Prices for U.S.-produced PC tie wire produced to the ASTM specification increased from first
quarter 2011 (*** through fourth quarter 2011 and first quarter 2012 (***), then declined
through second quarter 2013 before increasing again to *** in third quarter 2013 and then
decreasing in fourth quarter 2013. Overall, prices for U.S.-produced PC tie wire made to the
ASTM specification increased by *** percent during 2011-13. Prices for PC tie wire produced to

20 ***. Staff collected quarterly quantity and value data for ***. These data are presented in
Appendix D.
the ASTM specification imported from Mexico increased from *** in first quarter 2011 to *** in third quarter 2011. Prices of ASTM specification PC tie wire from Mexico generally declined from fourth quarter 2011 through second quarter 2013 before increasing to *** in third quarter 2013 and then decreasing in fourth quarter 2013. Overall, prices for PC tie wire made to the ASTM specification imported from Mexico increased by *** percent during 2011-13. Prices for U.S.-produced PC tie wire made to proprietary specifications fluctuated, and generally peaked in the second or third quarter of each year, 2011, 2012, and 2013. Overall, prices for U.S.-produced PC tie wire made to proprietary specifications decreased by *** percent during 2011-13. Prices for PC tie wire made to proprietary specifications imported from China and Mexico remained relatively stable around *** per pound. Price trend and summary data are presented in table V-7.

**Table V-7**

<table>
<thead>
<tr>
<th>PC tie wire: Summary of weighted-average f.o.b. prices for products 1-2 from the United States, China, and Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product 1</strong></td>
</tr>
<tr>
<td><strong>Item</strong></td>
</tr>
<tr>
<td>United States</td>
</tr>
<tr>
<td>China</td>
</tr>
<tr>
<td>Mexico</td>
</tr>
<tr>
<td><strong>Product 2</strong></td>
</tr>
<tr>
<td><strong>United States</strong></td>
</tr>
<tr>
<td>China</td>
</tr>
<tr>
<td>Mexico</td>
</tr>
</tbody>
</table>

* Percentage change from the first quarter in which data were available to the last quarter in which price data were available, based on rounded data.

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

**Price comparisons**

Margins for underselling and overselling are presented in table V-8. Based on these data, prices for PC tie wire imported from China were below those for U.S.-produced PC tie wire in all 7 instances; margins for underselling ranged from *** percent to *** percent, with an average margin of 17.0 percent. Prices for PC tie wire imported from Mexico were below those for U.S.-produced PC tie wire in 11 of 15 instances; margins for underselling ranged from *** percent to *** percent, with an average margin of 5.5 percent. In the remaining 4 instances, prices for PC tie wire from Mexico were above prices for U.S.-produced PC tie wire; margins of overselling ranged from *** percent to *** percent, with an average margin of 5.2 percent. Overall, there were 12 instances of comparison for product 1, and in 8 of those instances, prices for imported product were below prices for U.S.-produced PC tie wire. There were 10 instances of comparison for product 2, and in all 10 of those instances, prices for imported product were below those for U.S.-produced PC tie wire.
Table V-8
PC tie wire: Instances of underselling/overselling and the range and average of margins, by country, January 2011-December 2013

<table>
<thead>
<tr>
<th>Source</th>
<th>Underselling</th>
<th>Overselling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of instances</td>
<td>Range (percent)</td>
</tr>
<tr>
<td>China</td>
<td>7</td>
<td>***</td>
</tr>
<tr>
<td>Mexico</td>
<td>11</td>
<td>***</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>***</td>
</tr>
</tbody>
</table>

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

LOST SALES AND LOST REVENUE

Both U.S. producers reported that they ***. Petitioners provided specific lost sales and lost revenue allegations in the petition.21 The *** lost sale allegations concerning imports from subject countries China and Mexico totaled $*** and involved *** pounds of PC tie wire. The *** lost revenue allegations concerning subject countries China and Mexico totaled $*** and involved *** pounds of PC tie wire. Staff contacted all purchasers named in the allegations and a summary of the information obtained follows (tables V-9 and V-10). Information obtained on lost sales and revenue allegations involving nonsubject country Thailand is presented in Appendix E.

Table V-9
PC tie wire: U.S. producers’ lost sales allegations

* * * * * * *

Table V-10
PC tie wire: U.S. producers’ lost revenue allegations

* * * * * * *

*** responding purchasers reported that they had shifted purchases of PC tie wire from U.S. producers to subject imports since January 1, 2010, and *** purchasers reported that price was not the only reason for the shift. *** reported that PC tie wire from *** and *** stated that ***.

21 Lost sales and lost revenue allegations provided in the petition included ***.
*** reported that U.S. producers had reduced their prices since January 1, 2010, but stated that because PC tie wire prices fluctuate with raw material (steel rod) prices, it was unable to confirm the source of the price reduction. *** reported that ***.  
In addition, *** of *** stated that ***.  
In addition, ***. ***.  

---

22 ***.
23 ***.
24 Email from ***.
25 In additional responses to lost sales and revenue allegations, ***.
PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Davis and Insteel are the only known U.S. producers of PC tie wire.\(^1\)\(^2\) Both companies provided useable financial data on a calendar-year basis.\(^3\) An in-house examination of ***’s financial data as it pertained to the U.S. producer questionnaire was conducted on May 7, 2014. Changes pursuant to the examination are reflected in this section of the staff report.

The principal end use of PC tie wire is to provide compression strength to concrete railroad ties. The few immediate customers produce concrete railroad ties, which they sell to the primary users of railroad ties (Class I railroads, commuter railroads, and high speed railroads).\(^4\) Hence, factors that affect the demand for PC tie wire include the demand for concrete rail ties for new track construction and the renovation of existing railroad track beds. In turn, demand factors for reinforced concrete rail ties depend on levels of capital spending for track infrastructure by Class I railroads for new road and the expansion or renovation of existing lines, transit rail projects by municipalities, Federal stimulus spending, and consumer readiness to utilize rail transit alternatives to the automobile.\(^5\) As described in L.B. Foster’s 2013 annual report, shipments of concrete ties rose from 2011 to 2012 but decreased in 2013.\(^6\)

\(^1\) Petition, pp. 2-3.
\(^2\) Staff verification report, p. 3.
\(^3\) Both firms ***. ***. ***. Davis’s Kent, Washington plant is one of its three plants that produce a broad selection of wire and wire products, and is the one that produces rail tie wire. Davis is one of four companies that make up the Heico Wire Group, which are wholly-owned subsidiaries of The Heico Companies, a privately held holding company. Insteel Wire Products Company is a wholly owned subsidiary of Insteel Industries, Inc., which is self-described as the nation’s largest manufacturer of steel wire reinforcing products for concrete construction applications. Its Sanderson, Florida facility is one of nine facilities that produce drawn wire, wire mesh, PC strand, and other concrete reinforcement products. Insteel Industries, Inc., is a public company.

\(^4\) The two major customers are CXT, Inc., a division of L.B. Foster (which is dependent on the Union Pacific Railroad for a significant portion of its business) and Rocla Concrete Tie (which is part of the financial firm holding company Altus Capital Partners II, L.P.). Other producers of concrete ties are VAE Nortrak and KSA LP (a joint venture of Koppers and Heidelberg Cement AG). Consumption of concrete railroad ties is said to be growing; their use accounted for approximately 3.2 percent of the estimated 18.1 million railroad ties installed in 2013 and growth is estimated at about 7.5 percent through 2015. Railway Tie Association, “Crossties,” September/October 2013, p. 10. The two largest consumers of PC tie wire are ***. With respect to certain quality claims, closure of CXT’s Grand Island, Nebraska facility, and the Union Pacific Railroad warranty claim, see L.B. Foster Annual Reports on Form 10-K for 2009 (pp. 8-9, 20-21, and 29); for 2010 (pp. 28 and 31); for 2011 (pp. 19-20 and 73-74); for 2012 (pp. 20-21, and 74-76); and for 2013 (pp. 19-20 and 74-76). ***. Staff telephone interview with ***.

\(^5\) For example, see L.B. Foster, 2010 Annual Report on Form 10-K, pp. 28 and 31.

\(^6\) L.B. Foster stated that from 2011 to 2012, “our concrete tie division delivered volume growth, surpassing sales levels even from 2010 when we operated three plants” L.B. Foster, 2013 Annual Report (continued...)

VI-1
OPERATIONS ON PC TIE WIRE

Table VI-1 presents aggregated data on U.S. producers’ operations in relation to PC tie wire, while table VI-2 presents selected company-specific financial data. In brief, total sales of the two firms combined fell between 2011 and 2012 and then increased *** between 2012 and 2013, but were lower overall in 2013 than in 2011. Cost of goods sold (COGS) *** total net sales value in each year between 2011 and 2013, resulting in gross and operating *** in each year.

Table VI-1
PC tie wire: Results of operations of U.S. producers, 2011-13

* * * * * *

Table VI-2
PC tie wire: Results of operations of U.S. producers, by firm, 2011-13

* * * * * * *

Total net sales quantity and value

As shown in table VI-1, total net sales in terms of quantity declined from 2011 to 2012 by *** percent before increasing by *** percent in 2013. The value of net sales exhibited a similar pattern. The average unit values of net sales decreased from 2011 to 2013. As depicted in table VI-2, ***.

Operating costs and expenses

As depicted in tables VI-1 and VI-2, raw material costs, which consist of the cost of high-carbon steel wire rod, are a substantial share of sales, and were the largest single component of COGS. Raw material costs accounted for between *** and *** percent of total COGS in the yearly periods for the two firms together; raw materials accounted for *** and *** percent of total COGS in 2013 for Davis and Insteel, respectively. 7 Insteel stated that "during 2011 wire

(...continued)

(...continued)

on Form 10-K, p. 28. L.B. Foster reported “2013 sales results reflect a year in which a number of product lines had an excellent year, but the growth was more than offset by expected declines in other product lines... Reductions related to CXT concrete ties.” L.B. Foster 2013 Annual Report on Form 10-K, pp. 27-28.

7 Commission staff received a breakout of the components of COGS from both domestic producers. ***. E-mail from *** to Commission staff, April 1, 2014. EDIS document 530896.
rod prices rose due to the escalation in the cost of scrap and other raw materials for wire rod producers and increased demand from non-construction applications. After initially rising in the first half of 2012, wire rod prices declined during the latter part of the year due to reductions in the cost of scrap for wire rod producers and weakening demand. During 2013, wire rod prices fluctuated within a narrower range.”

Petitioners assert that the domestic producers are subject to a cost-price squeeze. They state that the domestic industry is unable to recover increases in raw material costs by raising sales prices. As noted in Insteel’s 2013 Annual Report, selling prices tend to be correlated with changes in prices of wire rod although the timing of the relative price changes varies depending upon market conditions and competitive factors. Raw materials cost recovery may be examined by use of the “metal spread” or “metal margin.” The metal spread is the difference between the firm’s per-pound sales price and the cost of raw material inputs. The term metal margin refers to the metal spread as a percentage of the product price, which is ratio of the metal spread to total net sales. As presented in table VI-3, the PC tie wire metal spread in absolute dollars fell *** from 2011 to 2012 and decreased further from 2012 to 2013. The per-pound metal spread and metal margin remained relatively stable from 2011 to 2012, then decreased in 2013.

Table VI-3
PC tie wire: Metal spread and metal margin of Davis and Insteel, fiscal years 2011-13

|     | * | * | * | * | * | * | * |

Profitability

Table VI-1 shows that the domestic industry reported *** of *** in 2011 and *** in 2013. As depicted in table VI-2, the majority of the ***. Insteel had ***. ***.

---

9 Petitioners’ postconference brief, pp. 14-15 and pp. 23-24
10 Insteel Industries, Inc., 2013 Annual Report on Form 10-K, p. 21. There is a delicate balance in maintaining relationships with customers and cost recovery. Postconference brief of SIW and Tata Steel, att. 1 (***).
11 An increasing metal spread indicates a widening between a firm’s sales value and its cost of raw materials, for example, when a firm’s sales price is rising faster than its cost of raw materials, or that the raw material costs are declining faster than a firm’s sales price, whereas a decreasing metal spread indicates the opposite. Changes in the metal margin indicate similar aspects of changes in the underlying factors.
Variance analysis

Table VI-4 presents a variance analysis for the operations of U.S. producers of PC tie wire. The information for this variance analysis is derived from tables VI-1 and VI-2. The variance analysis for Davis and Insteel together indicates that the *** between 2011 and 2013 was primarily attributable to ***.

Table VI-4
PC tie wire: Variance analysis on the operations of U.S. producers, 2011-13

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<tbody>
<tr>
<td>Capital expenditures and research and development expenses</td>
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Table VI-5 presents capital expenditures and research and development ("R&D") expenses by firm.

Table VI-5
PC tie wire: Capital expenditures and research and development expenses of U.S. producers, 2011-13

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<tbody>
<tr>
<td>Assets and return on investment</td>
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</tbody>
</table>

Table VI-6 presents data on the U.S. producers’ total assets and their return on investment ("ROI"). Operating income or loss (from table VI-2) was divided by total net assets to calculate ROI.

Table VI-6
PC tie wire: U.S. producers’ total assets and return on investment, 2011-13

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</table>

12 The Commission’s variance analysis is calculated in three parts: Sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.
Capital and investment

The Commission requested U.S. producers of PC tie wire to describe any actual or potential negative effects of imports of PC tie wire from China, Mexico, or Thailand on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Their responses are as follows:

Actual negative effects

*Davis:*

  ***.

*Insteel:*

  ***.

Anticipated negative effects

*Davis:*

  ***.

*Insteel:*

  ***.
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—

(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 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 nine firms believed to produce and/or export PC tie wire from China. 3 Two firms submitted useable responses to the Commission: New Mile and Silvery Dragon. 4

New Mile is a trading company that *** in 2012 and 2013. New Mile did not report ***, but did estimate that its exports to the United States accounted for approximately *** percent of total exports from China of PC tie wire in 2013. New Mile reported that *** is its Chinese supplier. New Mile *** to provide capacity and production data for 2011-13. 5 The tabulation below presents ***’s reported capacity and production data.

| * | * | * | * | * | * | * | *

Silvery Dragon specializes in prestressed concrete steel applications, covering a range of products from prestressed concrete steel strand to prestressed concrete steel bar. 6 In 2013, Silvery Dragon ***. Silvery Dragon estimated that it accounted for approximately *** percent of PC tie wire production in China. Silvery Dragon reported ***. Silvery Dragon’s capacity increased by *** percent from 2011 to 2013 and is projected to *** in 2014 and 2015. Table VII-1 presents information on the PC tie wire operations of the responding two firms in China.

Table VII-1
PC tie wire: Data for Chinese producers/exporters Silvery Dragon and New Mile, 2011-13

| * | * | * | * | * | * | * | *

Silvery Dragon reported a ***. 7

Table VII-2 presents information on Silvery Dragon’s overall production, capacity, and capacity utilization. Silvery Dragon ***.

---

3 These firms were identified through a review of information submitted in the petition and contained in proprietary Customs records.
4 These two firms were the only known active exporters of PC tie wire in 2013. The coverage of exports from China to the United States is *** percent for 2011-13. The reason for the low coverage is the absence of a response from Wuxi in either the preliminary phase or final phase of these investigations. Wuxi ***. Staff telephone interview with ***, January 30, 2014 and email from ***, April 3, 2014. ***.
5 New Mile explained that no one at *** factory speaks English. Email from ***, May 12, 2014.
7 Email from ***, May 12, 2014.
THE INDUSTRY IN MEXICO

The Commission issued a foreign producer’s questionnaire to one firm in Mexico, Acero Camesa S.A. de C.V. ("Camesa"), an affiliate of U.S. importer WireCo World Group. Camesa submitted a questionnaire response to the Commission. It reported that its exports to the United States accounted for approximately *** percent of total exports from Mexico of PC tie wire in 2013. Camesa estimated that it accounted for approximately *** percent of overall 2013 production of PC tie wire in Mexico. 8

Camesa reported that *** percent of its total sales in the most recent fiscal year were sales of PC tie wire. In 2013, *** percent of Camesa’s total shipments of PC tie wire were exported to the United States, *** percent of its total shipments were to its home market, 9 and *** percent of its total shipments were to other export markets. 10 Camesa’s exports to the United States increased by *** percent from 2011 to 2013. Camesa’s reported capacity remained steady from 2011 to 2013 and is projected to *** in 2014 and 2015. Its production increased by *** percent from 2011 to 2013, and is projected to *** from 2013 to 2014. Camesa reported that it shipped to *** during the 2011-13, *** U.S. purchaser, Rocla, reported that it ***. 11 Table VII-3 presents information on the PC tie wire operations of Camesa.

Table VII-3
PC tie wire: Data for Mexican producer Camesa, 2011-13

|   |   |   |   |   |   |   |   |

Camesa stated that between drawing and stress relieving capacity, the more accurate measure of its capacity is its stress relieving capacity. 12 Camesa reported overall its stress

8 Camesa reported that ***. The ***. Staff telephone interview with ***. ***. Email from ***, May 12, 2014.
9 Rocla opened a new concrete railroad tie facility in Mexico. This facility is to serve the Mexican market and according to Camesa will eliminate its unused capacity. Hearing transcript, p. 13 (Levinson). Petitioners stated that they were aware of Rocla’s plant in Mexico, but questioned whether it would be able to absorb all of Camesa’s capacity. Hearing transcript, p. 75 (Quirk and Wagner). Petitioners assert that the plant in Mexico ***. Petitioners’ posthearing brief, exhibit 1, p. 28. Rocla confirmed ***. Email from ***, May 12, 2014.
10 Camesa reported ***.
12 Hearing transcript, p. 123 (Barrios).
relieving capacity is *** pounds per year and its drawing capacity is *** pounds per year.13 Camesa’s reported stress relieving capacity is presented in table VII-3.

Camesa reported that its ***. It ***. The company provided data suggesting a product mix of *** percent PC tie wire and *** percent other stress relieved products, however actual production of PC tie wire fluctuated *** between 2011 and 2013.

Table VII-4 presents information on Camesa’s overall capacity, production, and capacity utilization. The *** of its production is used to produce ***. In 2013, PC tie wire accounted for *** percent of its total production, while all of its other products accounted for *** percent.

Table VII-4
PC tie wire: Mexican producer Camesa’s overall capacity, production, and capacity utilization, 2011-13

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity U.S.</th>
<th>Production U.S.</th>
<th>Capacity Utilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>2012</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>2013</td>
<td>*</td>
<td>*</td>
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</tr>
</tbody>
</table>

U.S. INVENTORIES OF IMPORTED MERCHANDISE

*** is the only U.S. importer that reported inventories of PC tie wire from ***. In 2012, *** held *** pounds and in 2013 it held *** pounds in inventory. In 2012 and 2013, the amount of inventory held was equivalent to *** percent and *** percent of imports from *** and *** percent and *** percent of U.S. shipments of imports from ***, respectively. In 2012 and 2013, the amount of inventory held *** accounted for *** percent and *** percent of U.S. imports from all sources and *** percent and *** percent of U.S. shipments of imports from all sources, respectively.

U.S. IMPORTERS’ OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of PC tie wire from China, Mexico, or Thailand after December 31, 2013. *** reported that *** arranged such shipments. Table VII-5 presents U.S. import shipments of PC tie wire arranged for importation after December 31, 2013.

Table VII-5
PC tie wire: U.S. importers’ current orders arranged for delivery after December 31, 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Orders U.S.</th>
<th>Shipments U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>2012</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>2013</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

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13 Email from ***, May 13, 2014.
ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

There have been no antidumping duty, countervailing duty, or safeguard investigations on PC tie wire in any other country.\(^{14}\)

INFORMATION ON NONSUBJECT COUNTRIES

The industry in Thailand

The Commission issued a foreign producer’s questionnaire to one firm, The Siam Industrial Wire Co., Ltd. (“SIW”), a wholly owned subsidiary of Tata Steel Group.\(^{15}\) SIW submitted a questionnaire response to the Commission. It reported that its exports to the United States accounted for *** percent of total exports from Thailand of PC tie wire in 2013. SIW estimated that it accounted for approximately *** percent of overall 2013 production of PC tie wire in Thailand.

SIW reported that *** percent of its total sales in the most recent fiscal year were sales of PC tie wire. In 2013, *** percent of SIW’s total shipments of PC tie wire were exported to the United States, *** percent of its total shipments were to its home market, *** percent of its total shipments were to other export markets, identified as ***, and *** percent of its total shipments were transferred internally ***. SIW’s exports to the United States increased by *** percent from 2011 to 2013, but are projected to ***. SIW reported ***. SIW’s reported capacity increased by *** percent from 2011 to 2013, but is projected to *** in 2014 and 2015. Its production increased by *** percent from 2011 to 2013, and it projects it will *** from 2013 to 2014 and then it projects it will *** in 2015. SIW reported that it shipped to ***. Table VII-6 presents information on the PC tie wire operations of SIW.

Table VII-6
PC tie wire: Data for Thai producer SIW, 2011-13

<p>| | | | | |</p>
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Table VII-7 presents information on SIW’s overall capacity, production, and capacity utilization. SIW is ***.\(^{16}\) The *** of its production is used to produce ***. In 2013, PC tie wire accounted for *** percent, PC crimped wire accounted for *** percent, and all other products accounted for *** percent of SIW’s total production.

14 *** reported that there was a third country trade action on PC wire from China in the European Union in 2008.
15 This firm was identified through a review of information submitted in the petition.
16 During the preliminary phase of these investigations, SIW ***. Staff telephone interview with ***, January 15, 2014.
Table VII-7
PC tie wire: Thai producer SIW's overall capacity, production, and capacity utilization, 2011-13

| * | * | * | * | * | * | * | * | * |

Information on other industries in nonsubject countries

There are reportedly several producers of PC tie wire from nonsubject sources, including Brazil, Colombia, Portugal, Spain, and the Netherlands. In Brazil, Belgo Mineira is a wholly-owned subsidiary of ArcelorMittal Açôs Longos (a subsidiary of ArcelorMittal) that produces carbon steel long products, including bars, wire rod, and wire.17 In Portugal, Fapricela produces prestressed steel strand and wire, among other wire products.18 Similarly, in Spain, TYCSA produces prestressed steel strand and wire, among other wire products, and has an annual production capacity of approximately 155,000 short tons.19 In addition, Emcocables of Colombia reportedly produces PC tie wire to the ASTM A881 specification.20

At the Commission’s staff conference, WireCo, a U.S. importer affiliated with Mexican PC tie wire producer Camesa, stated that in the event that an antidumping duty order against China, Mexico, and Thailand is imposed, U.S. purchasers would seek alternative supplies of PC tie wire from other nonsubject producers, including Belgo Mineira in Brazil, Fapricela in Portugal, and TYCSA in Spain.21 According to ***,22 in 2014, Rocla purchased PC tie wire from TYCSA of Spain.23 Rocla reported that it would ***.24

At least one other nonsubject source of PC tie wire includes the Netherlands. In the Netherlands, Nedri Spanstaal reportedly produces PC tie wire to the ASTM A881 specification.25 According to U.S. purchaser VAE Nortrak, ***.26

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21 Conference transcript, p. 106 (Barrios).
22 ***.
23 Hearing transcript, p. 124 (Barrios).
24 Camesa posthearing brief, exhibit 1.
26 VAE Nortrak, U.S. purchaser questionnaire, ***.
APPENDIX A

FEDERAL REGISTER NOTICES
The Commission makes available notices relevant to its investigations and reviews on its website, [www.usitc.gov](http://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.

<table>
<thead>
<tr>
<th>Citation</th>
<th>Title</th>
<th>Link</th>
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CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission’s hearing:

**Subject:** Prestressed Concrete Steel Rail Tie Wire from China and Mexico

**Inv. No.:** 731-TA-1207 and 1208 (Final)

**Date and Time:** May 6, 2014 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, DC.

OPENING REMARKS:

Petitioners (Kathleen W. Cannon, Kelley Drye Warren LLP)
Respondents (Lizbeth R. Levinson, Kutak Rock LLP)

**In Support of the Imposition of**
**Antidumping Duty Orders:**

Kelley Drye Warren LLP
Washington, DC
on behalf of

Davis Wire Corporation
Insteel Wire Products

James Hillebrandt, Chief Executive Officer and President
Davis Wire Corporation

Michael Quirk, Senior Vice President, Davis Wire Corporation

Richard Wagner, Vice President and General Manager,
Insteel Wire Products Company

E. Randy Plitt, National Sales Manager, Insteel Wire Products Company

Brad Hudgens, Economist, Georgetown Economic Services

Paul C. Rosenthal )
Kathleen W. Cannon – OF COUNSEL
R. Alan Luberda )

B-3
In Opposition to the Imposition of
Antidumping Duty Orders:

Kutak Rock LLP
Washington, D.C.
on behalf of

WireCo World Group, Inc. (“WireCo”)
Aceros Camesa, S.A. de C.V. (“Camesa”)

Joaquin Barrios, Senior Vice President, European Steel
Operations, WireCo
Michelle Toreline, General Counsel, WireCo

Lizbeth R. Levinson
Ronald M. Wisla

) – OF COUNSEL

REBUTTAL/CLOSING REMARKS:

Petitioners (Kathleen W. Cannon, Kelley Drye Warren LLP)
Respondents (Lizbeth R. Levinson, Kutak Rock LLP)
APPENDIX C

SUMMARY DATA
### Table C-1
PC tie wire: Summary data concerning the U.S. market, 2011-13
(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

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<tr>
<th></th>
<th>Reported data</th>
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<td>All others sources, nonsubject</td>
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<td>Total imports</td>
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<tr>
<td><strong>U.S. importers' U.S. shipments of Imports from</strong></td>
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<td>China:</td>
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<td>Ending inventory quantity</td>
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<td>Ending inventory quantity</td>
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<td>Subtotal, subject sources</td>
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<td>All other sources:</td>
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<td>Ending inventory quantity</td>
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<td>Total imports</td>
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<td><strong>U.S. producers'</strong></td>
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<td>Average capacity quantity</td>
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<tr>
<td>Production quantity</td>
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<td>Capacity utilization (fn1)</td>
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<tr>
<td>U.S. shipments:</td>
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<td>Quantity</td>
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<td>Value</td>
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<tr>
<td>Unit value</td>
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<tr>
<td>Export shipments:</td>
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<tr>
<td>Quantity</td>
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<td>Unit value</td>
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<tr>
<td>Ending inventory quantity</td>
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<tr>
<td>Inventories/total shipments (fn1):</td>
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<tr>
<td>Production workers:</td>
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<tr>
<td>Hours worked (1,000s)</td>
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<tr>
<td>Wages paid ($1,000)</td>
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<tr>
<td>Hourly wages</td>
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<td>Productivity (pounds per hour)</td>
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<tr>
<td>Unit labor costs (dollars per 1,000 pounds)</td>
<td><strong>...</strong></td>
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<tr>
<td>Net sales:</td>
<td></td>
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<tr>
<td>Quantity</td>
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<td>Value</td>
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<tr>
<td>Unit value</td>
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<tr>
<td>Cost of goods sold (COGS)</td>
<td><strong>...</strong></td>
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<tr>
<td>Gross profit of (loss)</td>
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<tr>
<td>SG&amp;A expenses</td>
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<td>Operating income or (loss)</td>
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<tr>
<td>Capital expenditures</td>
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<td>Unit COGS</td>
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<tr>
<td>COGS/sales (fn1)</td>
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<td>Operating income or (loss)/sales (fn1)</td>
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fn1.—Report data are in percent and period changes are in percentage points.

fn2.—Undefined.

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

Quarterly quantity and unit value data for *** during 2011-13
These data are presented in table D-1. All PC tie wire imported from ***.

Table D-1
PC tie wire: Quantity and unit value data for ***, January 2011-December 2013

| * | * | * | * | * | * | * | * | * |
APPENDIX E

Nonsnbject country price data and lost sales and revenue allegations
One importer, ***, reported price data for nonsubject country Thailand for product 2, PC tie wire produced to proprietary specifications. Price data reported by this firm accounted for *** percent of U.S. imports from Thailand during 2011-13. These data are comparable to data presented in table V-3. Price and quantity data for Thailand are shown in table E-1 and in figure E-1 (with domestic and subject sources).

**Table E-1**
PC tie wire: Weighted-average f.o.b. prices and quantities of imported product 2\(^1\) and margins of underselling/(overselling), by quarters, January 2011-December 2013

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**Figure E-1**
PC tie wire: Weighted-average f.o.b. prices and quantities of domestic and imported product 2,\(^1\) by quarters, January 2011-December 2013

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In comparing nonsubject country pricing data with U.S. producer pricing data, prices for PC tie wire imported from Thailand were below those for U.S.-produced PC tie wire in 6 of 7 instances. In comparing nonsubject country pricing data with subject country pricing data, prices for PC tie wire imported from Thailand were higher than prices for product imported from China in three of four instances. Prices for PC tie wire imported from Thailand were higher than prices for product imported from Mexico in both instances.

During the preliminary phase, U.S. producers provided specific lost sales and revenue allegations involving Thailand.\(^1\) The *** lost sales allegations totaled $*** and involved *** pounds of PC tie wire. The *** lost revenue allegation totaled $*** and involved *** pounds of PC tie wire. Staff contacted the purchasers named in the allegations and a summary of the information obtained is presented in tables E-2 and E-3.

**Table E-2**
PC tie wire: U.S. producers’ lost sales allegations involving Thailand

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**Table E-3**
PC tie wire: U.S. producers’ lost revenue allegation involving Thailand

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\(^1\) During the preliminary phase of these investigations, Thailand was a subject country. Commerce published its final negative determination with respect to Thailand on May 5, 2014.
APPENDIX F

Diagram of U.S. Producers’, U.S. Importers’, and U.S. Purchasers’ Sales Relationships by Product Grade
Diagram F-1

* * * * * * *
APPENDIX G

U.S. Producers’ U.S. Shipments and U.S. Imports
by U.S. Purchaser, Geographic Location, and Product Grade
Table G-1  

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Table G-2  
PC tie wire: U.S. imports by U.S. purchaser, geographic location, and product grade, 2011-13

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APPENDIX H

Combined Industry Data for China and Mexico
Table H-1
PC tie wire: Combined industry data for China and Mexico, 2011-13

| * | * | * | * | * | * | * | * |