

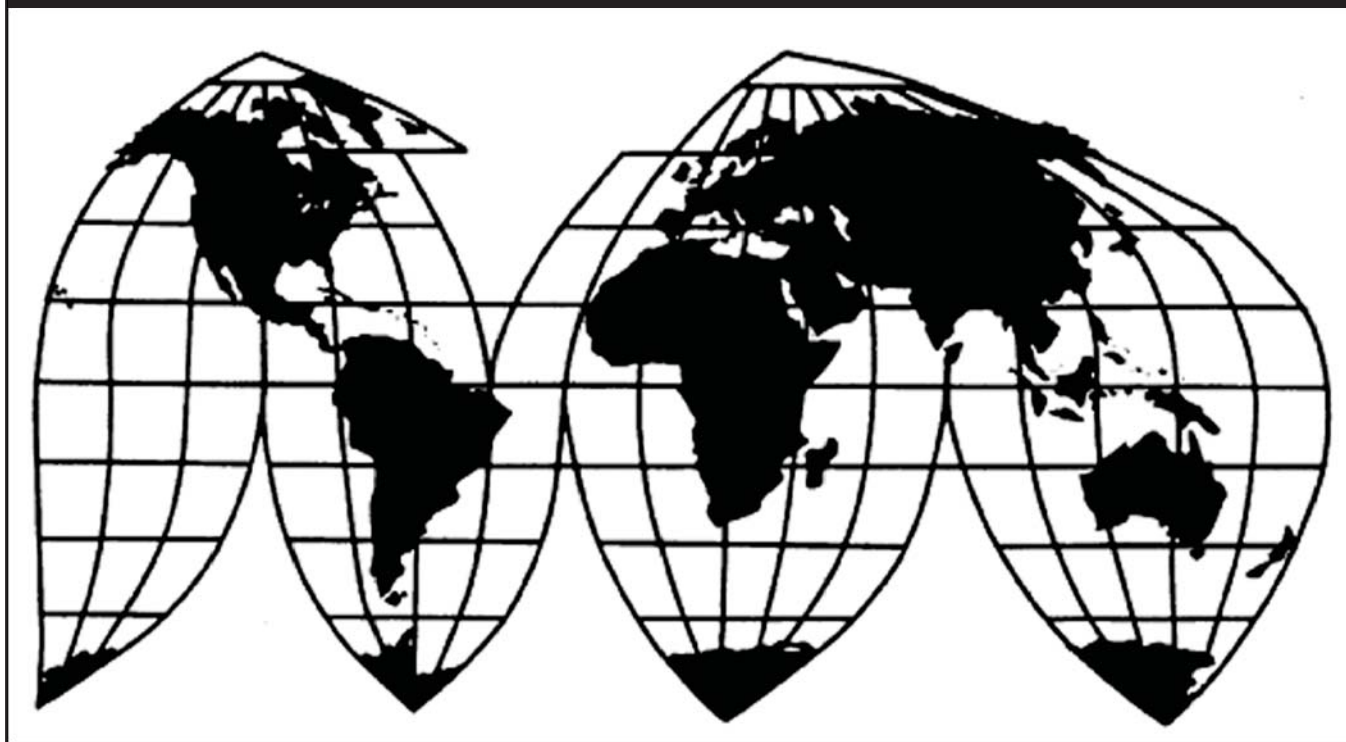
Certain Iron Mechanical Transfer Drive Components from Canada and China

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

Publication 4587

December 2015

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

COMMISSIONERS

Meredith M. Broadbent, Chairman

Dean A. Pinkert, Vice Chairman

Irving A. Williamson

David S. Johanson

F. Scott Kieff

Rhonda K. Schmidlein

Catherine DeFilippo
Director of Operations

Staff assigned

Mary Messer, Investigator

Andrew David, Industry Analyst

Dan Kim, Industry Analyst

John Benedetto, Economist

Lauren Gamache, Economist

Charles Yost, Accountant

Russell Duncan, Statistician

Mary Jane Alves, Attorney

Douglas Corkran, Supervisory Investigator

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

U.S. International Trade Commission

Washington, DC 20436
www.usitc.gov

Certain Iron Mechanical Transfer Drive Components from Canada and China

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

Publication 4587



December 2015

CONTENTS

	Page
Determinations	1
Views of the Commission	3
Part I: Introduction	I-1
Background.....	I-1
Statutory criteria and organization of the report	I-2
Statutory criteria	I-2
Organization of report.....	I-3
Summary data and data sources.....	I-3
Market summary	I-4
Previous and related investigations	I-5
Nature and extent of alleged subsidies and sales at LTFV	I-5
Alleged subsidies	I-5
Alleged sales at LTFV	I-7
The subject merchandise	I-8
Commerce’s scope	I-8
Tariff treatment.....	I-9
The product	I-10
Description	I-10
Applications	I-17
Manufacturing processes	I-18
Intermediate products	I-23
Uses	I-24
Markets.....	I-24
Characteristics and functions	I-24
Value	I-25
Transformation processes	I-25
Domestic like product and domestic industry issues.....	I-26
Physical characteristics and uses.....	I-27
Manufacturing facilities and production employees	I-28
Interchangeability.....	I-29
Customer and producer perceptions	I-30
Channels of distribution	I-31
Price	I-31

CONTENTS

	Page
Part II: Conditions of competition in the U.S. market.....	II-1
U.S. market characteristics.....	II-1
Channels of distribution	II-1
Geographic distribution	II-1
Supply and demand considerations	II-2
U.S. supply	II-2
U.S. demand	II-6
Substitutability issues.....	II-9
Lead times	II-9
Factors affecting purchasing decisions.....	II-10
Comparison of U.S.-produced and imported product	II-10
Part III: U.S. producers' production, shipments, and employment.....	III-1
U.S. producers	III-1
Related parties.....	III-2
Changes in operations	III-3
Production-related activities.....	III-3
Capital investments	III-3
Technical expertise	III-4
Value added.....	III-4
Employment levels	III-5
Sourcing of parts.....	III-5
Other costs and activities	III-5
U.S. production, capacity, and capacity utilization	III-5
Finished IMTDCs	III-5
Unfinished IMTDCs (not further finished by firm in the United States)	III-6
Alternative products.....	III-7
U.S. producers' U.S. shipments and exports.....	III-8
Finished IMTDCs	III-8
Unfinished IMTDCs (not further finished by firm in the United States)	III-9
U.S. shipments for apparent U.S. consumption calculation	III-9
U.S. producers' inventories	III-10
U.S. producers' imports and purchases	III-11
U.S. employment, wages, and productivity	III-26

CONTENTS

	Page
Part IV: U.S. imports, apparent U.S. consumption, and market shares	IV-1
U.S. importers.....	IV-1
U.S. imports.....	IV-2
U.S. imports from subject and nonsubject sources	IV-2
Negligible imports	IV-6
Cumulation	IV-7
Ratio of subject imports to U.S. production	IV-8
Apparent U.S. consumption and market shares	IV-9
Apparent U.S. consumption	IV-9
U.S. market shares.....	IV-10
Part V: Pricing data	V-1
Factors affecting prices	V-1
Raw material costs	V-1
Transportation costs to the U.S. market	V-3
U.S. inland transportation costs	V-3
Pricing practices	V-3
Pricing methods.....	V-3
Sales terms and discounts	V-4
Price data.....	V-4
Price trends.....	V-7
Price comparisons	V-7
Lost sales and lost revenue	V-8
Part VI: Financial experience of U.S. producers.....	VI-1
Background.....	VI-1
Operations on IMTDCS	VI-1
Net sales	VI-3
Costs and expenses	VI-3
Profitability	VI-3
Value-added	VI-4
Variance analysis	VI-4
Capital expenditures and research and development expenses	VI-5
Assets and return on investment	VI-6
Capital and investment	VI-7

CONTENTS

	Page
Part VII: Threat considerations and information on nonsubject countries	VII-1
The industry in Canada.....	VII-3
Overview.....	VII-3
Changes in operations	VII-3
Operations on IMTDCs	VII-3
Alternative products.....	VII-4
The industry in China.....	VII-4
Overview.....	VII-4
Changes in operations	VII-5
Operations on IMTDCs	VII-5
Alternative products.....	VII-6
The combined subject industries	VII-7
inventories of imported merchandise	VII-8
Finished IMTDCs	VII-8
Unfinished IMTDCs	VII-9
U.S. importers' outstanding orders.....	VII-9
Antidumping or countervailing duty orders in third-country markets	VII-10
Information on nonsubject countries	VII-10

Appendixes

A. <i>Federal Register</i> notices	A-1
B. Conference witnesses.....	B-1
C. Summary data	C-1
D. Nonsubject country price data.....	D-1

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

UNITED STATES INTERNATIONAL TRADE COMMISSION

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

Certain Iron Mechanical Transfer Drive Components from Canada and China

DETERMINATIONS

On the basis of the record¹ developed in the subject investigations, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of certain iron mechanical transfer drive components (“IMTDCs”) from Canada and China, provided for in subheadings 8483.30.80, 8483.50.60, 8483.50.90, 8483.90.30, 8483.90.80, 7325.10.00, 7325.99.10, 7326.19.00, 8431.31.00, 8431.39.00, and 8483.50.40 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value (“LTFV”) and that are allegedly subsidized by the government of China.

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission’s rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in section 207.21 of the Commission’s rules, upon notice from the Department of Commerce (“Commerce”) of affirmative preliminary determinations in the investigations under sections 703(b) or 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under sections 705(a) or 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

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

BACKGROUND

On October 28, 2015, TB Wood's Incorporated, Chambersburg, Pennsylvania filed petitions with the Commission and Commerce, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of IMTDCs from Canada and China and subsidized imports of IMTDCs from China. Accordingly, effective October 28, 2015, the Commission, pursuant to sections 703(a) and 733(a) of the Tariff Act of 1930 (19 U.S.C. §§ 1671b(a) and 1673b(a)), instituted countervailing duty investigation No. 701-TA-550 and antidumping duty investigation Nos. 731-TA-1304-1305 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference 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 November 3, 2015 (80 FR 67789). The conference was held in Washington, DC, on November 18, 2015, and all persons who requested the opportunity were permitted to appear in person or by counsel.

Views of the Commission

Based on the record in the preliminary phase of these investigations, we find that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of certain iron mechanical transfer drive components (“IMTDCs”) from Canada and China that are allegedly sold in the United States at less than fair value and allegedly subsidized by the government of China.

I. The Legal Standard for Preliminary Determinations

The legal standard for preliminary antidumping and countervailing duty determinations requires the Commission to determine, based upon the information available at the time of the preliminary determinations, whether there is a reasonable indication that a domestic industry is materially injured or threatened with material injury, or that the establishment of an industry is materially retarded, by reason of the allegedly unfairly traded imports.¹ In applying this standard, the Commission weighs the evidence before it and determines whether “(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation.”² As discussed below, when the U.S. Department of Commerce (“Commerce”) initiated these investigations, it revised, pursuant to Petitioner’s requests, the scope language from the definition of subject merchandise initially proposed in the petitions.³ Consequently, much of the usable information available at the time of the preliminary determinations consisted of information revised by questionnaire respondents or collected by the Commission in the fifteen business days between Commerce’s November 18, 2015 announcement of the revised scope and the Commission’s December 11, 2015 vote.

II. Background

On October 28, 2015, TB Wood’s Incorporated (“TB Woods”), a U.S. producer of certain unfinished and finished IMTDCs and an importer of ***, filed the instant antidumping and

¹ 19 U.S.C. §§ 1671b(a), 1673b(a); *see also American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States*, 20 CIT 353, 354-55 (1996). No party argues that the establishment of an industry in the United States is materially retarded by the allegedly unfairly traded imports.

² *American Lamb*, 785 F.2d at 1001; *see also Texas Crushed Stone Co. v. United States*, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

³ 80 Fed. Reg. 73716, 73721-22 (Nov. 25, 2015); 80 Fed. Reg. 73722, 73725-26 (Nov. 25, 2015). In determining whether to initiate investigations, Commerce ascertains “on the basis of sources readily available ... the accuracy and adequacy of the evidence provided in the petition, to determine whether the petition alleges the elements necessary for the imposition of a duty ... and contains information reasonably available to the petitioner supporting the allegations” and to determine “if the petition has been filed by or on behalf of the industry.” 19 U.S.C. §§ 1671a(c) and 1673a(c).

countervailing duty petitions.⁴ Effective the same date, the Commission instituted these investigations. Shortly thereafter, the Commission issued questionnaires to industry participants seeking data that were based on the definitions of subject merchandise proposed in the petitions.⁵ The Commission instructed questionnaire recipients to respond within ten days, by November 10, 2015.⁶ Amendments to the scope of these investigations that are outlined below and described in greater detail in section VI have affected the collection, presentation, and consideration of data in these investigations.

On November 5, 2015, TB Woods filed with Commerce and the Commission a supplement to the petitions in which, *inter alia*, it proposed changing the dimension element of the scope by inserting language specifying that IMTDCs subject to the investigations “are those not less than 4.0 inches (101 mm) in maximum nominal outside diameter.”⁷

On November 12, 2015, Commission staff visited TB Woods’ production facilities in Chambersburg, Pennsylvania in order to gain a better understanding of the product and manufacturing process.⁸ On that same date, Caterpillar Inc., an importer of finished IMTDCs from ***, and Baldor Electric Company (“Baldor”), a U.S. producer of finished IMTDCs and importer of finished IMTDCs from ***, and its affiliate, Baldor Electric Company Canada (“Baldor Canada”), a manufacturer/exporter of finished IMTDCs in Canada,⁹ argued in separate submissions to Commerce that the petitions lacked adequate domestic industry support. According to these respondents, the petitions failed to identify or account for the views of numerous other U.S. producers of the domestic like product.¹⁰ TB Woods responded to these

⁴ Confidential Report, Memorandum INV-NN-089 (Dec. 7, 2015), as revised by Memorandum INV-NN-090 (Dec. 10, 2015) (“CR”) at I-1; Public Report, *Certain Iron Mechanical Transfer Drive Components from Canada and China*, Inv. Nos. 701-TA-550 and 731-TA-1304 to 1305 (Preliminary), USITC Pub. 4587 (Dec. 2015) (“PR”) at I-1. *See also* Memorandum INV-NN-091 (Dec. 11, 2015) (containing supplemental information).

⁵ CR at I-4; PR at I-3.

⁶ CR at I-4; PR at I-3.

⁷ On its own initiative, TB Woods proposed limiting the diameter of the products within the scope definition. Specifically, it stated that “{u}pon further consideration of this issue, {TB Woods} now believes that the addition of a diameter limit to define the IMTDCs covered by the scope will improve the scope’s clarity and ability to distinguish between iron and steel products. Some small-diameter (*i.e.*, below 4.0 inches) imported mechanical transfer drive components may be produced from either steel or iron (or their production processes may be changed relatively easily to utilize steel), while such components in larger diameters are predominantly produced from iron and are likely to continue to be produced from iron in the future.” TB Woods argued that “U.S. producers do not produce significant quantities of IMTDCs in these small diameters in the United States. For example, ***.” Petitioner’s November 5, 2015 Supplement to the Petitions at 4-5; *see also* CR at I-1 at n.2, I-33 at n.80; PR at I-1 at n.2, I-26 at n.80.

⁸ *See* Notes from Staff Fieldwork at TB Woods’ Manufacturing Facility (Nov. 12, 2015).

⁹ CR at I-5 to I-6; PR at I-4 to I-5.

¹⁰ On November 12, 2015, Caterpillar provided the Commission with a copy of this submission in which it included a proprietary list of its own U.S. suppliers of IMTDCs and lists identifying U.S. pulley manufacturers and members of the Conveyor Industry of the Americas that it alleged collectively comprised over three dozen U.S. producers of flywheels, pulleys, and bushings that had not been (Continued...)

arguments in a November 16, 2015 submission to Commerce, the public version of which it attached to the November 23, 2015 postconference brief it submitted to the Commission.¹¹

On November 17, 2015, the deadline for Commerce's decision whether to initiate the investigations or to extend the deadline for initiation in order to poll or otherwise determine industry support for the petitions,¹² TB Woods filed with Commerce and the Commission an amendment to the petitions in which it proposed further modifying the scope of the investigations to revise the carbon content of the covered products.¹³

Commission staff held a conference on November 18, 2015.¹⁴ TB Woods participated in the conference accompanied by its counsel. Along with their counsel, certain respondents opposing the imposition of duties also participated in the conference, including Baldor and Baldor Canada, as well as Powermach Import & Export Co., Ltd. (Sichuan) ("Powermach") and Fuzhou Min Yue Mechanical & Electrical Co. Ltd. ("Min Yue") (collectively "Chinese Respondents"), producers and exporters of subject merchandise from China.¹⁵

On November 18, 2015, Commerce announced that on November 17, 2015, it had determined to initiate antidumping duty investigations on IMTDCs from Canada and China and a countervailing duty investigation on IMTDC imports from China. Commerce rejected Baldor's and Caterpillar's arguments that the petitions lacked adequate support and consequently did not exercise its statutory authority to extend the initiation deadline. The scope language that Commerce announced in the afternoon of November 18, 2015 effectuated Petitioner's

(...Continued)

identified by TB Woods. Baldor identified seven IMTDC foundries not previously identified by TB Woods as possible domestic producers as well as U.S. firms utilizing other production methodologies to manufacture mechanical transfer drive components. Baldor attached the public version of its Commerce submission to its postconference brief. Baldor's Postconf. Brief at Exhibit 10; November 30, 2015 Revised and Corrected Transcript of the Commission's November 18, 2015 Staff Conference ("Confer. Tr.") at 59-60.

¹¹ Petitioner's Postconf. Brief at Exhibit 20.

¹² 19 U.S.C. §§ 1671a(c), 1673a(c).

¹³ Under TB Woods' proposal, the scope would include articles with "a carbon content of 1.7 percent by weight or above, regardless of the presence and amount of additional alloying elements" instead of articles with a carbon content of 1.5 percent or higher. Petitioner's November 17, 2015 Amended Petitions at 1-2 and Attachment.

¹⁴ Due to scheduling conflicts with other proceedings involving Commission hearing rooms, the conference length was limited to four hours. In order to maximize the available time, avoid spending undue resources on uncontested issues, and focus on unclear factual and legal questions, Commission staff asked the parties to specify in their opening statements their positions regarding the domestic like product, the definition of the domestic industry (including sufficient production-related activities and related parties), cumulation, and any other arguments they intended to highlight in their panel testimony; Commission staff also reversed the typical order of the proceedings, scheduling the respondents' panel before petitioner's panel.

¹⁵ Caterpillar and its counsel did not participate in the staff conference, and Caterpillar did not submit its U.S. importer questionnaire response until November 23, 2015.

requested amendments to the definition of imported subject merchandise as to both carbon content and diameter dimensions.¹⁶

In view of Commerce's announcement, on November 18, 2015, Commission staff asked U.S. producer, importer, and foreign producer questionnaire respondents to revise their data in accordance with the revised scope language and issued additional U.S. producer questionnaires to the seven firms identified by Baldor as possible U.S. producers of unfinished IMTDCs, one additional firm identified as a possible finisher by Baldor, and *** additional firms identified by Caterpillar as its major U.S. suppliers of finished IMTDCs.¹⁷ The Commission asked for responses to these information requests by November 23, 2015.

On November 23, 2015, TB Woods, Baldor, Chinese Respondents, and Caterpillar submitted postconference briefs and had no alternative but to base their arguments on questionnaire data that had not yet been revised to reflect the intervening changes in the scope definitions. On December 7, 2015, the Commission's staff produced a report that compiled the information obtained during the investigations, including any information obtained that was responsive to Petitioner's late proposed scope changes that Commerce adopted. On December 11, 2015, the Commission's vote took place.¹⁸

III. Domestic Like Product

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."¹⁹ 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."²⁰ 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."²¹

The decision regarding the appropriate domestic like product(s) 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.²² No single factor is

¹⁶ 80 Fed. Reg. at 73721-22; 80 Fed. Reg. at 73725-26.

¹⁷ The Commission requested that ***, so that its staff could survey the largest of these potential producers of finished IMTDCs. At the Commission's request, *** refined its list and identified the following firms as its major domestic suppliers of IMTDCs: ***. CR at III-2; PR at III-2.

¹⁸ CR at I-1; PR at I-1.

¹⁹ 19 U.S.C. § 1677(4)(A).

²⁰ 19 U.S.C. § 1677(4)(A).

²¹ 19 U.S.C. § 1677(10).

²² 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 (Continued...)

dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.²³ The Commission looks for clear dividing lines among possible like products and disregards minor variations.²⁴ Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value,²⁵ the Commission determines what domestic product is like the imported articles Commerce has identified.²⁶ The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope.²⁷

(...Continued)

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). In a semi-finished products analysis, the Commission examines the following: (1) the significance and extent of the processes used to transform the upstream into the downstream articles; (2) whether the upstream article is dedicated to the production of the downstream article or has independent uses; (3) differences in the physical characteristics and functions of the upstream and downstream articles; (4) whether there are perceived to be separate markets for the upstream and downstream articles; and (5) differences in the costs or value of the vertically differentiated articles. See, e.g., *Glycine from India, Japan, and Korea*, Inv. Nos. 731-TA-1111 to 1113 (Preliminary), USITC Pub. 3921 at 7 (May 2007); *Artists' Canvas from China*, Inv. No. 731-TA-1091 (Final), USITC Pub. 3853 at 6 (May 2006); *Live Swine from Canada*, Inv. No. 731-TA-1076 (Final), USITC Pub. 3766 at 8 n.40 (Apr. 2005); *Certain Frozen Fish Fillets from Vietnam*, Inv. No. 731-TA-1012 (Preliminary), USITC Pub. 3533 at 7 (Aug. 2002).

²³ See, e.g., S. Rep. No. 96-249 at 90-91 (1979).

²⁴ See, e.g., *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.").

²⁵ See, e.g., *USEC, Inc. v. United States*, 34 Fed. App'x 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States*, 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

²⁶ *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 where Commerce found five classes or kinds).

²⁷ See, e.g., *Pure Magnesium from China and Israel*, Inv. Nos. 701-TA-403 and 731-TA-895 to 596 (Final), USITC Pub. 3467 at 8 n.34 (Nov. 2001); *Torrington*, 747 F. Supp. at 748-49 (the Commission is not legally required to limit the domestic like product to the product advocated by the petitioner, co-extensive with the scope).

A. The Scope Definition and the Parties' Arguments

In its initiation notices, Commerce defined the imported merchandise within the scope of these investigations as follows:

iron mechanical transfer drive components, whether finished or unfinished (*i.e.*, blanks or castings). Subject iron mechanical transfer drive components are in the form of wheels or cylinders with a center bore hole that may have one or more grooves or teeth in their outer circumference that guide or mesh with a flat or ribbed belt or like device and are often referred to as sheaves, pulleys, flywheels, flat pulleys, idlers, conveyer pulleys, synchronous sheaves, and timing pulleys. The products covered by these investigations also include bushings, which are iron mechanical transfer drive components in the form of a cylinder and which fit into the bore holes of other mechanical transfer drive components to lock them into drive shafts by means of elements such as teeth, bolts, or screws.

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

Unfinished iron mechanical transfer drive components (*i.e.*, blanks or castings) possess the approximate shape of the finished iron mechanical transfer drive component and have not yet been machined to final specification after the initial casting, forging or like operations. These machining processes may include cutting, punching, notching, boring, threading, mitering, or chamfering. Subject merchandise includes iron mechanical transfer drive components as defined above that have been finished or machined in a third country, including but not limited to finishing/machining processes such as cutting, punching, notching, boring, threading, mitering, or chamfering, or any other processing that would not otherwise remove the merchandise from the scope of the investigations if performed in the country of manufacture of the iron mechanical transfer drive components.

Subject iron mechanical transfer drive components are covered by the scope of the investigations regardless of width, design, or iron type (*e.g.*, gray, white, or ductile iron). Subject iron mechanical transfer drive components are covered by the scope of the investigations regardless of whether they have non-iron attachments or parts and regardless of whether they are entered with other mechanical transfer drive components or as part of a belted drive assembly (which typically includes one or more of the iron mechanical transfer drive components identified above, and which may also include other parts such as a belt, coupling and/or shaft). When entered as a mechanical transfer drive assembly, only the iron components that meet the physical description of

covered merchandise are covered merchandise, not the other components in the mechanical transfer drive assembly (*e.g.*, belt, coupling, shaft).

For purposes of these investigations, a covered product is of “iron” where the article has a carbon content of 1.7 percent by weight or above, regardless of the presence and amount of additional alloying elements.²⁸

The IMTDCs in these investigations encompass a range of sizes and features and consist of various forms, such as sheaves, pulleys,²⁹ flat pulleys,³⁰ idlers,³¹ flywheels,³² variable speed drives, conveyer pulleys,³³ synchronous sheaves, timing pulleys,³⁴ and bushings.³⁵ These

²⁸ As Commerce explained, the merchandise covered by these investigations is currently classifiable under Harmonized Tariff Schedule of the United States (“HTSUS”) statistical reporting numbers 8483.30.8090, 8483.50.6000, 8483.50.9040, 8483.50.9080, 8483.90.3000, and 8483.90.8080. Covered merchandise may also enter under the following HTSUS statistical reporting numbers: 7325.10.0080, 7325.99.1000, 7326.19.0010, 7326.19.0080, 8431.31.0040, 8431.31.0060, 8431.39.0010, 8431.39.0050, 8431.39.0070, 8431.39.0080, and 8483.50.4000. Commerce further noted that these HTSUS statistical reporting numbers are provided for convenience and customs purposes and that the written description of the scope of the investigations is dispositive. 80 Fed. Reg. at 73721-22; 80 Fed. Reg. at 73725-26.

²⁹ Sheaves (pulleys) vary in design and size depending on end use, but they generally consist of a wheel or cylinder with a center bore hole into which a bushing may be inserted in order to attach the product to a drive shaft. Sheaves typically have one or more grooves or indentations worked into the outer circumference, which permits them to engage with industrial belts to transmit power. For standard sheaves, which are used with a v-shaped belt, any grooves or indentations run around the outer circumference of the product, whereas the grooves or indentations on synchronous sheaves run across the outside diameter in order to accommodate a ribbed or tracked belt. Petitions, Vol. I at 6-7.

³⁰ Flat pulleys are sheaves that do not have grooves and typically use flat belts. Manufacturers sometimes round (or crown) the center of the pulley in flat belt drives to improve alignment with the belt; flat belt drives tend to be more efficient than V-belt drives used with grooved pulleys, but their belts tend to wear. CR at I-15; PR at I-12 to I-13.

³¹ Idler pulleys do not have a power transmission function. Rather, they are placed inside or outside of the drive and are used to increase tension, provide proper alignment, reduce the extent to which the belt can whip, and redirect the belts. CR at I-18 to I-19; PR at I-13 to I-15.

³² Flywheels usually have no grooves on their outer circumference and are used to store rotational energy. They provide continuous energy in applications where energy is variable, such as in an application using a reciprocal (piston) engine. Petitions, Vol. I at 6-7; CR at I-16, I-18; PR at I-14.

³³ Conveyor pulleys, including drum pulleys, are cylindrically shaped pulleys used to move a conveyor belt. Variable and adjustable drives permit output speed changes. CR at I-17; PR at I-14.

³⁴ Synchronous pulleys, including timing pulleys, are sheaves with grooves to correspond with belts with teeth that are used in synchronous drives; synchronous drives tend to be more expensive than v-belt drives but offer advantages such as high efficiency, constant speed, lower bearing loads, and lower operation and maintenance costs. CR at I-16; PR at I-13. TB Woods explains that the scope of these investigations includes synchronous sheaves that are part of belted drives that might be referred to as sprockets, although the scope of these investigations does not include sprockets consisting of toothed, typically steel, wheels that engage with chains (instead of belts) as components of chain drives. (Continued...)

IMTDCs have circular or cylindrical profiles, a center bore hole, and (being typically manufactured from gray or ductile iron) a carbon content that exceeds 1.7 percent, by weight.³⁶

Various forms of sheaves are designed to accommodate industrial belts and rotate around a drive shaft, and bushings are used to lock sheaves onto a shaft; together, they serve the common purpose of transmitting power in mechanical transfer drive systems.³⁷ The products described in the scope may be used as part of belted drive assemblies in fans, conveyers, compressors, pumps, and mixers. They are used in a range of applications, including heating, ventilating, and air conditioning (“HVAC”), industrial, agricultural, construction, mining, oilfield, and material handling applications.³⁸ Belted drive assemblies typically include one or more IMTDCs and may also include other parts, such as a belt, coupling, and/or shaft, with standard belted drive assemblies consisting of two sheaves, bushings, and a belt.³⁹

The parties discussed three domestic like product issues in these investigations: (1) whether to include unfinished and finished IMTDCs in the same domestic like product; (2) whether to include IMTDCs under 4 inches in maximum nominal outside diameter (herein “small-diameter” IMTDCs) in the same domestic like product definition as the large-diameter IMTDCs that correspond to the scope of these investigations (those whose maximum nominal outside diameter is at least 4 inches); and (3) whether to include mechanical transfer drive components (“MTDCs”) that are manufactured from sintered steel powder or direct-machined steel bars (collectively “steel MTDCs”) in the same domestic like product definition as the iron MTDCs corresponding to the scope of these investigations. TB Woods advocates defining a single domestic like product that would include all forms of IMTDCs, whether finished or unfinished, but that would not encompass small-diameter IMTDCs or steel MTDCs.⁴⁰ Baldor and the Chinese Respondents contend that the domestic like product should include small- and large-diameter MDTCs, including steel MTDCs, because these products have the same physical characteristics and uses, are sold through overlapping channels of distribution to the same

(...Continued)

Petitions, Vol. I at 42 & n.104; November 5, 2015 Petition Amendment at 3, 7, Exhibit I-S2 at paragraph 19; CR at I-16, II-9 to II-10, VII-12, IV-17; PR at I-3, II-6, VII-6, IV-8; Confer. Tr. at 91, 110-111, 142-43.

³⁵ 80 Fed. Reg. at 73721-22; 80 Fed. Reg. at 73725-26. Bushings, which also vary widely in design and size, generally consist of a cylindrical form with a center bore hole, and they allow sheaves to be mounted and locked onto drive shafts. Petitions, Vol. I at 8; CR at I-19; PR at I-16.

³⁶ CR at I-12 to I-19; PR at I-10 to I-16.

³⁷ Petitions, Vol. I at 19; Confer. Tr. at 88. Flywheels and idler pulleys share some of the same physical attributes as other IMTDCs, but they perform different functions, as described above. CR at I-22 to I-29; PR at I-18 to I-23.

³⁸ Petitions, Vol. I at 6; Petitioner’s Postconf. Brief at Exhibit 1 at 3-16; CR at I-20; PR at I-17; Confer. Tr. at 92-93.

³⁹ November 5, 2015 Amended Petitions at 3.

⁴⁰ Petitioner’s Postconf. Brief at 5, Exhibit I at 1-13; Confer. Tr. at 15, 110-111; November 5, 2015 Amended Petitions at 1-2, 7-9; Petitions, Vol. I at 12, 17-22.

customers, are viewed as interchangeable, and are priced similarly.⁴¹ Caterpillar argues that the record is unclear as to how to define the domestic like product due to Petitioner's late scope revisions.⁴² We consider below each of the three domestic like product issues that the parties briefed. At the outset, however, we observe that much of the record information concerning domestic like product issues originates from the parties' arguments. Due to the timing of TB Woods' requests to revise the scope of these investigations, the Commission's questionnaires did not seek information on a possible expanded domestic like product definition.

B. Are Unfinished and Finished IMTDCs Separate Domestic Like Products?

The scope of these investigations includes unfinished and finished IMTDCs. Unfinished IMTDCs are referred to as "blanks" and have the approximate shape or outline of the finished article or part, except for finishing operations such as machining of grooves or teeth and cutting of tap holes.⁴³ For purposes of the Commission's preliminary determinations, no party contends that unfinished and finished IMTDCs are separate domestic like products.⁴⁴ Based on an analysis of the semifinished product factors discussed below, we define unfinished and finished IMTDCs as part of the same domestic like product for purposes of these preliminary determinations.

Extent of Processes Used to Transform Downstream Product into Upstream Product.

TB Woods argues that finishing operations involve a single insignificant step, because producers intentionally manufacture unfinished IMTDCs to nearly final form in order to minimize waste generated at the finishing stage.⁴⁵ Chinese Respondents argue that transforming blanks into finished IMTDCs involves the second of two major production steps.⁴⁶ Baldor uses robotic cells, tooling, and other specially designed, dedicated equipment to perform finishing operations such as drilling, boring, turning, hobbing, broaching, flanging, coating, testing, and inspecting; it reports utilizing highly trained employees with advanced technical skills to *** operate that equipment.⁴⁷ It emphasizes that finishing operations are necessary for the product to be usable, and asserts that customers consider the finisher to be the producer.⁴⁸

The record indicates that the production of IMTDCs begins with the melting of pig iron, scrap iron, and ferrous scrap metal in a foundry furnace along with alloying agents that may be needed to ensure proper iron chemistry. Manufacturers pour the molten metal into a foundry

⁴¹ Baldor's Postconf. Brief at 2, 3-20, Exhibit 1 at 17-19; Chinese Respondents' Postconf. Brief at 6-13; Confer. Tr. at 8-10, 13-21, 24, 26-32.

⁴² Caterpillar's Postconf. Brief at 5 n.3.

⁴³ November 5, 2015 Amended Petitions at 1; Petitions, Vol. I at 12.

⁴⁴ Baldor's Postconf. Brief at Exhibit 1 at 18-19; Chinese Respondents' Postconf. Brief at 11-13; Petitioner's Postconf. Brief at 5; Petitions, Vol. I at 20-21; Confer. Tr. at 32, 58-59, 110.

⁴⁵ Petitioner's Postconf. Brief at Exhibit 1 at 16-18; Petitions, Vol. I at 20-21, 24.

⁴⁶ Chinese Respondents' Postconf. Brief at 12-13.

⁴⁷ Baldor's Postconf. Brief at 22-23, Exhibit 2 at paragraph 3, paragraph 6, Exhibit 10 at 4; Confer. Tr. at 18.

⁴⁸ Confer. Tr. at 19, 85.

mold that typically consists of an imprinted shape formed by sand that has been compacted into a cavity that approximates the finished shape of the desired output. Once the sand-cast molten metal has cooled into a solid, the manufacturer removes and blasts away the sand and removes any excess iron that may be present in the mold.⁴⁹ To finish the unfinished IMTDC blanks, manufacturers machine grooves or teeth, cut tap holes, sometimes apply surface treatments such as paint or oil, and then inspect and test the material.⁵⁰

Physical Characteristics and Functions of the Upstream and Downstream Articles. Blanks have the approximate shape or outline (*e.g.*, circular or cylindrical profile) of the finished article but require finishing operations, such as the machining of grooves or teeth and the cutting of tap holes. Being manufactured from the same raw materials, unfinished blanks and finished IMTDCs also share common chemistry. Blanks have no independent function other than to be converted into a downstream article.⁵¹

Dedication for Use. The parties agree that blanks are dedicated to produce IMTDCs.⁵² Without finishing operations, a sheave, flywheel, or bushing cannot be used for that purpose.⁵³

Separate Markets. U.S. finishing operations ***.⁵⁴ ***, Martin Sprocket & Gear, Inc. (“Martin Sprocket”), and TB Woods are integrated producers of unfinished and finished IMTDCs, and Baldor’s U.S. facility finishes unfinished IMTDCs that it sources from unrelated U.S. foundries: ***.⁵⁵ Additionally, ***.⁵⁶ Caterpillar contends that other non-integrated finishers also perform finishing operations in the United States.⁵⁷

⁴⁹ Confer. Tr. at 88-91; CR at I-22 to I-28; PR at I-18 to I-22. Melting, molding, and casting normally occur at a foundry, and these production steps are collectively referred to as “casting.” CR at I-22; PR at I-18.

⁵⁰ Petitioner’s Postconf. Brief at Exhibit 1 at 17-18; CR at I-22 to I-27; PR at I-18 to I-22. Manufacturers may perform design and finishing at the foundry or at a different site. CR at I-22; PR at I-18.

⁵¹ CR at I-29, I-30; PR at I-23, I-24; Petitioner’s Postconf. Brief at Exhibit 1 at 15-16; November 5, 2015 Amended Petitions at 8; Petitions, Vol. I at 20-21; Chinese Respondents’ Postconf. Brief at 12; *see also* Confer. Tr. at 85 (Baldor’s witness agreeing that “there’s no sellable value to {blanks} to an end customer. If we don’t finish {the blanks} into something, then {they’re} not sellable.”).

⁵² Petitioner’s Postconf. Brief at Exhibit 1 at 15-16; November 5, 2015 Amended Petitions at 1-2, 8; Petitions, Vol. I at 20-21; Chinese Respondents’ Postconf. Brief at 12; Confer. Tr. at 19, 85 (Baldor), 110 (TB Woods).

⁵³ Confer. Tr. at 19, 85 (Baldor).

⁵⁴ TB Woods asserted the contrary. Petitions, Vol. I at 21; November 5, 2015 Amended Petitions at 8, 9. In its postconference brief, TB Woods argues that the market for unfinished IMTDCs must be the same as the market for finished IMTDCs since unfinished IMTDCs have no independent use. Petitioner’s Postconf. Brief at Exhibit 1 at 16.

⁵⁵ CR at III-1, III-9; PR at III-1, III-5. Chinese Respondents argue that blanks are typically either internally consumed by vertically integrated firms to produce finished IMTDCs or sold to finishers. Chinese Respondents’ Postconf. Brief at 12.

⁵⁶ CR/PR at Table III-12.

⁵⁷ Caterpillar’s November 12, 2015, Submission Regarding Standing; Caterpillar’s Postconf. Brief at 4-6, 8-9.

Differences in Value. The parties disagree about the value added by finishing operations, with *** TB Woods arguing that finishing operations account for a minority of value added,⁵⁸ and Baldor and Chinese Respondents arguing that the finishing adds approximately half the value of the finished IMTDCs.⁵⁹

Analysis. We include unfinished and finished IMTDCs in the same domestic like product for purposes of these preliminary determinations, given that they have similar physical characteristics and unfinished IMTDCs serve no function other than being machined into finished IMTDCs. Unfinished IMTDCs are dedicated to the production of finished IMTDCs, and finishing operations are a necessary step for an unfinished IMTDC to be usable. The extent of any separate markets for unfinished and finished IMTDCs is disputed by the parties and unclear from the current record. There may be several firms that only cast unfinished IMTDCs and at least one firm that only finishes IMTDCs, but at least two U.S. firms manufacture both unfinished and finished IMTDCs. The value added by finishing operations is disputed by the parties, but is not insignificant.

C. Should Small-Diameter IMTDCs Be Included in the Domestic Like Product?

Baldor and Chinese Respondents ask the Commission to reject Petitioner's request to limit the domestic like product definition to large-diameter IMTDCs that meet the minimum diameter specification set forth in the scope definition, because there is no clear distinction between IMTDCs of at least four inches in nominal outside diameter and IMTDCs of smaller diameters. They observe that TB Woods originally proposed no such dividing line, so TB Woods' revised scope and domestic like product arguments conflict with its arguments in the petitions that favored a single domestic like product consisting of all IMTDCs regardless of diameter.⁶⁰ TB Woods argues that the domestic like product definition should not include small-diameter IMTDCs that are excluded from the investigations' scope; it argues that most

⁵⁸ According to *** TB Woods, casting accounts for the *** majority of the cost or value of the finished IMTDCs, whereas finishing represents on average *** percent of production costs. Petitioner's Postconf. Brief at Exhibit 1 at 17. This value-added estimate, however, varies *** ratio of conversion costs to cost of goods sold ("COGS") ranged from *** during the full years between 2012 and 2014. These ratios are likely somewhat overstated, however, because the conversion costs include certain costs for casting operations, and not just finishing operations. CR at I-31, III-8 to III-9; PR at I-24, III-4 to III-5; CR/PR at Table VI-6. The record indicates that the ***. CR at III-9; PR at III-4.

⁵⁹ Baldor asserts that its own finishing operations account for roughly the same share of the final cost as its purchases of cast products. Confer. Tr. at 19; Baldor's Postconf. Brief at Exhibit 1 at 22-23, Exhibit 2 at paragraph 4. According to Baldor's reported financial data on its large-diameter IMTDCs, finishing operations accounted for *** percent of the total COGS for the full years between 2012 and 2014. The record indicates that the average unit value of Baldor's domestic purchases of U.S.-origin unfinished IMTDCs as a share of the average unit value of Baldor's U.S. commercial shipments of finished IMTDCs, however, was lower, ranging from *** percent. CR at I-32, III-8; PR at I-25, III-4. Chinese Respondents argue that the finishing process adds *** percent towards the value of the final product. Chinese Respondents' Postconf. Brief at 12.

⁶⁰ Baldor's Postconf. Brief at 5-13, 27-28; Confer. Tr. at 124-125, 127, 156-157.

small-diameter IMTDCs are manufactured using different raw materials, production processes, and employees, leading to differences in physical characteristics and uses, customer and producer perceptions, interchangeability, and price.⁶¹ Based on an analysis of the traditional domestic like product factors discussed below, for purposes of these preliminary determinations, we include small-diameter IMTDCs in the same domestic like product definition as the large-diameter IMTDCs corresponding to the investigations' scope.

Manufacturing Facilities, Production Processes, and Employees. As Baldor and Chinese Respondents observe,⁶² TB Woods admitted in the original petitions that it uses common facilities, processes, and employees to manufacture all IMTDCs, without differentiating by diameter.⁶³ Baldor reports that it *** uses the same manufacturing equipment, processes, and employees to finish large- and small-diameter IMTDCs in the United States.⁶⁴ Integrated U.S. producer Martin Sprocket ***.⁶⁵

Physical Characteristics and Uses. To support its assertion that a clear 4-inch dividing line physically differentiates small- and large-diameter IMTDCs, TB Woods argues that 3-inch diameter sheaves cannot be used in assemblies requiring a 5-inch diameter sheave and that the strength of small-diameter IMTDCs differs from large-diameter IMTDCs.⁶⁶ This does not establish a clear dividing line at 4 inches, however, because no two IMTDCs of different diameters would be expected to substitute for one another. Additionally, as Baldor reports, small-diameter bushings are used on large-diameter sheaves, a particular belt might be used on small-diameter sheaves or with sheaves up to 20 or 30 inches in diameter, and certain castings of four inches or more in diameter might be used to produce two finished IMTDCs – one small-diameter and one large-diameter.⁶⁷ TB Woods' witnesses appear to concede at least some overlap in the functions of large- and small-diameter IMTDCs, although IMTDCs with smaller diameters are used in applications involving relatively less horsepower in smaller machines whereas IMTDCs with larger diameters are used in larger machines with greater horsepower.⁶⁸

Interchangeability. IMTDCs are manufactured in a range of dimensions and designs. Different sizes of IMTDCs cannot substitute for one another, and IMTDCs of one form (*e.g.*, sheaves) do not perform the function of and would not be interchangeable with other forms of IMTDCs (*e.g.*, bushings).⁶⁹

⁶¹ Petitioner's Postconf. Brief at 5, Exhibit 1 at 5-13. Petitioner explained that it asked to revise the scope of the investigations to exclude small-diameter products because its foundry typically does not make them or MTDCs from sintered steel powder or direct-machined steel. Confer. Tr. at 124-126.

⁶² Baldor's Postconf. Brief at 5-6, 11-12; Chinese Respondents' Postconference Brief at 10.

⁶³ Baldor's Postconf. Brief at 11-12; Petitions, Vol. I at 20, 21. According to more recent communications, ***. CR at I-39 (citing December 2, 2015 e-mail); PR at I-29.

⁶⁴ CR at I-38 to I-39; PR at I-29; Baldor's Postconf. Brief at Exhibit 2 at paragraph 2.

⁶⁵ CR at I-39 & n.96 (citing December 1 and December 5, 2015 e-mails); PR at I-29 at n.96.

⁶⁶ Petitioner's Postconf. Brief at Exhibit 1 at 5-6; CR at I-36; PR at I-28.

⁶⁷ Baldor's Postconf. Brief at 8-9 (citing Confer. Tr. at 127), Exhibit 2 at paragraph 2; CR at I-36 to I-37; PR at I-28; Confer. Tr. at 63-64.

⁶⁸ Petitioner's Postconf. Brief at Exhibit 1 at 5-6; CR at I-36; PR at I-28.

⁶⁹ Petitions, Vol. I at 19, 21; CR at I-12 to I-28, I-40 to I-41; PR at I-10 to I-23, I-30; Petitioner's Postconf. Brief at Exhibit 1 at 7; Baldor's Postconf. Brief at 9.

Channels of Distribution. Regardless of dimensions, all IMTDCs share common channels of distribution, being sold to end users/original equipment manufacturers (“OEMs”) and distributors.⁷⁰

Producer and Customer Perceptions. TB Woods provides no evidence to support its assertion that customers and producers have different perceptions of small- and large-diameter products given their different sizes and end uses, which also contradicts its statements in the petitions.⁷¹ Indeed, as Baldor observes, the product catalogues of TB Woods and Baldor do not differentiate between IMTDCs above and below a four-inch outside diameter.⁷² The record indicates that industry associations such as the Mechanical Power Transmission Association (“MPTA”)⁷³ and the Association of Rubber Products Manufacturers (“ARPM”) also do not differentiate between IMTDCs above and below four inches in outside diameter.⁷⁴ Testimony at the conference suggests that TB Woods proposed a four-inch dividing line based on its own production preferences, facilities, and import preferences rather than any distinctions recognized by the market.⁷⁵

Price. The parties agree that prices of IMTDCs depend on weight, size, and relative complexity, and that costs and therefore prices of IMTDCs increase with size, weight, and relative complexity.⁷⁶

Analysis. Based on a consideration of the traditional domestic like product factors, we determine that the record does not support TB Woods’ assertion that a clear line divides small-diameter IMTDCs from the large-diameter IMTDCs that correspond to the scope of these investigations. *** manufacture small- and large-diameter IMTDCs and *** finishes small- and large-diameter IMTDCs using some common facilities, processes, and employees. Small- and large-diameter IMTDCs have similar physical characteristics, and even TB Woods acknowledges some overlap in their end uses. Small- and large-diameter IMTDCs are sold through similar channels of distribution, and the record suggests that producers and customers do not differentiate among IMTDCs based on a four-inch diameter dividing line, as shown by available product catalogues and industry standards. It is not unexpected that prices differ for small- and large-diameter IMTDCs or that small- and large-diameter IMTDCs are not interchangeable. The

⁷⁰ Baldor’s Postconf. Brief at 9, Exhibit 2 at paragraph 2; Petitioner’s Postconf. Brief at Exhibit 1 at 8; CR at I-41 to I-43; PR at I-30 to I-31; CR/PR at Table II-1; Petitions, Vol. I at 19, 21.

⁷¹ Petitioner’s Postconf. Brief at Exhibit 1 at 9; CR at I-42; PR at I-31; Petitions, Vol. I at 20 (“Both producers and customers recognize the subject merchandise as components of mechanical transfer drives and, as such, a common product group.”).

⁷² Baldor’s Postconf. Brief at 18, Exhibit 2 at paragraph 2, Exhibit 5 (Baldor’s product catalogue), Exhibit 6 (TB Woods’ product catalogue); CR at I-42; PR at I-31.

⁷³ The MPTA is an industry organization comprised of North American manufacturers of mechanical power transmission equipment that works to develop industry standards to ensure the proper design, manufacturing, and application of such equipment. Confer. Tr. at 92, 129-131.

⁷⁴ Baldor’s Postconf. Brief at 10-11, Exhibit 2 at paragraph 2, Exhibit 7 (industry specifications).

⁷⁵ Baldor’s Postconf. Brief at 11 (citing Confer. Tr. at 124-25); Confer. Tr. at 158.

⁷⁶ Baldor’s Postconf. Brief at 12-13; CR at I-43 to I-44; PR at I-31 to I-32; Petitioner’s Postconf. Brief at Exhibit 1 at 12-13; Petitions, Vol. I at 20, 21; November 5, 2015 Amended Petitions at Exhibit I-S2 at para. 22.

same can be said regardless of the diameter used as the dividing line. For these reasons, we have determined to include small-diameter IMTDCs in the same domestic like product definition as large-diameter IMTDCs.⁷⁷

D. Should Steel MTDCs Be Included in the Domestic Like Product?

We also discuss whether to include mechanical transfer drive components manufactured from sintered steel powder or from direct-machined steel bars (“steel MTDCs”) in the same domestic like product definition as the iron MTDCs corresponding to the scope of these investigations. Baldor and Chinese Respondents ask the Commission to define the domestic like product more broadly than the investigations’ scope to include steel MTDCs.⁷⁸ Petitioner argues against including in the domestic like product definition those MTDCs made from non-iron raw materials that do not correspond to products within the investigations’ scope and that are made from different raw materials, using different employees, processes, and equipment.⁷⁹ Based on an analysis of the traditional domestic like product factors discussed below and the limited available information on this issue, for purposes of these preliminary determinations, we determine not to include steel MTDCs in the domestic like product.

Manufacturing Facilities, Production Processes, and Employees. U.S. firms that manufacture more than one type of MTDC utilize different raw materials and different processes, employees, and production equipment to manufacture iron MTDCs than to manufacture steel MTDCs. Iron MTDCs are made from pig iron, scrap iron, and ferrous scrap that are heated in a furnace into a molten metal that is sand-cast into a solid and then subjected to finishing operations such as machining grooves or teeth, cutting tap holes, and sometimes surface treating with paint or oil.⁸⁰ By comparison, steel MTDCs may involve fusing (without melting) compacted steel powder in a sintering furnace, cooling, and then minor processing,⁸¹ or they may involve cutting round steel bars to the desired thickness and then

⁷⁷ As discussed below, the record contains some information about the small-diameter IMTDC operations of *** and the finishing operations conducted by ***. This information suggests that production volumes of small-diameter IMTDCs in the United States are relatively small; indeed, small-diameter MTDCs are often manufactured from sintered steel powder or direct-machined steel bars instead of iron. *See, e.g.*, Confer. Tr. at 62-63, 134-135. It is unclear whether additional firms may also cast and/or finish small-diameter IMTDCs using the same or similar production equipment, processes, and equipment. We intend to seek further data that reflect the domestic industry’s small-diameter IMTDCs operations in any final phase of these investigations.

⁷⁸ Baldor’s Postconf. Brief at 13-20; Confer. Tr. at 28-29; Chinese Respondents’ Postconf. Brief at 7-11.

⁷⁹ Petitioner’s Postconf. Brief at 5, Exhibit 1 at 3-13; Confer. Tr. at 162-63.

⁸⁰ *See, e.g.*, Petitioner’s Postconf. Brief at Exhibit 1 at 17-18; CR at I-22 to I-27; PR at I-18 to I-22; Confer. Tr. at 88-91.

⁸¹ Manufacturers apply extreme pressure using mechanical presses to compress steel powder in molds or dies into a so-called “compact” that has the exact shape of the finished component. They heat the compact in a sintering furnace to a temperature that fuses (without melting) the steel powder.

(Continued...)

subjecting them to a high-speed spindle lathe to remove the metal necessary to create a component of the desired shape.⁸² The parties disagree whether domestic IMTDC producers also routinely manufacture MTDCs from sintered steel powder or direct-machined steel bars.⁸³ Baldor reports that it is one of three U.S. firms that, unlike TB Woods, invested in technology that permits it to manufacture MTDCs of up to six inches in diameter through a sintering process; it reports that other producers would be able to manufacture larger sizes if they use larger hydraulic presses.⁸⁴ Also unlike TB Woods, Baldor reports that it is one of eight U.S. firms that invested in high-speed spindle lathes that permit it to produce efficiently large volumes of MTDCs of up to 20.5 inches in diameter from direct-machined steel bar.⁸⁵ Chinese Respondents argue that the choice of manufacturing methodology does not dictate end use.⁸⁶ TB Woods disagrees, arguing that these differences impart distinct essential characteristics on the resulting products.⁸⁷

Physical Characteristics and Uses. Baldor and Chinese Respondents assert that MTDCs made from sintered steel powder and direct-machined steel bars are commercially identical in performance and physical characteristics and virtually indistinguishable, when placed side-by-side, from MTDCs made from iron.⁸⁸ At the same time, Baldor reports that the sintering step increases the compact's density and strength, yielding a lighter and stronger part than the casting and machining processes used to manufacture iron MTDCs.⁸⁹ TB Woods argues that

(...Continued)

Because the resulting sintered steel product has the exact shape of the final product, Baldor reports that only minor processing and finishing operations are needed, such as machining the groove of the sheaves and cutting the key in the bushings. Baldor's Postconf. Brief at Exhibit 1 at 20-21, Exhibit 2 at paragraphs 10-12; Confer. Tr. at 19-20, 61-62.

⁸² Manufacturers cut a round steel bar to the desired thickness and then place the resulting blank on a high-speed spindle lathe to remove the metal necessary to create the exact shape of the desired component. Baldor's Postconf. Brief at Exhibit 1 at 20-21, Exhibit 2 at paragraphs 13-16; Confer. Tr. at 20.

⁸³ *Compare, e.g.,* Chinese Respondent's Postconf. Brief at 8 *with, e.g.,* Petitions, Vol. I at 9 n.6 ("Both alternative production methods are uncommon for IMTDC.").

⁸⁴ Baldor's Postconf. Brief at 19, Exhibit 1 at 20-21, Exhibit 2 at paragraph 10-12 (reporting that Baldor alone produced *** pieces of MTDCs by sintering powdered metal into MTDCs with diameters above and below the four-inches dividing line proposed by Petitioner); Confer. Tr. at 19-20, 60-61; CR at I-37; PR at I-28.

⁸⁵ Baldor's Postconf. Brief at 19, Exhibit 1 at 21, Exhibit 2 at paragraph 14, 16 (reporting that in 2014 Baldor alone produced *** pieces of MTDCs by direct machining steel bars); Confer. Tr. at 20, 61; CR at I-37; PR at I-28.

⁸⁶ Chinese Respondent's Postconf. Brief at 8.

⁸⁷ Petitioner's Postconf. Brief at Exhibit 1 at 9-10; CR at I-37; PR at I-28.

⁸⁸ Baldor's Postconf. Brief at 15-16; CR at I-34 to I-35; PR at I-27; Confer. Tr. at 19-20, 158-59 (observing that TB Woods' witness who reported that he had never seen MTDCs made from sintered steel powder likely had seen them without realizing it, because Baldor regularly sells them and they would look identical to other sheaves).

⁸⁹ Baldor's Postconf. Brief at Exhibit 1 at 21, Exhibit 2 at paragraph 10; Confer. Tr. at 19-20.

steel MTDCs have a lower carbon content than iron MTDCs,⁹⁰ which affects their relative strengths, and it reports that sintered steel bushings sometimes crack and break.⁹¹

Interchangeability. The record contains conflicting information on interchangeability. TB Woods argues that differences in carbon content and size between iron and steel MTDCs affect end uses and limit interchangeability; as support, it observes that Baldor's witness testified that he would not be able to sell a sintered steel powder MTDC to a customer seeking a higher-strength iron MTDC.⁹² In contrast, three of 15 importers, two of which are also domestic producers (***) , reported that steel MTDCs are substitutes for iron MTDCs.⁹³ Respondents assert that industry associations and standards do not specify whether to manufacture the components from steel or iron. According to Baldor, small-diameter bushings are more likely to be manufactured from steel than iron, but many large-diameter sheaves require a small-diameter bushing, so indifferent customers may purchase an iron sheave with a steel bushing, based on the producer's choices about which raw materials or production processes were most cost-effective for that order.⁹⁴

Channels of Distribution. The parties agree that both iron MTDCs and steel MTDCs are sold to distributors and end users/OEMs, although TB Woods asserts that they likely serve different customers.⁹⁵

Producer and Customer Perceptions. Available information indicates that industry standards do not specify the process or raw materials used to manufacture MTDCs. The parties disagree whether producers or customers perceive iron MTDCs to be different products than steel MTDCs, although Baldor acknowledges that purchasers of custom products (that it estimates account for less than *** percent of all purchases) may express a preference.⁹⁶ *** reports that it manufactures ***.⁹⁷

⁹⁰ Although a carbon content of 2.0 percent, by weight, typically divides iron from steel, TB Woods sought a 1.7 percent dividing line in the revised scope because the carbon content of some gray iron MTDCs may be as low as 1.7 percent. In contrast, high-carbon steel bar MTDCs would have a carbon content of up to 1.4 percent and sintered steel MTDCs *** have an average carbon content of *** percent. Petitioner's Postconf. Brief at Exhibit 1 at 3-4, Exhibit 25 at paragraph 3; Confer. Tr. at 122-123.

⁹¹ Petitioner's Postconf. Brief at Exhibit 1 at 4; CR at I-35; Confer. Tr. at 126. Baldor disputes this claim, arguing that, if sintered steel powder MTDCs were so unreliable, Baldor would have discontinued production of them, but instead has been producing them for over thirty years. Confer. Tr. at 159.

⁹² Petitioner's Postconf. Brief at Exhibit 1 at 6-7 (citing Confer. Tr. at 45-46); CR at I-42 to I-43; PR at I-31.

⁹³ CR at II-13; PR at II-8; Chinese Respondents' Postconf. Brief at 8.

⁹⁴ Baldor's Postconf. Brief at 15-17, Exhibit 2 at paragraphs 17-18, Exhibit 7 (industry standards); Chinese Respondents' Postconf. Brief at 10-11; CR at I-40; PR at I-30; Confer. Tr. at 20, 44-46, 73-74.

⁹⁵ Baldor's Postconf. Brief at 17; CR at I-39, I-42 to I-43; PR at I-29, I-31; Petitioner's Postconf. Brief at Exhibit 1 at 7.

⁹⁶ Chinese Respondents' Postconf. Brief at 10-11; Baldor's Postconf. Brief at 17-18, Exhibit 2 at paragraphs 17-18, Exhibit 7 (industry standards); CR at I-41; PR at I-30; Confer. Tr. at 20-21, 45-46; Petitioner's Postconf. Brief at Exhibit 1 at 8-9.

⁹⁷ Petitioner's Postconf. Brief at Exhibit 25 at paragraph 4; CR at I-40; PR at I-30.

Price. TB Woods agrees with Baldor that steel MTDCs are price competitive but may cost less to manufacture than iron MTDCs. TB Woods refers to this as evidence of price differences. It also observes that differences in weight, size, and relative complexity affect prices, meaning that steel MTDCs, which it asserts tend to be manufactured in smaller dimensions, would be lower priced than iron MTDCs.⁹⁸

Analysis: We do not include MTDCs manufactured from sintered steel powder or direct-machined steel bars in the domestic like product definition with iron MTDCs, notwithstanding some similarities between the two types of products. Although customers and industry associations may not differentiate between MTDCs made from iron and steel and all such products appear to share channels of distribution, some evidence suggests that they have different physical qualities due to their different chemical properties. Indeed, those firms that manufacture MTDCs from iron and one or more of the steel raw materials (*i.e.*, sintered steel powder or direct-machined steel bar) do so using different raw materials, production facilities, processes, and employees. Finally, both T.B. Woods and Baldor report that iron MTDCs are priced differently than steel MTDCs.

E. Conclusion

For the reasons discussed above, we define the domestic like product in these preliminary determinations as all forms of unfinished and finished IMTDCs described in the scope of these investigations as well as small-diameter IMTDCs under 4 inches in maximum nominal outside diameter. We do not include steel MTDCs that are manufactured from sintered steel powder or direct-machined steel bars in the domestic like product definition.⁹⁹

IV. 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.”¹⁰⁰ In defining the domestic industry, the Commission’s general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market. These investigations raise two issues with respect to the domestic industry definition. The first concerns what processing activities are sufficient to constitute domestic production. The second concerns whether appropriate circumstances exist to exclude any domestic producers from the domestic industry as related parties.

⁹⁸ Petitioner’s Postconf. Brief at Exhibit 1 at 11-12; Baldor’s Postconf. Brief at 19-20; Confer. Tr. at 19-20; CR at I-43; PR at I-31.

⁹⁹ We remind parties to identify in their comments on the draft questionnaires for any final phase of these investigations any arguments that would implicate data collection, such as requests to define the domestic like product(s) in a different manner. *See, e.g.*, 19 C.F.R. § 207.20(b).

¹⁰⁰ 19 U.S.C. § 1677(4)(A).

A. Sufficient Production-Related Activities

In deciding whether a firm qualifies as a producer of the domestic like product, the Commission generally analyzes the overall nature of a firm's U.S. production-related activities, although production-related activity at minimum levels could be insufficient to constitute domestic production.¹⁰¹ The parties disagree whether finishing operations on unfinished blanks that result in finished IMTDCs constitute sufficient production-related activities to consider finishers to be domestic producers of the domestic like product. TB Woods argues that finishing operations do not, in and of themselves, constitute domestic production; it argues that Customs and Border Patrol ("CBP") assigns country of origin according to the country where the blank was cast, based on CBP's finding that finishing blanks does not constitute substantial transformation.¹⁰² Baldor and Chinese Respondents argue that finishing operations are substantial, add substantial value, and require substantial capital investment, so they contend that finishers should be considered producers of the domestic like product, regardless of whether the unfinished blanks are manufactured in the United States or imported.¹⁰³

1. Analysis of Relevant Factors

Based on our consideration of the factors below, we determine that finishing operations constitute sufficient production-related activities to include finishers in the domestic industry.¹⁰⁴

Quantity and Type of Parts Sourced in the United States: The parties disagreed about the facts pertinent to this factor, with TB Woods incorrectly arguing that finishers, such as Baldor, primarily rely on blanks imported from subject country sources and Respondents arguing otherwise.¹⁰⁵ Based on available information, slightly more than *** of the three responding U.S. producers' combined production of finished IMTDCs in terms of pieces is from

¹⁰¹ The Commission generally considers six factors: (1) source and extent of the firm's capital investment; (2) technical expertise involved in U.S. production activities; (3) value added to the product in the United States; (4) employment levels; (5) quantity and type of parts sourced in the United States; and (6) any other costs and activities in the United States directly leading to production of the like product. No single factor is determinative and the Commission may consider any other factors it deems relevant in light of the specific facts of any investigation. *Crystalline Silicon Photovoltaic Cells and Modules from China*, Inv. Nos. 701-TA-481 and 731-TA-1190 (Final), USITC Pub. 4360 at 4-12 (Nov. 2012), *aff'd*, *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp. 3d 1314, 1320-26 (Ct. Int'l. Trade 2015).

¹⁰² Petitioner's Postconf. Brief at 5, Exhibit 1 at 24-29; Confer. Tr. at 15; Petitions, Vol. I at 2, 13, 22-25, 27.

¹⁰³ Baldor's Postconf. Brief at 2-3, 20-25, Exhibit 1 at 13-16, 22-23, Exhibit 10 at 3; Confer. Tr. at 17-19, 31-32; Chinese Respondents' Postconf. Brief at 14-15.

¹⁰⁴ The available information for this analysis involves the domestic producers' operations on large-diameter IMTDCs.

¹⁰⁵ Petitions, Vol. I at 24; Baldor's Postconf. Brief at 24-25; CR at III-6 to III-10; PR at III-3 to III-5; Confer. Tr. at 17-18.

unfinished IMTDCs cast in their own U.S. facilities compared to *** percent purchased from other U.S. facilities and *** percent that is from unfinished IMTDCs imported from ***.¹⁰⁶

Technical Expertise: Integrated producers Martin Sprocket and TB Woods assert that finishing operations do not require substantial technical expertise, explaining that machine tool operators that finish blank IMTDCs require basic knowledge of machinery operations with ***.¹⁰⁷ Baldor argues that it utilizes robotic cells, tooling, and other specially designed equipment that are dedicated to machining blanks to perform finishing operations that include drilling, boring, turning, hobbing, broaching, flanging, coating, testing, and inspecting. It argues that its highly trained employees have undertaken extensive mathematical studies and use advanced technical skills to *** operate that equipment.¹⁰⁸

Employment Levels: TB Woods argues that machine finishing operations involve low levels of employment relative to casting operations.¹⁰⁹ Baldor argues that both operations involve significant production-related workers, although the record does not contain complete information on foundries or finishing operations.¹¹⁰ According to questionnaire data, finisher Baldor reported employing *** production and related workers (“PRWs”) whereas the two responding integrated producers (TB Woods and Martin Sprocket) reported employing *** PRWs for their combined U.S. casting and finishing operations.¹¹¹

Value Added: The parties disagree about the value added by finishing operations, with *** TB Woods arguing that finishing operations account for a minority of value added,¹¹² and Baldor and Chinese Respondents valuing unfinished and finished IMTDCs nearly equally (*i.e.*, the value of each is roughly fifty percent).¹¹³ Baldor emphasizes that the finishing operations are necessary for the product to be used as a sheave, flywheel, or bushing, and it reports that

¹⁰⁶ CR at III-19 at n.11; PR at III-8 at n.11.

¹⁰⁷ Petitioner’s Postconf. Brief at Exhibit 1 at 25-26; November 5, 2015 Amended Petitions at Exhibit I-S2 at para. 15; Petitions, Vol. I at 24; CR at III-7 to III-8; PR at III-4.

¹⁰⁸ Baldor’s Postconf. Brief at 22-23, Exhibit 2 at paragraph 3, paragraph 6, Exhibit 10 at 4; Confer. Tr. at 18; CR at III-7; PR at III-4. Chinese Respondents agree that finishing operations involve ***. Chinese Respondents’ Postconf. Brief at 15.

¹⁰⁹ Petitioners’ Postconf. Brief at Exhibit 1 at 27; Petitions, Vol. I at 24.

¹¹⁰ Baldor’s Postconf. Brief at 24, Exhibit 2 at paragraph 6.

¹¹¹ CR at III-9; PR at III-5; CR/PR at Table III-13.

¹¹² According to *** TB Woods, casting accounts for the *** majority of the cost or value of the finished IMTDCs, whereas finishing represents on average *** percent of production costs. Petitioner’s Postconf. Brief at Exhibit 1 at 17. As indicated above, this value-added estimate varies ***. CR at I-31, III-8 to III-9; PR at I-25, III-4 to III-5; CR/PR at Table VI-6.

¹¹³ Baldor asserts that its own finishing operations account for roughly the same share of the final cost as its cost of purchasing unfinished cast products. Baldor’s Postconf. Brief at Exhibit 1 at 22-23, Exhibit 2 at paragraph 4. According to Baldor’s reported financial data, finishing operations accounted for *** percent of the total COGS for the full years between 2012 and 2014. The record indicates that the average unit values of Baldor’s domestic purchases of U.S.-origin unfinished IMTDCs as a share of the average unit values of Baldor’s U.S. commercial shipments of finished IMTDCs, however, was lower, ranging from *** percent. CR at I-32, III-8; PR at I-25, III-4. Chinese Respondents argue that the finishing process adds upwards of 50 percent towards the value of the final product. Chinese Respondents’ Postconf. Brief at 12.

customers consider the finisher to be the producer of the components.¹¹⁴ TB Woods contends that Baldor's estimates are not documented and suggests that it "strains credulity to suggest that grinding or grooving operations in general, on average, equal the value created by the actual iron production and casting of these products."¹¹⁵ Whereas TB Woods repeatedly suggests that Baldor's higher value-added estimate is distorted by Baldor's use of unfairly traded imports,¹¹⁶ Baldor strongly disagrees, emphasizing that it "does not produce any finished IMTDCs from imported castings" in its U.S. facility, which was the basis for its calculations.¹¹⁷

Source and Extent of Capital Investment: Integrated producers TB Woods and Martin Sprocket estimate that finishing operations involve small capital investments,¹¹⁸ whereas Baldor and Chinese Respondents assert that finishing operations involve substantial capital investments.¹¹⁹ Baldor incurred nearly \$*** in capital expenditures and more than \$*** in ongoing research and development (R&D) during the January 2012 to September 2015 period of investigation ("POI").¹²⁰ It reported *** as the source of its capital and investments.¹²¹

Any Other Costs or Activities Leading to Production: TB Woods argues that finishing operations are a minor step in a much larger labor-intensive process. It asserts that the casting operations create the essential characteristics of the finished final product, after which only minor additional finishing occurs.¹²²

¹¹⁴ Baldor's Postconf. Brief at 23; Confer. Tr. at 19.

¹¹⁵ Petitioner's Postconf. Brief at Exhibit 1 at 26-27.

¹¹⁶ Despite Baldor's multiple denials, TB Woods repeats this claim in its brief. Confer. Tr. at 111-112, 116-17, 156; Petitioner's Postconf. Brief at Exhibit 1 at 27 ("While Respondent has stated that it did not base its calculation on the basis of dumped or subsidized product, ***. It is irrefutable that any such methodology would clearly and inappropriately inflate the value of finishing.") Baldor, however, has provided certified contrary explanations to both Commerce and the Commission.

¹¹⁷ Baldor's Postconf. Brief at Exhibit 1 at 22-23, Exhibit 2 at paragraph 3; Confer. Tr. at 17-18, 19, 32, 51, 74.

¹¹⁸ TB Woods estimates that capital investment for finishing operations is small, involving about \$***, compared to \$*** for an IMTDC foundry, and it argues that finishing operations may also be used to process non-IMTDC products. Petitions, Vol. I at 23-24, 25; CR at III-6 to III-7; PR at III-4; Petitioner's Postconf. Brief at Exhibit 1 at 25 (also arguing that "common sense, and the record evidence, dictates that the capital investment necessary to establish a foundry is considerably more than that required to conduct only machining of cast products"). Martin Sprocket reported in its questionnaire response that it would require *** more capital to install a foundry to produce unfinished IMTDCs than to install finishing operations for IMTDCs. CR at III-7; PR at III-4.

¹¹⁹ Baldor contends that finishers make substantial multimillion dollar capital investments and estimates that it would cost more than \$*** its robotic cells, tooling, and equipment that are specifically designed to finish IMTDCs. Baldor's Postconf. Brief at 22, Exhibit 2 at paragraph 5; Confer. Tr. at 18; Baldor's Postconf. Brief at Exhibit 10 at 4; CR at III-7; PR at III-4. Chinese Respondents argue that finishing operations involve ***. Chinese Respondents' Postconf. Brief at 15.

¹²⁰ Baldor's Postconf. Brief at 22 at n.19.

¹²¹ CR at III-6; PR at III-3.

¹²² Petitioner's Postconf. Brief at Exhibit 1 at 28-29. When asked to describe other costs or activities in the United States directly leading to the production of finished IMTDCs, Baldor reported "***." CR at III-10; PR at III-5.

2. Conclusion

Based on the record, we include within the domestic industry U.S. firms that finish IMTDCs. In making its arguments concerning this issue, Petitioner relied heavily on its erroneous assumption that Baldor and other finishers rely on imported unfinished IMTDCs for their finishing operations. Based on the questionnaire data received to date, Baldor only finishes unfinished IMTDCs manufactured in the United States, ***.¹²³ Available information indicates that Baldor's finishing operations employ fewer PRWs than the integrated operations of ***, but not insignificant numbers of workers, and that at least some specialized training is needed for these employees. The record provides conflicting information on the value added by finishing operations, but even at the lower ranges reported, the value added is substantial.¹²⁴ Moreover, finishing operations appear to involve substantial capital investments.

As a result of our determination to include within the domestic industry U.S. firms that perform finishing operations on IMTDCs, we treat their U.S. shipments as U.S. shipments of the domestic like product by the domestic industry regardless of the origin (subject, nonsubject, or United States) of the unfinished IMTDCs.

B. Related Parties

We must determine whether any producer of the domestic like product should be excluded from the domestic industry pursuant to Section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.¹²⁵ Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.¹²⁶

¹²³ CR at III-9, III-13, III-18 at n.9; PR at III-5, III-6, III-5 at n.9.

¹²⁴ CR at I-39, III-8; PR at I-29, III-4; CR/PR at Table VI-6.

¹²⁵ See *Torrington Co. v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd mem.*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), *aff'd mem.*, 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

¹²⁶ The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following: (1) the percentage of domestic production attributable to the importing producer; (2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market); (3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry; (4) the ratio of import shipments to U.S. production for the imported product; and (5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy*, 100 F. Supp. 3d at 1329; see also *Torrington*, 790 F. Supp. at 1168.

1. Parties' Arguments

Petitioner's arguments: TB Woods asks the Commission to determine that appropriate circumstances exist to exclude Baldor from the domestic industry as a related party. TB Woods argues that *** is related to producers of subject merchandise in Canada and (until late in the POI) China, that Baldor's primary interest lies with importation instead of domestic production, and that *** from its importation activity.¹²⁷

Respondents' arguments: Baldor argues against its exclusion from the domestic industry as a related party. It emphasizes that its U.S. facility finishes only U.S.-cast blanks, and not imported subject castings.¹²⁸ Even though it opposes the petitions, Baldor argues that it is strongly committed to its U.S.-based operations, explaining that it imports in order to fill out its product line and to meet customers' requirements for a full product range on a timely manner.¹²⁹ Baldor observes that TB Woods' imports of subject merchandise from China exceed Baldor's purchases from the same supplier in China.¹³⁰

Chinese Respondents argue that appropriate circumstances exist to exclude *** from the domestic industry as related parties. They argue that ***. Even though it would be "atypical" to exclude the petitioner from the domestic industry, Chinese Respondents argue that TB Woods should be excluded in order to avoid skewing the data towards ***.¹³¹

2. Analysis

Each of the three responding domestic producers is a related party as an importer of subject merchandise from ***.¹³² For the reasons discussed below, we determine for purposes of these preliminary determinations that appropriate circumstances do not exist to exclude any of the responding producers from the domestic industry as a related party, although we intend to revisit this issue in any final phase of these investigations.¹³³

¹²⁷ Petitioner's Postconf. Brief at 5, Exhibit 1 at 29-32; Petitions, Vol. I at 4, 27; Confer. Tr. at 112.

¹²⁸ Confer. Tr. at 17-18.

¹²⁹ Baldor's Postconf. Brief at Exhibit 10 at 15-16.

¹³⁰ Confer. Tr. at 8.

¹³¹ Chinese Respondents' Postconf. Brief at 1, 15-18.

¹³² CR/PR at Table III-12. Additionally, *** are related to producers/exporters of subject merchandise. CR/PR at Table III-2 (indicating that ***).

¹³³ We rely primarily on value-based indicators as the best measure for the product in investigations such as these that involve a large grouping of items differing greatly in size, characteristics, applications, and price. We are mindful of limitations in the use of value measures rather than quantity measures, such as the difficulty in determining whether changes in value totals are caused by changes in product mix or price. Therefore, we also considered quantity data, where appropriate. *See, e.g., Diamond Sawblades and Parts Thereof from China*, Inv. No. 731-TA-1092 (Review), USITC Pub. 4559 at 12 n.64 (Sept. 2015). The information available on which we base our analysis of related parties issues pertains to the firms' operations on large-diameter IMTDCs.

***. *** is a ***,¹³⁴ and it accounted for *** percent of responding U.S. producers' U.S. production of finished IMTDCs in 2014, by quantity in pounds.¹³⁵ The firm also imports ***.¹³⁶ On a value basis, the firm's imports of subject merchandise *** its production of IMTDCs.¹³⁷ *** capital expenditures during the POI *** R&D expenses ***.¹³⁸ The firm ***.¹³⁹ *** operated ***.¹⁴⁰

On balance, we determine that appropriate circumstances do not exist to exclude the firm as a related party. Although the firm's ratio of imports to domestic production is high, its poor financial performance does not suggest that it benefitted from its importing activities.¹⁴¹ Moreover, ***,¹⁴² another sign of its commitment to domestic production.¹⁴³

***. *** is a ***.¹⁴⁴ It accounted for *** percent of responding U.S. producers' production of finished IMTDCs in 2014 by quantity in pounds.¹⁴⁵ The firm also imported ***.¹⁴⁶

¹³⁴ CR at III-19; PR at III-8.

¹³⁵ CR/PR at Table III-1. *** accounted for *** percent of responding U.S. producers' production of finished IMTDCs in terms of pieces in 2014. Derived from INV-NN-091 at Table Supp-7.

¹³⁶ CR/PR at Table III-12 (indicating that the value of its *** expressed as a ratio to its U.S. shipments was *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in the first nine months of 2014 ("interim 2014") and was *** percent in interim 2015). On a pieces basis, its *** expressed as a ratio to its U.S. shipments was *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in interim 2014 and *** percent in interim 2015). INV-NN-091 at Table Supp-7.

¹³⁷ CR/PR at Table III-12 (also indicating that, by value, its total U.S. shipments of IMTDCs manufactured in the United States *** whereas ***). The firm's U.S. operations reportedly manage production, shipments, and product mix questions for all of its locations supplying the U.S. market. Confer. Tr. at 84-85. In terms of pieces, ***. INV-NN-091 at Table Supp-7.

¹³⁸ It had capital expenditures of \$*** in 2012, \$*** in 2013, \$*** in 2014, \$*** in interim 2014, and \$*** in interim 2015. Its R&D expenditures totaled \$*** in 2012, \$*** in 2013, \$*** in 2014, \$*** in interim 2014, and \$*** in interim 2015. CR/PR at Table VI-10.

¹³⁹ CR/PR at Table III-1.

¹⁴⁰ Its ratio of operating income to net sales was *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in interim 2014, and *** percent in interim 2015, whereas the domestic industry's average was *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in interim 2014, and *** percent in interim 2015. CR/PR at Table VI-5.

¹⁴¹ Vice Chairman Pinkert does not rely upon a firm's financial performance in these investigations as a factor in determining whether there are appropriate circumstances to exclude it from the domestic industry.

¹⁴² CR/PR at Table VII.

¹⁴³ Based on the information referenced above, Vice Chairman Pinkert and Commissioner Williamson determine that appropriate circumstances exist to exclude *** from the domestic industry as a related party. In particular, *** ratio of subject imports to U.S. shipments of domestically produced IMTDCs, based on value, ranged from *** percent to *** percent during 2012-2014, CR/PR at Table III-12, and its ratio of subject imports to U.S. production, based on quantity (pieces), ranged from *** percent to *** percent, INV-NN-091 at Table Supp-7, indicating that its primary interest lies in importation rather than domestic production. Exclusion of ***'s data from the data for the overall domestic industry, however, does not meaningfully affect the analysis in these investigations, and Vice Chairman Pinkert and Commissioner Williamson otherwise join the Commission's Views.

¹⁴⁴ CR at III-16; PR at III-7.

On a value basis, the firm's imports of subject merchandise *** its production of IMTDCs.¹⁴⁷ *** capital expenditures *** R&D expenses.¹⁴⁸ As previously noted, it is ***.¹⁴⁹ *** operated ***.¹⁵⁰

We determine that appropriate circumstances do not exist to exclude the firm as a related party. The firm's ratio of imports to domestic production is relatively low ***.¹⁵¹ Moreover, ***. These facts generally suggest that its interest is in domestic production.

***.¹⁵² and it is *** , accounting for *** percent of responding U.S. producers' production of finished IMTDCs in 2014 in terms of quantity in pounds.¹⁵³ The firm imported ***.¹⁵⁴ On a value basis, the firm's imports of subject merchandise *** its production of IMTDCs.¹⁵⁵ *** capital expenditures during the POI *** , and it reported *** R&D expenses.¹⁵⁶ The firm ***.¹⁵⁷ *** operated *** of the POI.¹⁵⁸

(...Continued)

¹⁴⁵ CR/PR at Table III-1. In terms of pieces, *** percent of domestic production in 2014. INV-NN-091 at Table Supp-7.

¹⁴⁶ CR/PR at Table III-12 (indicating that the value of its *** expressed as a ratio to its U.S. shipments was *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in interim 2014, and *** percent in interim 2015). TB Woods argues that it was forced to source some IMTDCs from China in order to remain competitive. Confer. Tr. at 105-106.

¹⁴⁷ CR/PR at Table III-12. On a pieces basis, the ratio of imports of subject merchandise to domestic production for *** is considerably higher and was *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in interim 2014, and *** percent in interim 2015. INV-NN-091 at Table Supp-7.

¹⁴⁸ It had capital expenditures of \$*** in 2012, \$*** in 2013, \$*** in 2014, \$*** in interim 2014, and \$*** in interim 2015. Its R&D expenditures totaled \$*** in 2012, \$*** in 2013, \$*** in 2014, \$*** in interim 2014, and \$*** in interim 2015. CR/PR at Table VI-10.

¹⁴⁹ CR/PR at Table III-1.

¹⁵⁰ Its average ratio of operating income to net sales was *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in interim 2014, and *** percent in interim 2015, whereas the domestic industry's average was *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in interim 2014, and *** percent in interim 2015. CR/PR at Table VI-5.

¹⁵¹ ***. November 5, 2015 Amendment to Petitions at Exhibit I-S2 at para. 25; ***.

¹⁵² CR at III-16; PR at III-7.

¹⁵³ CR/PR at Table III-1. On a pieces basis, *** accounts for *** percent of domestic production of finished IMTDCs in 2014. INV-NN-091 at Table Supp-7.

¹⁵⁴ CR/PR at Table III-12 (indicating that the value of its *** expressed as a ratio to its U.S. shipments was *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in interim 2014, and *** percent in interim 2015). In terms of pieces, its *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in interim 2014, and *** percent in interim 2015. INV-NN-091 at Table Supp-7.

¹⁵⁵ CR/PR at Table III-12.

¹⁵⁶ CR/PR at Table VI-10. It had capital expenditures of \$*** in 2012, \$*** in 2013, \$*** in 2014, \$*** in interim 2014, and \$*** in interim 2015. *Id.*

¹⁵⁷ CR/PR at Table III-1.

¹⁵⁸ Its ratio of operating income to net sales was *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in interim 2014, and *** percent in interim 2015, whereas the domestic (Continued...)

We determine that appropriate circumstances do not exist to exclude *** as a related party. The firm ***, it is ***, and its *** financial performance is not likely related to its importing activities, given the low volume of its imports of subject merchandise. These facts suggest that its principal interest is in domestic production.

C. Conclusion

For the reasons discussed above, we define the domestic industry as all U.S. producers of the domestic like product, including those entities that engage solely in finishing operations. The parties disagree as to how many firms are conceivably within this domestic industry. Caterpillar reported the potential existence of several hundred firms.¹⁵⁹ TB Woods disputes this and argues that the lists submitted by Respondents do not really prove the existence of U.S. operations producing IMTDCs beyond those already identified in the petitions.¹⁶⁰

The Commission initially issued U.S. producers' questionnaires to three firms identified as integrated producers of IMTDCs in the petitions, five firms identified as finishers of IMTDCs, and three additional firms identified from other industry sources as possible U.S. IMTDCs producers.¹⁶¹ Two integrated firms (Petitioner TB Woods and Martin Sprocket) and one finisher (Baldor) submitted questionnaire data. *** reported that it does not manufacture IMTDCs, and ***.¹⁶² As explained further in section VI.B.1.b, several firms that received U.S. producer questionnaires after Commerce initiated the investigations on November 17, 2015 and announced the revised scope language on November 18, 2015, did not file responses. As indicated in section III.C, the record contains limited information on the domestic industry's

(...Continued)

industry's average was *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in interim 2014, and *** percent in interim 2015. CR/PR at Table VI-5.

¹⁵⁹ After asserting in its November 12, 2015 submission on standing that Petitioner failed to identify dozens of domestic producers, Caterpillar and its counsel opted not to participate in the November 18, 2015 staff conference. Caterpillar submitted a postconference brief arguing that Petitioner's failure to identify these firms, as well as 465 foundries, foreclosed any meaningful injury analysis in these investigations. Caterpillar Postconf. Brief at 7-9.

¹⁶⁰ TB Woods used the MPTA membership list as the starting point to develop a list of U.S. producers of the domestic like product for the petitions. Of the MPTA members, TB Woods submits an affidavit indicating that three (Carlstar Group, Gates Corporation, and Continental ContiTech Ag) have no casting or finishing operations and are only resellers of IMTDCs; five (Diamond Chain Co., Frontline Industries, Lovejoy Inc., Rexnord Industries, and Webster Industries) produce only products other than the IMTDCs described by the scope and resell IMTDCs; one (Maurey Manufacturing Inc.) purchases and resells IMTDCs that are made in China; two (***) reported ***, two (***) submitted U.S. importer questionnaire responses, with the latter reporting ***, others (***) submitted U.S. producer questionnaire responses; and Petitioner estimated that the *** remaining firms (***) produced no more than *** pounds combined in 2014, far less than the combined production of *** pounds collectively reported by *** for that period). Petitioner's Postconf. Brief at Exhibit 1 at 35-37, Exhibit 21 (affidavit).

¹⁶¹ These questionnaires, which were issued shortly after the petitions were filed, were based on the scope definitions in the October 28, 2015 petitions. CR at III-1; PR at III-1.

¹⁶² CR at III-1 to III-2; PR at III-1.

production operations involving small-diameter IMTDCs. We have included these operations in our analysis of the domestic industry, where available, and intend to seek data specific to the domestic industry's operations producing the domestic like product in any final phase of these investigations.

V. Cumulation¹⁶³

For purposes of evaluating the volume and effects for a determination of reasonable indication 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.¹⁶⁴

¹⁶³ 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)). As discussed in section VI.B.1.b, available data on imports from subject and nonsubject imports may be understated or overstated due to the timing of TB Woods' proposed scope revisions and Commerce's announcement accepting those proposals. According to available information for the most recent twelve-month period prior to the filing of the petitions (October 2014 through September 2015), subject imports of IMTDCs from Canada accounted for 9.4 percent of total reported imports of IMTDCs by quantity (in pieces) and 12.7 percent of total reported IMTDCs by value, and reported imports from China accounted for 53.9 percent of total reported IMTDCs by quantities (in pieces) and 35.2 percent of total reported IMTDCs imports by value. CR/PR at Table IV-5; CR at IV-14 to IV-15; PR at IV-6 to IV-7. Each of these figures exceeds the applicable three percent negligible imports threshold. Consequently, we determine for purposes of these preliminary determinations that imports from Canada and China are not negligible.

¹⁶⁴ *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278 to 280 (Final), USITC Pub. 1845 (May 1986), *aff'd*, *Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898 (Ct. Int'l Trade), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

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.¹⁶⁵ Only a “reasonable overlap” of competition is required.¹⁶⁶

TB Woods argues that subject imports from Canada and China should be cumulated because questionnaire responses report that IMTDCs made in Canada, China, and the United States are highly fungible and compete in the same manner in the U.S. market for sales through distributors and directly to end users and OEMs.¹⁶⁷ It argues that producers in all three countries manufacture the full range of IMTDC products and that subject producers have supplied the U.S. market with some of the largest and most technically demanding sheaves, even if a decade ago they initially supplied only products of less than 18 inches in diameter.¹⁶⁸ Baldor does not argue against cumulation of imports from Canada and China for purposes of the Commission’s preliminary determinations.¹⁶⁹ Chinese Respondents state that they “do not

¹⁶⁵ See, e.g., *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int’l Trade 1989).

¹⁶⁶ The Statement of Administrative Action (“SAA”) to the Uruguay Round Agreements Act (“URAA”), expressly states that “the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition.” H.R. Rep. No. 103-316, Vol. I at 848 (1994) (citing *Fundicao Tupy*, 678 F. Supp. at 902); see *Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int’l Trade 1998) (“cumulation does not require two products to be highly fungible”); *Wieland Werke, AG*, 718 F. Supp. at 52 (“Completely overlapping markets are not required.”).

¹⁶⁷ Petitioner’s Postconf. Brief at 6-8 (also noting that a number of U.S. importers import subject merchandise from both Canada and China), 18 (channels of distribution), Exhibit 1 at 40-47; Confer. Tr. at 15, 113; Petitions, Vol. I at 28-31.

¹⁶⁸ TB Woods concedes that some U.S. production of light-duty sheaves shut down in response to competition with unfairly traded subject imports that were initially concentrated in smaller-diameter, light-duty sheaves, but it argues that some production of light-duty sheaves continues in the United States, including by TB Woods. Confer. Tr. at 132; Petitioner’s Postconf. Brief at 17, Exhibit 1 at 46-47 (arguing that light- and heavy-duty sheaves have similar physical characteristics, with light-duty sheaves typically having fewer grooves than heavy-duty sheaves).

¹⁶⁹ It reserves the right to do so in any final phase of the investigations based on what it believes are differences in the composition of the products supplied from Canada, China, and the United States in terms of light- and heavy-duty sheaves. Baldor estimates that the vast majority of imports from China consist of lower-priced light-duty sheaves that do not compete with heavy-duty sheaves imported from Canada and made in the United States because light-duty sheaves have not been manufactured in the United States for a number of years. At the same time, Baldor acknowledges that the current record does not contain sufficient information on this issue. Baldor’s Postconf. Brief at 27-28, Exhibit 1 at 4-6 (defining light-duty sheaves), Exhibit 2 at paragraphs 19-20; Confer. Tr. at 23, 47-48, 65-66 (also reporting that producers differentiate between light-duty and heavy-duty sheaves in their product catalogues), 71-72, 160 (questioning TB Woods’ report that it manufactures light-duty sheaves and instead arguing that any such sales consist of products that TB Woods imported from Powermach in China).

have sufficient information to take a position” on cumulation for purposes of these preliminary determinations.¹⁷⁰

We determine to cumulate subject imports from Canada and China for purposes of our analysis of whether there is a reasonable indication of material injury in these preliminary determinations, because the statutory criteria for cumulation are satisfied. TB Woods filed the countervailing duty petition with respect to IMTDCs from China and the antidumping duty petitions regarding subject imports from Canada and China on the same day, October 28, 2015.¹⁷¹ As discussed below, the record also supports finding a reasonable overlap of competition among IMTDCs made in Canada, China, and the United States.

Fungibility. The vast majority of U.S. producers and importers reported that IMTDCs from Canada, China, and the United States are “always” or “frequently” interchangeable.¹⁷² The record indicates that almost all U.S. shipments of IMTDCs made in Canada, China, and the United States in 2014 consisted of finished IMTDCs,¹⁷³ and the *** of U.S. shipments from all three sources consisted of sheaves (other than flywheels).¹⁷⁴

Channels of Distribution. Questionnaire data indicate that IMTDCs from Canada, China, and the United States were primarily sold to distributors and also to OEMs.¹⁷⁵

Geographic Overlap. The record indicates that IMTDCs from Canada, China, and the United States were sold in all regions of the United States.¹⁷⁶

Simultaneous Presence in Market. Questionnaire data indicate that subject imports from Canada were present in the U.S. market throughout the POI along with subject imports from China and the domestic like product.¹⁷⁷

Conclusion. Based on the record in the preliminary phase of these investigations, we find that subject imports from Canada and China are fungible with one another and the domestic like product and that all were sold simultaneously in overlapping geographic markets and through similar channels of distribution. Because the current record indicates a reasonable overlap of competition among IMTDCs made in Canada, China, and the United States, we determine to cumulate imports from Canada and China for purposes of our analysis of reasonable indication of material injury by reason of subject imports in these preliminary determinations.¹⁷⁸

¹⁷⁰ Chinese Respondents’ Postconf. Brief at 19.

¹⁷¹ CR at I-1; PR at I-1. None of the statutory exceptions to cumulation applies.

¹⁷² CR at II-15; PR at II-10; CR/PR at Table II-4.

¹⁷³ CR at IV-15; PR at IV-7; CR/PR at Table IV-6.

¹⁷⁴ CR/PR at Table IV-6; CR at IV-17; PR at IV-8 (indicating that sheaves accounted for *** percent of U.S. shipments of IMTDCs from the United States, *** percent of U.S. shipments of IMTDCs from Canada, and *** percent of U.S. shipments of IMTDCs from China).

¹⁷⁵ CR at II-1; PR at II-1; CR/PR at Table II-1.

¹⁷⁶ CR/PR at Table II-2.

¹⁷⁷ CR/PR at Table II-1, Tables IV-2 to IV-3.

¹⁷⁸ We remind parties to identify in their comments on the draft questionnaires for any final phase of these investigations any arguments that would implicate data collection. See, e.g., 19 C.F.R. § 207.20(b).

VI. Reasonable Indication of Material Injury by Reason of Subject Imports

A. Legal Standard

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.¹⁷⁹ 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.¹⁸⁰ The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”¹⁸¹ In assessing whether there is a reasonable indication that 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.¹⁸² 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.”¹⁸³

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is “materially injured by reason of” unfairly traded imports,¹⁸⁴ 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.¹⁸⁵ 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.¹⁸⁶

¹⁷⁹ 19 U.S.C. §§ 1671b(a), 1673b(a). The Trade Preferences Extension Act of 2015, Pub. L. 114-27, amended the provisions of the Tariff Act pertaining to Commission determinations of reasonable indication of material injury and threat of material injury by reason of subject imports in certain respects.

¹⁸⁰ 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 ... {a}nd explain in full its relevance to the determination.” 19 U.S.C. § 1677(7)(B).

¹⁸¹ 19 U.S.C. § 1677(7)(A).

¹⁸² 19 U.S.C. § 1677(7)(C)(iii).

¹⁸³ 19 U.S.C. § 1677(7)(C)(iii).

¹⁸⁴ 19 U.S.C. §§ 1671b(a), 1673b(a).

¹⁸⁵ *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) (“{T}he statute does not ‘compel the commissioners’ to employ {a particular methodology}.”), *aff’g* 944 F. Supp. 943, 951 (Ct. Int’l Trade 1996).

¹⁸⁶ The Federal Circuit, in addressing the causation standard of the statute, has observed that “{a}s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement.” *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was re-affirmed in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (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.¹⁸⁷ In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.¹⁸⁸ 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,

(...Continued)

(Fed. Cir. 2008), in which the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that “this court requires evidence in the record ‘to show that the harm occurred “by reason of” the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.’” See also *Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass’n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

¹⁸⁷ SAA, H.R. Rep. 103-316, Vol. I at 851-52 (1994) (“{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports.”); S. Rep. 96-249 at 75 (1979) (the Commission “will consider information which indicates that harm is caused by factors other than less-than-fair-value imports.”); H.R. Rep. 96-317 at 47 (1979) (“in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;” those factors include “the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry”); *accord Mittal*, 542 F.3d at 877.

¹⁸⁸ SAA at 851-52 (“{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports.”); *Taiwan Semiconductor*, 266 F.3d at 1345 (“{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports.” (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int’l Trade 2002) (“{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury” or make “bright-line distinctions” between the effects of subject imports and other causes.); see also *Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that “{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e.*, it is not an ‘other causal factor,’ then there is nothing to further examine regarding attribution to 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.”).

such as nonsubject imports, which may be contributing to overall injury to an industry.¹⁸⁹ It is clear that the existence of injury caused by other factors does not compel a negative determination.¹⁹⁰

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.”^{191 192} Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”¹⁹³

The Federal Circuit’s decisions in *Gerald Metals*, *Bratsk*, and *Mittal* all involved cases in which 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

¹⁸⁹ S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

¹⁹⁰ See *Nippon*, 345 F.3d at 1381 (“an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the ‘dumping’ need not be the sole or principal cause of injury.”).

¹⁹¹ *Mittal*, 542 F.3d at 877-78; see also *id.* at 873 (“While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured ‘by reason of’ subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.”) citing *United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75. In its decision in *Swift-Train v. United States*, 792 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission’s causation analysis as comports with the Court’s guidance in *Mittal*.

¹⁹² Vice Chairman Pinkert and Commissioner Kieff do not join this paragraph or the following three paragraphs. They note that the Federal Circuit, in *Bratsk*, 444 F.3d 1369, and *Mittal*, held that the Commission is *required*, in certain circumstances when analyzing present material injury, to consider a particular issue with respect to the role of nonsubject imports, without reliance upon presumptions or strict formulas. The Court has not prescribed a specific method of exposition for this consideration. *Mittal* explains as follows:

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

542 F.3d at 878.

¹⁹³ *Nucor Corp. v. United States*, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); see also *Mittal*, 542 F.3d at 879 (“*Bratsk* did not read into the antidumping statute a Procrustean formula for determining whether a domestic injury was ‘by reason’ of subject imports.”).

presence of price-competitive nonsubject imports.¹⁹⁴ 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* litigation.

Mittal 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.¹⁹⁵ Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

The progression of *Gerald Metals*, *Bratsk*, and *Mittal* clarifies that, in cases involving commodity products where price-competitive nonsubject imports are a significant factor in the U.S. market, the Court will require the Commission to give full consideration, with adequate explanation, to non-attribution issues when it performs its causation analysis.¹⁹⁶

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.¹⁹⁷ Congress has delegated this factual finding to the Commission because of the agency’s institutional expertise in resolving injury issues.¹⁹⁸

B. Conditions of Competition and the Business Cycle

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

¹⁹⁴ *Mittal*, 542 F.3d at 875-79.

¹⁹⁵ *Mittal*, 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).

¹⁹⁶ To that end, after the Federal Circuit issued its decision in *Bratsk*, the Commission began to present published information or send out information requests in the final phase of investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject merchandise (if, in fact, there were large nonsubject import suppliers). In order to provide a more complete record for the Commission’s causation analysis, these requests typically seek information on capacity, production, and shipments of the product under investigation in the major source countries that export to the United States. The Commission plans to continue utilizing published or requested information in the final phase of investigations in which there are substantial levels of nonsubject imports.

¹⁹⁷ We provide in our respective discussions of volume, price effects, and impact a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

¹⁹⁸ *Mittal*, 542 F.3d at 873; *Nippon*, 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.”).

1. Data Issues

These investigations raise a number of issues with respect to the collection and presentation of data, including double-counting, country of origin, and coverage concerns.

a. Double-counting and Country of Origin Concerns

The scope of these investigations includes both unfinished and finished IMTDCs.¹⁹⁹ Unfinished IMTDCs are not necessarily finished by the same firm that performed the casting operations, and finishing operations sometimes occur in a different country than the casting operations.²⁰⁰ Consequently, the Commission took steps to avoid double counting unfinished IMTDCs that were processed into finished IMTDCs.²⁰¹ To the extent that finishing operations do not occur within the same country as the casting operations, the Commission also took steps regarding the country of origin of IMTDCs. The parties agree that the Commission is bound by the scope in Commerce's initiation notices,²⁰² which defines the country of origin of subject merchandise based on the location where the IMTDCs were cast.²⁰³ Based on our determination that finishing operations constitute sufficient production-related activities to treat U.S. firms that finish IMTDCs as producers of the domestic like product, we have treated their U.S. shipments of IMTDCs finished in the United States as U.S. shipments of the domestic industry, regardless of whether they sourced their unfinished blanks from U.S. or foreign suppliers. For purposes of these preliminary determinations, we have also considered as U.S. production the volume and value of IMTDCs that were cast in the United States by TB Woods, exported to its affiliate in Mexico for finishing, and eventually sold in the U.S. market.²⁰⁴

b. Questionnaire Coverage

Based upon the scope in Commerce's initiation notices, the merchandise subject to these investigations is imported primarily under six HTS statistical reporting numbers.²⁰⁵ In its petitions, TB Woods relied on three of these HTS statistical reporting numbers as the best information available for its calculation of U.S. imports (8483.50.6000, 8483.50.9040, and 8483.90.8080), although it noted that these statistical reporting numbers are broad product categories that likely include out-of-scope merchandise.²⁰⁶ Shortly after the petitions were filed, the Commission issued U.S. importer questionnaires to 52 firms that together accounted

¹⁹⁹ 80 Fed. Reg. at 73721-22; 80 Fed. Reg. at 73725-26.

²⁰⁰ *See, e.g.*, CR at III-19; PR at III-8.

²⁰¹ *See, e.g.*, CR/PR at Table III-10 and nn.1-2.

²⁰² Petitioner's Postconf. Brief at 20-24; Confer. Tr. at 75-77, 112-13; Baldor's Postconf. Brief at Exhibit 1 at question 3.

²⁰³ 80 Fed. Reg. at 73721-22; 80 Fed. Reg. at 73725-26.

²⁰⁴ *See, e.g.*, CR/PR at Table III-9, Table III-10, Table VI-5; CR at VI-9; PR at VI-2. We invite the parties to comment on the country of origin issues in any final phase of these investigations.

²⁰⁵ 80 Fed. Reg. at 73721-22; 80 Fed. Reg. at 73725-26.

²⁰⁶ Petitions, Vol. I at 10.

for 52.6 percent of the total value of imports from all countries under these three HTS statistical reporting numbers based on ***.²⁰⁷ Firms that responded to these questionnaires, either with data or by certifying that they did not import the subject merchandise, accounted for the following shares of 2014 imports (by value) under the three combined provisions, according to ***: Canada, 72.5 percent; China, 63.0 percent; nonsubject Mexico, 81.3 percent; other nonsubject, 43.8 percent. Questionnaire data accounted for 53.4 percent of total subject and nonsubject imports. The Commission also issued U.S. importer questionnaires to all firms identified as importers in the petitions, and nine of these eighteen firms responded, either with data or by certifying that they did not import subject merchandise.²⁰⁸

Shortly after the petitions were filed, the Commission also issued U.S. producers' questionnaires to three firms that the petitions identified as integrated producers of IMTDCs, five firms identified as finishers of IMTDCs, and three additional firms identified from other industry sources as possible U.S. IMTDCs producers.²⁰⁹ Two integrated firms (Petitioner TB Woods and Martin Sprocket) and one finisher (Baldor) submitted questionnaire data. *** reported that it does not manufacture IMTDCs, and ***.²¹⁰ The Commission also transmitted foreign producer/exporter questionnaires to nine firms identified in the petitions as producers and/or exporters of IMTDCs from Canada and to 31 firms identified as producers and/or exporters of IMTDCs from China for which valid contact information existed.²¹¹

As indicated in section II above, the Commission predicated its initial U.S. importer, U.S. producer, and foreign producer questionnaires on the scope definitions from the petitions. On November 17, 2015, Commerce determined to initiate the investigations, and on November 18, 2015, Commerce announced scope language that differed from the scope definitions in the petitions because it incorporated the November 5 and November 17, 2015 amendments to the definition of imported subject merchandise that TB Woods requested as to both carbon content and diameter dimensions.²¹² The timing of TB Woods' requests to amend the scope and Commerce's announcement of a scope definition that incorporated both requests affected the collection, presentation, and consideration of data in these investigations.²¹³

²⁰⁷ CR at IV-3; PR at IV-2.

²⁰⁸ CR at IV-3; PR at IV-2.

²⁰⁹ These questionnaires, which were issued shortly after the petitions were filed, were based on the scope definitions in the October 28, 2015 petitions. CR at III-1; PR at III-1.

²¹⁰ CR at III-1 to III-2; PR at III-1 to III-2.

²¹¹ CR at VII-3, VII-8; PR at VII-3, VII-4.

²¹² 80 Fed. Reg. at 73721-22; 80 Fed. Reg. at 73725-26.

²¹³ Respondents questioned the rationale behind and the consequences of the scope changes in the instant investigations. Chinese Respondents' Postconf. Brief at 2-5; Confer. Tr. at 33-37, 54-56; Caterpillar's Postconf. Brief at 1-7; Baldor's Postconf. Brief at Exhibit 1 at 17. Wiley Rein, counsel to TB Woods, asserted that "to the extent that it was insinuated in any way ... that TB Woods intentionally created confusion in this record, I'm here to tell you that it's patently false, that while this is a new product that the Commission doesn't have experience with, we have attempted to comply to the best of our abilities. We'll continue to do so." Confer. Tr. at 162. The Commission appreciates diligence and attention to detail, particularly from practitioners that regularly appear before the agency. In order to facilitate the data collection and the analysis of these data by the Commission and all parties, counsel (Continued...)

In view of Commerce's announcement, Commission staff asked U.S. producer, importer, and foreign producer questionnaire respondents to revise their data accordingly and issued additional U.S. producer questionnaires to the seven firms identified by Baldor as possible U.S. producers of unfinished IMTDCs, one additional firm identified as a possible finisher by Baldor, and *** additional firms identified by Caterpillar as its major U.S. suppliers of finished IMTDCs. To date, none of the seven firms that Baldor identified as possible U.S. producers of unfinished IMTDCs (foundries) responded to the questionnaire, and *** of the other *** firms identified as producers of finished IMTDCs reported that they are not U.S. producers of IMTDCs.²¹⁴

The main body of the Commission's report based its coverage of U.S. imports on questionnaire responses from 18 responding U.S. importers that are estimated to have accounted for approximately 50 percent of U.S. imports of IMTDCs during 2014.²¹⁵ U.S. industry data are based on the questionnaire responses of two integrated U.S. producers of IMTDCs (TB Woods and Martin Sprocket) and one U.S. finisher of IMTDCS (Baldor) that are believed to have accounted for approximately 60-70 percent of U.S. casting of IMTDCs and approximately 90 percent of U.S. finishing of IMTDCs in 2014.²¹⁶ The Commission received responses to its foreign producer questionnaire from one firm in Canada (Baldor Canada) that reported accounting for approximately *** percent of all production of IMTDCs in Canada and

(...Continued)

should be forthcoming about the number and nature of potential scope amendments and, prior to filing petitions, should conduct adequate research about the nature of the product, market participants, and other market conditions. *Cf. Co-Steel Raritan, Inc. v. Int'l Trade Comm'n*, 357 F.3d 1294, 1317 (Fed. Cir. 2004) (affirming negative preliminary determinations that were based on the available information and not speculation whether Commerce would grant a scope request that petitioner submitted three days prior to the Commission's vote. The Federal Circuit observed that a contrary result in that case would encourage future petitioners "to make similar late-in-the-day scope modification requests to Commerce, and then argue before the Court of International Trade for remands and redeterminations based on new developments in the event a scope modification is made by Commerce. Under these circumstances, we cannot escape the conclusion that {failure to affirm the Commission's negative preliminary determinations} in this case would undermine the ability of the Commission to arrive at *final* preliminary determinations in antidumping cases.") (emphasis in original).

²¹⁴ CR at III-2 to III-3; PR at III-1 to III-2. The Commission requested that *** so that its staff could survey the largest of these potential producers of finished IMTDCs. At the Commission's request, *** refined its list and identified the following firms as its major domestic suppliers of IMTDCs: ***. CR at III-2; PR at III-1. More specifically, ***. See CR at III-3 n.4; PR at III-2 n.4 (citing e-mails from ***, November 19, 2015, and questionnaire responses from ***).

²¹⁵ Presenting a definitive estimate is complicated by the inclusion of subject and non-scope merchandise in the various relevant HTSUS provisions, the large number of potential importers identified by proprietary Customs data (especially compared to the relatively small number of importers identified in the petitions), the diversity of sizes and applications of the product at issue (making it difficult to identify relevant importers by business line or average unit value of imports), and changes in the definition of the subject merchandise itself since filing of the petitions. CR at I-4 to I-5, IV-1; PR at I-3 to I-4; CR/PR at Table IV-1.

²¹⁶ CR at I-4, III-1; PR at I-3, III-1; CR/PR at Table III-1.

approximately *** percent of all Canadian exports to the United States in 2014.²¹⁷ The Commission also received usable foreign producer questionnaire responses from four firms manufacturing subject merchandise in China: ***,²¹⁸ Min Yue; Maska; and Powermach. They collectively accounted for approximately *** percent of all IMTDC production in China and approximately *** percent of exports to the United States in 2014.²¹⁹

Our decision to include small-diameter IMTDCs in the same domestic like product definition as the large-diameter IMTDCs corresponding to the scope, discussed in section III.C above, however, has affected these estimates of questionnaire coverage. We estimate that data on the domestic industry's operations on the domestic like product, which include data initially submitted by U.S. producers TB Woods, Baldor, and Martin Sprocket on their small-diameter IMTDC operations, are relatively complete, although the Commission staff focused its review of all questionnaires primarily on data corresponding to Commerce's scope. In contrast, coverage of the volume of imports of IMTDCs corresponding to the scope from nonsubject countries and the volume of imports of out-of-scope small-diameter IMTDCs appear to be particularly uncertain at this time, given the questionnaire response rate, the changes to the scope definitions, and our domestic like product definition. Consequently, we consider apparent U.S. consumption and market share data, which are predicated in part on such imports, to be deficient. While we have examined all available data, for purposes of these preliminary determinations we have not given particular weight to data on apparent U.S. consumption, market share, and nonsubject imports.²²⁰

2. Demand Conditions

The record indicates that demand for IMTDCs is derived from demand for a variety of end uses, such as pump jacks, crushers and mixers, conveyor systems, OEM equipment, fans and blowers, HVAC applications (*e.g.*, exhaust ventilation fans), heat exchangers, oil and gas applications, and agricultural applications (*e.g.*, walnut machines and peanut combines).²²¹ As a consequence, TB Woods argues that demand generally tracks overall economic conditions

²¹⁷ CR at VII-3; PR at VII-3 (as corrected by Baldor Canada's December 7, 2015 revised questionnaire response (INV-NN-090)). Baldor Canada's reported exports to the United States were equivalent to *** percent of U.S. imports of IMTDCs from Canada in 2014 that were reported in U.S. importer questionnaire responses. CR/PR at Table VII-2 and Table IV-4.

²¹⁸ ***. CR at VII-8; PR at VII-4.

²¹⁹ Collectively, their reported exports were equivalent to *** percent of U.S. imports of IMTDCs from China in 2014 reported in U.S. importer questionnaire responses. CR/PR at Table VII-6 and Table IV-4.

²²⁰ See, *e.g.*, Supplement to Report, Memorandum INV-NN-091 (Dec. 11, 2015).

²²¹ Petitioner's Postconf. Brief at 9-10, Exhibit 1 at 54-55; Confer. Tr. at 85, 92-93, 120; CR at II-1, II-9 to II-10; PR at II-1, II-6. TB Woods estimates that the major end uses for IMTDCs include the following: ***. Petitioner's Postconf. Brief at 9-10, Exhibit 1 at 54-55; Confer. Tr. at 92-93 (reporting demand is driven by general industrial and construction demand, including for building and road construction, as well as for food and beverage and oil and gas sectors).

more closely than any one particular market segment.²²² All three U.S. producers and 14 of 17 importers reported that the IMTDC market is not subject to business cycles. Two importers (***) reported that oil and gas market demand affects demand for IMTDCs and importer *** reported that the agricultural and construction markets are subject to seasonal demand, which typically peaks at the end of the calendar year. These three importers reported that demand for IMTDCs has decreased since 2012 for the gas and oil sectors and for agricultural and construction uses.²²³

The current record contains conflicting information concerning apparent U.S. consumption trends during the POI, and market participants' views varied widely. Overall, TB Woods estimates that demand for IMTDCs in the United States is mature and "fluctuated but remained relatively flat" during the POI.²²⁴ Respondents argue that the oil and gas industry, which accounts for a significant share of the demand for IMTDCs, experienced a slowdown between 2014 and 2015, and they also report that demand for IMTDCs used in mining, turbine and power transmission, and engines is slowing or declining.²²⁵ According to questionnaire data, two of three U.S. producers reported that demand for IMTDCs had fluctuated since January 1, 2012, and one reported that demand had increased. Of the fourteen responding U.S. importers, four reported that demand for IMTDCs had increased, two reported no change, one reported a decrease, and seven reported that demand had fluctuated.²²⁶ In any final phase of these investigations, we intend to seek more information about the composition of purchasers in this industry, including the extent to which purchasers may be concentrated, as well as more information concerning demand trends and trends in apparent U.S. consumption during the relevant period. We also intend to seek further input from the parties regarding the reasons for any apparent divergences in volume trends from one period to the next, both at the aggregate level and with respect to supply from individual sources.²²⁷

²²² Petitioner's Postconf. Brief at 9 to 11; *see also* CR/PR at Figure II-1 (gross domestic product trends).

²²³ CR at II-10 to II-11; PR at II-7.

²²⁴ Petitioner's Postconf. Brief at 11-12, Exhibit 5 (casting), Exhibit 6 (Caterpillar), Exhibit 10 (parent ABB), Exhibit 14 (Caterpillar); Confer. Tr. at 96, 113-114. Because of the variety of applications in which IMTDCs are used, TB Woods contends that when demand for one segment (such as oil and gas) declines, demand in other segments (such as non-residential construction) may increase or remain flat (such as for farm machinery and equipment). Petitioner's Postconf. Brief at 9 to 11; *see also* CR/PR at Figure II-1 (gross domestic product trends).

²²⁵ Baldor's Postconf. Brief at 37; Confer. Tr. at 79-80; Chinese Respondents' Postconf. Brief at 22-23.

²²⁶ CR/PR at Table II-3.

²²⁷ For example, the current record suggests that *** is largely responsible for the increase in aggregate U.S. imports from Canada during 2013 and subsequent decline thereafter, whereas *** combined are largely responsible for the increase in aggregate U.S. imports from all other sources during 2014 and subsequent decline thereafter. *See, e.g.*, CR/PR at Table IV-2 at nn.1-2. To the extent that their imports consist of merchandise corresponding to the revised scope of these investigations, we seek additional information about demand trends that may explain these shifts in volume.

3. Supply Conditions

As indicated earlier, the domestic industry consists of at least two integrated firms (TB Woods and Martin Sprocket) and at least one firm (Baldor) that manufactures unfinished blanks into finished IMTDCs. We intend to seek additional information in any final phase of these investigations about any other firms that manufacture the domestic like product, including other foundries that cast unfinished IMTDCs, other integrated IMTDCs producers, and other firms that apparently engage in finishing operations. As also indicated above, we intend to ensure that these data also reflect the domestic industry's operations on small-diameter IMTDCs.

Although the petitions identified nine firms as possible producers and/or exporters of IMTDCs in Canada, only one firm (Baldor Canada) submitted questionnaire data on its operations.²²⁸ Five of the nine firms reported that they did not produce IMTDCs during the POI, and a sixth firm reported that is a relatively small producer of IMTDCs that would not be able to provide a questionnaire response in the requested manner.²²⁹ Baldor Canada is a finishing facility owned by Baldor that does not include any casting operations; Baldor Canada obtains some of its unfinished IMTDCs for its Canadian finishing operations from unaffiliated foundries in Canada.²³⁰ In December 2014, Baldor permanently closed its IMTDCs processing facility in China and disposed of all of the equipment.²³¹ Baldor now purchases IMTDCs from the same supplier in China that TB Woods uses.²³² Chinese Respondents estimate that Powermach and Min Yue are the largest exporters of subject merchandise from China, and they report the existence of perhaps two or three other firms of any significant size.²³³

The current record suggests that there are a number of sources of imports from nonsubject countries, including TB Woods' facility in Mexico, ***,²³⁴ ***,²³⁵

²²⁸ CR at VII-3; PR at VII-3.

²²⁹ CR at VII-3; PR at VII-3.

²³⁰ Confer. Tr. at 21, 51-52, 66-67 (offering to provide further information about the identity of other firms with operations in Canada). In any final phase of these investigations, we invite the parties to provide information on the identities of these foundries and any other firms that may be producing unfinished or finished IMTDCs in Canada.

²³¹ Confer. Tr. at 22.

²³² Confer. Tr. at 22.

²³³ Confer. Tr. at 34 (reporting that Powermach is the "single largest producer and exporter of China.").

²³⁴ Baldor's Postconf. Brief at Exhibit 1 at 22; Confer. Tr. at 23; CR at VII-18 to VII-19; PR at VII-10 to VII-11.

²³⁵ CR at VII-18; PR at VII-10.

4. Substitutability and Other Conditions

The parties disagree about the extent to which non-price factors influence purchasing decisions in this industry. TB Woods argues that “the only substantially meaningful factor in purchasing decisions” in the U.S. IMTDCs market is price per piece.²³⁶ It argues that OEMs have always been price sensitive and that distributors used to consider quality, brand, and availability, but now focus on price because large inventories of low-priced subject imports are readily available.²³⁷ Caterpillar argues that, for the specialized IMTDCs that it purchases, its qualification process for vendors takes 18 to 24 months. It disagrees that competition is based almost entirely on price for these highly differentiated purchases for which there is only attenuated competition.²³⁸

As discussed above, the vast majority of U.S. producers and importers reported that IMTDCs from Canada, China, and the United States are “always” or “frequently” interchangeable.²³⁹ When asked how often differences other than price were significant in sales of IMTDCs in the U.S. market, questionnaire respondents were divided.²⁴⁰ U.S. producers *** reported that low prices are sufficient to overcome any perceived quality differences or advantages in other factors.²⁴¹ U.S. importer *** reported that every sourcing decision is based first on quality and on-time delivery, and importer *** reported that transportation costs are always an important non-price factor.²⁴² The Commission also asked purchasers responding to lost sales and lost revenue allegations to identify the main factors affecting their IMTDCs purchasing decisions, and the major factors they identified were customer preference, quality, availability, cost, and delivery.²⁴³ Questionnaire respondents reported that IMTDCs are primarily sold from inventory, with both U.S. producers and importers reporting shipping a

²³⁶ Petitioner’s Postconf. Brief at 1, 8-9, Exhibit 1 at 52 (arguing IMTDCs have become a commodity product); Confer. Tr. at 114.

²³⁷ Confer. Tr. at 93-94, 100-101.

²³⁸ Caterpillar’s Postconf. Brief at 9-10.

²³⁹ CR at II-15; PR at II-10; CR/PR at Table II-4.

²⁴⁰ Two of three U.S. producers reported that non-price differences between the domestic like product and subject imports from Canada and China are significant. Six responding importers reported that non-price differences between IMTDCs from Canada and the United States are “always” or “frequently” significant, whereas five reported such non-price differences are only “sometimes” or “never” significant. Six responding importers reported that non-price differences between IMTDCs from China and the United States are “always” or “frequently” significant, whereas eight responding importers reported such differences are only “sometimes” or “never” significant. Responses regarding non-price differences between IMTDCs from Canada and China were similar. CR/PR at Table II-5.

²⁴¹ CR at II-16; PR at II-10 to II-11.

²⁴² CR at II-17; PR at II-11.

²⁴³ CR at II-15; PR at II-10.

majority of their commercial shipments from inventory.²⁴⁴ Based on the current record, we find that IMTDCs from the subject countries are highly substitutable for the domestic like product, although we intend to explore this issue further in any final phase of these investigations, including by surveying purchasers about factors important to their purchasing decisions.

For the domestic industry, raw materials as a percentage of COGS ranged from *** to *** percent in the full years between 2012 and 2014.²⁴⁵ Pig iron is the principal ferrous raw material utilized to produce ductile iron castings, although ferrous scrap and ferrous alloys are also used.²⁴⁶ Other costs to manufacture IMTDCs include electricity and natural gas.²⁴⁷ Overall, prices for pig iron, ferrous scrap, and natural gas fell in late 2014 and 2015 after being more stable or fluctuating during 2012 to 2013 and into 2014. Electricity prices were generally stable, with some seasonal fluctuations.²⁴⁸ Questionnaire respondents did not agree on the trends in raw material costs during the POI, although firms that reported decreasing raw material costs reported that the decreases were small or had little to no effect on their selling prices.²⁴⁹

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.”²⁵⁰

The value of U.S. shipments of cumulated subject imports from Canada and China increased from \$*** in 2012 to \$*** in 2013 and \$*** in 2014. It was higher in interim 2014 (\$***) than in interim 2015 (\$***).²⁵¹

The value of the domestic industry’s U.S. shipments of the domestic like product increased from \$*** in 2012 to \$*** in 2013 and \$*** in 2014. It was higher in interim 2014

²⁴⁴ CR at II-14 to II-15; PR at II-9 (indicating average lead times from inventories of *** days for U.S. producers and *** days for U.S. importers and indicating average lead times for items produced to order were *** days for U.S. producers and *** days for U.S. importers).

²⁴⁵ CR at V-1; PR at V-1.

²⁴⁶ CR at V-1; PR at V-1.

²⁴⁷ CR at V-3; PR at V-2.

²⁴⁸ CR at V-4; PR at V-3; CR/PR at Figure V-1 (pig iron, ferrous scrap), Figure V-2 (industrial electricity, natural gas).

²⁴⁹ U.S. producer *** reported that raw material costs generally rose during 2012 to 2014 before decreasing somewhat in interim 2015. ***. Baldor reported that raw material costs had fluctuated, whereas *** described raw material costs as rising during the POI. Among importers, three (***) described raw material costs as increasing, three described them as not changing, four (***) described them as fluctuating, and five described them as decreasing. CR at V-1; PR at V-1.

²⁵⁰ 19 U.S.C. § 1677(7)(C)(i).

²⁵¹ CR/PR at Table IV-7. In terms of pieces, U.S. shipments of cumulated subject imports from Canada and China increased from *** in 2012 to *** in 2013 and then declined to *** in 2014, and the level in interim 2014 (*** pieces) was higher than in interim 2015 (*** pieces). CR/PR at Table IV-7.

(\$***) than in interim 2015 (\$***).²⁵² Thus, the value of the domestic industry's U.S. shipments of the domestic like product exceeded the value of U.S. shipments of cumulated subject imports from Canada and China throughout this period, and both rose from 2012 to 2014 and were lower in interim 2015 than in interim 2014.²⁵³

As explained earlier, for purposes of these preliminary determinations, we do not give particular weight to any changes in apparent U.S. consumption or relative shares of apparent U.S. consumption due to deficiencies on the current record in terms of coverage.

The ratio of cumulated subject imports to total shipments of domestic production on a value basis increased from *** percent in 2012 to *** percent in 2013 and then declined to *** percent in 2014, and the ratio in interim 2014 (*** percent) was lower than in interim 2015 (*** percent).²⁵⁴

We find that the volume of cumulated subject imports from Canada and China is significant on an absolute basis and relative to domestic production. We will further explore the significance of any volume trends and any changes relative to apparent U.S. consumption and domestic production in any final phase of these investigations. We invite the parties to discuss these issues, including whether our analysis should focus on the value of U.S. shipments or the number of pieces sold.

D. Price Effects of the Subject Imports

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

- (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
- (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.²⁵⁵

As discussed above, the current record suggests that IMTDCs imported from the subject countries are highly substitutable for the domestic like product, although we intend to further

²⁵² INV-NN-091 at Table Supp-2. In terms of pieces, the domestic industry's U.S. shipments of the domestic like product decreased from *** in 2012 to *** pieces in 2013 and then increased to *** in 2014. It shipped more pieces in interim 2014 (***) than in interim 2015 (***). INV-NN-091 at Table Supp-2.

²⁵³ In terms of pieces, U.S. shipments of cumulated subject imports exceeded the domestic industry's U.S. shipments of the domestic like product throughout the POI. Year-to-year trends between 2012 and 2014 diverged for subject imports and the domestic industry, although subject imports and the domestic industry both shipped higher amounts in interim 2014 than in interim 2015. *Compare, e.g.,* CR/PR at Table IV-7 with INV-NN-091 at Table Supp-2.

²⁵⁴ Derived from CR/PR at Table IV-7, INV-NN-091 at Table Supp-1.

²⁵⁵ 19 U.S.C. § 1677(7)(C)(ii).

explore this issue and the extent to which price and non-price factors influence any purchasing decisions.

Questionnaire respondents reported that prices are set in the U.S. market by transaction-by-transaction negotiations, contracts, and price lists (product catalogues).²⁵⁶ TB Woods and Baldor both reported that catalogue sales account for a greater share of their sales than custom orders.²⁵⁷ The Commission requested that U.S. producers and U.S. importers provide quarterly data for the total quantity and f.o.b. value of four IMTDCs products shipped to their unrelated customers during the POI.²⁵⁸ ***, the Commission asked questionnaire respondents to segregate their sales to distributors from their sales to end users/OEMs.²⁵⁹

Two U.S. producers (***) and three importers (***) provided usable pricing data for sales of the requested products, although not all firms reported pricing data for all products for all quarters.²⁶⁰ In 2014, pricing data reported by these firms accounted for less than 0.5 percent of commercial shipments of IMTDCs produced in the United States and imported from China.²⁶¹ ***,²⁶² ***,²⁶³ and ***.²⁶⁴

When asked about the paucity of the pricing data coverage, the parties identified several reasons. Baldor describes pricing products 2 and 3 as “custom” products as opposed to “catalogue” products, and it observes that the pricing data pertain to the portion of the market that involves larger-diameter products with lower volumes.²⁶⁵ TB Woods reports that it reasonably believed that the four pricing products it selected represented “commercially significant quantities of IMTDCs in the U.S. market, including U.S.-, Canadian-, and Chinese-origin IMTDCs.” ***.²⁶⁶ Additionally, both Baldor and TB Woods reported that IMTDCs involve thousands of stock-keeping units (“SKUs”).²⁶⁷ Given the thousands of SKUs for this product, TB Woods argues that it is “unsurprising” that no single pricing product accounts for a large

²⁵⁶ CR at V-4; PR at V-3; CR/PR at Table V-1.

²⁵⁷ CR at V-4 to V-5; PR at V-3 to V-4.

²⁵⁸ These products included the following: (1) conventional (or classical) “C” groove sheave, with 24-inch outside diameter and five grooves, suitable for use with Type F bushing; (2) conventional (or classical) “C” groove sheave, with a 44-inch outside diameter and six grooves, suitable for use with Type N bushing; (3) conventional (or classical) “C” groove sheave, with a 50-inch outside diameter and eight grooves, suitable for use with Type J bushing; and (4) narrow “V” groove sheave, with a 53-inch outside diameter and six grooves, suitable for use with Type N bushing. CR at V-6 to V-7; PR at V-5.

²⁵⁹ The Commission also instructed U.S. importers to treat the country of origin of finished IMTDCs as the location where the IMTDC was cast. CR at V-6; PR at V-5.

²⁶⁰ CR at V-7; PR at V-5.

²⁶¹ CR at V-7; PR at V-5.

²⁶² CR at V-7; PR at V-5.

²⁶³ Chinese Respondents’ Postconf. Brief at 18-21.

²⁶⁴ CR at V-7 n.13; PR at V-5 n.13 (citing ***).

²⁶⁵ Baldor’s Postconf. Brief at 3, 32; Exhibit 1 at 19; Confer. Tr. at 22, 68-71 (observing at 69 that the pricing products in the petition do not “really give you a good representation of market pricing”); CR at V-7 & n.12; PR at V-5.

²⁶⁶ Petitioner’s Postconf. Brief at Exhibit 1 at 38-39.

²⁶⁷ CR at V-7 to V-8; PR at V-5; Confer. Tr. at 68-69; Baldor’s Postconf. Brief at Exhibit 5, Exhibit 6; Petitioner’s Postconf. Brief at Exhibit 1 at 38.

portion of the U.S. market.²⁶⁸ We invite the parties in their comments on the draft questionnaires for the final phase of these investigations to suggest pricing products that are likely to provide better coverage and that are likely to generate pricing observations for the domestic like product and subject imports from Canada and China.

Based on the available pricing data, cumulated subject imports from Canada and China undersold the domestic like product throughout the POI. Prices for subject imports of IMTDCs (***) were lower than prices of the domestic like product in 33 of 39 instances, involving an aggregate quantity of 232 pieces.²⁶⁹ Margins of underselling ranged from 11.8 to 63.5 percent.²⁷⁰ In the remaining six instances, involving an aggregate quantity of 53 pieces, prices for IMTDCs from China were between 4.9 and 35.2 percent higher than the domestic like product.²⁷¹

TB Woods argues that it was forced to reduce prices to compete with low-priced subject imports, lost some business even after lowering its prices, and was asked to lower its prices further at the risk of losing the rest of certain customers' accounts.²⁷² The current record does not support TB Woods' claims that it reduced prices. We do not find that cumulated subject imports from Canada and China depressed prices of the domestic like product. Prices generally increased during the POI, with price increases for five of eight pricing product/channel of distribution combinations for the domestic like product ranging from 1.2 to 65.7 percent between January 2012 and September 2015, and price decreases for the remaining three combinations ranging from 2.0 to 36.6 percent.²⁷³ For two of the three combinations for which there were declines in the price of the domestic like product (***), no pricing data were reported for subject imports.²⁷⁴

We also considered whether cumulated subject imports from Canada and China prevented domestic like product price increases, which otherwise would have occurred, to a significant degree. The domestic industry's COGS to net sales ratio increased from *** percent in 2012 to *** percent in 2013 and *** percent in 2014, and was higher in interim 2015 (*** percent) than in interim 2014 (*** percent).²⁷⁵ These data suggest that the domestic industry faced a cost-price squeeze. Given the limited record data, particularly with respect to pricing, it is unclear what is causing this cost-price squeeze. We intend to explore in any final phase of these investigations the extent to which subject imports, as opposed to other factors, are responsible.

We also considered the domestic industry's allegations of lost sales and lost revenue. Of the three responding U.S. producers, *** reported that *** had lost sales due to competition from imports of subject merchandise from Canada and China, *** reported that

²⁶⁸ Petitioner's Postconf. Brief at Exhibit 1 at 38.

²⁶⁹ CR/PR at Tables V-3 to V-12 and Figure V-3.

²⁷⁰ CR/PR at Table V-12.

²⁷¹ CR/PR at Table V-12.

²⁷² Confer. Tr. at 96, 99-100.

²⁷³ CR at V-25; PR at V-7; CR/PR at Table V-11.

²⁷⁴ CR/PR at Table V-11.

²⁷⁵ INV-NN-091 at Table Supp-3.

*** had to reduce prices, and *** reported that *** had to roll back price increases.²⁷⁶ *** of the three responding producers, ***, identified firms to which *** lost sales and/or revenue. ***.²⁷⁷ Two of the identified purchasers responded, and they reported that the vast majority of their purchases consisted of domestic product, although ***.²⁷⁸ The responding purchasers reported that *** U.S. producers had reduced prices in order to compete with lower-priced imports from the subject countries.²⁷⁹

As previously discussed, the record in the preliminary phase of these investigations indicates predominant underselling, notwithstanding that the reported pricing data have significant gaps ***. The record also contains information indicating that the domestic industry's ratio of COGS to net sales deteriorated as subject imports increased. As discussed above, we will examine these issues further in any final phase of these investigations. The current record consequently does not warrant a finding that subject imports did not have significant price effects.

E. Impact of the Subject Imports²⁸⁰

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, "shall evaluate all relevant economic factors which have a bearing on the state of the industry." These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debt, 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."²⁸¹

Between January 2012 and September 2015, although some of the domestic industry's performance indicators improved, the domestic industry performed poorly with respect to other performance indicia.²⁸² In particular, reporting producers displayed poor and deteriorating financial performance.

²⁷⁶ CR at V-27; PR at V-8.

²⁷⁷ CR at V-27; PR at V-8. For all petitions filed with the Commission after October 1, 2015, the Commission revised its rules regarding the format for submitting lost sales and lost revenue allegations. 19 C.F.R. § 207.11 (as amended by 80 Fed. Reg. 52617 (Sept. 1, 2015)). In its petitions, TB Woods did not submit its lost sales and lost revenue allegations in the format specified under the revised rules.

²⁷⁸ CR at V-28; PR at V-8.

²⁷⁹ CR at V-28; PR at V-8; CR/PR at Table V-13, Table V-14, Table V-15.

²⁸⁰ In its notices initiating the antidumping duty investigations, Commerce estimated antidumping duty margins of 9.60 to 191.34 percent for imports of IMTDCs from Canada and 67.82 percent to 401.68 percent for imports of IMTDCs from China. 80 Fed. Reg. 73716; CR at I-9 at n.15; PR at I-7 at n.15.

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

²⁸² For our impact analysis, we rely primarily on a supplement to the report that includes information derived from industry participants' initial questionnaire responses regarding their (Continued...)

The domestic industry increased production capacity from 2012 to 2014.²⁸³ By value, its U.S. shipments and net sales increased overall between 2012 and 2014, but were lower in interim 2015 than in interim 2014.²⁸⁴ In terms of pieces, the domestic industry's U.S. shipments, net sales, and production fluctuated over the POI.²⁸⁵ On the other hand, the domestic industry's inventories grew from 2012 to 2014,²⁸⁶ and its capacity utilization remained at low levels throughout this period.²⁸⁷ Employment-related factors increased overall.²⁸⁸

The domestic industry's financial performance deteriorated during the POI. The domestic industry's ratio of COGS to net sales rose between January 2012 and September 2015,²⁸⁹ and its ratio of operating income to net sales declined.²⁹⁰ Operating income declined

(...Continued)

operations on all IMTDCs, including small-diameter IMTDCs, that were submitted prior to the Commission's instruction to revise these responses according to Commerce's November 18, 2015 announcement regarding the scope of the investigations. Once Commerce announced the scope of the investigations, Commission staff's review of all questionnaires was directed primarily to data corresponding to Commerce's scope.

²⁸³ Average production capacity was *** pieces in 2012, *** pieces in 2013, *** pieces in 2014, *** pieces in interim 2014, and *** pieces in interim 2015. INV-NN-091 at Table Supp-1.

²⁸⁴ The value of the domestic industry's U.S. shipments was \$*** in 2012, \$*** in 2013, and \$*** in 2014, and was higher in interim 2014 (\$***) than in interim 2015 (\$***). INV-NN-091 at Table Supp-2. The value of its net sales was \$*** in 2012, \$*** in 2013, and \$*** in 2014, and was higher in interim 2014 (\$***) than in interim 2015 (\$***). INV-NN-091 at Table Supp-3.

²⁸⁵ In terms of pieces, the domestic industry's U.S. shipments of the domestic like product decreased from *** pieces in 2012 to *** pieces in 2013 and increased to *** pieces in 2014, and it shipped more pieces in interim 2014 (***) than in interim 2015 (***) pieces). INV-NN-091 at Table Supp-2. Its net sales increased irregularly, declining from *** pieces in 2012 to *** pieces in 2013 and increasing to *** pieces in 2014, and it sold more pieces in interim 2014 (***) than in interim 2015 (***) pieces). INV-NN-091 at Table Supp-3. Its production increased from *** pieces in 2012 to *** pieces in 2013 and *** pieces in 2014, and it produced more pieces in interim 2014 (***) than in interim 2015 (***) pieces). CR/PR at Table Supp-1.

²⁸⁶ End-of-period inventories increased from *** pieces in 2012 to *** pieces in 2013, and *** pieces in 2014, although they were higher in interim 2014 (***) than in interim 2015 (***) pieces). INV-NN-091 at Table Supp-5.

²⁸⁷ The domestic industry's capacity utilization for finished IMTDCs was *** percent in 2012, *** percent in 2013, *** percent in 2014, *** percent in interim 2014, and *** percent in interim 2015. INV-NN-091 at Table Supp-1.

²⁸⁸ Production-related workers, hours worked, and wages increased overall between 2012 and 2014 and were lower in interim 2015 than in interim 2014. INV-NN-091 at Table Supp-5.

²⁸⁹ The domestic industry's COGS as a ratio to net sales increased from *** percent in 2012 to *** percent in 2013 and *** percent in 2014, and was higher in interim 2015 (***) than in interim 2014 (***) percent). INV-NN-091 at Table Supp-3.

²⁹⁰ The domestic industry's operating income margin declined from *** percent in 2012 to *** percent in 2013 and then to *** percent in 2014. It had an operating income margin of *** percent in interim 2014 and an operating *** percent in interim 2015. INV-NN-091 at Table Supp-3. Its gross profits were \$*** in 2012, \$*** in 2013, \$*** in 2014, \$*** in interim 2014, and \$*** in interim 2015. (Continued...)

from \$*** in 2012 to \$*** in 2013 and then to *** in 2014, and its operating performance was worse in interim 2015 (***) than in interim 2014 (***) than.²⁹¹ The decline in the domestic industry's operating income was the result of increased unit costs outstripping the increases in unit sales values, and we intend to explore the role of subject imports in these trends in any final phase of these investigations.²⁹²

The POI was characterized by significant volumes of cumulated subject imports that the record indicates were good substitutes for the domestic like product. The available data indicate that at least some portion of this significant volume of cumulated subject imports undersold the domestic like product and that the domestic industry experienced a cost-price squeeze. In light of these considerations and the record as a whole in the preliminary phase of these investigations, we cannot find that there is clear and convincing evidence that the domestic industry's poor and declining financial performance was not caused by cumulated subject imports from Canada and China.

In reaching this conclusion, we have considered whether there are factors other than cumulated subject imports from Canada and China that may have had an adverse impact on the domestic industry during the POI to ensure that we are not attributing any injury from other such factors to the subject imports. Baldor and Chinese Respondents assert that any domestic industry performance declines are related to declines in demand for IMTDCs for use in the oil and gas sectors.²⁹³ As discussed above, however, available data on apparent U.S. consumption are deficient, so we are uncertain about trends in apparent U.S. consumption and relative market shares during the POI. In any final phase of these investigations, we encourage the parties to provide information about the relative size of purchasers in this industry and the extent to which trends in demand for specific applications affects the overall U.S. IMTDCs market.

Nonsubject imports were present in the U.S. market, although the current record does not contain reliable data on their magnitude or trends, as also discussed in section VI.B.1 above. The limited available pricing data on nonsubject imports indicates that IMTDCs imported from Mexico were priced higher than cumulated subject imports from Canada and China in all of the 25 available comparisons.^{294 295} Therefore, the current record does not appear to indicate that

(...Continued)

Its net income was \$*** in 2012, \$*** in 2013, and *** in 2014, and it had a net income of \$*** in interim 2014 and *** in interim 2015. Derived from questionnaire responses.

²⁹¹ INV-NN-091 at Table Supp-3. The domestic industry's capital expenditures declined from 2012 to 2014, but were higher in interim 2015 than in interim 2014. CR/PR at Table VI-10. Its research and development expenses increased irregularly between 2012 and 2014 and were higher in interim 2015 than in interim 2014. CR/PR at Table VI-10.

²⁹² INV-NN-091 at Table Supp-3, Table Supp-2.

²⁹³ Baldor's Postconf. Brief at 3, 36-37; Chinese Respondents' Postconf. Brief at 21-24.

²⁹⁴ CR at D-3; PR at D-3; CR/PR at Tables D-1 and D-2.

²⁹⁵ Based on the evidence in the preliminary phase of these investigations, Vice Chairman Pinkert and Commissioner Kieff find that, although nonsubject imports were a significant factor in the U.S. market during the POI, IMTDCs are not a commodity product. They come in three distinct types (Continued...)

demand conditions or nonsubject imports explain the domestic industry's poor and declining financial performance during the POI.

VII. Conclusion

For the reasons stated above, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of subject imports of IMTDCs from Canada and China that allegedly are sold in the United States at less than fair value and allegedly subsidized by the government of China.

(...Continued)

(sheaves, bushings, and flywheels), differ in iron content, and come in a wide variety of sizes and configurations. CR at I-12 to I-20; PR at I-10 to I-17.

PART I: INTRODUCTION

BACKGROUND

These investigations result from petitions filed with the U.S. Department of Commerce (“Commerce”) and the U.S. International Trade Commission (“Commission”) by TB Wood’s Incorporated (“TB Woods”), Chambersburg, Pennsylvania, on October 28, 2015, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value (“LTFV”) imports of certain iron mechanical transfer drive components (“IMTDCs”)¹ from Canada and China and subsidized imports of IMTDCs from China. The petitioner subsequently amended and/or supplemented the petitions on November 5, November 6, November 10, and November 17, 2015.² The following tabulation provides information relating to the background of these investigations.^{3 4}

Effective date	Action
October 28, 2015	Petitions filed with Commerce and the Commission; institution of Commission investigations (80 FR 67789, November 3, 2015)
November 18, 2015	Commission’s conference
November 17, 2015	Commerce’s notices of initiation (80 FR 73716-73726, November 25, 2015)
December 11, 2015	Commission’s vote
December 14, 2015	Commission’s determinations
December 21, 2015	Commission’s views

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

² As discussed in greater detail below, on November 5, 2015, the petitioner proposed revising the scope language to change, among other things, the dimension element of the scope. In addition, on November 17, 2015, the petitioner proposed revising the chemistry element of the scope.

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

⁴ A list of witnesses that appeared at the conference is presented in app. B of this report.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

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

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

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--⁵

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

⁵ Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.

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

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—⁶

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

Organization of report

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

SUMMARY DATA AND DATA SOURCES

Commission staff initially electronically transmitted questionnaires that were based on the scope language in the October 28, 2015 petitions to industry participants beginning on October 31, 2015 with a completion deadline of November 10, 2015. On November 18, 2015, after learning about the scope language on which Commerce initiated its investigations,⁷ Commission staff contacted industry participants that had responded to its original questionnaires in order to collect revised data on the more narrowly defined scope. Also at that time, Commission staff issued additional questionnaires to an expanded universe of possible domestic producers and importers of unfinished and finished IMTDCs as identified by respondent interested parties and in questionnaire responses that had been received to date.⁸

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

⁷ As previously noted, the petitioner amended the original petitions on November 5 and 17 to propose revising the scope language to change, among other things, the dimension and chemistry elements of the covered items.

⁸ Staff issued questionnaires to *** additional firms identified by Baldor as its major domestic suppliers of unfinished IMTDCs and to *** additional firms identified by Caterpillar as its major domestic
(continued...)

A summary of data collected in these investigations is presented in appendix C, table C-1 (including unfinished and finished domestic production by Baldor, Martin Sprocket, and TB Woods) and table C-2 (excluding domestic finisher Baldor). Except as noted, U.S. industry data are based on questionnaire responses of three firms that are estimated to have accounted for approximately 90 percent of U.S. production of finished IMTDCs during 2014 and approximately 60-70 percent of U.S. production of unfinished IMTDCs. U.S. imports are based on questionnaire responses of 18 firms that are estimated to have accounted for approximately 50 percent of U.S. imports of IMTDCs during 2014. However, presenting a decisive estimate is complicated by the inclusion of subject and nonsubject merchandise in the various relevant HTSUS provisions, the large number of potential importers identified by proprietary Customs data (especially compared to the relatively small number of importers identified in the petitions), the diversity of sizes and applications of the product at issue (making it difficult to identify relevant importers by business line or average unit value of imports), and the shifting definition of the subject merchandise itself.

MARKET SUMMARY

An IMTDC (including sheaves (also known as pulleys), flywheels, and bushings) is an iron wheel or cylinder that may be fitted with a belt around the outer circumference for use in transmitting power generated by a motor, turbine, or engine to another shaft (i.e., sheave) or to store rotational energy (i.e., flywheel). The leading integrated U.S. producers of IMTDCs identified by the petitioner include TB Woods and Martin Sprocket & Gear (“Martin Sprocket”).⁹ Leading domestic finishers of IMTDCs identified by the petitioner include the following four firms: B&B Manufacturing (“B&B”), Baldor Electric Company (“Baldor”), Custom Machine & Tool Co., Inc. (“Custom”), and Maurey Manufacturing Corporation (“Maurey”).¹⁰ A leading producer of IMTDCs in Canada is Baldor Electric Canada (“Baldor Canada”) and leading producers/exporters of IMTDCs in China include Powermach Import & Export Co. Ltd. (Sichuan (“Powermach”), Fuzhou Min Yue Mechanical & Electrical Co., Ltd. (“Min Yue”), and Maska

(...continued)

suppliers of finished IMTDCs. In addition, a questionnaire was issued to ***, a firm identified as an importer in other previously submitted questionnaire responses.

⁹ Petitioner TB Woods and domestic producer Martin Sprocket provided responses to the Commission’s questionnaire. The petitioner also identified a third domestic integrated producer of IMTDCs (Goldens’ Foundry and Machine Company (“Goldens”)) but estimated that it produced *** of IMTDCs in its U.S. facility in 2014. Petitions, vol. I, exhs. I-1, I-2, and I-4. Goldens did not provide a response to the Commission’s questionnaire.

¹⁰ Petitions, vol. I, exh. I-3. Of these, only Baldor completed a producer questionnaire. The petitioner identified Baldor as *** domestic finishing firm for IMTDCs. Torque Transmission (“Torque”) was also identified by the petitioner as a domestic finisher of IMTDCs, however, the firm responded to the Commission’s questionnaire indicating ***. The petitioner estimated that during 2014, Custom, Maurey, and Torque finished *** combined. Petitions, vol. I, exh. I-4. B&B estimated that it produces *** IMTDC pieces (\$***) each year. Email from ***, November 23, 2015.

Power Transmission (Changzhou) Co. Ltd. (“Maska”).¹¹ Of those firms responding to the Commission’s questionnaire, the largest U.S. importers of IMTDCs from Canada are ***, while the largest responding importers from China are ***. Leading importers of IMTDCs from nonsubject countries that responded to the Commission’s questionnaire include ***. Leading purchasers include ***.¹² See Part II of this report for a discussion of the wide variety of purchasers of IMTDCs.

According to questionnaires received in the preliminary phase of these investigations, apparent U.S. consumption of IMTDCs totaled approximately *** pieces (\$***) in 2014. Reporting U.S. producers’ U.S. shipments of IMTDCs totaled *** pieces (\$***) in 2014, and accounted for *** percent of apparent U.S. consumption by quantity (in pieces) and *** percent by value. U.S. shipments of imports from responding firms reporting imports from subject sources totaled *** pieces (\$***) in 2014 and accounted for *** percent of apparent U.S. consumption by quantity (in pieces) and *** percent by value. U.S. shipments of imports from responding firms reporting imports from nonsubject sources totaled *** pieces (\$***) in 2014 and accounted for *** percent of apparent U.S. consumption by quantity (in pieces) and *** percent by value.

PREVIOUS AND RELATED INVESTIGATIONS

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

NATURE AND EXTENT OF ALLEGED SUBSIDIES AND SALES AT LTFV

Alleged subsidies

On November 25, 2015, Commerce published a notice in the *Federal Register* of the initiation of its countervailing duty investigation on IMTDCs from China.¹³ Based on its review of the petitions, it found that there was sufficient information to initiate a countervailing duty investigation on 39 of the 40 alleged programs in China. Commerce did not initiate an investigation on the following alleged program in China: Preferential Income Tax Subsidies for Foreign Investment Enterprises (“FIEs”) – “Two Free, Three Half Program.” The 39 programs on which Commerce initiated its countervailing duty investigation are as follows:

¹¹ Maska permanently closed its production facilities in China in *** 2014.

¹² Baldor’s postconference brief, exhibit 1, p. 3, and producer questionnaire responses of ***.

¹³ *Certain Iron Mechanical Transfer Drive Components from the People Republic of China: Initiation of Countervailing Duty Investigation*, 80 FR 73722, November 25, 2015.

- A. Preferential Loans and Interest Rates
 - 1. Policy Loans to the Iron Transfer Drive Component Industry
 - 2. Treasury Bond Loans or Grants
 - 3. Preferential Loans for Key Projects and Technologies
 - 4. Loans and Interest Subsidies Provided Pursuant to the Northeast Revitalization Program
- B. Grant Programs
 - 1. Foreign Trade Development Fund Grants
 - 2. Export Assistance Grants
 - 3. Export Interest Subsidies
 - 4. Subsidies for Development of “Famous Brands” and China World Top Brands
 - 5. Sub-Central Government Subsidies for Development of Famous Brands and China World Top Brands
 - 6. Funds for Outward Expansion of Industries in Guangdong Province
 - 7. Provincial Fund for Fiscal and Technological Innovation
 - 8. State Special Fund for Promoting Key Industries and Innovation Technologies
 - 9. Shandong Province’s Special Fund for the Establishment of Key Enterprise Technology Centers
 - 10. Grants for Antidumping Investigations
 - 11. Shandong Province’s Award Fund for Industrialization of Key Energy-Saving Technology
 - 12. Shandong Province’s Environmental Protection Industry Research and Development Funds
 - 13. Waste Water Treatment Subsidies
 - 14. Funds of Guangdong Province to Support the Adoption of E-Commerce by Foreign Trade Enterprises
 - 15. Technology to Improve Trade Research and Development Fund
- C. Provision of Inputs for Less Than Adequate Remuneration (“LTAR”)
 - 1. Provision of Pig Iron for LTAR
 - 2. Provision of Ferrous Scrap for LTAR
 - 3. Provision of Electricity for LTAR
 - 4. Provision of Water for LTAR
- D. Provision of Land for LTAR
 - 1. Provision of Land-Use Rights to Private Entities for LTAR
 - 2. Provision of Land to SOEs for LTAR

E. Tax Benefit Programs

1. Income Tax Reductions under Article 28 of the Enterprise Income Tax (“EIT”)
2. Tax Offsets for Research and Development under the EIT
3. Income Tax Reductions for Export-Oriented FIEs
4. Income Tax Benefits for FIEs Based on Geographic Locations
5. Local Income Tax Exemption and Reduction Programs for “Productive” FIEs
6. Tax Offsets for Research and Development by FIEs
7. Tax Refunds for Reinvestment of FIE Profits in Export-Oriented Enterprises
8. Preferential Tax Programs for Foreign Invested Enterprises – High or New Technology FIEs
9. Preferential Income Tax Policy for Enterprises in the Northeast Region
10. Forgiveness of Tax Arrears for Enterprises in the Old Industrial Bases of Northeast China
11. Income Tax Credits for Domestically-Owned Companies Purchasing Domestically Produced Equipment

F. Value Added Tax (“VAT”) Programs

1. VAT and Import Duty Exemptions for Use of Imported Equipment
2. VAT Rebate Exemptions on FIE Purchases of Chinese-Made Equipment
3. VAT and Tariff Exemptions for Purchases of Fixed Assets Under the Foreign Trade Development Fund¹⁴

Alleged sales at LTFV

On November 25, 2015, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigations on IMTDCs from Canada and China.¹⁵ Commerce initiated antidumping duty investigations based on estimated dumping margins of 9.60 to 191.34 percent for IMTDCs from Canada and 67.82 to 401.68 percent for IMTDCs from China.

¹⁴ *Enforcement and Compliance, Office of AD/CVD Operations, CVD Investigation Initiation Checklist: Certain Iron Mechanical Transfer Drive Components from the People’s Republic of China*, November 17, 2015.

¹⁵ *Certain Iron Mechanical Transfer Drive Components from Canada and The People’s Republic of China: Initiation of Less-Than-Fair-Value Investigations*, 80 FR 73716, November 25, 2015.

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of these investigations as follows:

The products covered by these investigations are iron mechanical transfer drive components, whether finished or unfinished (i.e., blanks or castings). Subject iron mechanical transfer drive components are in the form of wheels or cylinders with a center bore hole that may have one or more grooves or teeth in their outer circumference that guide or mesh with a flat or ribbed belt or like device and are often referred to as sheaves, pulleys, flywheels, flat pulleys, idlers, conveyer pulleys, synchronous sheaves, and timing pulleys. The products covered by these investigations also include bushings, which are iron mechanical transfer drive components in the form of a cylinder and which fit into the bore holes of other mechanical transfer drive components to lock them into drive shafts by means of elements such as teeth, bolts, or screws.

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

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

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

Subject iron mechanical transfer drive components are covered by the scope of the investigations regardless of width, design, or iron type (e.g., gray, white, or ductile iron). Subject iron mechanical transfer drive components are covered by the scope of the investigations regardless of whether they have non-iron attachments or parts and regardless of whether they are entered with other mechanical transfer drive

components or as part of a mechanical transfer drive assembly (which typically includes one or more of the iron mechanical transfer drive components identified above, and which may also include other parts such as a belt, coupling and/or shaft). When entered as a mechanical transfer drive assembly, only the iron components that meet the physical description of covered merchandise are covered merchandise, not the other components in the mechanical transfer drive assembly (e.g., belt, coupling, shaft).

For purposes of these investigations, a covered product is of “iron” where the article has a carbon content of 1.7 percent by weight or above, regardless of the presence and amount of additional alloying elements.¹⁶

Tariff treatment

Based upon the scope set forth by Commerce, the merchandise subject to these investigations is imported under the following statistical reporting numbers of the Harmonized Tariff Schedule of the United States (“HTS”): 8483.30.8090, 8483.50.6000, 8483.50.9040, 8483.50.9080, 8483.90.3000, and 8483.90.8080. Such goods are dutiable at general duty rates from 2.8 percent to 4.5 percent ad valorem. Covered merchandise may also be imported under the following HTS statistical reporting numbers: 7325.10.0080, 7325.99.1000, 7326.19.0010, 7326.19.0080, 8431.31.0040, 8431.31.0060, 8431.39.0010, 8431.39.0050, 8431.39.0070, 8431.39.0080, and 8483.50.4000. General duty rates on these goods range from free to 5.7 percent ad valorem.

¹⁶ *Certain Iron Mechanical Transfer Drive Components from Canada and The People’s Republic of China: Initiation of Less-Than-Fair-Value Investigations*, 80 FR 73716, November 25, 2015.

THE PRODUCT

Description

The subject IMTDCs are typically gray or ductile iron¹⁷ wheels or cylinders known as sheaves (also commonly referred to as pulleys) (figure I-1). The subject iron products are those with carbon contents, by weight, of 1.7 percent or above,¹⁸ regardless of the presence and amount of additional alloying elements. IMTDCs also include bushings, which are used to connect the shaft to the sheave. Most sheaves are connected with belts to transmit power from a shaft operated by a motor or engine to another shaft. The combined belt and sheave are referred to as a belt drive, which is typically defined by the shape of the belt. For sheaves with grooves, the belts fit into the center grooves, though certain types of sheaves have a flat surface without grooves.¹⁹

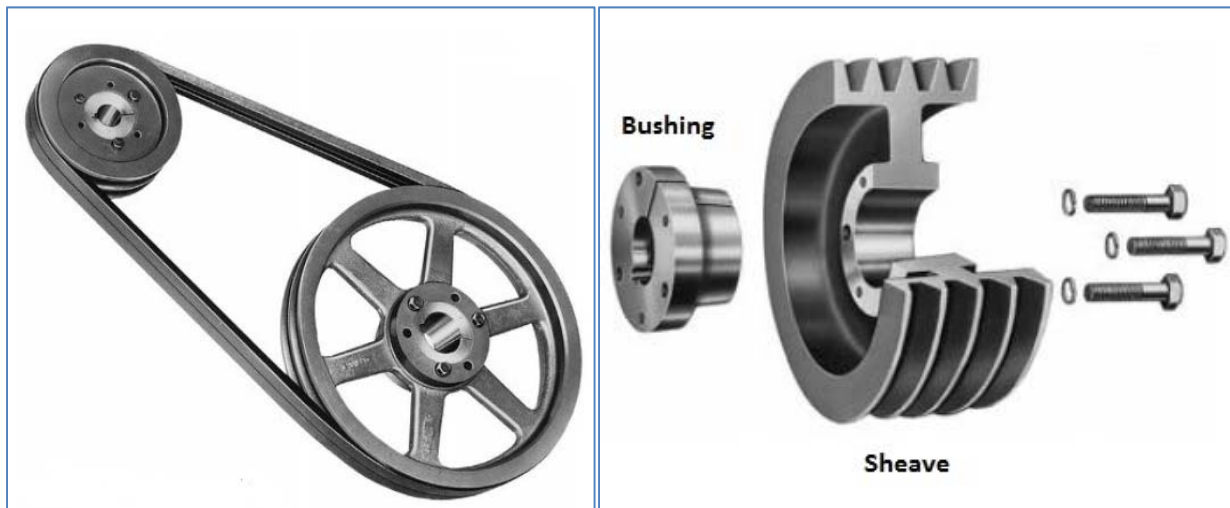
¹⁷ Nonsubject mechanical transfer drive components are produced from other materials, including aluminum, plastic, and steel. They may also be made from powder metals, which are “discrete particles of elemental metals or of mixtures of elemental metals or of alloys.” These various metals have different strengths and maximum possible rim speeds for sheaves. For example, a gray iron sheave may have a maximum rim speed of 6,500 to 7,500 feet per minute (fpm) (depending on the class of material), a ductile iron sheave 8,000 to 9,000 fpm, a steel sheave 9,000 to 11,000 fpm, a powder metal (sintered steel) sheave 7,000 to 9,000 fpm, and aluminum 11,000 to 15,000 fpm. Conference transcript, p. 19 (McCartney); Gates Corp., *Metals Technical Guide*, pp. 1–5, <https://www.gates.com/~media/files/gates/industrial/power-transmission/manuals/metals-technical-guide.pdf> (accessed November 21, 2015); and Metal Powder Industries Federation Website, <https://www.mpif.org/AboutMPIF/mppa.asp?linkid=31> (accessed November 28, 2015).

¹⁸ Iron is typically defined as having a carbon content of more than 2 percent. Atlas Foundry Company Website, <http://www.atlasfdry.com/cast-irons.htm> (accessed November 27, 2015); and Engineers Handbook Website, <http://www.engineershandbook.com/Materials/castiron.htm> (accessed November 27, 2015). Steel has a carbon content of less than 2 percent, with most commercially available steel less than 1 percent. Atlas Foundry Company Website, <http://www.atlasfdry.com/cast-irons.htm> (accessed November 27, 2015). The five types of iron include gray iron, ductile iron, malleable iron, compacted graphite iron (CGI) and white iron. There can be overlap in the chemical composition of these irons, and they are defined by their structure. Gray iron, for example, “contains a large amount of carbon in the form of gray graphite flakes,” while in ductile iron “the graphite is in the shape of spheres or nodules.” Gray, ductile, and white iron with more than 3 percent of an alloy are often referred to as high-alloy iron. Gates Corp., *Metals Technical Guide*, pp. 1–5, <https://www.gates.com/~media/files/gates/industrial/power-transmission/manuals/metals-technical-guide.pdf> (accessed November 21, 2015); Atlas Foundry Company Website, <http://www.atlasfdry.com/cast-irons.htm> (accessed November 27, 2015); and Engineers Handbook Website, <http://www.engineershandbook.com/Materials/castiron.htm> (accessed November 27, 2015).

¹⁹ Petitions, pp. 6–8; and conference transcript, pp. 41 (Luberda) and 88 (Juergens).

Figure I-1

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



Source: TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," pp. B2-1–2.

Sheaves vary in size depending on the application and type of sheave, and may be stock items or may be customized for individual purchasers. Stock classic sheaves, for example, range from less than 5 inches in outer diameter, with a weight of 1 to 2 pounds, to more than 58 inches and 1,500 pounds or more.²⁰

V-belt drives

The most common type of belt drive is the V-belt drive.²¹ The V-belt drive uses a belt shaped like a V that usually fits into shaped grooves in the sheave (figure I-2). This configuration provides advantages in some applications, such as lower bearing loads and longer belt life, as compared to flat pulleys (discussed below). The sheave may have one groove or multiple grooves.²²

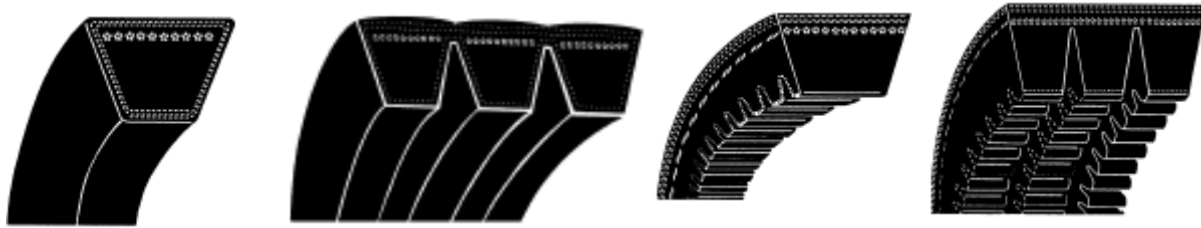
²⁰ Baldor Maska Product Catalog, February 2014, pp. 78–99; TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," pp. B2-4–12; and conference transcript, p. 78 (McCartney).

²¹ Conference transcript, p. 79 (McCartney).

²² Joseph L. Foszcz, "Basics of Belt Drives," *Plant Engineering*, September 1, 2001, <http://www.plantengineering.com/single-article/basics-of-belt-drives/981c1be10d400323db10aa592e4cc7b3.html>; Arthur G. Erdman and Raymond Giese, "Belt Drive," Access Science, 2014, <http://www.accessscience.com/content/belt-drive/078100>; and TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," p. B2-13.

Figure I-2

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

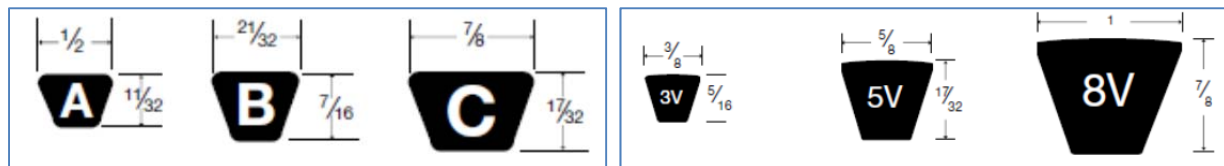


Source: TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," pp. B2-13.

The main types of V-belt drives are classical, narrow, and light duty. Classical drives are the original V-belt drives used in industry. Narrow V-belt drives were developed later with new materials, such that a thinner belt could carry the same load as a classical V-belt.²³ Light duty V-belt drives are designed for use in applications less than 15 horsepower, and do not exceed 18.75 inches in diameter.²⁴ Within these three types of drives, there are a range of belts of standard dimensions (figure I-3). There are also cogged V-belts, which are more expensive but provide advantage such as a higher power capacity and reduced friction and, therefore, heat.²⁵

Figure I-3

IMTDCs: Select classic V-belts (left) and narrow V-belts (right)



Source: TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," pp. B1-11 and B2-13.

Flat pulleys

Flat pulleys are sheaves that do not have grooves and typically use flat belts (figure I-4). Flat belt drives are more efficient than V-belt drives, but have drawbacks such as higher bearing loads and more wear on the belt, as noted above. In many flat belt drives, pulleys are rounded

²³ Greg Cober, "Understanding Trade-Offs When Selecting Belted Drive Systems," TB Woods, p. 2, <http://www.altraliterature.com/pdfs/P-7636-TBW.pdf> (accessed November 11, 2015).

²⁴ A light duty sheave uses less material and is lighter than a heavy duty sheave of the same diameter. Conference transcript, pp. 47–48 (McCartney) and 71–72 (Luberda).

²⁵ Unlike synchronous belt drives, the cogs in the V-belts are not gripped by matching grooves on the sheaves. Greg Cober, "Understanding Trade-Offs When Selecting Belted Drive Systems," TB Woods, pp. 2–3, <http://www.altraliterature.com/pdfs/P-7636-TBW.pdf> (accessed November 11, 2015); and TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," pp. B2-13.

so that the center is slightly raised (or crowned) to improve the belt alignment.²⁶ In retrofit applications, it is possible that only one sheave in the drive will be replaced with a V-belt sheave (with the other remaining a flat pulley). In these drives, the flat pulley will use a V-belt.²⁷

Figure I-4
IMTDCs: Flat pulley



Source: TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," p. B5-1.

Synchronous drives

Synchronous drives, including timing pulleys, use belts with teeth and sheaves with corresponding grooves (figure I-5).²⁸ Sheaves for synchronous belt drives may also be referred to as sprockets.²⁹ Synchronous drives are typically more expensive than V-belt drives, but offer a number of advantages, including high efficiency, constant speeds, lower bearing loads, and lower operation and maintenance costs. They can also be used in applications, such as those requiring more precise timing, that have not traditionally used belt drives.³⁰ There have been a

²⁶ Joseph L. Foszcz, "Basics of Belt Drives," *Plant Engineering*, September 1, 2001, <http://www.plantengineering.com/single-article/basics-of-belt-drives/981c1be10d400323db10aa592e4cc7b3.html>; and TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," pp. B5-5.

²⁷ TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," p. BEV-8.

²⁸ Conference transcript, p. 91 (Juergens).

²⁹ Conference transcript, p. 142 (Price). Sprockets that are toothed wheels that engage with chains, rather than belts, and gears that are toothed wheels that transfer energy by engaging with other gears, however, are not included in the scope. Chain belt drives are not included in the scope. Petitions, vol. I, p. 42 and footnote 104; and petition amendment, November 5, 2015, pp. 3 and 7, exh. S-52 (paragraph 19).

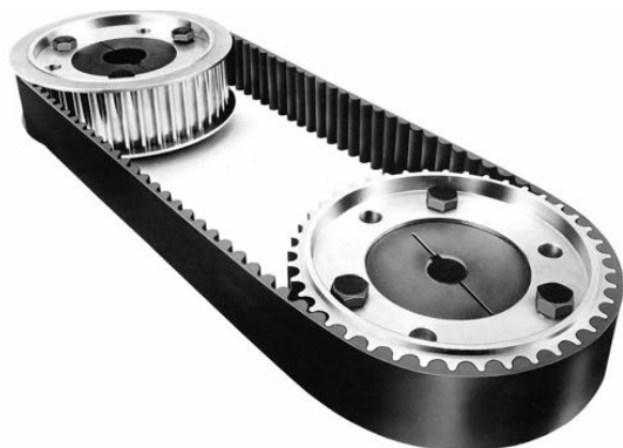
³⁰ Synchronous drives are also sometimes referred to as chain belt drives. TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," pp. C1-2-3; and Greg Coper, "Understanding Trade-Offs When

(continued...)

number of improvements in synchronous drives over time—including increasing load capacities—and they are the fastest growing segment of the IMTDC market.³¹

Figure I-5

IMTDCs: Synchronous belt drive



Source: TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," p. C1-1.

Other IMTDCs for power transfer applications

Other types of IMTDCs include variable speed drives and conveyor pulleys. Variable and adjustable drives permit output speed changes without having to turn the drive on and off (figure I-6). Some drives require manual speed adjustment,³² while others can be adjusted while the drive is in motion.³³ Conveyor pulleys, including drum pulleys, are cylindrically shaped pulleys used for moving a conveyor belt.³⁴

(...continued)

Selecting Belted Drive Systems," TB Woods, pp. 3–4, <http://www.altraliterature.com/pdfs/P-7636-TBW.pdf> (accessed November 11, 2015).

³¹ Conference transcript, p. 79 (McCartney).

³² For example, certain TB Woods sheaves are adjusted by "loosening the clamping screws and turning a single adjusting screw." TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," pp. D1-44.

³³ TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," p. D1-44.

³⁴ Martin Sprocket and Gear Website, <http://www.martinsprocket.com/products/conveyor-pulleys> (accessed November 10, 2015); and Baldor Website, <http://www.baldor.com/brands/baldor-dodge/products/conveyor-components/pulleys/drum-pulleys> (accessed November 10, 2015).

Figure I-6

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



Source: TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," pp. D1-44 (left) and D1-14 (right).

Flywheels and idler pulleys

While the function of most IMTDCs is to transmit power from one shaft to another, flywheel and idler pulleys do not have a power transmission function. Flywheels are rotating mechanical devices that are used to store rotational energy (figure I-7). The rotational momentum of the flywheel is used to provide continuous energy in applications where energy is variable, such as with a reciprocating (piston) engine.³⁵ Flywheels and sheaves may be produced separately so that they can be placed on different parts of the shaft, or may be produced as a part of the same unit (known as a flywheel sheave).³⁶ Idler pulleys are placed inside or outside of the drive, and are used to increase tension, provide proper alignment, reduce the extent to which the belt can whip, and redirect the belts. They are not used to drive the pulley system. Idler pulleys are used in a range of applications, including with conveyor belts.³⁷

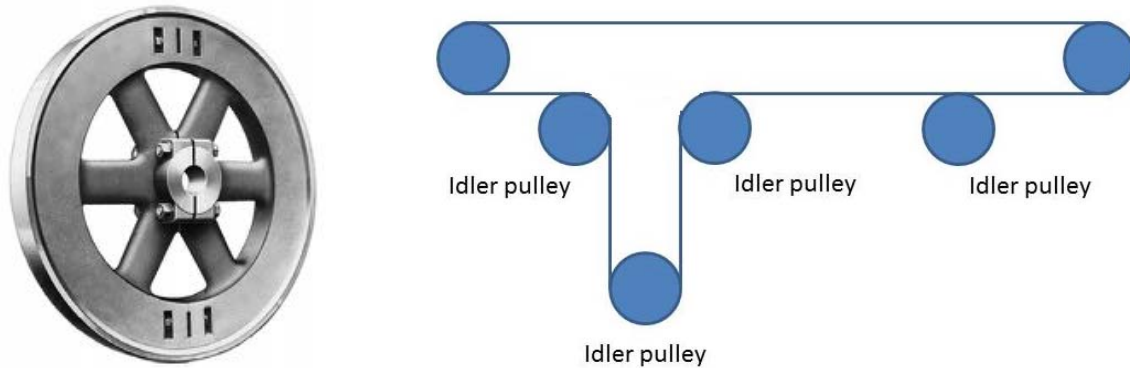
³⁵ Conference transcript, pp. 57–58 (McCartney) and 138–139 (Christenson); TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," p. B1-70; and Baldor's postconference brief, exh. 1, pp. 17–18.

³⁶ Conference transcript, p. 139 (Christenson).

³⁷ PCI, Conveyor Pulley Selection Guide, November 2014, p. 4, http://www.pcimfg.com/wp-content/uploads/2014/11/PCI_Pulley_Selection_Guide_2014.pdf; and TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," p. BEV-7.

Figure I-7

IMTDCs: Flywheel (left) and schematic of a conveyor belt with idler pulleys (right)



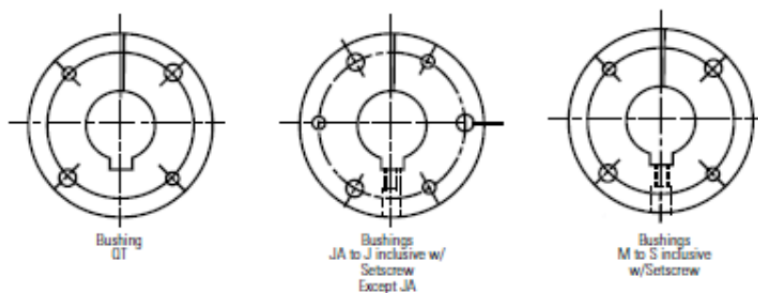
Source: TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," p. B5-5; diagram developed based on information in PCI, Conveyor Pulley Selection Guide, November 2014, p. 4, http://www.pcimfg.com/wp-content/uploads/2014/11/PCI_Pulley_Selection_Guide_2014.pdf.

Bushings

Bushings are used to connect the shaft to the sheave. Standard bushing sizes and configurations are set by the Mechanical Power Transmission Association ("MPTA"). There are three main bushing types, based on the number of screw holes in the bushing (figure I-8). Standard diameters range from 2.0 inches to 17.8 inches, though those below 4 inches are excluded from the scope of the subject imports in these investigations. Standard bushing lengths are 0.7 to 15.7 inches. Five of the 14 bushing types listed in the MPTA standards are less than 4 inches in outer diameter. In addition to these bushing types, there are a range of other bushings on the market, such as those in metric dimensions and flangeless bushings.³⁸

Figure I-8

IMTDCs: Three standard types of bushings



Source: TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," p. A1-3.

³⁸ Mechanical Power Transmission Association, "Quick Detachable Bushing & Mating Hub Standard," MPTA-B6i-2010, 2010, <http://www.mpta.org/MPTAPubs.htm>; and TB Wood's Inc., "Belt Drives, Sheaves, and Couplings," pp. A1-3–A2-5.

Applications

Most IMTDCs are used to transmit power from a motor or engine to products such as fans, conveyors, compressors, pumps, and mixers.³⁹ They are used in a range of applications, including heating, ventilating, and air conditioning (HVAC), industrial, agricultural, construction, mining, oilfield, and material handling applications.⁴⁰ TB Woods estimates that general industrial use and air handling each account for *** percent of the U.S. market, pumps and compressors for *** percent, oil and gas for *** percent, material handling for *** percent, construction and agriculture for *** percent, and sand and gravel for *** percent.⁴¹

In HVAC applications, for example, light duty and variable speed belt drives are often used to transmit power from a motor to a fan (figure I-9).⁴² In the agricultural sector, sheaves and belt drives are used in equipment ranging from combines and harvesters to conveyor belts.⁴³ In the material handling industry, conveyor pulleys are used in applications such as mining, product packaging, food processing, power generation, and recycling.⁴⁴ The oil industry is a significant user of large sheaves in upstream applications such as drilling.⁴⁵ Flywheels are commonly used in applications where energy is variable, such as with a reciprocating (piston) engine. The oil industry is one example of where flywheels are used. The flywheel is used with a pump jack, for example, and is counterbalanced on the other end of the shaft from the sheave.⁴⁶

³⁹ Conference transcript, p. 92 (Coder).

⁴⁰ IMTDCs less than 4 inches are also used in a range of applications, including some applications that overlap with applications for subject IMTDCs. Some examples of the applications of IMTDCs less than 4 inches include HVAC applications and metalworking and woodworking equipment. Petitions, p. 6; Martin Sprocket and Gear Website, <http://www.martinsprocket.com/products/conveyor-pulleys> (accessed November 10, 2015); conference transcript, p. 79 (McCartney); Baldor Maska, “HVAC Product Catalog” December 2013; and Baldor Website, <http://www.baldor.com/brands/baldor-mask/products/mechanical-drive-components/sheaves/step-pulleys> (accessed November 28, 2015).

⁴¹ Petitioner’s postconference brief, exh. 1, pp. 54–55.

⁴² Though belt drives have traditionally been used in large fans, direct drive fan set-ups—in which the motor connects directly to the fan and variable frequency drives (VFDs) are used to control the speed of the motor—are increasingly used in this application. Trane Engineers Newsletter, “Direct Drive Plenum Fans and Fan Arrays,” vol. 31, no. 1 (2010), https://www.trane.com/content/dam/Trane/Commercial/global/products-systems/education-training/engineers-newsletters/acoustics/admapn036en_0310.pdf; Conference transcript, p. 79 (McCartney); and Baldor Maska Product Catalog, February 2014, p. 58.

⁴³ Altra Industrial Motion, “Power Transmission Solutions for the Farm and Agriculture Market,” p. 7, <http://www.altraliterature.com/pdfs/P-7362-C.pdf> (accessed November 11, 2015).

⁴⁴ Martin Sprocket and Gear Website, <http://www.martinsprocket.com/products/conveyor-pulleys> (accessed November 10, 2015); and Baldor Website, <http://www.baldor.com/brands/baldor-dodge/products/conveyor-components/pulleys/drum-pulleys> (accessed November 10, 2015).

⁴⁵ Conference transcript, p. 79–80 (McCartney and Moore) and p. 93 (Coder); and petitioner’s postconference brief, exh. 1, p. 55.

⁴⁶ Conference transcript, pp. 57–58 (McCartney).

Figure I-9
IMTDCs: Belt drive in an HVAC application



Source: Petitioner's conference presentation, p. 3.

Manufacturing processes

The subject IMTDCs are manufactured in five steps: (1) design, (2) iron melting, (3) mold making, (4) casting, and (5) finishing (also known as machining).⁴⁷ Melting, mold making, and casting normally take place at a foundry, and these production steps combined are collectively referred to as "casting." Design and finishing may be performed at the foundry, but these steps may also take place at a separate plant. The manufacturing processes and technologies used by foreign producers are largely similar to those of domestic producers.⁴⁸

Design

Sheaves and bushings are designed by engineers using computer simulations of metal flow and solidification.⁴⁹ While customers usually choose from an extensive catalog of sheaves and corresponding bushings, some applications require customized sheaves that meet specific size, strength, speed or other requirements.⁵⁰ Customers may provide the designs themselves, or design engineers at the foundry may provide design consultation and services.⁵¹

⁴⁷ Conference transcript, p. 88-91 (Juergens); and U.S. International Trade Commission, "Foundry Products: Competitive Conditions in the U.S. Market," Investigation No. 332-460, May 2005, p. 2-7 to 2-8.

⁴⁸ Conference transcript, p. 150 (Crist).

⁴⁹ USITC, "Foundry Products," p. 2-7.

⁵⁰ ***.

⁵¹ USITC, "Foundry Products," p. 2-7.

Iron melting

The melting takes place at the foundry using a variety of raw materials, such as pig iron, recycled materials (gates, risers, and scrap castings), and scrap steel (figure I-10).⁵²

Figure I-10

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



Source: TB Wood's Inc., "V-Belt, Synchronous, and Variable Speed Drives," p. 5.

Each furnace is specific to the iron type, such as gray iron or ductile iron (figure I-11). A combination of raw materials ("the recipe") is weighed and processed through a preheater to evaporate moisture and then placed gradually in the furnace to melt at a high temperature.⁵³ White iron is not commonly used because it is brittle and not easily machined.⁵⁴ The chemistry of the melting material inside the furnace (called the "charge") is measured *** to ensure a desired composition of iron, carbon, silicon, and other content specific to the iron type.⁵⁵ ***.⁵⁶ Once the desired chemistry and temperature is reached, the molten iron is ready to be poured.

⁵² Conference transcript, p. 88; and USITC, "Foundry Products," p. 2-7.

⁵³ TB Wood's Inc, "V-Belt, Synchronous, and Variable Speed Drives," p. 6; and ***.

⁵⁴ Machine design, "Cast iron," <http://machinedesign.com/basics-design/cast-iron> (accessed December 3, 2015).

⁵⁵ TB Wood's Inc, "V-Belt, Synchronous, and Variable Speed Drives," p. 6; and ***.

⁵⁶ ***.

Figure I-11

IMTDCs: Iron melting furnace at TB Woods' facility in Chambersburg



Source: TB Wood's Inc., "V-Belt, Synchronous, and Variable Speed Drives," p. 6.

Mold making

The mold making process begins with making patterns mounted on flasks. Patterns determine the contours and shapes of the sand mold through which molten metal will flow to fill the cavity of the finished mold (figure I-12).⁵⁷ Patterns are made of metal and wood plates. Patterns may be made at the foundry or made at a separate facility.⁵⁸

Sand is filled into the patterned flask, pressed, and hardened by a heat or chemical treatment. Different types of sands are used for specific iron types.⁵⁹ Sand that is hardened primarily through chemical treatment (referred to as "chemical sand" or "no bake sand") is used to make ductile iron castings; sand that is hardened by pressure treatment (referred to as "green sand") is used to make gray iron castings.⁶⁰

***.⁶¹ After the sand hardens sufficiently, the molds are removed from the flasks. Two halves of the molds are usually hardened separately (figure I-11), and then placed together to make a complete mold.⁶²

⁵⁷ Conference transcript, p. 89 (Juergens); and USITC, "Foundry Products," 2-7.

⁵⁸ USITC, "Foundry Products," p. 2-7.

⁵⁹ TB Woods' Foundry Capabilities, http://www.tbwoods.com/Products_Mechanical_Castings.asp (accessed December 3, 2015).

⁶⁰ The American Foundry Society, "Guide to Casting and Molding Processes", p. 1-3; and ***.

⁶¹ ***.

⁶² Conference transcript, p. 89 (Juergens).

Figure I-12

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



Source: TB Wood's Inc., "V-Belt, Synchronous, and Variable Speed Drives," p. 7.

Casting: pouring, cooling, and cleaning

Castings, otherwise referred to as "blanks," are made by pouring molten iron into the sand mold using pouring ladles (figure I-13). The molten iron within the sand mold is left to cool and harden (figure I-13). After cooling and hardening, the sand mold is broken away, and the sand is recycled. Limited processing is performed on the molds to remove excess materials, such as sand, gate connections, and risers (figure I-14).⁶³ Resulting scrap materials are returned to the melting furnace to be recycled.

Figure I-13

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



Source: TB Wood's Inc., "V-Belt, Synchronous, and Variable Speed Drives," p. 10.

⁶³ USITC, "Foundry Products," p. 2-8; and conference transcript, p. 90 (Juergens).

Figure I-14

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



Source: TB Wood's Inc., "V-Belt, Synchronous, and Variable Speed Drives," p. 11.

Finishing

Castings undergo a finishing process to achieve their final specified size and characteristics (figures I-15 and I-16). Grooves or teeth are cut into the casting's outer circumference using a variety of machines.⁶⁴ Other machining processes include drilling holes in sheaves and bushings, balancing large sheaves, broaching, and painting.⁶⁵ The various machining processes can be completely automated, or can utilize a combination of machines and labor. The finishing process may take place at a facility adjacent to the foundry, or may take place at a separate plant.⁶⁶

⁶⁴ Examples of automated machines can be found at JK Pulley Company's *website* <http://www.jkpulley.com/high-production-robotic-machining-services.html> (accessed December 3, 2015), and TB Woods also lists machining capabilities on its website http://www.tbwoods.com/Products_Mechanical_Castings.asp (accessed December 3, 2015); and ***.

⁶⁵ TB Woods website, http://www.tbwoods.com/Products_Mechanical_Castings.asp (accessed December 3, 2015), ***.

⁶⁶ USITC, "Foundry Products," 2-8; and ***.

Figure I-15

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



Source: TB Wood's Inc., "V-Belt, Synchronous, and Variable Speed Drives," pp. 12.

Figure I-16

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



Source: TB Wood's Inc., "V-Belt, Synchronous, and Variable Speed Drives," pp. 13.

INTERMEDIATE PRODUCTS

The petitioner argues that the Commission should find that semi-finished IMTDCs (i.e., "blanks" or "castings") are part of the same domestic like product as finished IMTDCs. It also argues that the Commission should define the domestic industry to include only domestic producers that cast IMTDCs in the United States because finishing IMTDCs in the United States does not constitute sufficient production-related activity.⁶⁷

⁶⁷ Petitioner's postconference brief, p. 5.

Chinese respondents agree with the petitioner that blanks and finished IMTDCs should be considered part of the same domestic like product.⁶⁸ Although Baldor notes that there is not a sufficient response from all parts of the domestic industry for it to assess the merits of treating semi-finished and finished IMTDCs as separate domestic like products according to the semi-finished/finished analysis, it argues that the record in these preliminary investigations demonstrates that the domestic industry should include entities that cast and/or finish IMTDCs. It explains that this should include entities that purchase castings and process them into finished IMTDCs, as well as entities that produce the castings and sell them to finishers.⁶⁹

Uses

Unfinished IMTDCs have the approximate shape or outline of a finished IMTDC but lack the machining of grooves or teeth and tap holes of a finished IMTDC. As such, unfinished castings (or blanks) are effectively dedicated to the production of finished IMTDCs and have no known independent uses.⁷⁰ According to conference testimony, “if you took that casting that we purchased, there’s no sellable value to it to an end customer. If we don’t finish it into something, then it’s not sellable.”⁷¹

Markets

The petitioner argues that because an unfinished IMTDC has no independent use from a finished IMTDC, there are no separate markets for unfinished and finished IMTDCs.⁷² Chinese respondents agree that both blanks and finished IMTDCs are sold in similar markets.⁷³

Characteristics and functions

Both unfinished and finished IMTDCs are produced from the same initial raw material and have the same chemical composition (i.e., iron), general size, and shape (i.e., circular or cylindrical profile with a center bore hole). In addition both the unfinished and finished IMTDC ultimately function as part of a belted drive system to transmit power generated by a motor, turbine, or engine to other equipment.⁷⁴

⁶⁸ Chinese respondents’ postconference brief, p. 11.

⁶⁹ Baldor’s postconference brief, p. 21 and exh. 1, p. 18.

⁷⁰ Conference transcript, pp. 85 (McCartney) and 110 (Pickard); petitioner’s postconference brief, exh. 1, pp. 15-16; and Chinese respondents’ postconference brief, p. 12.

⁷¹ Conference transcript, p. 85 (McCartney).

⁷² Petitioner’s postconference brief, exh. 1, p. 16.

⁷³ Chinese respondents’ postconference brief, p. 13.

⁷⁴ Petitioner’s postconference brief, exh. 1, pp. 16-17; and Chinese respondents’ postconference brief, p. 12.

Value

The petitioner argues that a significant portion of the total cost of production and value of the finished IMTDC is accounted for by the unfinished IMTDC and that “***.”⁷⁵ *** estimate that the unfinished casting represents about *** percent of the total production cost of the finished IMTDC and that finishing accounts for *** percent.⁷⁶ These estimates vary considerably from financial data reported in TB Woods’ and Martin Sprocket’s producer questionnaire responses (table VI-6). The costs of production provided by the two firms in their financial data include all costs related to both casting and finishing operations. That is, labor and factory overhead costs related to the finishing operations for these two integrated producers could not be broken out separately from the built up costs of casting. Therefore, the ratios of conversion costs to cost of goods sold, which ranged from *** percent for TB Woods and *** percent for Martin Sprocket during the full annual periods from 2012 to 2014 (as presented in table VI-6) are not comparable to the companies’ separately provided value-added estimates of the finishing operations alone.

Respondent Baldor notes that in its process, about one-half of the value of the finished IMTDC is in the finishing stage.⁷⁷ According to financial data reported in its producer questionnaire response, the costs involved in Baldor’s finishing operations accounted for *** percent of the total cost of manufacture of the finished IMTDC during the full annual periods from 2012 to 2014. The average unit values of Baldor’s domestic purchases of U.S.-origin unfinished IMTDCs, which ranged from \$*** per piece, accounted for *** percent of the average unit values of Baldor’s U.S. commercial shipments of finished IMTDCs, which ranged from \$*** per piece.

Transformation processes

For a detailed description of the production process for unfinished and finished IMTDCs, please refer to the previous section in this part of the report titled “Manufacturing processes.”

The petitioner argues that finishing operations are a relatively minor step in a much larger process. It states that the casting process requires *** more technical expertise, labor, and capital investment than the finishing process.⁷⁸

Respondent Baldor argues that the capital investment in its finishing facility is sizeable (multi-millions of dollars) and that the processing of finished components is significant. It adds that creating quality finished components requires the particular expertise of highly trained employees to operate its finishing equipment. It noted that its particular finishing process

⁷⁵ Petitioner’s postconference brief, exh. 1, p. 17.

⁷⁶ Petitioner’s postconference brief, exh. 1, p. 17; and questionnaire response of ***.

⁷⁷ Conference transcript, pp. 48 (Luberda) and 156 (Cannon).

⁷⁸ Petitions, p. 21; and petitioner’s postconference brief, exh. 1, pp. 17-18.

utilizes robotic cells and specially designed tooling and equipment that is dedicated to the manufacture of mechanical transfer components.⁷⁹

DOMESTIC LIKE PRODUCT AND DOMESTIC INDUSTRY ISSUES

The petitioner proposes that IMTDCs constitute a single domestic like product, coextensive with the scope of these investigations as initiated by Commerce. Specifically, the petitioner notes that the Commission should not include in the domestic like product IMTDCs that are less than four inches in diameter or mechanical transfer drive components (“MTDCs”) that are not made of iron (such as sintered steel powder MTDCs and MTDCs made from direct machined steel bars).⁸⁰

Respondent Baldor and Chinese respondents Powermach and Min Yue argue that all IMTDCs should be considered to be within the same domestic like product regardless of diameter, and that MTDCs made from sintered steel or machined steel bar should also be included in the same domestic like product as MTDCs made from iron.⁸¹ Additionally, based on its proposed expanded domestic like product, Baldor argues that the domestic industry should include those firms that produce items using a sintering and/or direct machining process, regardless of the carbon content, and those that produce items below 4 inches in diameter.⁸²

Respondent Caterpillar argues that the petitioner’s suggestion that the Commission’s domestic like product must necessarily be coterminous with Commerce’s scope is incorrect, but otherwise makes no specific arguments as to domestic like product and domestic industry. It simply notes that the definitions remain “wide open questions” and argues that the petitioner’s change in the scope language very late during the Commission’s preliminary phase of the investigations hindered the Commission’s ability to gather the appropriate industry information.

⁷⁹ Conference transcript, p. 18 (McCartney).

⁸⁰ Petitioner’s postconference brief, p. 5. As noted previously, the petitioner amended its original petitions on November 5, 2015 to propose revisions to the scope language. As part of those revisions, the petitioner proposed excluding items of less than 4.00 inches (101 mm) in maximum nominal outer diameter from the scope. The petitioner argues that the addition of a diameter limit to define the IMTDCs covered by the scope will improve the scope’s clarity and ability to distinguish between iron and steel products since it argues that some small-diameter (i.e., below 4.0 inches) imported components may be produced from either steel or iron (or their production processes may be changed relatively easily to utilize steel), while larger diameter components are predominantly produced from iron. *Response to the Department’s November 3, 2015 Supplemental Questions Regarding Volume I of the Petition for the Imposition of Antidumping and Countervailing Duties*, November 5, 2015, pp. 4-5. The petitioner again amended its petitions on November 17, 2015 to propose further modifications to the scope language by adjusting the carbon content threshold from 1.5 to 1.7 percent by weight or above for items included in the scope. *Additional Revision to the Scope*, November 17, 2015, p. 1.

⁸¹ Baldor’s postconference brief, p. 5; and Chinese respondents’ postconference brief, p. 7.

⁸² Baldor’s postconference brief, p. 27.

The Commission's decision regarding the appropriate domestic product that is "like" the subject imported product is based on a number of factors including: (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and (6) price. Information regarding these factors is discussed below.

Physical characteristics and uses

Sintered steel powder and direct machined steel bars

The petitioner argues that MTDCs manufactured from sintered steel powder or direct machined steel bars do not have the same physical characteristics and uses as the iron MTDCs described in the scope. It states that IMTDCs, by definition, are made of iron, defined as having a carbon content of 1.7 percent by weight or above in the scope definition, and that MTDCs produced from sintered steel powder or steel bar are composed of steel and thus have a significantly lower carbon content level than 1.7 percent by weight. The petitioner also notes that sintered sheaves and bushings are physically smaller in diameter than the iron MTDCs, such that *** sintered sheaves and bushings have an outer diameter of less than four inches. In addition, the different chemical compositions of the iron MTDCs and the MTDCs produced from sintered steel powder or steel bar differ in level of strength since sintered steel bushings sometimes crack or break upon opening.⁸³ Because of these physical differences, the petitioner notes that the small diameter and limited strength of components produced from sintered steel powder limits the types of applications in which the items can be used, such as in "fractional horsepower" motors in HVAC systems and other small machinery. By contrast, IMTDCs as defined by the scope are also used in larger scale machinery, such as used in mining operations and aggregate equipment.⁸⁴

Respondent Baldor argues that iron MTDCs and MTDCs made from sintered steel or machined from bar steel are identical in all commercially important physical and performance characteristics, with sintered steel and machined steel MTDCs being equally as strong as cast iron. It further argues that the predominant production input in cast iron is scrap steel and that cast iron does not impart any characteristic to the product that steel does not.⁸⁵

Outside diameters of less than four inches

The petitioner argues that MTDCs measuring less than four inches in diameter do not have the same physical characteristics or end uses as the items described in the scope. It notes that any component measuring less than four inches is, by definition, physically distinct from a subject IMTDC with a diameter measuring four inches or more. In addition, the petitioner notes

⁸³ Petitioner's postconference brief, exh. 1, pp. 3-4.

⁸⁴ Petitioner's postconference brief, exh. 1, pp. 4-5.

⁸⁵ Baldor's postconference brief, pp. 15-16.

that the strength level of the items four inches and above is different than the level of strength of the items below four inches.⁸⁶ It notes that although the smaller items can transmit power in certain mechanical drive systems, the size limits the types of applications for which they can be used. It reports that the smaller items are largely used in “fractional horsepower” motors, such as motors in HVAC systems and other small machinery, whereas the larger subject IMTDCs are also used in much larger scale machinery, such as mining operations, aggregate equipment, and oil and gas rigs.⁸⁷

Respondent Baldor agrees with certain language in the petitions as originally filed and argues that there are no differences in physical characteristics and use between IMTDCs based on the diameter of the product. Baldor argues that all IMTDCs are part of a single continuum of items of different diameters with no bright line division at 4 inches in outer diameter. It points out any dividing line is blurred by the fact that bushings measuring under four inches are used on larger sheaves that measure above four inches and that castings measuring more than four inches can be used to produce two different finished items with different diameters, one below four inches and the other above four inches. Respondent Baldor also pointed to conference testimony that indicated that there is not a distinct end use market for IMTDCs under four inches and that there is some overlap in such end uses.⁸⁸

Manufacturing facilities and production employees

Sintered steel powder and direct machined steel bars

The subject IMTDCs (sheaves, flywheels, and bushings) are generally produced in common facilities, using common machinery and employees. Petitioner argues that iron MTDCs are manufactured through different production processes, raw materials, production equipment, and production employees than MTDCs made from sintered steel powder or steel bars.⁸⁹ Respondent Baldor agrees that there are differences in the manufacturing facilities and production employees for iron MTDCs and MTDCs produced from sintered steel powder and steel bars, but argues that this fact is not dispositive. It argues further that the different production facilities simply represent different production and business models to produce directly competing articles.⁹⁰

⁸⁶ Petitioner’s postconference brief, exh. 1, p. 5.

⁸⁷ Petitioner’s postconference brief, exh. 1, p. 6.

⁸⁸ Baldor’s postconference brief, pp. 7-9.

⁸⁹ Petitioner’s postconference brief, exh. 1, pp. 9-10; and conference transcript, p. 61 (McCartney) and p. 126 (Christenson).

⁹⁰ Baldor’s postconference brief, pp. 18-19.

Outside diameters of less than four inches

In its original petitions, which included all diameters of IMTDCs, the petitioner noted that domestic producers manufacture all IMTDCs in common facilities, using common production processes and common employees. It explained that casting operations for sheaves (pulleys), flywheels, and bushings, involve the same furnaces, the same casting technologies and employees, and the same cleaning processes and equipment, and that finish machining operations also involve the same equipment, processes, and employees.⁹¹ Respondent Baldor agrees with these statements as they appear in the original petitions and noted that petitioner testified that it produces mechanical transfer drive components with an outer diameter of less than four inches “on a limited basis” in its facility.⁹² In its postconference brief, however, the petitioner argued that the Commission should determine that mechanical transfer drive components with diameters below four inches differ from subject IMTDCs as to manufacturing facilities, production processes and production employees because most of these smaller components are sintered from steel powder or machined from steel bar and not of cast iron.⁹³

Supplemental questions to the producer’s questionnaire were sent to U.S. producers Baldor, Martin Sprocket, and TB Woods requesting information on common manufacturing equipment and machinery and/or labor used to produce IMTDCs of four inches in outside diameter and those components of less than four inches in outside diameter. Domestic finisher Baldor reported ***.⁹⁴ It also noted ***.⁹⁵ Integrated domestic producer Martin Sprocket responded ***.⁹⁶ TB Woods responded ***. It added ***.⁹⁷

Interchangeability

Sintered steel powder and direct machined steel bars

Among the substitute products identified by *** in their responses to the Commission’s questionnaire are MTDCs produced from sintered steel powder and steel bar. See Part II for further information on these and other substitute products.

⁹¹ Petitions, p. 20.

⁹² Baldor’s postconference brief, p. 11; and conference transcript, p. 124 (Crist).

⁹³ Petitioner’s postconference brief, exh. 1, pp. 10-11.

⁹⁴ Email from ***, December 1, 2015. Based on pieces, the components measuring less than four inches in outside diameter accounted for about *** percent of Baldor’s total finishing (compare original questionnaire response with requested revisions to extract data concerning items less than four inches in outside diameter).

⁹⁵ Email from ***, December 1, 2015.

⁹⁶ Emails from ***, December 1 and 5, 2015. According to a comparison of the company’s originally submitted questionnaire data (all diameters) with requested revisions (four inches and above in diameter), the components measuring less than four inches in outside diameter accounted for about *** percent of Martin Sprocket’s total domestic production of iron MTDCs (based on pieces).

⁹⁷ Email from ***, December 2, 2015.

The petitioner argues that there is limited interchangeability between MTDCs manufactured from sintered steel powder or steel bar, and iron MTDCs because of differences in physical characteristics (e.g., diameter, carbon content, and strength) that result in differences in end uses.⁹⁸ However, respondent Baldor argues that MTDCs made from iron, sintered steel, and machined steel bar are interchangeable, are complete substitutes for one another, and that the choice of material is driven by the production method of the manufacturer, not the industry specification. It notes that specific industry standards for these items published by the Mechanical Power Transmission Association (“MPTA”) and the Association for Rubber Products Manufacturers (“ARMP”) do not dictate or constrain manufacturers to use specific product materials but define only the dimensions for product interchangeability. It adds that the membership of the MPTA includes producers that manufacture MTDCs from iron, sintered steel, and steel bar.⁹⁹

Outside diameters of less than four inches

The petitioner argues that components measuring less than four inches in diameter are not interchangeable with those measuring four inches or more in diameter and that a bright line is drawn clearly at the four-inch mark. In support of its argument, it states that a three-inch sheave cannot be used as a five-inch sheave and, thus, the two items are not interchangeable. In illustration, it notes that a large-diameter component designed for an oil and gas rig is not interchangeable with a small-diameter motor for a typical HVAC system.¹⁰⁰

Respondent Baldor argues that there is no clear dividing line at the four-inch level and that the components are part of a continuum of sizes. It notes further that no two separate sizes of finished components can serve as complete substitutes for one another, which makes this “largely meaningless” as a distinguishing factor between the sizes of items.¹⁰¹

Customer and producer perceptions

Sintered steel powder and direct machined steel bars

The petitioner argues that MTDCs that are made from sintered steel powder or steel bar are perceived by customers and producers to be distinct from MTDCs made from cast iron. It explains that sintered steel powder or steel bar products are typically used in “fractional horsepower” motors and other small machinery, whereas IMTDCs are also used in larger scale machinery.¹⁰² Respondent Baldor, on the other hand, argues that in more than *** percent of purchases of MTDCs, customers generally express no preference for either iron, powdered

⁹⁸ Petitioner’s postconference brief, pp. 6-7.

⁹⁹ Baldor’s postconference brief, p. 17; and conference transcript, p. 46 (McCartney).

¹⁰⁰ Petitioner’s postconference brief, p. 7.

¹⁰¹ Baldor’s postconference brief, p. 9.

¹⁰² Petitioner’s postconference brief, pp. 8-9.

steel, or machined steel. It adds that industry standards published by the MPTA and ARMP do not specify the material to be used in the production of these items and that the choice of the material is dictated solely by the manufacturer.¹⁰³

Outside diameters of less than four inches

The petitioner argues that MTDCs that have diameters below four inches and IMTDCs with diameters of four inches and above differ as to customer and producer perceptions. It notes that the smaller items are typically used in only certain limited end uses, such as in “fractional horsepower” motors, whereas IMTDCs are also used in larger machinery. Because of this difference, the petitioner argues that customers and producers have different perceptions of the items that are less than four inches in outside diameter.¹⁰⁴

Respondent Baldor argues that no producer or purchaser makes a distinction between products based on the four-inch outside diameter line. It notes that the petitioner’s IMTDC bushing catalog offerings range from 2.5 to 17.75 inches in outside diameter and its sheaves catalog offerings range from 2.2 to 33.5 inches without a clear dividing line at four inches. It adds that industry standards published by the MPTA and ARMP do not distinguish IMTDCs by the four-inch diameter line.¹⁰⁵

Channels of distribution

The petitioner notes that, although the ultimate end user often differs between iron MTDCs and MTDCs produced from sintered steel powder or steel bar, as well as MTDCs below and above four inches in outside diameter, the items may be sold through similar channels of distribution as the iron MTDCs.¹⁰⁶ Similarly, respondent Baldor argues that the items are all sold through common distribution channels to the same OEM or distribution customers for the same end uses.¹⁰⁷

Price

Sintered steel powder and direct machined steel bars

The petitioner argues the prices of subject iron MTDCs differ from the prices of MTDCs manufactured through sintering steel powder or machined from steel bar. The basis of its argument relies on the idea that prices typically increase with the size and weight of the item and that prices are driven by the cost of production. It stated further stated that conference

¹⁰³ Baldor’s postconference brief, pp. 17-18.

¹⁰⁴ Petitioner’s postconference brief, p. 9.

¹⁰⁵ Baldor’s postconference brief, pp. 10-11.

¹⁰⁶ Petitioner’s postconference brief, pp. 7-8.

¹⁰⁷ Baldor’s postconference brief, pp. 9 and 17.

testimony revealed that there were cost differences between the production of iron MTDCs and MTDCs made from sintered steel powder and steel bars.¹⁰⁸ Respondent Baldor, on the other hand, argues that the prices of like-sized MTDCs made from iron and those made from sintered steel or steel bar are similar. It bases its argument on conference testimony that certain items are competitive in the marketplace.¹⁰⁹

Outside diameters of less than four inches

The petitioner argues that components measuring less than four inches in outside diameter and the IMTDCs of four inches and above vary significantly in price. It notes that prices typically depend on several factors, including weight, size, and relative complexity of the component, and that prices typically increase with size and weight. Therefore, the subject IMTDCs measuring more than 4 inches in diameter, which are designed for larger scale machinery, are typically priced higher than the smaller items of less than four inches, which are used for “fractional horsepower” purposes.¹¹⁰

Respondent Baldor cites the original petitions in its argument that “the prices of IMTDC fall within a similar range” based on the size and complexity of the product. It agrees with petitioner in that the larger diameter sheaves are more expensive than smaller diameter sheaves due to the additional material involved but argues that these price differences are based on a typical product continuum and do not support a distinction in domestic like product.¹¹¹

¹⁰⁸ Petitioner’s postconference brief, pp. 11-12; and conference transcript, p. 73 (McCartney).

¹⁰⁹ Baldor’s postconference brief, pp. 19-20; and conference transcript, p. 46 (McCartney).

¹¹⁰ Petitioner’s postconference brief, pp. 12-13.

¹¹¹ Baldor’s postconference brief, pp. 12-13; and petitions, vol. I, p. 20.

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

U.S. MARKET CHARACTERISTICS

IMTDCs can vary substantially in size and are used in a variety of machinery applications, such as fans, conveyors, pumps, compressors, and mixers, for use in HVAC, mining, upstream oil and gas, building and road construction, and general industrial and agricultural sectors.¹ IMTDCs are produced in two phases: casting and finishing. IMTDCs may be cast by one firm, and finished by another. Unfinished cast products generally have no use other than to be finished.² Apparent U.S. consumption of IMTDCs fluctuated during 2012-14. Overall, apparent U.S. consumption in 2014 was *** percent higher than 2012 levels, on a unit (piece) basis, and *** percent higher on a value basis.

CHANNELS OF DISTRIBUTION

U.S. producers of finished IMTDCs,³ as well as importers of Canadian, Chinese, and Mexican finished IMTDCs, sold mainly to distributors, as shown in table II-1. In 2014, *** percent of U.S. producers' shipments of finished IMTDCs were to end users, *** percent of shipments from Canada were to end users, and *** percent of shipments from China were to end users. TB Woods indicated that the distributors of IMTDCs focus primarily on the replacement market.⁴

Table II-1

IMTDCs: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2012-14, January-September 2014, and January-September 2015

* * * * *

GEOGRAPHIC DISTRIBUTION

U.S. producers and importers of IMTDCs from Canada, China, and nonsubject country Mexico reported selling IMTDCs to all regions in the contiguous United States (table II-2). For U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers sold *** percent within 100 miles of their U.S. point of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

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

² Conference transcript, p. 85 (McCartney).

³ ***.

⁴ Conference transcript, p. 93 (Coder).

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

Region	U.S. producers	U.S. imports from Canada	U.S. imports from China	U.S. imports from subject sources	U.S. imports from Mexico
Northeast	3	6	12	13	10
Midwest	3	7	14	15	12
Southeast	3	7	14	15	11
Central Southwest	3	7	14	15	11
Mountains	3	7	14	15	11
Pacific Coast	3	7	14	15	11
Other ¹	3	5	10	10	10
All regions (except Other)	3	6	12	13	10
Reporting firms	3	7	14	15	12

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

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

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

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

Industry capacity

Domestic capacity utilization for finished IMTDCs increased slightly from *** percent in 2012 to *** percent in 2014.⁵ Domestic capacity utilization for unfinished IMTDCs decreased slightly from *** percent in 2012 to *** percent in 2014. This relatively low level of capacity utilization suggests that U.S. producers may have a substantial ability to increase production of product in response to an increase in prices.

⁵ Capacity of the domestic industry for finished product increased from *** pieces in 2012 to *** pieces in 2014. Capacity for unfinished product *** pieces during 2012-14.

Alternative markets

U.S. producers' exports of finished IMTDCs, as a percentage of total shipments, decreased slightly from *** percent in 2012 to *** percent in 2014. These levels indicate that U.S. producers may have a limited ability to shift shipments of IMTDCs between the U.S. market and other markets in response to price changes.

Inventory levels

U.S. producers' inventories of finished IMTDCs increased from *** pieces (equivalent to *** percent of total shipments) in 2012 to *** pieces (equivalent to *** percent of total shipments) in 2014. While there is substantial variation among different sizes and some IMTDCs may be custom products, the vast majority of IMTDCs are standard catalog products.⁶ This may indicate that U.S. producers' inventories could be able to supply orders. These inventory levels suggest that U.S. producers may have substantial ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

*** responding U.S. producers stated that they could switch production from IMTDCs to other products, although *** reported actually doing so. Other products that producers reportedly can produce on the same equipment as IMTDCs are couplings and castings for non-IMTDC products, and clutch assemblies. Producer ***, while indicating that it was able to switch production, noted that the machines "do not allow for change out to produce other products." Petitioner alleges that after the initial investment in a foundry and the necessary equipment, it is very easy for firms to switch production from other products to IMTDCs.⁷

Supply constraints

No supply constraints for domestic product were reported by responding firms.

Subject imports from Canada⁸

Based on available information, producers of IMTDCs in Canada have the ability to respond to changes in demand with large changes in the quantity of shipments of IMTDCs to the U.S. market. The main contributing factors to this degree of responsiveness of supply are ***, though supply is constrained by a ***.

⁶ Conference transcript, p. 69 (Beck); and ***.

⁷ Conference transcript, p. 145 (Crist).

⁸ The Commission received *** questionnaire response from Canadian producers. The exports of this firm accounted for *** percent (in pieces) of reported imports of finished and unfinished IMTDCs from Canada during January 2012-September 2015.

Industry capacity

The overall capacity utilization for IMTDCs for Baldor Canada, the only responding Canadian producer, decreased slightly from *** percent (** pieces produced) in 2012 to *** percent (** pieces produced) in 2014.⁹ This relatively low level of capacity utilization suggests that Canadian producers may have a substantial ability to increase production of product in response to an increase in prices.

Respondent Baldor states that ***.¹⁰

Alternative markets

The sole responding Canadian producer reported that its exports to the United States decreased from *** percent of total shipments in 2012 to *** percent in 2014. Its home market accounted for the remaining share of IMTDC shipments. Petitioner argues that the Canadian economy is in a downward cycle, which is negatively affecting the end-use markets for IMTDCs in Canada.¹¹

Inventory levels

Baldor Canada's end-of-period inventories *** from 2012 to 2014 *** pieces. Inventories as a ratio to total shipments *** from *** percent in 2012 to *** percent in 2014.

Production alternatives

Baldor Canada reported that it is *** to shift production of IMTDCs to other products using the same equipment, ***.

Supply constraints

Importers of IMTDCs from Canada reported no supply constraints.

Subject imports from China¹²

Based on available information, producers of IMTDCs in China have the ability to respond to changes in demand with large changes in the quantity of shipments of IMTDCs to

⁹ Its capacity decreased from *** pieces in 2012 to *** pieces in 2014.

¹⁰ Baldor's postconference brief, p. 38.

¹¹ Conference transcript, p. 149 (Price); Petitioner's postconference brief, pp. 13-14.

¹² The Commission received four questionnaire responses from Chinese producers. The reported exports of these firms exceeded reported imports of IMTDCs from China during January 2012-September 2015.

the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, existence of alternate markets and inventories, and an ability to produce alternate products.

Industry capacity

Chinese respondents stated that Powermach and Fuzhou Min Yue are the largest exporters of IMTDCs from China, and that there may be a few more of significant size.^{13 14} Capacity utilization for IMTDCs of responding Chinese producers increased from *** percent (** pieces produced) in 2012 to *** percent (** pieces produced) in 2014.¹⁵ This moderate level of capacity utilization, combined with the potential for higher Chinese capacity, suggests that Chinese producers may have an ability to increase production of product in response to an increase in prices.

Alternative markets

Responding Chinese producers reported that *** percent of their shipments were to the Chinese home market in 2014. Export shipments to the United States were *** percent of total shipments in 2014, up from *** percent in 2012. The remaining *** percent were to other markets in 2014.

Petitioner argued that the Chinese economy is in a downward cycle, and end-use markets in China are negatively affected. Petitioner noted that Caterpillar, *** reported slowing growth and a depressed equipment market in China.¹⁶

Inventory levels

Chinese producers' inventories as a share of total shipments increased from *** percent (** pieces) in 2012 to *** percent (** pieces) in 2014.

Production alternatives

Two Chinese producers reported that they are not able to shift production between IMTDCs and other products using the same equipment, while two producers reported that they are able to shift production. *** reported producing *** on the same equipment.

¹³ Conference transcript, p. 34 (Grimson).

¹⁴ Petitioner argued that China shipped 44.5 million tons of castings in 2013, while the United States shipped less than 12.3 million tons, and that China has thousands of cast-iron foundries that have the capability to produce IMTDCs. Petitioner's postconference brief, p. 16.

¹⁵ Capacity of the Chinese industry increased from *** pieces in 2012 to *** pieces in 2014.

¹⁶ Conference transcript, p. 149 (Price); Petitioner's postconference brief, p. 14.

Supply constraints

Chinese producers reported that production is constrained by the physical plant's capacity and equipment, and labor resources. No importers reported experiencing supply constraints.

Nonsubject imports

The largest source of nonsubject imports of finished IMTDCs during 2012-14 was Mexico, which accounted for *** percent of reported nonsubject imports (in pieces) in 2014, and *** percent of total imports (in pieces) of finished IMTDCs.

U.S. demand

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

End uses

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

At the conference, TB Woods described IMTDCs as used in a wide variety of downstream applications, including fans, conveyors, pumps, compressors, rock crushers, and mixers. It stated that U.S. demand for IMTDCs follows general industrial and construction demand, including building and road construction and mining, as well as the food and beverage and oil and gas sectors.¹⁷ Overall, TB Woods stated that the U.S. belted drives market was divided among the following sectors: general industrial (*** percent); air handling (*** percent), pump and compressor (*** percent), oil and gas (*** percent), materials handling (*** percent), construction and agriculture (*** percent), and sand and gravel (*** percent).¹⁸

Cost share

IMTDCs account for a small share of the cost of the downstream end-use products in which they are used, but can be a larger share of replacement components. Reported cost shares include less than one percent for automotive and tractor applications, one percent for

¹⁷ Conference transcript, pp. 92-93 (Coder), 120 (Christenson).

¹⁸ Petitioner's postconference brief, exh. 1, p. 55.

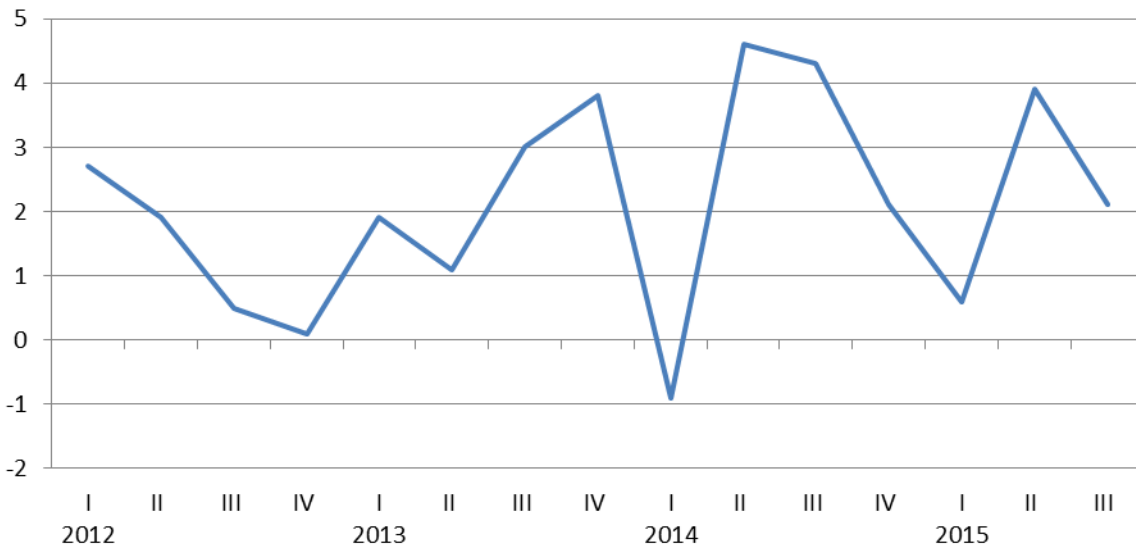
some HVAC end uses, agricultural equipment, and construction equipment, and five percent for some HVAC end uses, conveyor systems, and oil and gas applications. For some OEM equipment and replacements, IMTDCs can represent about 70 percent of the total cost.

Business cycles

All three U.S. producers and 14 of 17 importers indicated that the IMTDC market was not subject to business cycles. However, importers *** and *** reported that oil and gas market demand affects the demand for IMTDCs. Importer *** reported that the agriculture and construction markets are subject to seasonal demand, and that demand typically peaks at the end of the calendar year as a result of orders for the next season. These three importers reported that demand in both the gas and oil sectors and for agricultural and construction goods have decreased since 2012. No producers or importers reported distinct conditions of competition for IMTDCs.

Petitioner stated that IMTDC demand is derived from a variety of end-use sectors and generally tracks overall economic conditions more closely than any particular market segment (see figure II-1). It added that demand is driven by general industrial and construction demand, including building and road construction, demand in the food and beverage sectors, and demand in the oil and gas sectors.¹⁹

Figure II-1
GDP: Percent change from preceding period in real GDP in the United States, seasonally adjusted at annual rates, in percent, January 2012-September 2015



Source: BEA, Table 1.1.1. Percent Change From Preceding Period in Real Gross Domestic Product. http://www.bea.gov/iTable/index_nipa.cfm. Accessed December 1, 2015.

¹⁹ Petitioner’s postconference brief, p. 9-10.

Demand trends

A plurality of firms reported fluctuating U.S. demand for IMTDCs since January 1, 2012 (table II-3). U.S. producers reported that demand outside the United States fluctuated or decreased, while importers' responses were more varied. Importer *** reported that demand has become less predictable since 2012, and that U.S. customs and port costs have doubled.

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

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand inside the United States:				
U.S. producers	1	0	0	2
Importers	4	2	1	7
Demand outside the United States:				
U.S. producers	0	0	1	2
Importers	3	2	4	4

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

At the conference and in its postconference brief, Baldor described the oil and gas industry as an important demand segment for IMTDCs, especially heavy-duty sheaves. It added that the slowdown in the oil and gas industry in 2015 was a major cause of slowing demand for IMTDCs in 2015 compared to 2014.²⁰ Baldor also stated that demand from the mining, turbine and power transmission, and engine markets is also slowing or declining.²¹ However, TB Woods stated that oil and gas was only one of many IMTDC demand segments. It also indicated that while demand in the oil and gas sector was down, demand had increased in nonresidential construction, and was flat in the farm machinery and equipment sector.²²

Substitute products

One producer and 12 importers indicated that there were no substitutes for IMTDCs. However, two producers (***) and three importers (***) indicated that there were substitutes, including steel, nylon (for elevator applications), and plastic pulleys (for small applications that do not require significant horsepower, like HVAC units). ***.

Baldor stated that mechanical transfer drive components made from sintered steel powder or machined from steel bars have the same characteristics and uses as those made from cast-iron, and are viewed as perfect substitutes in the market.²³ Baldor continued that

²⁰ Conference transcript, pp. 79-80 (McCartney and Moore). See also Chinese respondents' postconference brief, pp. 22-23, with data on the oil and gas rig count.

²¹ Baldor's postconference brief, p. 37.

²² Petitioner's postconference brief, p. 11, citing Federal Reserve of St. Louis Nonresidential Construction Data and Farm Machinery and Equipment Data.

²³ Conference transcript, pp. 9 and 28 (Luberda).

purchasers buy components made from a variety of these production processes, and that specifications from the MPTA do not specify production methods or required materials from which components must be produced.²⁴ It also stated that a purchaser would not care whether a component is made out of sintered steel powder, steel bar, or cast iron.²⁵

On the other hand, petitioner argued that if a customer requires MTDCs with specific requirements, a product must be custom-produced and will not necessarily be interchangeable with MTDCs made from sintered steel powder. It also argued that sintered steel and steel bar MTDCs are typically used only in fractional horsepower motors and other small machinery whereas IMTDCs are used in larger scale machinery as well.²⁶

Additionally, U.S. *** reported that changes in prices of steel components affect the prices of IMTDCs, and that some subject producers offer steel MTDCs at prices as low as or lower than IMTDC prices. Importer *** reported that pressed steel pulleys and plastic pulleys for auto applications are less expensive than IMTDCs.

SUBSTITUTABILITY ISSUES

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

Lead times

IMTDCs are primarily sold from inventory. U.S. producers reported that *** percent of their commercial shipments were shipped from inventory, with lead times averaging *** days. The remaining domestic IMTDCs that are produced-to-order have lead times averaging *** days. Importers reported that *** percent of their commercial shipments were sold from inventories, with lead times averaging *** days, and *** percent of shipments were produced-to-order, with lead times averaging *** days. The remaining *** percent of their commercial shipments came from foreign inventories, with lead times averaging *** days.

Petitioner argued that the large inventories of imported product have made it difficult to differentiate its product from subject product on the basis of lead time.²⁷

²⁴ Conference transcript, pp. 19-20 (McCartney); Baldor's postconference brief, pp. 16-17.

²⁵ Conference transcript, pp. 45-46 (McCartney, Moore). ***. Baldor's postconference brief, p. 15.

²⁶ Petitioner's postconference brief, exh. 1, pp. 7-8.

²⁷ Conference transcript, pp. 100-101 (Crist).

Factors affecting purchasing decisions

Purchasers responding to lost sales and lost revenue allegations²⁸ were asked to identify the main factors in their purchasing decisions for IMTDCs. The major purchasing factors identified by firms include customer preference, quality, availability, cost, and delivery.

Comparison of U.S.-produced and imported product

In order to determine whether U.S.-produced IMTDCs can generally be used in the same applications as imports from Canada and China, U.S. producers and importers were asked whether the products can “always,” “frequently,” “sometimes,” or “never” be used interchangeably. As shown in table II-4, the vast majority of producers and importers find IMTDCs from all sources always or frequently interchangeable. One importer, ***, indicated that products from all sources are never interchangeable because each part must be validated for design and performance in specific applications. It stated that in some cases, design may be specific to each supplier, and each part must go through the validation process prior to purchase. Importer *** reported that IMTDCs from China are never interchangeable with domestically produced product. Petitioner argued that IMTDCs from Canada and China are highly interchangeable with one another, and compete in the same manner in the U.S. market.²⁹

Table II-4
IMTDCs: Interchangeability between IMTDCs produced in the United States and in other countries, by country pairs

Country pair	U.S. producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. Canada	2	1	0	0	7	4	0	1
United States vs. China	2	1	0	0	5	7	0	2
Canada vs. China	2	1	0	0	5	5	0	1
United States vs. Mexico	2	1	0	0	6	5	0	1
United States vs. Other	1	1	0	0	4	5	0	1
Canada vs. Mexico	2	1	0	0	6	4	0	1
Canada vs. Other	1	1	0	0	4	5	0	1
China vs. Mexico	2	1	0	0	5	5	0	1
China vs. Other	1	1	0	0	4	5	0	1
Mexico vs. Other	1	1	0	0	5	4	0	1

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

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

²⁸ This information is compiled from responses by purchasers identified by petitioner to the lost sales and lost revenue allegations. See Part V for additional information.

²⁹ Conference transcript, p. 15 (Price); petitioner’s postconference brief, p. 8.

In addition, producers and importers were asked to assess how often differences other than price were significant in sales of IMTDCs from the United States, subject, or nonsubject countries. As seen in table II-5, both producers and importers were split over the significance of differences among IMTDCs from different sources. U.S. producers *** and *** reported that low prices are sufficient to overcome any perceived quality or advantages in other factors. TB Woods stated that it used to compete on the basis of quality, brand, and availability, but that low-priced subject imports, available in large inventories, have made price the major factor considered by purchasers.³⁰ U.S. importer *** reported that every sourcing decision is based first on quality and on-time delivery, and importer *** reported that transportation costs are always an important factor other than price.

Table II-5
IMTDCs: Significance of differences other than price between IMTDCs produced in the United States and in other countries, by country pair

Country pair	U.S. producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. Canada	0	2	0	1	3	3	2	3
United States vs. China	0	2	0	1	2	4	5	3
Canada vs. China	0	2	0	1	2	4	2	3
United States vs. Mexico	0	2	0	1	2	4	3	3
United States vs. Other	0	1	0	1	2	3	3	2
Canada vs. Mexico	0	2	0	1	2	4	2	3
Canada vs. Other	0	1	0	1	2	3	2	3
China vs. Mexico	0	2	0	1	2	4	3	2
China vs. Other	0	1	0	1	2	3	2	3
Mexico vs. Other	0	1	0	1	2	3	3	2

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

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

³⁰ Conference transcript, p. 93 (Coder); petitioner's postconference brief, p. 8.

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 alleged subsidies and dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of two domestic integrated firms and one domestic finisher that are believed to have accounted for approximately 60-70 percent of U.S. casting of IMTDCs and approximately 90 percent of U.S. finishing of IMTDCs during 2014.

U.S. PRODUCERS

Shortly after the petitions were filed, the Commission issued U.S. producers' questionnaires to three firms that were believed to be domestic integrated producers (*i.e.*, they perform both casting and finishing operations) and five firms that were believed to be domestic finishers based on information contained in the petitions,¹ and to three additional firms identified from other industry sources as possible U.S. producers of IMTDCs. Two domestic integrated firms (Martin Sprocket and petitioner TB Woods) and one domestic finishing firm (Baldor), all identified in the petitions, provided useable data on their U.S. production operations. One domestic integrated producer identified in the petitions ("Goldens") did not provide a response to the Commission's questionnaire. The petitioner estimated that Goldens produced *** of IMTDCs in its U.S. facility in 2014. Of the five firms that were identified by the petitioner as domestic finishers (*i.e.*, B&B, Baldor, Custom, Maurey, and Torque), only Baldor completed a producer questionnaire. The petitioner identified Baldor as the largest domestic finishing firm for IMTDCs. *** responded to the Commission's questionnaire indicating that it does not produce or import iron pulleys but that it manufactures pulleys from aluminum and molded plastic. *** did not provide a questionnaire response, although *** separately estimated that it produces about *** of IMTDCs that are four inches or greater in outside diameter each year.² The petitioner estimated that during 2014, *** finished *** combined.

The Commission later issued U.S. producer questionnaires to *** additional firms that are possible domestic casters of unfinished IMTDCs and *** additional firms that are possible domestic finishers of IMTDCs.³ These additional firms were identified by participating

¹ Petitions, vol. I, exhs. I-1, I-2, and I-4. These questionnaires were re-issued to responding firms following changes to the scope language that excluded IMTDCs of less than four inches in outside diameter and that adjusted the carbon content threshold from 1.5 to 1.7 percent by weight or above.

² *** reported that it produces *** of all sizes of IMTDCs, *** percent of which are four inches or greater in outside diameter.

³ Staff issued questionnaires to *** additional firms identified by Baldor as its major domestic suppliers of unfinished IMTDCs (***) and to *** additional firm (***) identified by Baldor as a finisher of
(continued...)

respondents in the preliminary phase of these investigations. Of these firms, *** that were named as possible finishers notified the Commission that they were not U.S. producers of IMTDCs. None of the other additional firms identified by the respondents provided a response to the Commission’s request for information.⁴

Staff believes that the three questionnaire responses received from Baldor, Martin Sprocket, and TB Woods represented approximately 60-70 percent of U.S. casting and approximately 90 percent of U.S. finishing of IMTDCs during 2014. Table III-1 lists responding integrated U.S. producers and finishers of IMTDCs, their production locations, positions on the petitions, and shares of reported 2014 production.

Table III-1
IMTDCs: U.S. producers, their position on the petitions, location of production, and share of reported production, 2014

Firm	Position on petitions	Production location(s)	Share of casting ¹ (percent)	Share of finishing ¹ (percent)
Baldor	***	Weaverville, NC	***	***
Martin Sprocket	***	Arlington, TX Abilene, TX Ft. Worth, TX Paragould, AR Dallas, TX	***	***
TB Woods	Support	Chambersburg, PA	***	***
Total			100.0	100.0

¹ Share of production based on quantity in pounds.

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

Related parties

Table III-2 presents information on U.S. producers’ ownership and related and/or affiliated firms. As shown, *** are related to foreign producers of the subject merchandise. In addition, as discussed in greater detail below, *** responding producers directly import the subject merchandise and *** purchases the subject merchandise from U.S. importers.

(...continued)

IMTDCs. Staff also issued questionnaires to *** additional firms identified by Caterpillar as its major domestic suppliers of finished IMTDCs (***).

⁴ None of the casting firms identified by Baldor responded to the Commission’s request for information. *** firms identified as possible finishers by Caterpillar (***) responded that they were not producers of the IMTDCs as described in Commerce’s scope. Staff requested that ***, so that staff could survey the largest of these potential producers of finished IMTDCs. *** was able to provide listings for several product types. For sheaves, *** reported that they did not produce the subject merchandise. For pulleys, *** reported that they did not produce the subject merchandise. For flywheels, *** reported that it did not produce the subject merchandise. See emails from ***, November 19, 2015, and questionnaire responses from ***.

Table III-2
IMTDCs: U.S. producers' ownership, related and/or affiliated firms, since January 2012

* * * * *

Changes in operations

*** responding domestic producers reported changes in their operations related to the production of IMTDCs since January 1, 2012. Details concerning the changes reported are presented in table III-3.

Table III-3
IMTDCs: U.S. producers' reported changes in operations, since January 1, 2012

* * * * *

PRODUCTION-RELATED ACTIVITIES

In the Commission's producer questionnaire, firms with finishing operations but not casting operations were asked to describe the source and extent of their capital and investment, the quantity and type of parts sourced in the United States, the value-added operations performed in the United States, the technical expertise involved in the U.S. finishing operations, and any other costs or activities in the United States directly leading to the production of finished IMTDCs. In addition, firms with both casting and finishing operations in the United States were asked to describe and quantify the amount of capital investment needed to produce IMTDCs for casting and for finishing separately. Baldor's, Martin Sprocket's, and TB Wood's responses are summarized below.

Capital investments

Finisher Baldor reported in its questionnaire response that *** was the source of its capital and investments and that the current machinery, building, and land replacement cost for its current domestic capacity for IMTDC finishing operations is \$***. Baldor also estimated that it would cost \$*** in machining equipment alone to build a new finishing facility like the one it currently uses to machine castings into finished IMTDCs.⁵

Integrated producer TB Woods reported in its questionnaire response that a total capital investment of about \$*** is required to establish a foundry capable of casting IMTDCs. It also reported that a total capital investment of about \$*** would establish a machine shop capable of finishing IMTDC blanks. It added that the capital investment related to finishing/machining therefore represents *** percent of the total capital investment for an

⁵ Baldor's postconference brief, exh. 2, p. 1.

integrated (foundry plus finishing) manufacturer. Integrated producer Martin Sprocket reported in its questionnaire response that the amount of capital needed to install a foundry to produce unfinished IMTDC castings is *** larger than the amount of capital necessary to install a finishing line for the unfinished IMTDCs.

Technical expertise

With regard to the Commission's request of finisher Baldor to describe the technical expertise involved in the U.S. finishing operations, the firm responded in its questionnaire that finishing operations require "****." It adds that "****." In its postconference brief, Baldor also noted that the workers employed at its North Carolina facility must undertake substantial training to acquire the technical skills involved in the processing of cast blanks into finished product including extensive mathematical studies.⁶

Integrated producers Martin Sprocket and TB Woods reported in their questionnaire responses that finishing/machining of IMTDC castings requires that an operator working the machine tool ****. They added that **** technical expertise is required for the finishing operation.

Value added

Finisher Baldor described in its questionnaire response the value-added operations in its finishing operations for IMTDCs as including drilling, turning, hobbing, broaching, flanging, coating, testing, and inspecting. According to financial data reported in its producer questionnaire, the costs involved in Baldor's finishing operations accounted for *** percent to *** percent of the total cost of goods sold of the finished IMTDC during the full annual periods from 2012 to 2014 (table VI-6). However, the average unit values of Baldor's domestic purchases of U.S.-origin unfinished IMTDCs as a share of the average unit values of Baldor's U.S. commercial shipments of finished IMTDCs was lower, ranging from *** percent to *** percent.

Integrated producers Martin Sprocket and TB Woods characterized the value added through finishing/machining as approximately *** percent of the total cost of production for their finished IMTDCs.⁷ As previously explained in Part I, this value-added estimate varies considerably from the financial data reported in TB Woods' and Martin Sprocket's producer questionnaire responses. The firms' ratios of conversion costs to cost of goods sold, which ranged from *** percent for TB Woods and *** percent for Martin Sprocket during the full annual periods from 2012 to 2014 (table VI-6), however, are not comparable to the companies' separately provided value-added estimates of the finishing operations alone because these financial ratios include all costs related to both casting and finishing operations. The average unit values of Martin Sprocket's U.S. imports of unfinished IMTDCs from China as a share of the

⁶ Baldor's postconference brief, p. 23.

⁷ Petitioner's postconference brief, exh. 1, p. 17; and questionnaire response of ****.

average unit values of Martin Sprocket's total U.S. commercial shipments of domestically finished IMTDCs was lower, ranging from *** percent to *** percent.

Employment levels

During 2014, finisher Baldor reported the employment of *** production and related workers. The responding integrated producers Martin Sprocket and TB Woods reported the employment of *** production and related workers combined (see table III-13).

Sourcing of parts

With regard to the Commission's request of finisher Baldor to describe the quantity and type of parts sourced in the United States, the firm responded that all of the unfinished castings that it further finishes in its domestic facilities are sourced in the United States from the following foundries: ***.⁸ During 2014, Baldor's U.S. purchases of unfinished castings produced in the United States amounted to *** pieces (\$***).

Other costs and activities

Domestic finisher Baldor described other costs or activities in the United States directly leading to the production of finished IMTDCs as including ***.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Finished IMTDCs

Baldor's, Martin Sprocket's, and TB Woods' combined U.S. capacity, production, and capacity utilization data for finished IMTDCs are presented in table III-4 and figure III-1.⁹ These data include IMTDCs that are finished in the United States regardless of casting location. The production data presented are broken out separately for the following sources of castings for use in the firms' finishing operations: (1) using own firm's unfinished IMTDCs, (2) using purchased domestic unfinished IMTDCs, (3) using imported unfinished IMTDCs from subject sources, and (4) using imported unfinished IMTDCs from nonsubject sources (for which none were reported).

⁸ None of these foundries were identified in the petitions as U.S. producers of IMTDCs. All of these foundries were issued producer questionnaires following the petitioner's change in scope language as described earlier in this part of the report; however, none of the foundries responded to the Commission's request for information.

⁹ Martin Sprocket's reported data are ***.

Table III-4

IMTDCs: U.S. producers' capacity, production, and capacity utilization for finished IMTDCs, 2012-14, January to September 2014, and January to September 2015

* * * * *

Figure III-1

IMTDCs: U.S. producers' capacity, production, and capacity utilization for finished IMTDCs (in pounds and in pieces), 2012-14, January to September 2014, and January to September 2015

* * * * *

The reported data show that the domestic producers' aggregate capacity fluctuated upward in terms of pieces and pounds during the annual periods from 2012 to 2014 within a relatively narrow range. Reported capacity in terms of pieces and pounds was lower during January-September 2015 than it was during January-September 2014.

*** of the three firms' combined finished IMTDCs production in terms of pieces is from unfinished IMTDCs cast in their own domestic facilities, whereas *** percent is from unfinished IMTDCs ***. The remaining *** percent of production is from *** cast IMTDCs. Aggregate production in terms of pounds increased by *** percent from 2012 to 2014, but was *** percent lower in January-September 2014 than in January-September 2015. Production in terms of pieces increased by *** percent from 2012 to 2014 but was *** percent lower in January-September 2014 than in January-September 2015.

Capacity utilization increased slightly in terms of pounds from *** percent in 2012 to *** percent in 2014. Capacity utilization during January-September 2015 was lower at *** percent as compared to *** percent in January-September 2014. Capacity utilization in terms of pieces increased from *** percent in 2012 to *** percent in 2013 and 2014. Capacity utilization during January-September 2015 was higher at *** percent as compared to *** percent in January-September 2014.

Unfinished IMTDCs (not further finished by firm in the United States)

TB Woods exports a portion of the unfinished IMTDCs it casts in the United States to *** Mexico for finishing. It reported that the castings that it exports to its Mexican subsidiary generally are *** castings. Thus, these exports accounted for only *** percent of the total castings it produced in the United States in terms of pounds in 2014 but *** percent in terms of pieces. *** of the IMTDCs that are finished in Mexico using U.S. castings are then shipped back to TB Woods in the United States for sale.¹⁰ TB Woods' capacity, production, and capacity utilization data for these unfinished IMTDCs not used by TB Woods in the downstream finished

¹⁰ As a share of its exports of castings to its affiliate in Mexico, TB Woods' reported U.S. imports of finished IMTDCs from its Mexican affiliate accounted for *** percent in 2012, *** percent in 2013, and *** percent in 2014.

IMTDC production in the United States are presented in table III-5 and figure III-2. TB Woods' capacity for unfinished IMTDCs *** during the annual periods. Production and capacity utilization of these castings *** in terms of pounds and pieces from 2012 to 2014 and were *** in January-September 2014 than in January-September 2015.

Table III-5

IMTDCs: U.S. producer's capacity, production, and capacity utilization for unfinished IMTDCs not used by the firm in the downstream finished IMTDC production in the United States, 2012-14, January to September 2014, and January to September 2015

* * * * *

Figure III-2

IMTDCs: U.S. producers' capacity, production, and capacity utilization for unfinished IMTDCs not used by firm in downstream finished IMTDC production in the United States (in pounds and pieces), 2012-14, January to September 2014, and January to September 2015

* * * * *

Alternative products

Finished IMTDCs

As shown in table III-6, *** (in terms of pounds) and *** (in terms of pieces) of finished items produced by U.S. firms are IMTDCs corresponding to the scope language. *** reported that other products finished on the same equipment as IMTDCs corresponding to the scope language include ***. *** reported finishing products other than IMTDCs on the finishing equipment that is used to produce finished IMTDCs.

Table III-6

IMTDCs: U.S. producers' overall capacity and production on the same equipment as finishing operations for IMTDCs, 2012-14, January to September 2014, and January to September 2015

* * * * *

Unfinished IMTDCs

As shown in table III-7, *** (in terms of pounds) and *** (in terms of pieces) of castings produced by U.S. firms are unfinished IMTDCs corresponding to the scope. As was the case with the finished items that *** produced, the company reported that other products cast on the same equipment as unfinished IMTDCs include ***. *** did not report casting items other than IMTDCs on the same casting equipment that is used to produce unfinished IMTDCs.

Table III-7

IMTDCs: U.S. producers' overall capacity and production on the same equipment as casting operations for IMTDCs, 2012-14, January to September 2014, and January to September 2015

* * * * *

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

Finished IMTDCs

Table III-8 presents U.S. producers' U.S. shipments, export shipments, and total shipments of finished IMTDCs as reported by Baldor, Martin Sprocket, and TB Woods. The data in this table include shipments of IMTDCs finished in the United States from (1) internally produced unfinished IMTDCs by Martin Sprocket and TB Woods domestically, (2) purchased unfinished IMTDCs produced in the United States (***) , and (3) imported unfinished IMTDCs from ***.¹¹ The responding producers reported that they did not import unfinished IMTDCs from *** for use in their IMTDC finishing operations. None of the responding firms reported ***. Finisher Baldor accounted for *** percent of total U.S. shipments reported by the three firms in terms of quantity (in pieces) and *** percent in terms of value. Integrated producer Martin Sprocket accounted for *** percent of total U.S. shipments reported by the three firms in terms of quantity (in pieces) and *** percent in terms of value. Integrated producer TB Woods accounted for *** percent of total U.S. shipments reported by the three firms in terms of quantity (in pieces) and *** percent in terms of value.

Table III-8

IMTDCs: U.S. producers' U.S. shipments, export shipments, and total shipments of finished IMTDCs, 2012-14, January to September 2014, and January to September 2015

* * * * *

These data show that U.S. producers' total shipments, of which approximately *** percent were U.S. shipments, increased from 2012 to 2014 in terms of quantity (in pieces) and value. Total shipments in terms of quantity (in pieces) were higher in the first three quarters of 2015 than in the first three quarters of 2014, but were lower in terms of value. Average unit

¹¹ As noted in the previous section in this part on U.S. production, *** of the three firms' combined finished IMTDCs production in terms of pieces is from unfinished IMTDCs cast in their own domestic facilities, whereas *** percent is from unfinished IMTDCs ***. The remaining *** percent of production is from *** cast IMTDCs. Thus, Table III-8 illustrates the domestic industry's U.S. shipments if the Commission were to find that finishing operations constitute sufficient production related activities to warrant including finishers in the domestic industry even if they use imported unfinished IMTDCs, except that it does not include U.S. shipments of products cast by TB Woods in the United States that are finished in Mexico and shipped to the U.S. market, which are separately identified in Table III-10.

values also increased from 2012 to 2014, but were lower during the first three quarters of 2015 as compared with the first three quarters of 2014.

*** reported export shipments of the IMTDCs they finished. Principal export markets identified *** include ***, whereas ***. Of the *** responding firms, *** was the largest exporter of finished IMTDCs, accounting for *** of domestic producers' U.S. exports during 2014 in terms of quantity (in pieces) and *** percent in terms of value. Exports accounted for about *** percent of U.S. producers' combined total shipments during 2014.

Unfinished IMTDCs (not further finished by firm in the United States)

*** IMTDC caster that reported shipments of unfinished IMTDCs was ***. As previously noted, TB Woods exports a portion of the unfinished IMTDCs it casts in the United States to *** Mexico for finishing. TB Woods' shipments for these unfinished IMTDCs not used by TB Woods in the downstream finished IMTDC production in the United States are presented in table III-9. ***. Exports of TB Woods' IMTDC castings to *** Mexico *** since 2012 in terms of both quantity (in pieces) and value.

Table III-9

IMTDCs: TB Woods' export shipments of unfinished IMTDCs, 2012-14, January to September 2014, and January to September 2015

* * * * *

U.S. shipments for apparent U.S. consumption calculation

Table III-10 presents U.S. shipments for purposes of the apparent U.S. consumption calculation in the body of this report. These U.S. shipment data reflect U.S. producers' U.S. shipments of finished IMTDCs produced from unfinished IMTDCs cast in the United States plus U.S. producers' U.S. shipments of unfinished IMTDCs produced in the United States not already reported as a finished IMTDC. The data also include U.S. importers' U.S. shipments of finished IMTDCs that were cast/forged in the United States but finished abroad (Mexico). This quantity measure excludes any IMTDCs finished in the United States from imported unfinished IMTDCs, as those are reported for the purposes of apparent consumption as imports. The value of U.S. producers' U.S. shipments for apparent U.S. consumption purposes reflects the total shipment values of the quantity measures described above, but also adds in the incremental value attributable to finishing operations conducted in the United States on imports of unfinished IMTDCs.

Table III-10

IMTDCs: U.S. producers' U.S. shipments for purposes of apparent U.S. consumption, 2012-14, January to September 2014, and January to September 2015

* * * * *

U.S. PRODUCERS' INVENTORIES

Table III-11 presents U.S. producers' end-of-period inventories of finished IMTDCs and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments during 2012-14, January to September 2014, and January to September 2015 as reported by Baldor, Martin Sprocket, and TB Woods. The data in this table include inventories of IMTDCs finished in the United States from (1) internally produced unfinished IMTDCs by Martin Sprocket and TB Woods domestically, (2) purchased unfinished IMTDCs produced in the United States (***) , and (3) imported unfinished IMTDCs from ***.¹² There were *** reported inventories of unfinished castings held by these firms.

Table III-11
IMTDCs: U.S. producers' inventories of finished IMTDCs, 2012-14, January to September 2014, and January to September 2015

* * * * *

*** domestic producers reported holding end-of-period inventories of finished IMTDCs, *** accounted for the largest share of inventories, holding *** percent of the aggregate. Aggregate data show that inventories of finished IMTDCs increased during 2012-14 but were lower in the first three quarters of 2015 than in the first three quarters of 2014. U.S. producers' inventories were equivalent to between *** percent of U.S. producers' total shipments during 2012-14, but reached *** percent during the first three quarters of 2014 and *** percent during the first three quarters of 2015.

On a firm-by-firm basis, *** reported that its inventories fell from *** percent of its total shipments during 2012 to *** percent in 2014, and was *** percent during the first three quarters of 2015. *** reported that its inventories fell from *** percent of its total shipments during 2012 to *** percent in 2014, and was *** percent during the first three quarters of 2015. *** reported that its inventories increased from *** percent of its total shipments during 2012 to *** percent in 2014, and was *** percent during the first three quarters of 2015.

¹² As noted in the previous section in this part on U.S. production, *** of the three firms' combined finished IMTDCs production in terms of pieces is from unfinished IMTDCs cast in their own domestic facilities, whereas *** percent is from unfinished IMTDCs imported from ***. The remaining *** percent of production is from *** cast IMTDCs.

U.S. PRODUCERS' IMPORTS AND PURCHASES

U.S. producers' imports and purchases of IMTDCs are presented in table III-12.

Table III-12

IMTDCs: U.S. producers' subject imports and domestic purchases of subject imports, 2012-14, January to September 2014, and January to September 2015

* * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-13 shows U.S. producers' employment-related data reported by finisher Baldor and by integrated producers Martin Sprocket and TB Woods. Combined U.S. producers' employment for finisher Baldor and integrated producers Martin Sprocket and TB Woods measured by PRWs increased from 2012 to 2014, but was lower during the first three quarters of 2015 as compared with the first three quarters of 2014. In fact, almost all employment indicators increased overall from 2012 to 2014, whereas only hours worked and unit labor costs were higher during January-September 2015 than reported in January-September 2014. Productivity remained stable within a range of *** pieces per hour.

Table III-13

IMTDCs: U.S. producers' employment related data, 2012-14, January to September 2014, and January to September 2015

* * * * *

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

U.S. IMPORTERS

The Commission issued importer questionnaires to a total of 66 firms believed to be possible importers of subject IMTDCs, as well as to all U.S. producers of IMTDCs.¹ Usable questionnaire responses were received from 18 companies. Table IV-1 lists all responding U.S. importers of IMTDCs from Canada, China, and other sources, their locations, and their shares of reported U.S. imports of IMTDCs in 2014.

Table IV-1

IMTDCs: U.S. importers, their headquarters, and share of total imports by source (based on pieces), 2014

* * * * *

For purposes of identifying possible importers of the subject merchandise to which questionnaires were issued in these investigations, staff focused on available information pertaining to the following three HTS statistical reporting numbers: 8483.50.6000, 8483.50.9040, and 8483.90.8080. The petitioner relied on these three numbers as the best available for its calculation of U.S. imports in its petitions, although it noted that these numbers are broader product categories which likely include merchandise that is outside the scope of the petitions.² The import value data based on these three HTS statistical reporting numbers presented in the petitions show that subject imports from Canada totaled \$103.5 million in 2012, \$114.7 million in 2013, \$133.3 million in 2014, \$89.7 million during the first eight months of 2014, and \$78.7 million in the first eight months of 2015. Subject imports from China totaled \$126.7 million in 2012, \$121.7 million in 2013, \$137.9 million in 2014, \$92.7 million during the first eight months of 2014, and \$107.9 during the first eight months of 2015. Imports from all other sources combined (i.e., other than subject Canada and China) totaled \$474.6 million in 2012, \$415.8 million in 2013, \$445.6 million in 2014, \$301.4 million during the first eight months of 2014, and \$296.5 during the first eight months of 2015.³

¹ The Commission issued questionnaires to 18 firms identified in the petitions, along with 47 additional firms that, based on a review of data provided by U.S. Customs and Border Protection (“Customs”), are leading importers of items imported under HTS statistical reporting numbers 8483.50.6000, 8483.50.9040, and 8483.90.8080 (the primary HTS statistical reporting numbers identified in the petitions) since 2012. In addition, a questionnaire was sent to ***, a firm identified as an importer in other previously submitted questionnaire responses.

² Petitions, p. 10.

³ The petitioner noted that comparable quantity data are not available. Petitions, vol. I, p. 31 and exh. I-13.

Fifty-two of the importer questionnaires that staff issued were to leading companies identified in *** that together accounted for 52.6 percent of the total value of imports from all countries under the three primary HTS provisions identified by petitioner.⁴ Companies that responded to the Commission's questionnaires, either with data or by certifying that they did not import the subject merchandise, accounted for the following shares of 2014 imports (by value) under those provisions, according to ***:

- Canada: 72.5 percent
- China: 63.0 percent
- Mexico (nonsubject): 81.3 percent
- Other (nonsubject): 43.8 percent
- Total (subject and nonsubject): 54.3 percent

Staff also issued questionnaires to all companies identified as importers in the petitions (based on a broader proposed scope than that on which Commerce ultimately initiated its investigations). Nine of the eighteen companies identified in the petitions as importers responded (50 percent), either with data or by certifying that they did not import the subject merchandise.⁵

Staff estimate importers' questionnaire data coverage to be approximately 50 percent. However, presenting a decisive estimate is complicated by the inclusion of subject and nonsubject merchandise in the various relevant HTS provisions, the large number of potential importers identified by proprietary Customs data (especially compared to the relatively small number of importers identified in the petition), the diversity of sizes and applications of the product at issue (making it difficult to identify relevant importers by business line or average unit value of imports), and the shifting definition of the subject merchandise itself.

U.S. IMPORTS

U.S. imports from subject and nonsubject sources

Finished IMTDCs

Table IV-2 and figure IV-1 presents data for U.S. imports of finished IMTDCs from Canada, China, Mexico, and all other sources. These import data for finished IMTDCs are based on the country in which the unfinished IMTDC was cast/forged and do not necessarily correspond to the country of finishing and/or country of exportation. The responding importers reported that the vast majority of imports of IMTDCs were finished items. Of the total reported

⁴ The remaining 47.4 percent of the total value of imports under these three primary HTS provisions were imported by more than 3,000 smaller importing firms.

⁵ Three of the importers identified in the petitions indicated in their responses that they did not import IMTDCs. Six of the importers identified in the petitions indicated that they imported IMTDCs and provided the information requested by the Commission.

finished and unfinished IMTDCs imported from Canada, China, and Mexico during 2014, *** were finished (based on quantity in pieces). Of the total reported finished and unfinished IMTDCs imported from all other countries during 2014, *** percent were finished (based on quantity in pieces).

Table IV-2

IMTDCs: U.S. imports of finished IMTDCs, by source, 2012-14, January to September 2014, and January to September 2015

* * * * *

Figure IV-1

IMTDCs: U.S. import volumes and average unit values of imported finished IMTDCs, 2012-14, January to September 2014, and January to September 2015

* * * * *

Imports of finished IMTDCs from the subject countries increased by *** percent based on quantity (in pieces) and *** percent based on value from 2012 to 2013, but decreased by *** percent based on quantity (in pieces) and *** percent based on value from 2013 to 2014, a level in 2014 that was *** percent higher in terms of quantity (in pieces) and *** percent higher in terms of value that that reported in 2012. Imports were *** percent lower based on quantity (in pieces) and *** percent lower based on value during the first three quarters of 2015 compared with the first three quarters of 2014. As a share of total imports, subject imports of finished IMTDCs increased from *** percent in 2012 to *** percent, before decreasing to *** percent in 2014. Subject imports accounted for *** percent of total imports in the first three quarters of 2014 and *** percent of total U.S. imports in the first three quarters of 2015. The average unit values of subject finished imports increased overall from 2012 to 2014, but were lower in the first three quarters of 2015 compared with the first three quarters of 2014.

Mexico was one of the largest nonsubject sources for U.S. imports of finished IMTDCs, accounting for *** percent of the quantity of total U.S. imports of finished IMTDCs in 2014. U.S. imports of finished IMTDCs from all nonsubject countries increased from 2012 to 2014, but were lower during the first three quarters of 2015 than in the comparable period of 2014. The average unit values of nonsubject imports decreased from 2012 to 2014, and were lower in the first three quarters of 2015 compared with the first three quarters of 2014.

Unfinished IMTDCs

Table IV-3 presents data for U.S. imports of unfinished IMTDCs. These data show that there are reported U.S. imports of unfinished IMTDCs from China and Mexico. The responding importers reported that unfinished IMTDCs from China and Mexico accounted for a *** of total imports of IMTDCs. Of the total reported finished and unfinished IMTDCs imported from Canada during 2014, *** percent were unfinished (based on quantity in pieces). Of the total reported finished and unfinished IMTDCs imported from Mexico during 2014, *** percent were unfinished (based on quantity in pieces).

Table IV-3

IMTDCs: U.S. imports of unfinished IMTDCs, by source, 2012-14, January to September 2014, and January to September 2015

* * * * *

Imports from China accounted for *** of the total imports of unfinished IMTDCs reported by U.S. importers since 2012. Imports of unfinished IMTDCs from China increased overall from 2012 in terms of quantity (in pieces) from 2012 to 2014, but were lower during the first three quarters of 2015 compared with the first three quarters of 2014. The average unit values of subject unfinished imports from China (ranging from \$*** to \$*** per piece) increased from 2012 to 2014, and were higher in the first three quarters of 2015 compared with the first three quarters of 2014.

All finished and unfinished IMTDCs

Table IV-4 and figure IV-2 presents data for U.S. imports of all IMTDCs from Canada, China, Mexico, and all other sources. These import data include unfinished IMTDCs, as well as finished IMTDCs, and are based on the country in which the unfinished IMTDC was cast/forged. Therefore, the data presented may not necessarily correspond to the country of finishing and/or country of exportation.

Imports of unfinished and finished IMTDCs combined from the subject countries increased by 46.2 percent based on quantity (in pieces) and 24.8 percent based on value from 2012 to 2013, but decreased by 26.0 percent based on quantity (in pieces) and 5.5 percent based on value from 2013 to 2014, a level in 2014 that was 8.1 percent higher in terms of quantity (in pieces) and 18.0 percent higher in terms of value than that reported in 2012. Imports were 1.4 percent lower based on quantity (in pieces) and 5.7 percent lower based on value during the first three quarters of 2015 compared with the first three quarters of 2014. As a share of total imports, subject imports of finished and unfinished IMTDCs increased from 66.8 percent in 2012 to 74.8 percent in 2013, before decreasing to 58.1 percent in 2014. Subject imports accounted for 58.6 percent of total imports in the first three quarters of 2014 and 66.0 percent of total U.S. imports in the first three quarters of 2015. The average unit values of subject finished imports increased overall from 2012 to 2014, but were lower in the first three quarters of 2015 compared with the first three quarters of 2014.

U.S. imports of finished and unfinished IMTDCs from all nonsubject countries increased from 2012 to 2014, but were lower during the first three quarters of 2015 than in the comparable period of 2014. The average unit values of nonsubject imports decreased from 2012 to 2014, and were lower in the first three quarters of 2015 compared with the first three quarters of 2014.

Table IV-4

IMTDCs: U.S. imports of all IMTDCs (finished and unfinished combined), by source, 2012-14, January to September 2014, and January to September 2015

Item	Calendar year			January to September	
	2012	2013	2014	2014	2015
	Quantity (pieces)				
U.S. imports from.-- Canada	***	***	***	***	***
China	***	***	***	***	***
Subject sources	1,859,087	2,718,078	2,009,197	1,503,227	1,482,054
Mexico	569,305	568,829	557,435	446,026	421,939
All other sources	353,316	349,244	893,316	615,203	342,200
Nonsubject sources	922,621	918,073	1,450,751	1,061,229	764,139
Total U.S. imports	2,781,708	3,636,151	3,459,948	2,564,456	2,246,193
	Value (1,000 dollars)				
U.S. imports from.-- Canada	***	***	***	***	***
China	***	***	***	***	***
Subject sources	34,434	42,990	40,629	30,463	28,739
Mexico	14,903	14,364	14,397	11,138	11,162
All other sources	27,974	30,000	39,855	26,984	15,029
Nonsubject sources	42,877	44,363	54,253	38,123	26,190
Total U.S. imports	77,311	87,353	94,882	68,586	54,929
	Unit value (dollars per piece)				
U.S. imports from.-- Canada	***	***	***	***	***
China	***	***	***	***	***
Subject sources	18.52	15.82	20.22	20.27	19.39
Mexico	26.18	25.25	25.83	24.97	26.45
All other sources	79.18	85.90	44.61	43.86	43.92
Nonsubject sources	46.47	48.32	37.40	35.92	34.27
Total U.S. imports	27.79	24.02	27.42	26.74	24.45

Table continued on following page.

Table IV-4--Continued

IMTDCs: U.S. imports of all IMTDCs (finished and unfinished combined), by source, 2012-14, January to September 2014, and January to September 2015

Item	Calendar year			January to September	
	2012	2013	2014	2014	2015
	Share of quantity (percent)				
U.S. imports from.-- Canada	***	***	***	***	***
China	***	***	***	***	***
Subject sources	66.8	74.8	58.1	58.6	66.0
Mexico	20.5	15.6	16.1	17.4	18.8
All other sources	12.7	9.6	25.8	24.0	15.2
Nonsubject sources	33.2	25.2	41.9	41.4	34.0
Total U.S. imports	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.-- Canada	***	***	***	***	***
China	***	***	***	***	***
Subject sources	44.5	49.2	42.8	44.4	52.3
Mexico	19.3	16.4	15.2	16.2	20.3
All other sources	36.2	34.3	42.0	39.3	27.4
Nonsubject sources	55.5	50.8	57.2	55.6	47.7
Total U.S. imports	100.0	100.0	100.0	100.0	100.0

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

Figure IV-2

IMTDCs: U.S. import volumes and average unit values of all imported IMTDCs (finished and unfinished combined), 2012-14, January to September 2014, and January to September 2015

* * * * * * *

Negligible imports

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.⁶ Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the

⁶ Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.⁷

As shown in table IV-5, reported imports from Canada accounted for *** percent of the total reported imports of IMTDCs by quantity (in pieces) and *** percent of total reported imports of IMTDCs by value during the 12-month period immediately preceding the filing of the petitions (i.e., October 2014 through September 2015). Reported imports from China accounted for *** percent of the total reported imports of IMTDCs by quantity (in pieces) and *** percent of total reported imports of IMTDCs by value during the applicable 12-month period.

Table IV-5
IMTDCs: U.S. imports in the 12-month period immediately preceding the filing of the petitions, October 2014 through September 2015

Item	October 2014 to September 2015			
	Quantity (pieces)	Share of quantity (percent)	Value (\$1,000s)	Share of value (percent)
U.S. imports from.-- Canada	***	***	***	***
China	***	***	***	***
Subject sources	1,988,024	63.3	38,905	47.9
Mexico	533,348	17.0	14,421	17.8
All other sources	620,313	19.7	27,900	34.3
Nonsubject sources	1,153,661	36.7	42,320	52.1
Total U.S. imports	3,141,685	100.0	81,225	100.0

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

Cumulation

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Certain information concerning these factors is presented in Part II of this report. Information concerning fungibility in the market is presented below.

Table IV-6 presents data for U.S. producers' and U.S. importers' commercial U.S. shipments of unfinished and finished IMTDCs during 2014, by type of component (i.e., bushings, flywheels, sheaves (other than flywheels), and other). *** commercial U.S. shipments of domestic, Canadian, and Chinese IMTDCs were finished components during 2014 and *** commercial U.S. shipments of IMTDCs from nonsubject sources were finished components.

⁷ Section 771 (24) of the Act (19 U.S.C § 1677(24)).

*** of U.S. commercial shipments of domestically produced and imported IMTDCs during 2014 were sheaves (including flywheels).

Table IV-6
IMTDCs: Commercial U.S. shipments of U.S.-produced and imported IMTDCs, by product type and source, 2014

* * * * *

U.S. producers and importers of IMTDCs from Canada and China reported that *** percent, *** percent, and *** percent of their IMTDC U.S. commercial shipments, respectively, during 2014 were sheaves (other than flywheels). Bushings accounted for *** of the U.S. and Canadian IMTDCs, whereas flywheels accounted for *** of the U.S. commercial shipments of IMTDCs imported from China. Other types of IMTDCs (such as synchronous sheaves, hubs, tensioners, gears, flexplates, brackets, and timing pulleys) accounted for *** of U.S. commercial shipments of U.S., Canadian, and Chinese IMTDCs.

Importers from nonsubject sources reported that flywheels accounted for *** percent of their total commercial U.S. shipments in 2014, sheaves (other than flywheels) accounted for *** percent, and other types of IMTDCs (such as synchronous sheaves, balancers, tensioners, gears, dampers, hubs, converters, clutches, and covers) accounted for *** percent. Bushings accounted for *** of U.S. commercial shipments of imports from nonsubject sources in 2014.

RATIO OF SUBJECT IMPORTS TO U.S. PRODUCTION

The ratios of subject imports to U.S. production of finished and unfinished IMTDCs were presented previously in tables IV-2 and IV-3, respectively. The ratio of subject import quantity of finished IMTDCs (in pieces) to U.S. production of finished IMTDCs increased from *** percent in 2012 to *** percent in 2013, but decreased to *** percent in 2014. The ratios for finished IMTDCs were *** percent in the first three quarters of 2014 and *** percent in the first three quarters of 2015. The ratio of subject import quantity of unfinished IMTDCs (in pieces) to U.S. production of unfinished IMTDCs remained at *** percent in all periods.⁸

⁸ *** IMTDCs were finished items. Of the total reported finished and unfinished IMTDCs imported from Canada, China, and Mexico during 2014, *** were finished (based on quantity in pieces). During 2014, domestic integrated producers and finisher Baldor reported domestic production of *** finished pieces of IMTDCs, whereas integrated producer TB Woods reported domestic production of *** unfinished pieces of IMTDCs that were not further finished by it in the United States.

APPARENT U.S. CONSUMPTION AND MARKET SHARES

Apparent U.S. consumption

Table IV-7 and figure IV-3 presents calculated data on apparent U.S. consumption of IMTDCs. U.S. producers' U.S. shipment data in the calculation in this presentation include the U.S. shipment data of U.S. integrated producers Martin Sprocket and TB Woods, as well as the responding U.S. finisher Baldor.⁹

Table IV-7
IMTDCs: Apparent U.S. consumption, 2012-14, January to September 2014, and January to September 2015

Item	Calendar year			January to September	
	2012	2013	2014	2014	2015
Quantity (pieces)					
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments of imports from.--					
Canada	***	***	***	***	***
China	***	***	***	***	***
Subject sources	1,829,218	2,683,538	1,986,290	1,508,394	1,411,643
Mexico	455,768	469,868	470,090	374,985	342,214
All other sources	340,177	350,914	806,342	505,746	333,494
Nonsubject sources	795,945	820,782	1,276,432	880,731	675,708
Total U.S. importers' U.S. shipments	2,625,163	3,504,320	3,262,722	2,389,125	2,087,351
Apparent U.S. consumption	***	***	***	***	***
Value (1,000 dollars)					
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. importers' U.S. shipments of imports from.--					
Canada	***	***	***	***	***
China	***	***	***	***	***
Subject sources	47,151	54,579	55,803	41,415	37,998
Mexico	22,393	21,637	22,085	16,458	15,168
All other sources	28,554	31,120	35,084	25,146	22,311
Nonsubject sources	50,947	52,757	57,170	41,604	37,479
Total U.S. importers' U.S. shipments	98,098	107,336	112,972	83,019	75,477
Apparent U.S. consumption	***	***	***	***	***

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

⁹ As previously indicated in Part I of this report, table C-2 in app. C presents apparent U.S. consumption data with the U.S. shipment data of domestic finisher Baldor presented separately.

Figure IV-3
IMTDCs: Apparent U.S. consumption, 2012-14, January to September 2014, and January to September 2015

* * * * *

As explained previously in Part III (“U.S. shipments for apparent U.S. consumption calculation”), the U.S. component of the consumption calculation reflects U.S. producers’ U.S. shipments of finished IMTDCs produced from unfinished IMTDCs cast in the United States plus U.S. producers’ U.S. shipments of unfinished IMTDCs produced in the United States not already reported as a finished IMTDC. The U.S. component also includes U.S. importers’ U.S. shipments of finished IMTDCs that were cast/forged in the United States but finished abroad (Mexico). This quantity measure excludes any IMTDCs finished in the United States from imported unfinished IMTDCs, as those are reported for the purposes of apparent consumption as imports.

These data show that apparent consumption (in terms of quantity in pieces) increased by *** percent from 2012 to 2013, but declined by *** percent in 2014 to a level that was *** percent higher than that reported in 2012. In terms of value, apparent U.S. consumption increased by *** percent from 2012 to 2014. Apparent U.S. consumption was *** percent lower in terms of quantity (in pieces) and *** percent lower in terms of value during January-September 2015 as compared with January-September 2014.

U.S. market shares

Calculated U.S. market share data for IMTDCs are presented in table IV-8. U.S. integrated producers Martin Sprocket and TB Woods are aggregated with responding U.S. finisher Baldor in this presentation.¹⁰

Table IV-8
IMTDCs: Market shares, 2012-14, January to September 2014, and January to September 2015

* * * * *

These data show that the U.S. producers’ market share in terms of quantity (in pieces) declined by *** percentage points from *** percent in 2012 to *** percent 2013, but increased by *** percentage points to *** percent in 2014. The share of the U.S. market held by the U.S. producers during the first three quarters of 2015 was *** percent in terms of quantity (in pieces). The U.S. market share in terms of quantity (in pieces) held by the subject sources increased by *** percentage points from *** percent in 2012 to *** percent in 2013, but declined by *** percentage points to *** percent in 2014. Subject imports held *** percent of the U.S. market during January-September 2015. The U.S. market share in terms of quantity (in

¹⁰ As previously indicated in part I of this report, table C-2 in app. C presents calculated market share data with the U.S. shipment data of domestic finisher Baldor presented separately.

pieces) held by the nonsubject sources decreased by *** percentage points from *** percent in 2012 to *** percent in 2013, but increased by *** percentage points to *** percent in 2014. Nonsubject imports held *** percent of the U.S. market during January-September 2015.

In terms of value, U.S. producers' market share declined by *** percentage points from *** percent in 2012 to *** percent in 2014. The share of the U.S. market held by the U.S. producers during the first three quarters of 2015 was *** percent in terms of value. The U.S. market share in terms of value held by the subject sources increased by *** percentage points from *** percent in 2012 to *** percent in 2013, but declined by *** percentage points to *** percent in 2014. Subject imports held *** percent of the U.S. market during January-September 2015 in terms of value. The share of the U.S. market in terms of value held by imports of IMTDCs from nonsubject sources remained relatively steady at *** percent since 2012.

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material and energy costs

For U.S. producers, raw materials as a percent of costs of goods sold ranged from *** to *** percent over 2012 through 2014. Pig iron is the principal ferrous raw material in production of ductile iron castings, although ferrous scrap and ferrous alloys can also be used.¹

Producers and importers described different trends in raw material prices since January 2012. Among producers,² *** described raw material prices as generally rising during 2012-14, before decreasing somewhat during January-September 2015. ***.³ *** also indicated that raw material prices had fluctuated. However, *** described raw material prices as increasing since January 2012. Among importers, three (***) described raw material prices as increasing, three described them as not changing, four (***) described them as fluctuating, and five described them as decreasing. However, four of those that described raw materials prices as decreasing indicated that the decreases were small or had little to no impact on their selling prices.

Pig iron and ferrous scrap prices are provided in figure V-1.

Figure V-1

IMTDCs: Prices of imported pig iron and of ferrous scrap, January 2012-November 2015

* * * * *

¹ See <http://metallics.org.uk/nodular-pig-iron-for-foundries-producing-ductile-iron-castings/> downloaded November 17, 2015, and petitions, p. 9.

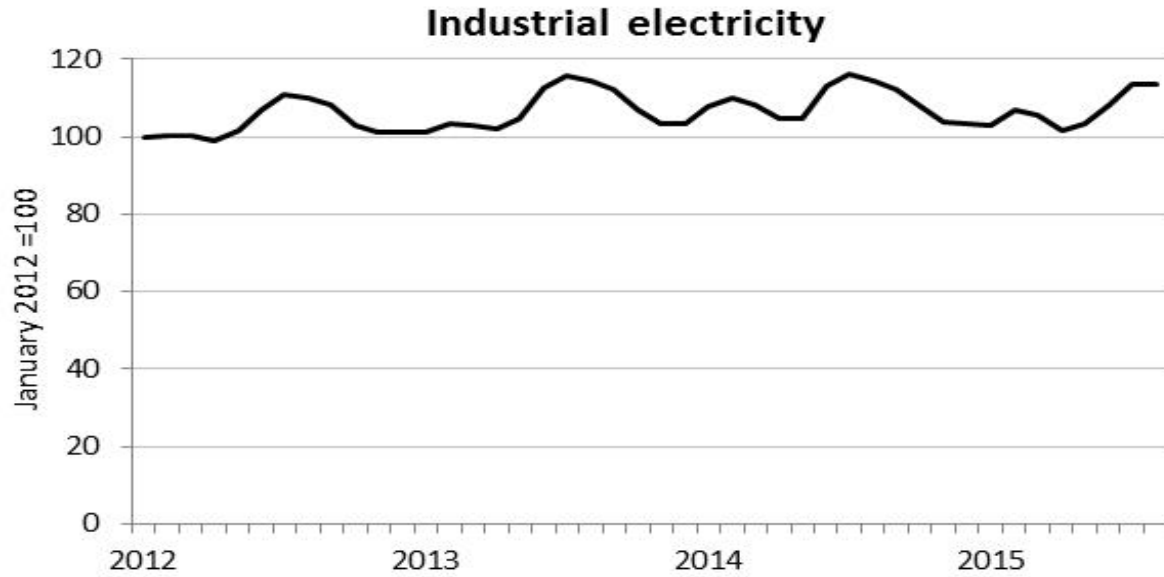
² ***.

³ Email from ***, November 24, 2015.

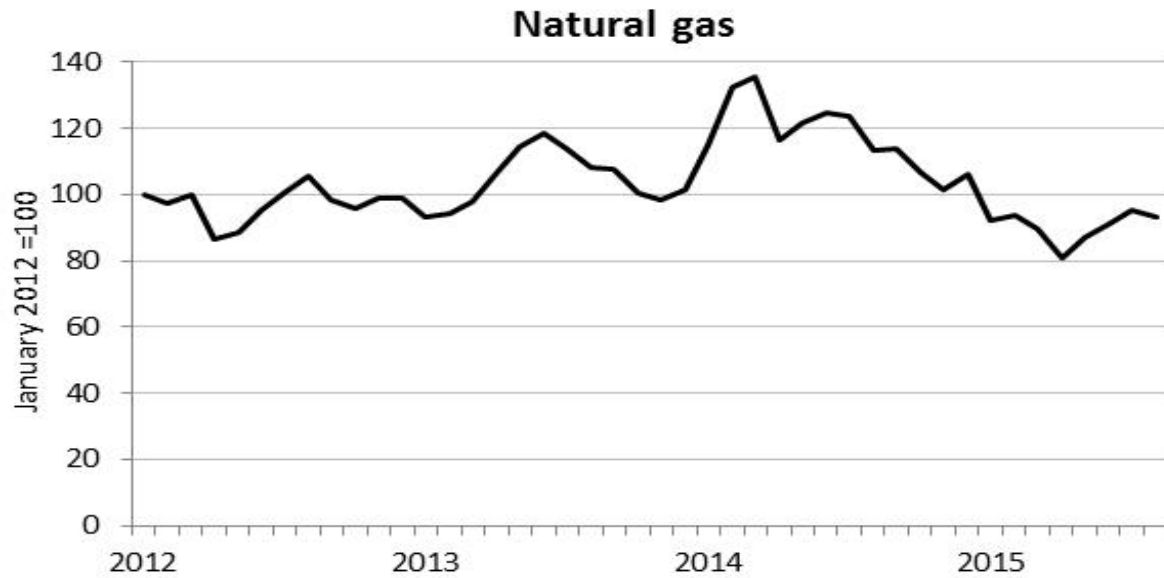
Electricity and natural gas are also costs,⁴ and their prices are provided in figure V-2.

Figure V-2

IMTDCs: Prices of industrial electricity and natural gas, January 2012-August 2015



Source: Energy Information Administration and staff calculations.



Source: Energy Information Administration and staff calculations.

⁴ Conference transcript, p. 104 (Christenson), and ***.

Overall, prices for pig iron, ferrous scrap, and natural gas fell in late 2014 and 2015 after being more stable or fluctuating during 2012-13 and into 2014. Electricity prices were generally stable with seasonal fluctuations.

Transportation costs to the U.S. market

During the 12-month period from October 2014 to September 2015, transportation costs to the U.S. market were 0.8 percent for IMTDCs from Canada, 6.4 percent for IMTDCs from China, and 0.9 percent for IMTDCs from Mexico.⁵

U.S. inland transportation costs

*** U.S. producers and 10 importers reported that they typically arrange transportation to their customers, while *** and six importers reported that their purchasers typically arrange transportation. U.S. producers reported that their U.S. inland transportation costs ranged from one to three percent of total delivered cost while seven of 11 responding importers reported costs of one to five percent.⁶

PRICING PRACTICES

Pricing methods

As shown in table V-1, U.S. producers and importers reported using transaction-by-transaction negotiations, contracts, and price lists. TB Woods and Baldor described selling IMTDCs out of their catalogues as well as through custom orders. TB Woods added that custom orders are often smaller volume with lower profit margins.⁷ An economic consultant for Baldor stated that both firms sell more products from their catalogues than from custom orders.⁸

⁵ Transportation costs were determined by comparing the c.i.f. value of imports to the Customs value of imports for HTS codes 8483.50.6000, 8483.50.9040, and 8483.90.8080.

⁶ Four importers reported costs of above five percent.

⁷ Conference transcript, pp. 21 and 69 (McCartney) and p. 100 (Crist).

⁸ Conference transcript, p. 69 (Beck).

Table V-1

IMTDCs: U.S. producers and importers reported price setting methods, by number of responding firms¹

Method	U.S. producers	U.S. importers
Transaction-by-transaction	3	7
Contract	2	5
Set price list	3	12
Other	0	0

¹ The sum of responses in each column may not add up to the total number of responding firms, as each firm was instructed to check all applicable price setting methods employed.

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

TB Woods also stated that its customers had quoted subject import prices to it during negotiations. However, it added that when it refused to lower prices during negotiations, its purchasers often switched purchases to subject imports.⁹

As shown in table V-2, U.S. producers were most likely to sell their product as spot sales, while a plurality of importers' sales were under long-term contracts. Long-term contract length ranged from one year *** to two years *** and up to three or more years (***). For both producers and importers, long-term contracts typically allowed price renegotiation during the contract, but did not have meet-or-release provisions. (***) For both producers and importers, short-term and annual contracts generally did not allow price renegotiation, did not have meet-or-release provisions, had durations of one to six months, and fixed price.

Table V-2

IMTDCs: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2014

* * * * *

Sales terms and discounts

U.S. producers and a majority of importers typically quote prices on an f.o.b. basis, but one-third of responding importers also quote prices on a delivered basis. Most responding producers and importers reported offering quantity, total volume, or other discounts. Most producers and importers also reported sales terms of net 30 days.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following IMTDC products shipped to unrelated U.S. customers during January 2012-September 2015. Data were requested for sales to distributors

⁹ Conference transcript, p. 99 (Crist).

and sales to end users/original equipment manufacturers (“OEMs”) separately.¹⁰ Importers were instructed to assume that the country of origin of finished IMTDCs is the location where the IMTDC was cast/forged.

Product 1.—Conventional (or classical) “C” groove sheave, with 24-inch outside diameter and five grooves, suitable for use with Type F bushing

Product 2.—Conventional (or classical) “C” groove sheave, with a 44-inch outside diameter and six grooves, suitable for use with Type N bushing

Product 3.—Conventional (or classical) “C” groove sheave, with a 50-inch outside diameter and eight grooves, suitable for use with Type J bushing

Product 4.—Narrow “V” groove sheave, with a 53-inch outside diameter and six grooves, suitable for use with Type N bushing

Baldor described pricing products 2 and 3 as “custom” products as opposed to catalog products.¹¹ (***) Baldor added that the pricing products represent the portion of the market with larger diameters and lower volumes.¹²

Two U.S. producers (***)¹³ and three importers (***) provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.¹⁴ In 2014, pricing data reported by these firms accounted for less than 0.5 percent of commercial shipments of IMTDCs produced in the United States and imported from China. ***. Baldor stated that both it and the petitioner have thousands of different SKUs.¹⁵ TB Woods stated that with thousands of different types of IMTDCs, it is “unsurprising” that no single pricing product accounted for a large portion of the U.S. market.¹⁶

Price data for products 1-4 are presented in tables V-3 to V-10 and figure V-3. Nonsubject country (Mexican) prices are presented in Appendix D.¹⁷

¹⁰ See staff telephone interview with ***, October 28, 2015.

¹¹ Baldor’s postconference brief, p. 32.

¹² Conference transcript, pp. 68-69 (McCartney and Luberda). Additionally, ***. Email from Gina Beck, economic consultant for Baldor, November 24, 2015.

¹³ ***.

¹⁴ Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

¹⁵ Conference transcript, pp. 68-69 (McCartney and Luberda), and Baldor’s postconference brief, exhibits 5 and 6.

¹⁶ Petitioner’s postconference brief, exh. 1, p. 38.

¹⁷ ***.

Table V-3

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 sold to distributors, and margins of underselling/(overselling), by quarters, January 2012-September 2015

* * * * *

Table V-4

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 sold to end users/OEMs, and margins of underselling/(overselling), by quarters, January 2012-September 2015

* * * * *

Table V-5

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 sold to distributors, and margins of underselling/(overselling), by quarters, January 2012-September 2015

* * * * *

Table V-6

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 sold to end users/OEMs, and margins of underselling/(overselling), by quarters, January 2012-September 2015

* * * * *

Table V-7

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 sold to distributors, and margins of underselling/(overselling), by quarters, January 2012-September 2015

* * * * *

Table V-8

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 sold to end users/OEMs, and margins of underselling/(overselling), by quarters, January 2012-September 2015

* * * * *

Table V-9

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 sold to distributors, and margins of underselling/(overselling), by quarters, January 2012-September 2015

* * * * *

Table V-10

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 sold to end users/OEMs, and margins of underselling/(overselling), by quarters, January 2012-September 2015

* * * * *

Figure V-3
IMTDCs: Weighted-average prices and quantities of domestic and imported product, by quarters, January 2012-September 2015

* * * * *

Price trends

Prices generally increased during January 2012 to September 2015. Table V-11 summarizes the price trends, by product and by country. As shown in the table, domestic price increases ranged from 1.2 to 65.7 percent during January 2012 to September 2015, while domestic price decreases ranged from 2.0 to 36.6 percent. For the products with data from China, import price changes ranged from a decrease of 17.0 percent to an increase of 38.8 percent.

Table V-11
IMTDCs: Summary of weighted-average f.o.b. prices for products 1-4 from the United States and China, by channel of distribution

* * * * *

Price comparisons

As shown in table V-12, prices for IMTDCs imported from China were below those for U.S.-produced product in 33 of 39 instances (232 pieces); margins of underselling ranged from 11.8 to 63.5 percent. In the remaining 6 instances (53 pieces), prices for IMTDCs from China were between 4.9 and 35.2 percent above prices for the domestic product.

In its postconference brief, Baldor stated that ***.¹⁸ However, TB Woods stated that price competition with subject imports had forced U.S. prices lower than they would otherwise be, with low prices on one product forcing prices lower on other products as well. It added that Baldor has recently announced an additional price reduction of 10 to 15 percent ***.¹⁹ ***.²⁰

¹⁸ Baldor's postconference brief, p. 34.

¹⁹ Petitioner's postconference brief, p. 23. TB Woods also stated that it had been the price leader in the U.S. market (and able to raise selling prices to cover rising raw material costs) before subject imports had taken that ability away. Conference transcript, p. 95 (Coder).

²⁰ Baldor's postconference brief, exhibit 2.

Table V-12

IMTDCs: Instances of underselling/overselling and the range and average of margins, by country, January 2012-September 2015¹

Source	Underselling				
	Number of quarters	Quantity ¹ (pieces)	Average margin (percent)	Margin range (percent)	
				Min	Max
Canada	***	***	***	***	***
China	33	232	41.1	11.8	63.5
Total	33	232	41.1	11.8	63.5
Source	(Overselling)				
	Number of quarters	Quantity ¹ (pieces)	Average margin (percent)	Margin range (percent)	
				Min	Max
Canada	***	***	***	***	***
China	6	53	(18.2)	(4.9)	(35.2)
Total	6	53	(18.2)	(4.9)	(35.2)

¹ These data include only quarters in which there is a comparison between the U.S. and subject product.

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

LOST SALES AND LOST REVENUE

The Commission requested U.S. producers of IMTDCs to report purchasers where they experienced instances of lost sales or revenue due to competition from imports of IMTDCs from Canada and China during January 2012-September 2015. Of the three responding U.S. producers, *** reported that *** had lost sales, *** reported that *** had to reduce prices, and *** reported that *** had to roll back price increases. However, *** identified firms where *** lost sales and revenue. *** submitted *** firm names to which *** lost sales and/or revenue (***). U.S. producer *** reported that *** and *** reported that, while it had ***.²¹

The Commission received two responses from identified purchasers. The responding purchasers indicated that the vast majority of their purchases were of domestic product, although *** (table V-13). The responding purchasers reported that *** U.S. producers had reduced prices in order to compete with lower-priced imports from subject countries (tables V-14 and V-15).

²¹ U.S. producer *** stated that ***.

Table V-13

IMTDCs: Purchasers' responses to purchasing patterns, 2014

* * * * *

Table V-14

IMTDCs: Purchasers' responses to shifting supply sources

* * * * *

Table V-15

IMTDCs: Purchasers' responses to U.S. producer price reductions

* * * * *

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Three U.S. producers provided useable financial data.¹ Two of the responding firms, TB Woods and Martin Sprocket, are integrated producers in the sense that they produce castings from which they produce IMTDCs.² The third responding firm, Baldor, purchases castings from third party casters and performs machining operations on the purchased castings. The data in this section of the report are for the sales and costs of finished IMTDCs. No firm that produces and sells castings only responded to the Commission's questionnaire.

OPERATIONS ON IMTDCS

Table VI-1 presents aggregated data on U.S. producers' total operations in relation to IMTDCs over the period examined for the three firms aggregated. Table VI-2 presents aggregated data for U.S. producers for operations wherein both the casting and finishing are performed only in the United States.³ Table VI-3 provides data excluding Baldor but aggregated for Martin Sprocket and for TB Woods mixed U.S. and Mexico operations (and corresponds to the data shown in table C-2).

Table VI-1
IMTDCs: Results of operations of U.S. producers, fiscal years 2012-14, January-September 2014, and January-September 2015

* * * * *

Table VI-2 presents the aggregated data for the three producers but does not include ***.

¹ These firms (and their fiscal year-ends) were: TB Woods (***), Martin Sprocket (***), and Baldor (***). ***.

² ***.

³ Table VI-2 differs from table VI-1 in that it does not include the sales (and related costs) of IMTDCs that are finished outside the United States at ***. According to the petition, the country of origin of the finished IMTDC is that where the unfinished blanks (castings) for IMTDCs are produced. Petitions, Vol. 1, pp. 11-13 and exhs. I-10. Thus, if unfinished blanks were manufactured in the United States and later shipped in the U.S. market, they would be treated as shipments of U.S. product even if they were finished somewhere else (like Mexico). Because shipments were treated in this manner, financial data were collected in manner corresponding to these shipments. Respondent Baldor states such sales should be excluded. Baldor's postconference brief, exh. 1, "responses to questions by ITC staff", pp. 11-12. The data are presented both ways. See further discussion later in this section.

Table VI-2

IMTDCs: Results of operations of U.S. producers, fiscal years 2012-14, January-September 2014, and January-September 2015

* * * * *

Table VI-3 presents the aggregated data of Martin Sprocket and TB Woods but not those of Baldor.

Table VI-3

IMTDCs: Results of operations of U.S. producers excluding Baldor, fiscal years 2012-14, January-September 2014, and January-September 2015

* * * * *

TB Woods provided the sales and total costs for IMTDCs finished outside the United States from U.S.-produced castings.⁴ TB Woods also provided a breakout of sales and costs for its IMTDCs that were finished in Mexico and sold in or exported from the United States (table VI-4).⁵

Table VI-4

IMTDCs: TB Woods' U.S. sales and mixed U.S. and Mexico cost data for its Mexico finishing operations, fiscal years 2012-14, January-September 2014, and January-September 2015

* * * * *

Pursuant to a request by Commission staff, TB Woods provided a further break out of *** in Mexico (that are based on its U.S. foundry castings) from those of its operations at Chambersburg, Pennsylvania (table VI-4 presented earlier).⁶ ***.⁷ ***.

Table VI-5 presents the results of operations on IMTDCs by firm and corresponds to the data presented in table VI-1. TB Woods' *** are shown separately from its U.S. casting and finishing operations.⁸

⁴ The Commission's questionnaire requested sales and costs of IMTDCs that were finished outside the United States to be included in the reported data for total sales and costs (see footnote 3 earlier). The questionnaire also requested a breakout of the sales and costs of those finished IMTDCs separately. See U.S. producers' questionnaire, sections III-9 and III-10.

⁵ Email from ***, November 23, 2015.

⁶ Email from ***, November 23, 2015.

⁷ Email from ***, November 24, 2015.

⁸ Respondent Baldor argues that "the Commission should treat all IMTDCs that are finished in the United States as domestic production, whether or not the casting is purchased from a domestic foundry, imported from a non-subject source, or imported from a subject source. . . Thus, U.S. castings finished in
(continued...)

Table VI-5
IMTDCs: Results of operations of U.S. producers, by firm, fiscal years 2012-14, January-September 2014, and January-September 2015

* * * * *

Net sales

Based on the data in tables VI-1 and VI-5, total net sales by quantity declined irregularly from 2012 to 2014 and were *** lower in January-September 2015 than in January-September 2014. Total net sales by value increased *** from 2012 to 2014 (despite declining in 2013) and were lower in January-September 2015 than in January-September 2014. Increased sales by *** ***.⁹ The average unit value of total net sales (dollars per piece) increased from 2012 to 2014 (despite declining in 2013) and was lower in January-September 2015 than in the comparable period one year earlier. The average unit value of sales of ***.

Costs and expenses

Based on the data in tables VI-1 and VI-5, total COGS rose from 2012 to 2014 after declining in 2013 and were lower in interim 2015 than in interim 2014. The ratio of COGS to total net sales rose from 2012 to 2014 and was *** lower in January-September 2015 than in January-September 2014. The average unit value of COGS rose between the full yearly periods but was lower in interim 2015 than in interim 2014. The value of each of the categories of COGS rose with the majority of the increase in “other factory costs.” The values of raw material costs and other factory costs were lower in January-September 2015 than in January-September 2014; overall, total COGS was lower in interim 2015 than in interim 2014. As shown by the data in table VI-2, ***.¹⁰ SG&A expenses increased from 2012 to 2014, despite declining in 2013, and were lower in January-September 2015 than in January-September 2015. The increase in this category from 2012 to 2014 reported by ***. As a ratio to total sales and on a per-unit basis SG&A expenses increased *** between 2012 and 2014 and were higher in interim 2015 than interim 2014.

Profitability

Based on the data in tables VI-1 and VI-4, gross profits of the three reporting firms declined from 2012 to 2014 and were *** lower in January-September 2015 than in January-September 2014, which may be attributed to higher other factory costs and SG&A expenses, as well as lower average unit value of sales in interim 2015. The firms reported operating losses

(...continued)

a non-subject third country like Mexico should be treated as non-subject imports.” Baldor’s postconference brief, exh. 1, “response to ITC staff questions,” pp. 11-12.

⁹ As may be seen from the data in table VI-5, in 2014, ***.

¹⁰ This may be due to the product mix of ***.

and net losses in 2013 and 2014 and both interim periods after reporting profits in 2012. Cash flows were positive because depreciation charges were greater than net losses in each period.

Value added

The Commission has examined converting/finishing operations and the value added to the raw materials purchased or provided by the firm using such services (a tollee to toller relationship, for example). The value-added analysis uses two ratios: (1) the ratio of conversion costs, which are direct labor and other factory costs (factory overhead) to total COGS; and (2) the ratio of the sum of conversion costs plus SG&A expenses to the sum of total COGS plus SG&A expenses. The analysis relies on the separation of costs of the input raw material from costs related to that raw material's conversion to finished product. In these investigations, Baldor's cost structure reflects its purchases of castings and its finishing operations only. The cost structure of the other two reporting firms, Martin Sprocket and TB Woods, includes labor and factory overhead in both the costs of casting and finishing IMTDCs without distinguishing between casting and finishing. The value-added calculations for these two firms are shown but because of the differences in cost structure, the ratios are not comparable with those for Baldor.¹¹ Table VI-6 depicts value-added calculations for the three firms separately.

Table VI-6
IMTDCs: Value-added analysis of U.S. producers, by firm, fiscal years 2012-14, January-September 2014, and January-September 2015

* * * * *

Variance analysis

A variance analysis for the operations of U.S. producers of IMTDCs is presented in table VI-7 for the three firms together, in table VI-8 for the three firms but not including TB Woods' Mexico finishing, and in table VI-9 for Martin Sprocket and TB Woods (excluding Baldor).¹² A

¹¹ Commission staff asked TB Woods to provide a breakout of costs at the San Luis Potosi, Mexico facility from those at its Chambersburg, Pennsylvania facility. TB Woods produces casting blanks at Chambersburg and *** at the Mexico plant. As ***. According to testimony by personnel of TB Woods, value added through finishing represents approximately *** percent of the total cost of production. Petitioner's postconference brief, exh. 1, p. 17. See also ***. As noted earlier in this report, the ratios of conversion costs to COGS are not comparable to the companies' separately provided value-added estimates of the finishing operations alone.

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 each

(continued...)

variance analysis is a method to assess the changes in profitability from period to period by measuring the impact of changes in the relationships between price, cost, and volume. A calculation is made of the impact of each factor by varying only that factor while holding all other factors constant. The components of net sales variances are either favorable (positive), resulting in an increase in net sales and profitability or unfavorable (negative) resulting in the opposite. The analysis in tables VI-7 and VI-8 is similar: the industry's operating loss increased between the full yearly periods generally because unfavorable operating costs variances (unit costs increased) were greater than favorable price variances (unit sales values increased). Between 2012 and 2013, the variances of price, cost, and volume were unfavorable. Between the interim periods, the price variance was unfavorable while the cost variance was favorable. The analysis in table VI-9 indicates that operating losses increased attributable to unfavorable cost/expense variances being much greater than a favorable price variance, while the price variance was favorable and net cost/expense and volume variances were unfavorable between the interim periods.

Table VI-7
IMTDCs: Variance analysis on the operations of U.S. producers, between fiscal years 2012-14, and January-September 2014-15

* * * * *

Table VI-8
IMTDCs: Variance analysis on the operations of U.S. producers excluding TB Woods' mixed U.S. casting and Mexico finishing operations, between fiscal years 2012-14, and January-September 2014-15

* * * * *

Table VI-9
IMTDCs: Variance analysis on the operations of U.S. producers excluding Baldor, between fiscal years 2012-14, and January-September 2014-15

* * * * *

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Capital expenditures are included in a firm's statement of cash flows within the section, "cash flows from investing activities." In accounting terms, capital expenditures increase the value of specific plant and equipment and total assets, while charges for depreciation and

(...continued)

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.

amortization (in the case of intangible assets), impairments, and divestitures (or retirement or abandonment of property) decrease the value of assets. Capital expenditures are made and R&D expenses are incurred to achieve improvements in equipment or reduce operating costs and the quality of products produced. Total capital expenditures fell from 2012 to 2014 but were greater in interim 2015 than in interim 2014. The data for 2012 reflect ***. R&D expenses were for product development.

Table VI-10 presents capital expenditures and research and development (“R&D”) expenses by firm.

Table VI-10
IMTDCs: Capital expenditures and R&D expenses of U.S. producers, fiscal years 2012-14, January-September 2014, and January-September 2015

* * * * *

Firms were requested to describe the nature, focus, and significance of their capital expenditures and their R&D expenses. Their comments are shown in in table VI-11.

Table VI-11
IMTDCS: Narrative responses by U.S. producers on their capital expenditures and R&D expenses

* * * * *

ASSETS AND RETURN ON INVESTMENT

Table VI-12 presents data on the U.S. producers’ total assets and the ratio of operating income/(loss) and net income/(loss) to assets. As reported by the three firms, total assets increased irregularly from 2012 to 2014 and declined in 2013.

Table VI-12
IMTDCs: U.S. producers’ total assets and ratio of income/(loss) to assets, fiscal years 2012-14

* * * * *

The Commission’s questionnaire requested firms to describe the nature of substantial changes in total assets. Martin Sprocket ascribed such changes ***. TB Woods stated that ***.

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of IMTDCs to describe any actual or potential negative effects of imports of IMTDCs from Canada and/or China on their return on investment, or their growth, investment, ability to raise capital, existing development and production efforts (including efforts to develop a derivative or more advanced version of the product), or the scale of capital investments as a result of imports of IMTDCS from Canada and/or China. Table VI-13 tabulates the responses on actual negative effects on investment, growth, and development while table VI-14 presents responses on actual negative effects on growth of domestic producers.

Table VI-13
IMTDCs: Negative effects of imports from subject sources on investment, growth, and development since January 1, 2012

* * * * *

*** experienced no actual or anticipated negative effects of the subject imports on *** investment and on *** growth and development since January 1, 2012. Each responding firm stated that its response did not differ by country.¹³ The comments of responding U.S. producers are shown in table VI-14.

Table VI-14
IMTDCs: Narrative responses by U.S. producers regarding actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2012

* * * * *

¹³ ***.

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 factors¹--

- (I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
- (II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
- (III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
- (IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
- (V) inventories of the subject merchandise,*

¹ Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that “The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition.”

- (VI) *the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,*
- (VII) *in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),*
- (VIII) *the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and*
- (IX) *any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).²*

Information on the nature of the alleged subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV and V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

² Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

THE INDUSTRY IN CANADA

Overview

The Commission issued foreign producer/exporter questionnaires to nine firms identified in the petitions as producers and/or exporters of IMTDCs from Canada.³ Useable responses to the Commission's questionnaire were received from one firm: Baldor Electric Canada ("Baldor Canada"). According to estimates provided by the responding Canadian producer in its questionnaire response, Baldor Canada accounted for approximately *** percent of all production of IMTDCs in Canada and approximately *** percent of Canadian exports to the United States during 2014. Baldor Canada's exports to the United States were equivalent to *** percent of U.S. imports of IMTDCs from Canada during 2014 as reported in Commission importer questionnaire responses.

Table VII-1 presents the Canadian producer of IMTDCs that responded to the Commission's questionnaire and certain 2014 summary data reported in its questionnaire response.

Table VII-1
IMTDCs: Summary data on the responding firm in Canada, 2014

* * * * *

Changes in operations

Baldor Canada *** changes in its operations in Canada related to the production of IMTDCs since January 1, 2012.

Operations on IMTDCs

Table VII-2 presents information on the IMTDC operations of Baldor Canada. The data presented for Canada are the portion of finished IMTDCs machined in Baldor's Canadian finishing facility from unfinished IMTDCs cast/forged in Canada.⁴

³ Five of the nine firms in Canada indicated in their response that they did not produce IMTDCs and two firms did not provide a response. One relatively small IMTDC producer (***) responded that IMTDCs comprised *** in total company sales during fiscal year ending on September 30, 2015 and that it exported subject IMTDCs (***) to the United States in the amount of \$*** during 2014, or *** percent of 2014 total U.S. imports from Canada as reported in Commission questionnaire responses. *** stated that it produces *** and that it does not record or compile information regarding production and shipments in a manner that would enable it to provide a complete and accurate response to the questionnaire.

⁴ ***. Baldor Canada reported that ***.

Table VII-2

IMTDCs: Data on industry in Canada, 2012-14, January to September 2014, and January to September 2015 and projection calendar years 2015 and 2016

* * * * *

Baldor Canada’s capacity, production, capacity utilization, and shipments generally decreased from 2012 to 2014, but were higher during the first three quarters of 2015 than in the comparable period of 2014, following the ***. Baldor Canada’s exports to the United States accounted for *** of the firm’s total shipments, declining from *** percent of total shipments in 2012 to *** percent of total shipments in 2014. The firm’s exports to the United States accounted for *** percent of total shipments during January-September of 2015. Exports of IMTDCs to the United States by Baldor Canada decreased by *** percent from *** pieces in 2012 to *** pieces in 2014, and were *** percent lower at *** pieces in the first three quarters of 2015 compared with *** pieces in the first three quarters of 2014. Home market shipments accounted for *** of the firm’s shipments, increasing from *** percent of total shipments in 2012 to *** percent of total shipments in 2014. The firm’s home market shipments accounted for *** percent of its total shipments during January-September 2015. Baldor Canada *** export IMTDCs to markets other than the United States.

Alternative products

As shown in table VII-3, *** reported IMTDC production by Baldor in Canada is subject merchandise.

Table VII-3

IMTDCs: Canada producer’s overall capacity and production on the same equipment as finishing operations for IMTDCs, 2012-14, January to September 2014, and January to September 2015

* * * * *

THE INDUSTRY IN CHINA

Overview

The Commission issued foreign producer/exporter questionnaires to 31 firms identified in the petitions (including revisions to the petitions) as producers and/or exporters of IMTDCs from China.⁵ Useable responses to the Commission’s questionnaire were received from four firms: ***,⁶ integrated producer Fuzhou Min Yue Mechanical & Electrical Co. Ltd. (“Min Yue”),

⁵ Staff attempted to contact five additional firms in China identified in the petitions but valid contact information was not available for these firms.

⁶ ***.

finisher Maska Power Transmission (Changzhou) Co. Ltd. (“Maska”), and integrated producer Powermach Import & Export Co. Ltd. Sichuan (“Powermach”). According to an estimate provided by a responding Chinese producer in its questionnaire response, aggregate data on IMTDCs produced in China reported in questionnaire responses accounted for approximately 40 percent of all production of IMTDCs in China and approximately 45 percent of exports to the United States during 2014. These firms’ exports to the United States were equivalent to *** percent of U.S. imports of IMTDCs from China during 2014 as reported in Commission importer questionnaire responses.

Table VII-4 lists the Chinese producers of IMTDCs that responded to the Commission’s questionnaire and certain 2014 summary data reported in response to Commission questionnaires.

**Table VII-4
IMTDCs: Summary data on firms in China, 2014**

* * * * *

Changes in operations

One responding producer in China reported a change in its operations related to the production of IMTDCs since January 1, 2012. Details concerning the change reported is presented in table VII-5.

**Table VII-5
IMTDCs: Chinese producers’ reported changes in operations, since January 1, 2012**

* * * * *

Operations on IMTDCs

Table VII-6 presents information on the IMTDC operations of the responding producers/exporters in China. Chinese capacity, production, capacity utilization, inventories, and shipments increased from 2012 to 2014, but were lower during the first three quarters of 2015 than in the comparable period of 2014 as one of the Chinese producers closed its facility in *** 2014.

**Table VII-6
IMTDCs: Data on industry in China, 2012-14, January to September 2014, and January to September 2015 and projection calendar years 2015 and 2016**

* * * * *

Home market sales accounted for the majority of total shipments by the Chinese producers, declining from *** percent of total shipments in 2012 to *** percent of total shipments in 2014. Home market sales by responding Chinese producers accounted for ***

percent of total sales during the first quarter of 2015. Export markets other than the United States accounted for between *** percent and *** percent of the responding Chinese producers' total shipments since 2012. Other major export markets identified by the producers in China include ***.

Exports of IMTDCs to the United States by the producers in China increased by *** percent from *** pieces in 2012 to *** pieces in 2014, but were *** percent lower at *** pieces in the first three quarters of 2015 compared with *** pieces in the first three quarters of 2014. As a share of Chinese producers' total shipments, exports to the United States increased from *** percent in 2012 to *** percent in 2014, and were *** percent of total shipments during the first quarter of 2015.

Alternative products

As shown in tables VII-7 and VII-8, approximately *** of all reported IMTDC production by responding Chinese producers is subject merchandise. Other products produced in China on the same equipment as finished IMTDCs include ***.

Table VII-7

IMTDCs: Chinese producers' overall capacity and production on the same equipment as finishing operations for IMTDCs, 2012-14, January to September 2014, and January to September 2015

* * * * *

Table VII-8

IMTDCs: Chinese producers' overall capacity and production on the same equipment as casting operations for IMTDCs, 2012-14, January to September 2014, and January to September 2015

* * * * *

THE COMBINED SUBJECT INDUSTRIES

Table VII-9 presents information on the IMTDC operations of the responding producers and exporters in both Canada and China combined for 2012-14, January-September 2014, and January-September 2015, as well as projections for 2015-16.

Table VII-9

IMTDCs: Data on industry in subject countries, 2012-14, January to September 2014, and January to September 2015 and projection calendar years 2015 and 2016

Item	Actual experience					Projections	
	Calendar year			January to September		Calendar year	
	2012	2013	2014	2014	2015	2015	2016
Quantity (pieces)							
Capacity	10,987,079	11,191,188	11,196,797	8,291,870	8,043,516	10,714,459	10,714,459
Production	6,824,139	6,907,287	8,342,360	***	***	***	***
End-of-period inventories	***	***	***	***	***	***	***
Shipments:							
Home market :							
Internal consumption/transfers	***	***	***	***	***	***	***
Commercial Shipments	***	***	***	***	***	***	***
Subtotal, home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	1,905,215	1,986,673	2,357,495	1,717,391	1,191,145	1,583,853	1,583,853
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	7,081,542	6,954,317	8,174,229	***	***	***	***
Ratios and shares (percent)							
Capacity utilization	62.1	61.7	74.5	***	***	***	***
Inventories/production	***	***	***	***	***	***	***
Inventories/total shipments	***	***	***	***	***	***	***
Share of shipments:							
Home market:							
Internal consumption/transfers	***	***	***	***	***	***	***
Commercial Shipments	***	***	***	***	***	***	***
Subtotal, home market shipments	***	***	***	***	***	***	***
Export shipments to:							
United States	26.9	28.6	28.8	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	***	***	***	***	***	***	***
Total shipments	100.00	100.0	100.0	100.0	100.0	100.0	100.0

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

INVENTORIES OF IMPORTED MERCHANDISE

Finished IMTDCs

Table VII-10 presents data on U.S. importers' reported inventories of finished IMTDCs. During 2014, Canadian and Chinese IMTDCs accounted for *** and *** percent, respectively, of all inventories of imported IMTDCs held in the United States. Inventories of subject imports declined from 2012 to 2014, but were higher in January-September 2015 than in the comparable period in 2014.

Table VII-10

IMTDCs: U.S. importers' end-of-period inventories of imports of finished IMTDCs by source, 2012-14, January to September 2014, and January to September 2015

Item	Calendar year			Jan.-Sept.	
	2012	2013	2014	2014	2015
Finished IMTDCs from Canada:					
Inventories (pieces)	***	***	***	***	***
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Finished IMTDCs from China:					
Inventories (pieces)	***	***	***	***	***
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Finished IMTDCs from subject sources:					
Inventories (pieces)	666,339	630,305	604,223	575,813	605,840
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Finished IMTDCs from Mexico:					
Inventories (pieces)	115,407	145,480	137,477	127,891	146,830
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Finished IMTDCs from all other sources:					
Inventories (pieces)	28,266	18,558	66,603	90,414	34,429
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Finished IMTDCs from nonsubject sources:					
Inventories (pieces)	143,673	164,038	204,080	218,305	181,259
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***
Finished IMTDCs from all sources:					
Inventories (pieces)	810,012	794,343	808,303	794,118	787,099
Ratio to U.S. imports (percent)	***	***	***	***	***
Ratio to U.S. shipments of imports (percent)	***	***	***	***	***
Ratio to total shipments of imports (percent)	***	***	***	***	***

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

Unfinished IMTDCs

Two firms reported U.S. imports of unfinished IMTDCs.⁷ *** imported unfinished IMTDCs from China and *** imported unfinished IMTDCs from Mexico. Neither *** nor *** held inventories of their U.S. imports of unfinished IMTDCs in the United States.

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they had imported or arranged for the importation of IMTDCs for delivery after September 30, 2015. Fourteen firms reported data concerning such imports or arrangements of imports of finished IMTDCs, 5 of which reported imports from Canada and 12 of which reported such imports from China. Data concerning U.S. imports subsequent to September 30, 2015 are presented in table VII-11. These data show an increase in arranged U.S. imports from China from the fourth quarter of 2015 to the first quarter of 2016, most of which was due to an increase in arranged imports from China reported by ***. All subsequent quarters show declines in arranged imports from China and all quarterly data show declines in arranged U.S. imports from Canada and nonsubject countries.

Table VII-11

IMTDCs: U.S. importers' arranged imports of finished IMTDCs by source in terms of pieces

	Oct-Dec 2015	Jan-Mar 2016	Apr-Jun 2016	Jul-Sep 2016	Total 12 mo. Period
Quantity (in pieces)					
Arranged U.S. imports of finished IMTDCs from.--					
Canada	***	***	***	***	222,915
China	***	***	***	***	791,239
Subject sources	***	***	***	***	1,014,154
Mexico	***	***	***	***	139,863
All other sources	***	***	***	***	834,981
Nonsubject sources	***	***	***	***	974,844
All sources	***	***	***	***	1,988,998

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

⁷ A third firm (***) reported U.S. imports of unfinished items from Canada, China, and Mexico and U.S. inventories of such imports. However, these unfinished items (i.e., hose extensions, jackshafts, rollers, and sickle-tails) are not items described by Commerce's scope and have been removed from the data for unfinished IMTDCs.

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

The Commission asked questionnaire recipients to identify whether the products subject to this proceeding have been the subject of any other import relief proceedings in the United States or in any other countries. No firms participating in this proceeding have identified any other import relief proceedings or orders in the United States or in any other countries with regard to IMTDCs.

INFORMATION ON NONSUBJECT COUNTRIES

In assessing whether the domestic industry is materially injured or threatened with material injury “by reason of subject imports,” the legislative history states “that the Commission must examine all relevant evidence, including any known factors, other than the dumped or subsidized imports, that may be injuring the domestic industry, and that the Commission must examine those other factors (including non-subject imports) ‘to ensure that it is not attributing injury from other sources to the subject imports.’”⁸

IMTDCs are produced in a number of nonsubject countries. Four of these economies—Mexico, the European Union, Japan, and India—are discussed in more detail below:

- **Mexico:** The industry in Mexico produces castings and finished sheaves. Firms engaged in production in Mexico include the subsidiaries of multinational firms as well as Mexico-based firms.⁹ ***.¹⁰
- **European Union:** The EU has a substantial sheave industry, with EU-28 production—including nonsubject products such as steel pulleys and sheaves and products less than 4 inches in diameter—totaling \$700 million, up from \$513 million in 2012. The largest producers in 2014, in value terms, were Germany (\$242 million), Slovakia (\$240 million), France (\$74 million), and Italy (\$62 million).¹¹ The largest producers in quantity terms, in 2013, were France (35 million kg, or 39,000 short tons), Germany (18 million kg, or 20,000 short tons), Denmark (15 million kg, or 17,000 short tons), and Slovakia (10

⁸ *Mittal Steel Point Lisas Ltd. v. United States*, Slip Op. 2007-1552 at 17 (Fed. Cir. Sept. 18, 2008), quoting from Statement of Administrative Action on Uruguay Round Agreements Act, H.R. Rep. 103-316, Vol. I at 851-52; see also *Bratsk Aluminum Smelter v. United States*, 444 F.3d 1369 (Fed. Cir. 2006).

⁹ Directorio de Exportadores Website, <http://www3.promexico.gob.mx> (accessed November 20, 2015); TB Woods Website, http://www.tbwoods.com/Company_WorldWide_Locations.asp (accessed November 12, 2015); Martin Sprocket and Gear Website, <http://www.martinsprocket.com/locations/mexico> (accessed November 21, 2015); Petitioners’ postconference brief, exh. 1, p. 53.

¹⁰ Compiled from data submitted in response to Commission questionnaires.

¹¹ Eurostat database, <http://ec.europa.eu/eurostat/data/database> (accessed November 20, 2015); Board of Governors of the Federal Reserve System Website, Historical Rates for the EU Euro, http://www.federalreserve.gov/releases/h10/hist/dat00_eu.htm (accessed November 20, 2015)

million kg, or 11,000 short tons).¹² Reported EU exports totaled \$835 million (exceeding reported production by 19 percent).¹³

- **Japan:** Japan was the third largest exporter of flywheels and pulleys—including nonsubject products such as steel pulleys and sheaves and products less than 4 inches in diameter—in 2014, with \$484 million in exports.¹⁴ Japanese manufacturers produce both castings and finished IMTDCs.¹⁵
- **India:** There are a large number of IMTDC manufacturers in India that produce both castings and finished sheaves and flywheels. The main Indian export markets for IMTDCs include the European Union, Japan, and the United States.¹⁶

¹² Quantity data were not available for all EU members in 2013. Eurostat database, <http://ec.europa.eu/eurostat/data/database> (accessed November 20, 2015).

¹³ While the reported value of EU exports in 2013 and 2014 exceeded the value of production, the quantity of production exceeded the quantity of exports. Eurostat database, <http://ec.europa.eu/eurostat/data/database> (accessed November 20, 2015); Board of Governors of the Federal Reserve System Website, Historical Rates for the EU Euro, http://www.federalreserve.gov/releases/h10/hist/dat00_eu.htm (accessed November 20, 2015).

¹⁴ GTIS, Global Trade Atlas database, <https://www.gtis.com> (accessed November 10, 2015).

¹⁵ Business Information in Hiroshima Website, <http://www.hitec.city.hiroshima.jp/EE/ee00268.html>; Kinoshita Manufacturing Company Website, <http://www.kinoshitaseisakusho.co.jp/en/profile/> (accessed November 10, 2015); Protechnology Website, <http://protechnology.jp/companies/parts-manufacturing/kinsei-engineering> (accessed November 10, 2015); The Leading Japan Foundries Catalog, <http://www.japan-foundries.com/The-Leading-Japan-Foundries-Catalog.pdf> (accessed November 10, 2015); J-GoodTech Website, <https://jgoodtech.smrj.go.jp/corporations/90?locale=en> (accessed November 9, 2015).

¹⁶ Zaub Technologies & Data Services Pvt. Ltd., database, <https://www.zaub.com/> (accessed November 9, 2015); Trade Data Services, Inc., Import Genius database, <https://www.importgenius.com/> (accessed November 5–9, 2015); Craft & Technik Industries Website, <http://www.craftandtechnik.com> (accessed November 5, 2015); KTN Website, <http://www.ktn techno.com> (accessed November 6, 2015); Mutha Group Website, <http://www.muthagroup.com> (accessed November 6, 2015); Shanthala Spherocast Private Limited, <http://www.shanthalaspherocast.com> (accessed November 6, 2015); The Allied Founders Pvt. Ltd. Website, <http://www.alliedfoundersindia.com/> (accessed November 6, 2015); Electro Steel Engineering Co. Website, <http://www.fenner.in/> (accessed November 9, 2014); Texspares Corporation of India Website, <http://www.texsparescorporation.com/> (accessed November 9, 2015); Ravi Transmission Products Website, <http://www.sprocketpulleyscoupling.com/> (accessed November 9, 2015); Atmiya Manufacturing Website, <http://www.paperdonamachine.com/> (accessed November 9, 2015); B & B Machines, Rajkot Website, <http://www.bandbmachines.in/> (accessed November 9, 2015); Ashton Green & Company Website, <http://www.dratonconveyors.com/> (accessed November 9, 2015); Jay Khodiyar Industries Website, <http://www.jaykhodiyarind.in> (accessed November 9, 2015); NK Engineers and Contractors Website, <http://www.shaftspulleys.com/industrial-pulley.html> (accessed November 9, 2015).

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
80 FR 67789, November 3, 2015	<i>Certain Iron Mechanical Transfer Drive Components From Canada and China; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations</i>	http://www.gpo.gov/fdsys/pkg/FR-2015-11-03/pdf/2015-27956.pdf
80 FR 73716, November 25, 2015	<i>Certain Iron Mechanical Transfer Drive Components from Canada and The People’s Republic of China: Initiation of Less-Than-Fair-Value Investigations</i>	http://www.gpo.gov/fdsys/pkg/FR-2015-11-25/pdf/2015-29985.pdf
80 FR 73722, November 25, 2015	<i>Certain Iron Mechanical Transfer Drive Components From the People’s Republic of China: Initiation of Countervailing Duty Investigation</i>	http://www.gpo.gov/fdsys/pkg/FR-2015-11-25/pdf/2015-29945.pdf

APPENDIX B
CONFERENCE WITNESSES

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

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

Subject: Certain Iron Mechanical Transfer Drive Components from Canada and China
Inv. Nos.: 701-TA-550 and 731-TA-1304-1305 (Preliminary)
Date and Time: November 18, 2015 - 9:00 a.m.

Sessions were held in connection with these preliminary phase investigations in Courtroom A (Room 100), 500 E Street, S.W., Washington, DC.

OPENING REMARKS:

Respondents (**R. Alan Luberda**, Kelley Drye & Warren LLP)
Petitioner (**Alan H. Price**, Wiley Rein LLP)

**In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:**

Kelley Drye & Warren LLP
Washington, DC
on behalf of

Baldor Electric Company

T. Dent McCartney, General Product Manager, Power Transmission Components, Baldor Electric Company

Jeff Moore, Vice President, Marketing, Baldor Electric Company

Gina Beck, Economic Consultant, Georgetown Economic Services

R. Alan Luberda)
) – OF COUNSEL
Kathleen W. Cannon)

**In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders (continued):**

Mowry & Grimson PLLC
Washington, DC
on behalf of

Powermach Import & export Co., Ltd. (Sichuan)
Fuzhou Min Yue Mechanical & Electrical Co., Ltd.

Jeffrey S. Grimson)
Sarah M. Wyss) – OF COUNSEL
Daniel R. Wilson)

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

Wiley Rein LLP
Washington, DC
on behalf of

TB Wood’s Incorporated (TB Wood’s)

Carl Christenson, Chairman *and* Chief Executive Officer,
Altra Industrial Motion Corp.

Lew Crist, General Manager, TB Wood’s

William R. Juergens, Commercial Castings Sales Manager, TB Wood’s

Took Coder, Former Vice President of Sales, TB Wood’s

Alan H. Price)
Daniel B. Pickard)
) – OF COUNSEL
Robert E. DeFrancesco)
Laura El-Sabaawi)

REBUTTAL/CLOSING REMARKS:

Respondents (**Kathleen W. Cannon**, Kelley Drye & Warren LLP)
Petitioner (**Daniel B. Pickard**, Wiley Rein LLP)

APPENDIX C
SUMMARY DATA

Table C-1

IMTDCs: Summary data concerning the U.S. market, 2012-14, January to September 2014, and January to September 2015

(Quantity=pieces; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per piece; Period changes=percent--exceptions noted)

	Report data					Period changes			
	2012	Calendar year 2013	2014	January to September 2014	2015	2012-14	Calendar year 2012-13	2013-14	Jan-Sept 2014-15
U.S. consumption quantity:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Canada.....	***	***	***	***	***	***	***	***	***
China.....	***	***	***	***	***	***	***	***	***
Subject sources.....	***	***	***	***	***	***	***	***	***
Mexico.....	***	***	***	***	***	***	***	***	***
All others sources.....	***	***	***	***	***	***	***	***	***
Nonsubject sources.....	***	***	***	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Canada.....	***	***	***	***	***	***	***	***	***
China.....	***	***	***	***	***	***	***	***	***
Subject sources.....	***	***	***	***	***	***	***	***	***
Mexico.....	***	***	***	***	***	***	***	***	***
All others sources.....	***	***	***	***	***	***	***	***	***
Nonsubject sources.....	***	***	***	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	***	***	***	***
U.S. importers' U.S. shipment of finished and unfinished IMTDCs from:									
Canada:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
China:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Subject sources:									
Quantity.....	1,829,218	2,683,538	1,986,290	1,508,394	1,411,643	8.6	46.7	(26.0)	(6.4)
Value.....	47,151	54,579	55,803	41,415	37,998	18.3	15.8	2.2	(8.3)
Unit value.....	\$25.78	\$20.34	\$28.09	\$27.46	\$26.92	9.0	(21.1)	38.1	(2.0)
Ending inventory quantity.....	666,339	630,305	604,223	575,813	605,840	(9.3)	(5.4)	(4.1)	5.2
Mexico:									
Quantity.....	455,768	469,868	470,090	374,985	342,214	3.1	3.1	0.0	(8.7)
Value.....	22,393	21,637	22,085	16,458	15,168	(1.4)	(3.4)	2.1	(7.8)
Unit value.....	\$49.13	\$46.05	\$46.98	\$43.89	\$44.32	(4.4)	(6.3)	2.0	1.0
Ending inventory quantity.....	115,407	145,480	137,477	127,891	146,830	19.1	26.1	(5.5)	14.8
All other sources:									
Quantity.....	340,177	350,914	806,342	505,746	333,494	137.0	3.2	129.8	(34.1)
Value.....	28,554	31,120	35,084	25,146	22,311	22.9	9.0	12.7	(11.3)
Unit value.....	\$83.94	\$88.68	\$43.51	\$49.72	\$66.90	(48.2)	5.7	(50.9)	34.6
Ending inventory quantity.....	28,266	18,558	66,603	90,414	34,429	135.6	(34.3)	258.9	(61.9)
Nonsubject sources:									
Quantity.....	795,945	820,782	1,276,432	880,731	675,708	60.4	3.1	55.5	(23.3)
Value.....	50,947	52,757	57,170	41,604	37,479	12.2	3.6	8.4	(9.9)
Unit value.....	\$64.01	\$64.28	\$44.79	\$47.24	\$55.47	(30.0)	0.4	(30.3)	17.4
Ending inventory quantity.....	143,673	164,038	204,080	218,305	181,259	42.0	14.2	24.4	(17.0)
Total imports:									
Quantity.....	2,625,163	3,504,320	3,262,722	2,389,125	2,087,351	24.3	33.5	(6.9)	(12.6)
Value.....	98,098	107,336	112,972	83,019	75,477	15.2	9.4	5.3	(9.1)
Unit value.....	\$37.37	\$30.63	\$34.63	\$34.75	\$36.16	(7.3)	(18.0)	13.0	4.1
Ending inventory quantity.....	810,012	794,343	808,303	794,118	787,099	(0.2)	(1.9)	1.8	(0.9)
U.S. producers':									
Finished IMTDCs: Average capacity quantity.....	***	***	***	***	***	***	***	***	***
Finished IMTDCs: Production quantity.....	***	***	***	***	***	***	***	***	***
Finished IMTDCs: Capacity utilization (fn1).....	***	***	***	***	***	***	***	***	***
Unfinished IMTDCs: Average capacity quantity.....	***	***	***	***	***	***	***	***	***
Unfinished IMTDCs: Production quantity.....	***	***	***	***	***	***	***	***	***
Unfinished IMTDCs: Capacity utilization (fn1).....	***	***	***	***	***	***	***	***	***
U.S. shipments (fn 3):									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Export shipments (fn 4):									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn 1):									
Production workers.....	***	***	***	***	***	***	***	***	***
Hours worked (1,000s).....	***	***	***	***	***	***	***	***	***
Wages paid (\$1,000).....	***	***	***	***	***	***	***	***	***
Hourly wages (dollars).....	***	***	***	***	***	***	***	***	***
Productivity (pieces per hour).....	***	***	***	***	***	***	***	***	***
Unit labor costs.....	***	***	***	***	***	***	***	***	***
Net Sales:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS).....									
Gross profit or (loss).....	***	***	***	***	***	***	***	***	***
SG&A expenses.....	***	***	***	***	***	***	***	***	***
Operating income or (loss).....	***	***	***	***	***	***	***	***	***
Net income or (loss).....	***	***	***	***	***	***	***	***	***
Capital expenditures.....	***	***	***	***	***	***	***	***	***
Unit COGS.....	***	***	***	***	***	***	***	***	***
Unit SG&A expenses.....	***	***	***	***	***	***	***	***	***
Unit operating income or (loss).....	***	***	***	***	***	***	***	***	***
Unit net income or (loss).....	***	***	***	***	***	***	***	***	***
COGS/sales (fn1).....	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1).....	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1).....	***	***	***	***	***	***	***	***	***

fn1.--Report data are in percent and period changes are in percentage points.

fn2.--Undefined.

fn3.--U.S. producers' U.S. shipments reported here include all shipments to U.S. customers of IMTDCs that were cast/forged in the United States (regardless of where they were finished) and deducts the quantity and value of any imports of unfinished IMTDCs that were finished by U.S. producers. The deduction for imports used in production ***. See part III for a detailed discussion.

fn4.--Export shipments reported here represent only U.S. exports of finished IMTDCs as ***. See part III for a detailed discussion.

Table C-2

IMTDCs: Summary data concerning the U.S. market excluding U.S. producer Baldor Electric, 2012-14, January to September 2014, and January to September 2015

* * * * *

APPENDIX D

NONSUBJECT COUNTRY PRICE DATA

Importers *** reported price data for Mexico,¹ the nonsubject country for which price data was requested. These pricing products and accompanying data are comparable to those presented in tables V-3 to V-10. Price and quantity data for Mexico are shown in tables D-1 and D-2 and in figure D-1 (with domestic and subject sources).²

In comparing nonsubject country pricing data with U.S. producer pricing data, prices for product imported from Mexico were lower than prices for U.S.-produced product in 8 instances and higher in 16 instances. In comparing nonsubject country pricing data with subject country pricing data, prices for product imported from Mexico were lower than prices for product imported from China in no instances and higher in 25 instances. A summary of price differentials is presented in table D-3.

Table D-1

IMTDCs: Weighted-average f.o.b. prices and quantities of imported product 1 from Mexico sold to distributors, by quarters, January 2012-September 2015

* * * * *

Table D-2

IMTDCs: Weighted-average f.o.b. prices and quantities of imported product 4 from Mexico sold to distributors, by quarters, January 2012-September 2015

* * * * *

Figure D-1

IMTDCs: Weighted-average f.o.b. prices and quantities of domestic and imported product, by quarters, January 2012-September 2015

* * * * *

Table D-3

IMTDCs: Summary of underselling/(overselling), by country, January 2012-September 2015

Country	United States vs. Mexico			China vs. Mexico		
	Number of comparisons	Underselling (Mexican price lower)	Overselling (Mexican price higher)	Number of comparisons	Underselling (Chinese price lower)	Overselling (Chinese price higher)
Mexico	24	8	16	25	25	0

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

¹ ***.

² ***, Canada has been excluded from the following tables and figures.