Malleable Iron Pipe Fittings From China

Investigation No. 731-TA-1021 (Second Review)
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On the basis of the record¹ developed in the subject five-year review, the United States International Trade Commission (Commission) determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)), that revocation of the antidumping duty order on malleable iron pipe fittings from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted this review on March 3, 2014, (79 FR 11819) and determined on June 6, 2014 that it would conduct an expedited review (79 FR 34550, June 17, 2014).

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

Based on the record in this five-year review, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Tariff Act"), that revocation of the antidumping duty order on malleable iron pipe fittings from China would likely lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. Background

Original Investigation and Prior Review. In December 2003, the Commission determined that a domestic industry was threatened with material injury by reason of imports of malleable iron pipe fittings (“malleable pipe fittings”) from China that the U.S. Department of Commerce ("Commerce") found had been sold at less than fair value.1 On December 12, 2003, Commerce issued an antidumping duty order on these imports.2

In April 2009, the Commission conducted an expedited first five-year review of the order and determined that revocation of the antidumping duty order on malleable pipe fittings from China would likely lead to continuation or recurrence of material injury to an industry within a reasonably foreseeable time.3 On April 22, 2009, Commerce issued a notice continuing the antidumping duty order on imports of malleable iron pipe fittings from China.4

Current Review. The Commission instituted this second five-year review on March 3, 2014.5 Domestic producers Anvil International ("Anvil") and Ward Manufacturing ("Ward") (collectively, "domestic producers") submitted a joint response to the Commission’s notice of institution.6 The Commission did not receive a response from any respondent interested party. On June 6, 2014, the Commission found each domestic producer’s response to the notice of institution individually adequate, the domestic interested party group response adequate, and the respondent interested party group response inadequate.7 In the absence of any circumstances warranting a full review, the Commission determined to conduct an expedited review.

7 Explanation of Commission Determination on Adequacy, EDIS Doc. 535541 (June 2014).
II. Domestic Like Product and Industry

A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the “domestic like product” and the “industry.” 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 under this subtitle.” The Commission’s practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.

Commerce has defined the imported merchandise within the scope of the order under review as follows:

{C}ertain malleable iron pipe fittings, cast, other than grooved fittings . . . . The merchandise is currently classified under item numbers 7307.19.90.30, 7307.19.90.60 and 7307.19.90.80 of the Harmonized Tariff Schedule of the United State (HTSUS). Excluded from the scope of this order are metal compression couplings, which are imported under HTSUS number 7307.19.90.80. A metal compression coupling consists of a coupling body, two gaskets, and two compression nuts. These products range in diameter from ½ inch to 2 inches and are carried only in galvanized finish.

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8 Explanation of Commission Determination on Adequacy, EDIS Doc. 535541.
9 Malleable Iron Pipe Fittings from China: Joint Comments on the Record (June 12, 2014) (“Comments”).
The scope definition set out above is unchanged from Commerce’s scope definition in the original investigation and prior review.

Malleable pipe fittings are used for connecting two or more pipes or tubes, connecting a pipe to some other apparatus, changing the direction of fluid flow, or closing a pipe. They are principally used in the gas and water systems of residential and non-residential buildings and pipe systems of oil refractories. Malleable pipe fittings are made from cast iron from alloys primarily composed of iron, carbon, and silicon. The metal is subject to a lengthy annealing process following casting that improves its machineability, ductility, and durability. Malleable pipe fittings are employed when shock and vibration resistance are required and the fittings must withstand quick temperature changes.

In the original investigation, the Commission found a single domestic like product consisting of malleable iron pipe fittings that were coextensive with Commerce’s scope. The Commission adopted the same domestic like product definition in the first five-year review. In this review, the domestic producers have stated that they agreed with the domestic like product definition the Commission adopted in the original investigation and first review. There is no new information in the record indicating that the characteristics of malleable pipe fittings have changed since the prior proceedings. Accordingly, we define the domestic like product as malleable iron pipe fittings, commensurate with Commerce’s scope.

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry 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.” In defining the domestic industry, the Commission’s general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

In the original investigation and prior review, the Commission found a single domestic industry consisting of all domestic producers of malleable pipe fittings. In this review, the domestic producers assert that the Commission should define the domestic industry as it did in

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15 CR at I-11, PR at I-7.
16 CR at I-12, PR at I-9.
17 Original Determination, USITC Pub. 3649 at 5-6.
19 Response at 24; Comments at 2.
20 See generally CR at I-8-16, PR at I-7-11.
the original investigation and first review.\textsuperscript{23} Evidence on the record shows that *** has imported subject merchandise, but domestic producers contend that *** should not be excluded from the domestic industry because its primary interest is domestic production and it has invested heavily in maintaining its U.S. operations.\textsuperscript{24}

We therefore examine whether *** should be excluded from the domestic industry pursuant to section 771(4)(B) of the Tariff Act. Section 771(4)(B) 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.\textsuperscript{25} Exclusion of such a producer is within the Commission’s discretion based on the facts presented in each case.\textsuperscript{26}

In this review, the record shows that *** accounted for *** percent of U.S. production of malleable pipe fittings in 2013.\textsuperscript{27} In that same year, its ratio of subject imports to domestic production was *** percent.\textsuperscript{28} *** states that *** and that it supports continuation of the order.\textsuperscript{29} Finally, in 2013, ***.\textsuperscript{30,31} Accordingly, we find that appropriate circumstances do not exist that warrant excluding *** as a related party, and we define the domestic industry as all U.S. producers of malleable pipe fittings.

\begin{flushleft}
\textsuperscript{23} Response at 24.  \\
\textsuperscript{24} Response at 27-28; Comments at 2-3.  \\
\textsuperscript{25} The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party are as follows:  \\
(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, i.e., 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; and  \\
(3) the position of the related producer vis-à-vis the rest of the industry, i.e., whether inclusion or exclusion of the related party will skew the data for the rest of the industry. \textit{See, e.g., Torrington Co. v. United States}, 790 F. Supp. 1161, 1168 (Ct. Int’l Trade 1992), \textit{aff’d without opinion}, 991 F.2d 809 (Fed. Cir. 1993).  \\
\textsuperscript{27} Response at 25; CR/PR at Table I-1.  \\
\textsuperscript{28} Response at Exh. 19.  \\
\textsuperscript{29} Response at 25.  \\
\textsuperscript{30} Response at Exh. 10.  \\
\textsuperscript{31} Vice Chairman Pinkert does not rely upon financial performance to determine whether there are appropriate circumstances to exclude *** from the domestic industry. In his view, the present record is not sufficient to link the company’s financial performance with respect to U.S. operations to any benefit it derives as a related party.
\end{flushleft}
III. Revocation of the Antidumping Duty Order Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order “would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.”\(^\text{32}\) The Uruguay Round Agreements Act Statement of Administrative Action (“SAA”) states that “under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports.”\(^\text{33}\) Thus, the likelihood standard is prospective in nature.\(^\text{34}\) The U.S. Court of International Trade has found that “likely,” as used in the five-year review provisions of the Tariff Act, means “probable,” and the Commission applies that standard in five-year reviews.\(^\text{35}\)

The statute states that “the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time.”\(^\text{36}\) According to the SAA, a “reasonably foreseeable time’ will vary from case-to-case, but

\(^{32}\) 19 U.S.C. § 1675a(a).

\(^{33}\) SAA, H.R. Rep. 103-316, vol. I at 883-84 (1994). The SAA states that “[t]he likelihood of injury standard applies regardless of the nature of the Commission’s original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed.” Id. at 883.

\(^{34}\) While the SAA states that “a separate determination regarding current material injury is not necessary,” it indicates that “the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued (sic) prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked.” SAA at 884.

\(^{35}\) See NMB Singapore Ltd. v. United States, 288 F. Supp. 2d 1306, 1352 (Ct. Int’l Trade 2003) (“‘likely’ means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a”), aff’d mem., 140 Fed. Appx. 268 (Fed. Cir. 2005); Nippon Steel Corp. v. United States, 26 CIT 1416, 1419 (2002) (same); Usinor Industeel, S.A. v. United States, 26 CIT 1402, 1404 nn.3, 6 (2002) (“more likely than not” standard is “consistent with the court’s opinion;” “the court has not interpreted ‘likely’ to imply any particular degree of ‘certainty’”); Indorama Chemicals (Thailand) Ltd. v. United States, 26 CIT 1059, 1070 (2002) (“standard is based on a likelihood of continuation or recurrence of injury, not a certainty”); Usinor v. United States, 26 CIT 767, 794 (2002) (“‘likely’ is tantamount to ‘probable,’ not merely ‘possible’”).

\(^{36}\) 19 U.S.C. § 1675a(a)(5).
normally will exceed the ‘imminent’ timeframe applicable in a threat of injury analysis in original investigations.”

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to “consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated.” It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if the orders are revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4). The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission’s determination.

In evaluating the likely volume of imports of subject merchandise if the orders under review are revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States. In doing so, the Commission must consider “all relevant economic factors,” including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) 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.

In evaluating the likely price effects of subject imports if the orders under review are revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the

37 SAA at 887. Among the factors that the Commission should consider in this regard are “the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities.” Id.

39 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings with respect to the order currently under review. CR at I-5, PR at I-3.
40 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.
United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.\textsuperscript{43}

In evaluating the likely impact of imports of subject merchandise if the orders under review are revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.\textsuperscript{44} All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the order under review and whether the industry is vulnerable to material injury upon revocation.\textsuperscript{45}

No respondent interested party participated in this expedited review. The record, therefore, contains limited new information with respect to the malleable pipe fittings industry in China. There also is limited information on the malleable pipe fittings market in the United States during the period of review. Accordingly, for our determination, we rely as appropriate on the facts available from the original investigation and prior review, data submitted in the response to the notice of institution, and other public data.

\textbf{B. Conditions of Competition and the Business Cycle}

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”\textsuperscript{46} The following conditions of competition inform our determination.

\textbf{Demand Conditions.} In the original investigation, the Commission found that demand for malleable pipe fittings was based on demand in construction and systems incorporating

\textsuperscript{43} See 19 U.S.C. § 1675a(a)(3). The SAA states that “[c]onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices.” SAA at 886.

\textsuperscript{44} 19 U.S.C. § 1675a(a)(4).

\textsuperscript{45} The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission “considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.” SAA at 885.

\textsuperscript{46} 19 U.S.C. § 1675a(a)(4).
such pipe fittings, primarily the residential and commercial/industrial building markets.\textsuperscript{47} Demand for malleable pipe fittings decreased irregularly between 2000 and 2002.\textsuperscript{48} Apparent U.S. consumption was *** short tons in 2000, *** short tons in 2001, and *** short tons in 2002.\textsuperscript{49}

In the first review, the Commission found that demand for malleable pipe fittings weakened in 2007.\textsuperscript{50} At the time, the record indicated that demand was likely to continue to weaken in the reasonably foreseeable future due to a decline in construction spending.\textsuperscript{51} Apparent U.S. consumption was *** short tons in 2007.\textsuperscript{52}

In this review, the information available indicates that the conditions of competition that influence demand for malleable pipe fittings have not changed significantly since the original investigation. Domestic producers report that demand for malleable pipe fittings continues to be driven by construction in the residential and commercial markets.\textsuperscript{53} Apparent U.S. consumption of malleable pipe fittings in 2013 was *** short tons.\textsuperscript{54} This is lower than apparent U.S. consumption reported in the original investigation and the prior review.\textsuperscript{55}

\textbf{Supply Conditions.} In the original investigation, the Commission found that Anvil and Ward accounted for nearly all of the U.S. production of malleable pipe fittings in 2002.\textsuperscript{56} The Commission observed that Anvil’s production capacity was reduced in 2001 due to the consolidation of its foundries.\textsuperscript{57} The U.S. market was also supplied by subject and nonsubject imports, both of which increased in volume during the original investigation.\textsuperscript{58}

In the first review, the Commission found that domestic producers Anvil and Ward continued to supply the U.S. market alongside subject and nonsubject imports in 2007.\textsuperscript{59} Subject imports were higher in 2007 than in 2002, whereas nonsubject imports were lower in 2007 than in 2002.\textsuperscript{60}

In this review, domestic producers Anvil and Ward have stated that they are the only remaining domestic producers of malleable pipe fittings.\textsuperscript{61} Domestic producers’ U.S. shipments

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\textsuperscript{47} Original Determination, USITC Pub. 3649 at 7.
\textsuperscript{48} Original Determination, USITC Pub. 3649 at 7.
\textsuperscript{49} CR/PR at Table I-5.
\textsuperscript{50} Review Opinion, USITC Pub. 4069 at 8-9.
\textsuperscript{51} Review Opinion, USITC Pub. 4069 at 9.
\textsuperscript{52} CR/PR at Table I-5.
\textsuperscript{53} Comments at 4.
\textsuperscript{54} CR/PR at Table I-5. These calculations are based on the reported shipments of the two responding domestic parties and official import data. \textit{Id.}
\textsuperscript{55} CR/PR at Table I-5.
\textsuperscript{56} Original Determination, USITC Pub. 3649 at 7.
\textsuperscript{57} Original Determination, USITC Pub. 3649 at 7.
\textsuperscript{58} Original Determination, USITC Pub. 3649 at 9-10.
\textsuperscript{59} Review Opinion, USITC Pub. 4069 at 9.
\textsuperscript{60} Review Opinion, USITC Pub. 4069 at 9.
\textsuperscript{61} CR at I-16-17, PR at I-13.
accounted for *** percent of apparent U.S. consumption in 2013, subject imports accounted for *** percent, and nonsubject imports of malleable pipe fittings accounted for *** percent.\textsuperscript{62}

**Substitutability.** In the original investigation, the Commission found that the domestic like product and subject imports were substitutable.\textsuperscript{63} The Commission also found that price and quality were important factors in purchasing decisions.\textsuperscript{64} While quality was the primary consideration, most purchasers reported that subject imports and the domestic like product were comparable in terms of quality and consistency.\textsuperscript{65} In the first review, domestic producers argued and the Commission found that these conditions continued to apply.\textsuperscript{66}

In this review, there is no new information on the record to suggest that the substitutability of malleable pipe fittings from domestic and subject sources has changed since the original investigation and prior review. Accordingly, we again find that the domestic like product and subject malleable pipe fittings are substitutable and that price continues to be an important factor in purchasing decisions.

C. Likely Volume of Subject Imports

**Original Investigation and Prior Review.** In the original investigation, the Commission found that the volume and market share of subject imports increased substantially, with the quantity of subject imports increasing by 54.2 percent between 2000 and 2002.\textsuperscript{67} Shipments of subject imports as a share of apparent U.S. consumption also increased over the period of investigation (“POI”), even while apparent U.S. consumption declined.\textsuperscript{68} The Commission found that the volume of subject imports was significant both in absolute terms and relative to production and apparent consumption in the United States and that the increase in the volume of subject imports was also significant.\textsuperscript{69}

In its analysis of threat of material injury, the Commission found that its findings of a significant rate of increase in subject import volume and the growth in subject import market share at the expense of the domestic industry strongly indicated the likelihood of substantially increased imports.\textsuperscript{70} The Commission concluded that the Chinese industry had substantial and growing capacity, that it was export oriented, and that due to barriers to exports in other markets it would likely utilize its increased capacity, inventories, and underselling to increase imports to the United States.\textsuperscript{71}

\textsuperscript{62} CR/PR at Table I-5.
\textsuperscript{63} Original Determination, USITC Pub. 3649 at 7.
\textsuperscript{64} Original Determination, USITC Pub. 3649 at 7.
\textsuperscript{65} Original Determination, USITC Pub. 3649 at 7.
\textsuperscript{66} Review Opinion, USITC Pub. 4069 at 9.
\textsuperscript{67} Original Determination, USITC Pub. 3649 at 10.
\textsuperscript{68} Original Determination, USITC Pub. 3649 at 10.
\textsuperscript{69} Original Determination, USITC Pub. 3649 at 10.
\textsuperscript{70} Original Determination, USITC Pub. 3649 at 14-16.
\textsuperscript{71} Original Determination, USITC Pub. 3649 at 14-16.
In the first review, the Commission found that subject imports declined after imposition of the antidumping duty order in 2003, but then increased steadily over the period of review before declining in 2007.\(^\text{72}\) The market share of subject imports was higher in 2007 than in 2002, the final year of the original POI.\(^\text{73}\) The Commission found that data on the record indicated that Chinese producers had substantial excess capacity and would have had the incentive to shift production from non-malleable pipe fittings, which were subject to antidumping duties, to the production of subject merchandise if the order were revoked.\(^\text{74}\) The Commission found that the likely volume of subject imports, both in absolute terms and relative to production and consumption in the United States, would likely be significant if the order were revoked.\(^\text{75}\)

**Current Review.** The information available in this review shows that subject imports have increased in volume since the original investigation and prior review. Subject imports were 13,492 short tons in 2000, 13,443 short tons in 2001, 20,809 short tons in 2002, 25,065 short tons in 2007, and 27,900 short tons in 2013.\(^\text{76}\) Subject imports from China accounted for *** percent of apparent U.S. consumption in 2013, which represents an increase in market share since the original investigation and prior review despite the existence of the order.\(^\text{77}\) In contrast, U.S. shipments of the domestic like product only accounted for *** percent of apparent U.S. consumption in 2013.\(^\text{78}\)

The record does not contain any current data specific to malleable pipe fittings production or capacity in China because subject producers did not participate or furnish information in this review.\(^\text{79}\) Nonetheless, the information available in this review indicates that Chinese producers of malleable pipe fittings remain very interested in the U.S. market. Subject import volumes increased between imposition of the order and the first review and are higher in this review than in the prior review period. Subject producers, therefore, have demonstrated their ability to increase exports to the U.S. market. Global trade data show that China has been the largest exporter of malleable pipe fittings since 2009,\(^\text{80}\) and evidence on the record shows that the United States is the largest market for imports of malleable pipe fittings from China.\(^\text{81}\) Additionally, the volume of subject imports from China is larger than imports of malleable pipe fittings from all nonsubject sources combined.\(^\text{82}\) Moreover, Argentina, the European Union,

\(^{72}\) Review Opinion, USITC Pub. 4069 at 10.

\(^{73}\) Review Opinion, USITC Pub. 4069 at 10.

\(^{74}\) Review Opinion, USITC Pub. 4069 at 11.

\(^{75}\) Review Opinion, USITC Pub. 4069 at 11.

\(^{76}\) CR/PR at Table I-5.

\(^{77}\) CR/PR at Table I-5.

\(^{78}\) CR/PR at Table I-5.

\(^{79}\) The record also does not contain any current information about inventories of the subject merchandise or subject producers’ ability to shift production between products.

\(^{80}\) CR/PR at Table I-8. The data in this table include some products outside the scope of this review, such as ductile iron fittings and grooved couplings.

\(^{81}\) CR/PR at Table I-6. The data in this table include some products outside the scope.

\(^{82}\) CR/PR at Table I-4.
and Turkey have imposed antidumping duty orders on imports of malleable pipe fittings from China. Consequently, subject producers have both the means and incentive to further increase their exports of the subject merchandise to the United States should the order be revoked.

We find that given the continued interest that Chinese producers of malleable iron fittings have in the U.S. market, their ability to sharply increase export volumes, and the historic volume of subject imports from China that have entered the U.S. market, the malleable pipe fittings industry in China is likely to export a significant volume of subject merchandise to the United States upon revocation of the order. Therefore, we find that the likely volume of subject imports, both in absolute terms and relative to consumption in the United States, would be significant if the order were revoked.

D. Likely Price Effects

**Original Investigation and Prior Review.** In the original determination, the Commission found consistent and significant underselling by the subject imports throughout the POI, occurring in 223 of 224 quarterly comparisons. Nonetheless, the Commission also found that the subject imports did not have significant price-depressing or suppressing effects during the period of investigation. Prices for the domestic like product increased over the POI, despite a decline in apparent U.S. consumption. The Commission was able to confirm some lost sales. The Commission concluded that subject imports did not have significant price effects on the domestic industry.

In its analysis of threat of material injury, the Commission found that the consistent underselling that it observed during the POI would likely continue and because price was a significant factor in purchasing decisions, the observed underselling was eroding the preference of certain purchasers for the domestic like product. The Commission also observed that underselling margins increased over the POI and the domestic industry responded by choosing to cede volume to subject imports while maintaining its prices at or near current levels. The Commission concluded that in light of the increasing underselling margins and the domestic industry’s declining market share, there would likely be increased demand for subject imports.

In the first review, the Commission found that there was nothing in the record to suggest that price would not continue to be an important factor in purchasing decisions. It found that if the antidumping duty order were revoked, Chinese producers would likely

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83 CR at I-31, PR at I-21.
84 Original Determination, USITC Pub. 3649 at 10.
85 Original Determination, USITC Pub. 3649 at 10-11.
86 Original Determination, USITC Pub. 3649 at 10.
87 Original Determination, USITC Pub. 3649 at 11.
88 Original Determination, USITC Pub. 3649 at 15.
89 Original Determination, USITC Pub. 3649 at 15.
90 Original Determination, USITC Pub. 3649 at 15.
91 Review Opinion, USITC Pub. 4069 at 12.
significantly increase exports and undersell the domestic like product to gain market share as they did in the original POI.\textsuperscript{92} The Commission concluded that if the order were revoked, subject imports would likely have significant depressing or suppressing effects on prices for the domestic like product.\textsuperscript{93}

**Current Review.** There is no new product-specific pricing information on the record for malleable pipe fittings. As explained above, we find that subject import volume would likely be significant in the reasonably foreseeable future if the order were revoked. We also found above that the domestic like product and the subject imports are substitutable and that price continues to be an important factor in purchasing decisions. Consequently, if the order were revoked, subject imports would likely increase their sales in the U.S. market by underselling the domestic like product at high margins, as they did in the original investigation. We therefore find that should the order be revoked, subject imports would likely enter in significant volumes at prices that likely would significantly undersell the domestic like product, and that these imports would likely have adverse effects on the domestic industry, as discussed below.

**E. Likely Impact\textsuperscript{94}**

**Original Investigation and Prior Review.** In the original investigation, the Commission found that the subject imports did not have a significant adverse impact on the domestic industry’s performance during the POI for purposes of its present material injury analysis.\textsuperscript{95} Although a number of performance indicators for the domestic industry had declined, the Commission found that the financial condition of the domestic industry was healthy and that the declines in several indicators resulted, at least in part, from factors other than subject imports, such as declining apparent U.S. consumption.\textsuperscript{96}

In its analysis of threat of material injury, the Commission observed that the likely significantly increased volume and market share of imports in the imminent future would likely have a significant negative impact on the domestic industry’s production, capacity, employment levels, and profitably.\textsuperscript{97}

\textsuperscript{92} Review Opinion, USITC Pub. 4069 at 12.

\textsuperscript{93} Review Opinion, USITC Pub. 4069 at 12.

\textsuperscript{94} Under the statute, “the Commission may consider the magnitude of the margin of dumping” in making its determination in a five-year review. 19 U.S.C. § 1675a(a)(6). The statute defines the “magnitude of the margin of dumping” to be used by the Commission in five-year reviews as “the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title.” 19 U.S.C. § 1677(35)(C)(iv); see also SAA at 887.

Commerce expedited its antidumping duty review determination and found that revocation of the antidumping duty order would likely lead to continuation or recurrence of dumping at margins up to 111.36 percent. Commerce Final Determination, 79 Fed. Reg. at 42291 (Jul. 21, 2014).

\textsuperscript{95} Original Determination, USITC Pub. 3649 at 12.

\textsuperscript{96} Original Determination, USITC Pub. 3649 at 13-15.

\textsuperscript{97} Original Determination, USITC Pub. 3649 at 16.
In the first review, the Commission found that the domestic industry’s production was lower and the domestic industry’s financial performance appeared to have deteriorated since the original investigation. The Commission found that revocation of the order would likely lead to a significant increase in the volume of subject imports, which would likely undersell the domestic like product to a significant degree and suppress or depress prices for the domestic like product. The Commission found that this would likely cause the domestic industry to lose market share to imports from China, resulting in a decline in production, shipments, sales and revenue for the domestic industry.

**Current Review.** The limited information available concerning the domestic industry’s condition in this review consists of the data that Anvil and Ward provided in response to the notice of institution and data from the original investigation and prior review. The record is insufficient for us to make a finding on whether the domestic industry is vulnerable to the continuation or recurrence of material injury in the event of revocation of the order.

In 2013, the average capacity of the reporting domestic producers was *** short tons, production was *** short tons, and capacity utilization was *** percent. U.S. shipments in 2013 were *** short tons valued at $***. The domestic industry reported that its ratio of operating income to net sales was *** percent. This is higher than it was during the prior review period and the end of the original period of investigation, but is lower than the first two years of the original period of investigation. Based on the limited information on the record, we find that should the order be revoked, the likely significant volume and underselling of the subject imports would likely have a significant adverse impact on the production, shipments, sales, market share, and revenues of the domestic industry. This impact would likely cause declines in the domestic industry’s financial performance.

We have also considered the role of factors other than subject imports, including the presence of nonsubject imports, so as not to attribute injury from other factors to the subject imports. Nonsubject imports as a share of the U.S. market in 2013 were the lowest on record, accounting for *** percent of consumption based on quantity. Nonsubject imports held ***

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101 Based on the record of this review, which shows that the domestic industry had an operating income margin of *** percent in 2013, CR/PR at Table I-2, Vice Chairman Pinkert finds that the domestic industry is not vulnerable to the continuation or recurrence of material injury in the event of revocation of the order. Nevertheless, he notes that other indicators of the industry’s performance in 2013, including its capacity, production, capacity utilization, shipments, net sales, gross profits, and operating income, were below the levels reported in 2002, the last year of the period of the original investigation.
102 CR/PR at Table I-2.
103 CR/PR at Table I-2.
104 CR/PR at Table I-2.
105 See CR/PR at Table I-2.
106 CR/PR at Table I-5.
percent of the U.S. market in 2000, *** percent in 2001, *** percent in 2002, and *** percent in 2007.\textsuperscript{107} While nonsubject imports have decreased their share of the U.S. market, subject imports have increased their share of the U.S. market.\textsuperscript{108}

Accordingly, we conclude that if the orders were revoked, subject imports would likely have a significant adverse impact on the domestic industry within a reasonably foreseeable time.

\textbf{IV. Conclusion}

For the above reasons, we determine that revocation of the antidumping duty order on malleable pipe fittings from China would likely lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

\textsuperscript{107} CR/PR at Table I-5.
\textsuperscript{108} See CR/PR at Table I-5.
INFORMATION OBTAINED IN THE REVIEW

INTRODUCTION

Background

On March 3, 2014, the U.S. International Trade Commission (“Commission” or “USITC”) gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended (“the Act”)¹, that it had instituted a review to determine whether revocation of the antidumping duty order on U.S. imports of malleable iron pipe fittings (“malleable fittings”) from China would likely lead to the continuation or recurrence of material injury to a domestic industry.² On June 6, 2014, the Commission determined that it would conduct an expedited review pursuant to section 751(c)(3) of the Act.³ The following tabulation presents information relating to the background and schedule of this proceeding:

¹ 19 U.S.C. 1675(c).
² Malleable Iron Pipe Fittings From China; Institution of a Five-Year Review, 79 FR 11819, March 3, 2014. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.
³ In accordance with section 751(c) of the Act, the U.S. Department of Commerce (“Commerce”) published a notice of initiation of a five-year review of the subject antidumping duty order concurrently with the Commission’s notice of institution. Initiation of Five-Year (“Sunset”) Review, 79 FR 11762, March 3, 2014.
⁴ In response to its notice of institution for the subject review, the Commission received a joint submission from domestic producers, Anvil International, LLC (“Anvil”) and Ward Manufacturing (“Ward”) (collectively referred to herein as “domestic interested parties” or “domestic producers”). Ward Manufacturing is represented by Schagrin Associates, whereas Anvil International, LLC is represented by King and Spalding LLP. The domestic producers believe that together they represent all domestic production of malleable pipe fittings. Domestic Interested Parties’ Response to the Notice of Institution, April 2, 2014, p. 1.
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<th>Effective date</th>
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<td>July 22, 2014</td>
<td>Commission’s vote</td>
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<td>August 4, 2014</td>
<td>Commission’s determination and views</td>
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The Original Investigation

On October 30, 2002, a petition was filed with Commerce and the Commission alleging that an industry in the United States was materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of malleable fittings from China. On October 20, 2003, Commerce made an affirmative final LTFV determination and, on November 21, 2003, the Commission completed its original investigation, determining that an industry in the United States was threatened with injury by reason of LTFV imports of malleable fittings from China.

The First Five-Year Review

In the first five-year review of the order, the Commission determined that the domestic interested party group response to its notice of institution was adequate. In the absence of an adequate respondent interested party group response, or any other circumstances that would

5 The petition was filed by Anvil, Portsmouth, NH, and Ward, Blossburg, PA.
7 The Commission, given its determination of no present material injury by reason of subject imports, did not reach the issue of whether critical circumstances existed. Malleable Iron Pipe Fittings From China: In. No. 731-TA-1021 (Final), USITC Publication 3549, December 2003, p.14, fn. 86.
warrant a full review, the Commission determined that it would conduct an expedited review. In April 2009, it determined that revocation of the antidumping order on malleable iron pipe fittings from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time. Commerce issued a continuation of the order on April 22, 2009.

**Commerce’s Original Determination and Subsequent Review Determinations**

Commerce’s original determination was published on October 28, 2003, and the antidumping duty order concerning malleable fittings from China was issued on December 12, 2003. Since the issuance of the antidumping duty order, there have been no scope rulings concerning the antidumping duty order, no new shipper reviews, no changed circumstances determinations, and no duty absorption findings.

**Commerce’s Final Result of Second Expedited Five-Year Review**

After determining that it did not receive an adequate response from respondent interested parties, Commerce conducted expedited reviews with respect to the antidumping order on malleable iron pipe fittings from China. On July 21, 2014, it determined that revocation of the order would be likely to lead to continuation or recurrence of dumping at weighted-average dumping margins up to 111.36 percent.

**Previous and Related Investigations**

On April 13, 1977, the Commission instituted investigation No. TA-201-26 under section 201 of the Trade Act of 1974 concerning malleable cast iron pipe and tube fittings in response to a petition filed by the American Pipe Fittings Association (“APFA”). The Commission made a negative determination in the investigation.

On January 7, 1980, Commerce made a preliminary determination that the Government of Japan was providing benefits that might constitute bounties or grants on the manufacture, production, or exportation of certain malleable cast iron pipe fittings. Accordingly, the Commission instituted investigation No. 701-TA-9 (Final) under section 703(a) of the Tariff Act

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of 1930 ("the Act"). On March 20, 1980, the Commission terminated the investigation upon written request by petitioner, the APFA.

On September 18, 1984, the Cast Iron Pipe Fittings Committee ("CIPFC") filed countervailing duty petitions with the Commission and Commerce on imports from Brazil and India of certain cast-iron pipe fittings, other than for cast iron soil pipe. On October 9, 1984, following receipt of a letter from counsel for the petitioners withdrawing the petition relating to imports of the subject merchandise from India, the Commission terminated its investigation concerning India. In the remaining investigation concerning Brazil, the Commission made final determinations that there were two domestic like products, malleable cast iron pipe fittings and non-malleable cast iron pipe fittings, other than for cast iron soil pipe, and made negative determinations concerning both malleable and non-malleable cast iron pipe fittings which were subsidized by the Government of Brazil.\(^{14}\)

Effective July 31, 1985, the Commission instituted investigation Nos. 731-TA-278-281 (Preliminary) following receipt of antidumping complaints from the CIPFC on malleable cast iron pipe fittings from Brazil, Korea, and Taiwan and non-malleable cast iron pipe fittings, other than for cast iron soil pipe, from Taiwan. On January 14, 1986, Commerce published notice of its preliminary determinations that malleable cast iron pipe fittings from Brazil, Korea, and Taiwan were being, or were likely to be, sold in the United States at LTFV and that non-malleable cast iron pipe fittings from Taiwan were not being, nor likely to be, sold in the United States at LTFV.\(^{15}\) Accordingly, effective January 13, 1986, the Commission instituted final investigations. The Commission made affirmative determinations on imports from Brazil, Korea, and Taiwan of malleable cast iron pipe fittings.\(^{16}\)

On August 29, 1986, antidumping petitions were filed on behalf of the CIPFC alleging that malleable cast iron pipe fittings from Japan and Thailand were being sold at LTFV. In June 1987, the Commission determined that an industry in the United States was materially injured by reason of LTFV imports of malleable cast iron pipe fittings from Japan, and in August 1987, the Commission determined that an industry in the United States was materially injured by reason of LTFV imports of malleable cast iron pipe fittings from Thailand.\(^{17}\)

On January 4, 1999, the Commission instituted reviews to determine whether revocation of the antidumping duty orders on malleable cast iron pipe fittings from Brazil, Japan, Korea, Taiwan, and Thailand would likely lead to the continuation or recurrence of

\(^{14}\) Certain Cast-Iron Pipe Fittings from Brazil, Inv. No. 701-TA-221 (Final), USITC Publication 1681, April 1985.

\(^{15}\) Subsequently, the petition with respect to non-malleable cast iron pipe fittings from Taiwan was withdrawn and the investigation terminated.

\(^{16}\) Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan, Inv. Nos. 731-TA-278-280 (Final), USITC Publication 1845, May 1986.

\(^{17}\) The Commission rejected arguments presented in the Japan/Thailand investigations that the domestic like product should be defined to also include grooved and/or non-malleable pipe fittings. Certain Malleable Cast-Iron Pipe Fittings from Japan, Inv. No. 731-TA-347 (Final), USITC Publication 1987, June 1987, and Certain Malleable Cast-Iron Pipe Fittings from Thailand, Inv. No. 731-TA-348 (Final), USITC Publication 2004, August 1987.
material injury to a domestic industry. After conducting full reviews pursuant to section 751(c)(5) of the Act, the Commission determined that revocation of the antidumping duty orders covering malleable cast iron pipe fittings from Brazil, Taiwan, and Thailand would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time and that revocation of the antidumping duty orders concerning malleable cast iron pipe fittings from Japan and Korea would be likely to lead to continuation or recurrence of material injury to an industry within the United States within a reasonably foreseeable time.\(^\text{18}\) In each of the original investigations, the Commission had defined the domestic like product as all malleable cast iron pipe fittings other than grooved.\(^\text{19}\) In the reviews, no party argued for a different domestic like product definition. The Commission found no need to revisit its original determinations concerning domestic like product and adopted the same definition as in the original determinations. In 2005, because the domestic interested parties did not participate in the sunset review, Commerce revoked the antidumping duty orders on malleable cast iron pipe fittings from Korea and Japan.\(^\text{20}\)

On February 21, 2002, Anvil and Ward filed a petition with the Commission and Commerce alleging that the non-malleable iron pipe fittings industry in the United States was being materially injured and threatened with material injury by reason of imports from China. In March 2003, the Commission determined that an industry in the United States was threatened with material injury by reason of imports from China of non-malleable cast iron pipe fittings that were found by Commerce to be sold in the United States at less than fair value. The Commission further determined that it would not have found material injury but for the suspension of liquidation.\(^\text{21}\) Following affirmative determinations by the Commission and Commerce during the review investigation, the antidumping duty order was continued in 2008.\(^\text{22}\)

Most recently, the Commission determined that revocation of the antidumping duty order on non-malleable cast iron pipe fittings from China would be likely to lead to continuation

\(^{18}\) *Malleable Cast Iron Pipe Fittings from Brazil, Japan, Korea, Taiwan, and Thailand, Inv. Nos. 731-TA-278-280 (Review) and 731-TA-347-348 (Review), USITC Publication 3274, February 2000.*


\(^{21}\) *Non-malleable Cast Iron Pipe Fittings from China, Inv. No. 731-TA-990 (Final), USITC Publication 3586, March 2003, I-3.* During the original investigation, petitioners argued that the duties put in place subsequent to the Commission’s affirmative determination in the non-malleable fittings investigation created an incentive for Chinese producers to shift production from non-malleable to malleable fittings, thereby increasing their exports of malleable fittings to the United States.

\(^{22}\) *Continuation of Antidumping Duty Order on Non-Malleable Cast Iron Pipe Fittings From the People’s Republic of China, 73 FR 47887, August 15, 2008.*
or recurrence of material injury to an industry in the United States within a reasonable foreseeable time.\textsuperscript{23}

\section*{THE PRODUCT}

\subsection*{Commerce’s scope}

The product subject to this investigation is defined by Commerce as follows:

The products covered are certain malleable iron pipe fittings, cast, other than grooved fittings, from the People’s Republic of China. The merchandise is classified under item numbers 7307.19.9030, 7307.19.9060, and 7307.19.9080 of the Harmonized Tariff Schedule.

Excluded from the scope of this investigation are metal compression couplings, which are imported under HTS number 7307.19.90.80. A metal compression coupling consists of a coupling body, two gaskets, and two compression nuts. These products range in diameter from ½ inch to 2 inches and are carried only in a galvanized finish.\textsuperscript{24 25}

\subsection*{U.S. tariff treatment}

Malleable fittings are provided for in subheading 7307.19.90 of the Harmonized Tariff Schedule of the United States (“HTS”) and are imported under statistical reporting numbers 7307.19.9030 (unions), 7307.19.9060 (other, threaded), and 7307.19.9080 (other). Malleable fittings that are the product of China enter the United States at a column 1-general duty rate of 6.2 percent \textit{ad valorem}.

\subsection*{Domestic like product and domestic industry}

The domestic like product is defined as the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the subject merchandise. In its original determination and its expedited first five-year review determination, the Commission defined the domestic like product as malleable iron pipe fittings.


\textsuperscript{24} Counsel for domestic producers stated that both U.S. imports and apparent consumption of these couplings is very small, \textit{Malleable Iron Pipe Fittings From China}, Inv. No. 731-TA-1021 (Review).

\textsuperscript{25} Harmonized Tariff Schedule of the United States (2014).
fittings, cast, other than grooved, coextensive with Commerce’s scope.\textsuperscript{26} In the current review, according to their response to the notice of institution, the domestic producers concur with this definition.\textsuperscript{27}

The domestic industry is defined as the U.S. producers as a whole of the domestic like product, or those producers whose collective output of the domestic like product constitutes a major proportion of the total domestic production of the product. In its original determination and its expedited first five-year review determination, the Commission defined the domestic industry as consisting of Anvil, Ward, and the Buck Co., which accounted for all U.S. production of malleable iron pipe fittings during those periods.\textsuperscript{28} In the current review, the domestic interested parties believe that they account for 100 percent of current domestic production of malleable iron pipe fittings. They claimed that Buck, although part of the domestic industry in the original investigation and first review of this order, no longer produces malleable iron pipe fittings.\textsuperscript{29}

In the first review, the Commission considered whether ***, a domestic producer, should be excluded from the domestic industry because it had imported subject merchandise from China. The Commission found that appropriate circumstances did not exist to exclude *** from the domestic industry.\textsuperscript{30} In the current review, ***. *** that it again should not be excluded from the domestic industry in this review because its primary interest lies in domestic production and not importation. *** reported that it accounted for *** percent of total U.S. production in 2013. *** also stated that it ***. *** reported that it only imported the subject product because ***.\textsuperscript{31}

\textbf{Description and applications\textsuperscript{32}}

Pipe fittings are generally used for connecting the bores of two or more pipes or tubes, connecting a pipe to some other apparatus, and changing the direction of fluid flow. They are also used for closing a pipe. The material from which the subject fittings are made, cast iron, is a general term for alloys which are primarily composed of iron, carbon (more than 2 percent),

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{26} *Malleable Iron Pipe Fittings From China, Inv. No. 731-TA-1021 (Final), USITC Publication 3649, (December 2003), pp. 4-6; Malleable Iron Pipe Fittings From China, Inv. No. 731-TA-1021 (Review), USITC Publication 4069 (April 2009), pp. 4-5.
\item \textsuperscript{27} Domestic Interested Parties' Response to the Notice of Institution, April 2, 2014, p. 24.
\item \textsuperscript{29} Domestic Interested Parties’ Response to the Notice of Institution, April 2, 2014, p. 1, 21. Buck Co. is still in operation as a casting foundry, however, no longer produces the subject product.
\item \textsuperscript{30} Malleable Iron Pipe Fittings From China, Inv. No. 731-TA-1021 (Review), USITC Publication 4069 (April 2009), p. 6.
\item \textsuperscript{31} Domestic Interested Parties’ Response to the Notice of Institution, April 2, 2014, p. 24-28.
\item \textsuperscript{32} Information used in this section is from Malleable Iron Pipe Fittings From China, Inv. No. 731-TA-1021 (Review), USITC Publication 4069, April 2009, pp. I-10 – I-12.
\end{itemize}
\end{footnotesize}
and silicon.\textsuperscript{33} Made to the American Society for Testing and Materials (“ASTM”) and the American Society of Mechanical Engineers (“ASME”) specifications, iron castings exhibit mechanical properties which are determined by the cooling rate during and after solidification, by chemical composition, by heat treatment, by design, and by the nature of the molding technique. During the cooling and solidification processes, carbon is segregated within the crystalline structure of the iron in the form of iron carbide or graphite, resulting in different types of cast irons with different physical properties.

There are three basic metallurgical types of cast iron pipe fittings - namely, malleable, nonmalleable (or gray iron), and ductile fittings. These types of fittings and the cast iron from which they are made are discussed below.

\textbf{Malleable Fittings}

Malleable iron is initially cast as white iron\textsuperscript{34} which, after casting, is subject to a lengthy annealing process which strengthens the cast iron. The annealing process consists of rapidly heating the casting to approximately 1,750° F, followed by a slow controlled cooling period.\textsuperscript{35} This annealing process distinguishes the product from non-malleable cast iron pipe fittings in microstructure and physical characteristics. Specifically, annealing improves the machinability, ductility, and durability of the metal by reducing its brittleness. The overall production and heat treatment process performed on malleable iron fittings distinguishes the product from non-malleable cast iron pipe fittings in chemical composition, microstructure, material strength, size, and weight. Malleable iron can be specified either by its tensile properties or by hardness of the casting.\textsuperscript{36}

The principal uses of malleable fittings are in gas lines, piping systems of oil refineries, and building gas and water systems. In some applications, malleable fittings may be substituted for nonmalleable fittings, but due to the higher cost of the product, such substitution is uneconomical. Malleable fittings are available in many configurations, the most common being 90-degree elbows, tees, couplings, crosses, and unions. They are produced in both black (non-


\textsuperscript{34} White iron (so-called because of the color of the fractured surface of the 39 cast iron) is sometimes called chilled iron because it is produced by a rapid solidification process. During this process, carbon and iron elements remain chemically combined in colonies of iron carbide (Fe3C), which contains 6.67 percent carbon by weight and is formed more readily than graphite because iron and carbon atoms are not completely separated in the structure. This results in a hard and brittle cast, which has superior abrasion resistance but is normally unmachinable. \textit{Iron Castings Handbook}, Charles F. Walton (Ed.), Gray and Ductile Iron Founder’s Society, 1971, pp. 55, 94, 114-115.

\textsuperscript{35} The overall cooling process takes from 25 to 40 hours to complete. \textit{Malleable Iron Pipe Fittings From China, Inv. No. 731-TA-1021 (Final)}, USITC Publication 3649, December 2003, pp. I-5-I-6.

galvanized) and galvanized form.\textsuperscript{37} Malleable fittings are lighter, thinner, stronger, and less brittle than non-malleable cast iron fittings and are used where shock and vibration resistance is required and where fittings are subject to quick temperature changes.

**Non-Malleable Fittings**

Non-malleable or gray cast iron\textsuperscript{38} is defined by the ASTM as cast iron that has fine graphite flakes which are formed during cooling. Gray iron has excellent machinability, wear resistance, and high hardness value. Yield strength, however, is not a significant property of gray iron.\textsuperscript{39} Gray irons exhibit no elastic behavior and are comparatively weak, with a tensile strength\textsuperscript{40} ranging from 20,000 to 58,000 pounds per square inch ("psi"). The graphite flakes dominate the properties of this material, weakening the metallic matrix and causing fractures under stress. Fittings produced from non-malleable iron are used primarily in fire protection/sprinkler systems, but are also sometimes used in steam conveyance systems installed in some older buildings.

**Ductile Fittings**

Ductile iron is the latest addition to the family of cast irons, dating from 1940. It is sometimes referred to as nodular iron or spheroid iron because, as defined by the ASTM, it is a cast iron that has a very small but definite amount of magnesium added in the liquid state so as to induce the formation of graphites as spheroids or nodules which remain in the as-cast iron. The characteristics of the particular ductile fittings are derived from the metallurgical differences imparted during the production process. Ductile iron has the ductility of malleable iron and the corrosion resistance of alloy cast iron. It compares in strength and elastic properties with cast steel and can be stronger than malleable iron, with a tensile strength ranging from 60,000 to 100,000 psi.\textsuperscript{41} Ductile iron fittings are superior to gray cast iron fittings in elastic properties, impact resistance, yield strength/weight,\textsuperscript{42} and wear resistance; they are


\textsuperscript{38} The term "gray" is given because of the gray color of the fractured surface of the cast iron.

\textsuperscript{39} Any time a piece of iron is pulled apart along its length by force, 44 it will be elongated. The stress (or force per unit, measured in pounds per square inch ("psi") of the cross section of the iron piece) that results in a specified limit of permanent strain (or the change per unit of length measured in percent) is called the yield strength. Yield strength is the maximum load that induces a permanent strain in a material, usually at 0.2 percent above the limit. Iron Castings Handbook, Charles F. Walton (Ed.), Gray and Ductile Iron Founder’s Society, 1971, pp. 205, 668.

\textsuperscript{40} The maximum load a piece of metal will withstand prior to fracture.


\textsuperscript{42} Ductile fittings are thinner and lighter than gray fittings.
comparable to such fittings in castability, surface hardenability, and corrosion resistance, and are inferior in ease of machining, vibration damping, and cost of manufacture.

**Grooved Fittings**

Grooved fittings are specifically excluded from the scope of this investigation. Grooved fittings are produced from ductile or malleable cast iron and are a different type of fitting from threaded or flanged fittings in that a split coupling attaches to a circumferential groove near the end of each piece to be joined. A gasket inside the coupling serves as a seal for the pipe and the coupling. Grooved fittings are used for the same purpose for which threaded or flanged fittings are used.

**Manufacturing processes**

Cast iron pipe fittings are manufactured using a technologically mature process. It begins with the making of molten iron in a foundry with fuel provided by foundry coke or an electric furnace. The raw materials are scrap steel, iron scrap, and other materials such as silicon carbide and carbon. The molten iron for cast iron fittings contains approximately 3.5 percent carbon, 2.5 percent silicon, and 0.5 percent manganese by weight, but may vary.

The casting process begins with the making of a pattern, which has the same external form and shape as the designed fitting. Sand casting is the predominant method used in the making of malleable fittings. Molding sand, after being mixed with a binder, is spread around the pattern in a mold, and then rammed by a machine to compact the sand. The pattern is then withdrawn, leaving a mold cavity in the sand. Solid molded sand cores are inserted to form the internal shape of the fitting. Two mold halves are put together with the core in the center. A system of gates, risers, and vents is provided in the casting cavity to ensure a smooth flow of the molten iron into the mold cavity under gravity. To form the shape of the fittings, molten iron is poured into the mold cavity. After the iron solidifies, the red-hot fittings are shaken out of the sand on a shaker table or belt and allowed to cool for four to five hours.

The specific chemical compositions and manufacturing processes of malleable, non-malleable, and ductile iron fittings differ somewhat, although all are comprised mainly of iron. Cast iron pipe fittings are available in similar configurations and all are produced using sand casting; however, the specific molds for the individual castings are reportedly not interchangeable. After casting, the production of non-malleable and ductile cast iron pipe fittings is essentially complete, except for cooling, cleaning, and, if necessary, machining, threading, or finishing. In contrast, malleable fittings are subjected to an additional process of annealing and controlled cooling after casting. This additional process makes malleable fittings more expensive to produce per pound than both the ductile and nonmalleable ones. Malleable

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43 The vast majority of grooved fittings are manufactured using ductile iron.
fittings are employed when shock and vibration resistance is required and the fittings must withstand quick temperature changes.

The basic manufacturing processes and technologies for iron castings are well established and are similar throughout the world. Differences lie mainly in the extent of the application of automatic equipment and ancillary operations such as environmental control facilities.

THE INDUSTRY IN THE UNITED STATES

U.S. producers

U.S. industry data collected in the original investigation was based on the questionnaire responses of three domestic producers that accounted for virtually all U.S. production of malleable fittings. Petitioners Anvil and Ward accounted for *** of reported U.S. production of malleable fittings during 2002.45 The domestic interested parties reported in their joint response to the Commission’s notice of institution that there are currently only two domestic producers of malleable fittings: Anvil and Ward.46 Details regarding each firm’s location and company shares of 2002, 2007 and 2013 total domestic production of malleable fittings are presented in table I-1.

Table 1-1

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46 Domestic Interested Parties’ Response to the Notice of Institution, April 2, 2014, p. 21; There was a third domestic producer, The Buck Company, Inc. (“Buck”) during the original investigation and the first sunset review. See Malleable Iron Pipe Fittings From China, Inv. No. 731-TA-1021 (Final), USITC Publication 3649, December 2003, at 7; Malleable Iron Pipe Fittings From China, Inv. No. 731-TA-1021 (Review), Pub. 4069, April 2009, at 5. Buck Co. is still in operation as a casting foundry, however, no longer produces the subject product.
Anvil

Anvil is headquartered in Portsmouth, NH, and is wholly owned by Mueller of Atlanta, GA. Anvil manufactures and sells piping connections and support systems including fittings, flanges, unions, couplings, nipples, valves, pipe hangers and supports. The primary markets for these products are: heating, ventilating and air conditioning (“HVAC”) / industrial, plumbing, fire protection, mining, oil field, offshore, process and industrial piping, original equipment manufacturer (“OEM”), power plants, and water and waste water treatment. The company operates 11 manufacturing facilities in the United States and Canada, which include foundry, machining, fabrication, assembly, testing, and painting operations. Anvil reported that it utilizes highly automated vertical and horizontal green sand molding equipment and computer controlled machines. Through its network of wholesale distributors, which are serviced through regional distribution centers, Anvil’s products are sold to end users, including commercial construction contractors, municipalities, publicly and privately owned water and wastewater utilities, and gas utilities.

Ward

Ward, headquartered in Blossburg, PA, produces a full line of malleable pipe fittings and unions, cast iron pipe fittings, and nipples, along with corrugated stainless steel gas piping systems. In 1990, Ward was acquired by Tokyo-based Hitachi Metals Ltd. (“HML”) and today is a wholly owned subsidiary of Hitachi Metals America, Ltd.

U.S. producers’ trade and financial data

Data reported by U.S. producers of malleable fittings in the Commission’s original investigation, its first expedited five-year review, and its second five-year are presented in table

---

47 Mueller Water Products is a leading North American manufacturer and marketer of infrastructure and flow control products for use in water distribution networks and treatment facilities. Its broad product portfolio includes engineered valves, hydrants, pipe fittings and ductile iron pipe, which are used by municipalities, as well as the commercial and residential construction, oil and gas, HVAC and fire protection industries. Based in Atlanta, Georgia, the company is comprised of two main operating segments: Mueller Co. and Anvil. In 2013, net sales were approximately 1.2 billion. Mueller Water Products, 2013 Annual Report, p. 3.


50 Mueller Water Products, 2013 Annual Report, p. 11


I-2. Data presented for 2000 to 2002 were provided by three producers (Anvil, Buck, and Ward) that were believed to have represented nearly 100 percent of the U.S. production of malleable fittings during the period. Data presented for 2007 were provided by two producers (Anvil and Ward) that are believed to have represented 90-95 percent of U.S. malleable fitting production during the period.\textsuperscript{53} Data presented for 2013 were provided by the same two producers (Anvil and Ward) that are believed to have represented nearly 100 percent of the U.S. production of malleable fittings during the period.\textsuperscript{54}

<table>
<thead>
<tr>
<th>Table 1-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malleable fittings: U.S. producers’ trade, employment, and financial data, 2000-2002, 2007, and 2013\textsuperscript{1}</td>
</tr>
<tr>
<td>* * * * * * * *</td>
</tr>
</tbody>
</table>

From 2000 to 2002, the domestic industry experienced a *** percent decline in capacity.\textsuperscript{55} Total U.S. production of malleable fittings decreased by *** percent from 2000 to 2002. U.S. shipment volume similarly decreased by *** percent overall, although unit values peaked at *** per ton in *** Transfers to related firms and internal shipments were *** for U.S. producers.\textsuperscript{56} The industry’s export shipments averaged about *** percent of total shipment volume and were made ***.\textsuperscript{57} The operating income margin decreased and the volume of total net sales declined from 2000 to 2002. The average cost of goods sold ("COGS") increased faster than the rise in average unit value of sales, resulting in a lower gross profit. Moreover, the selling, general, and administrative ("SG&A") expenses in absolute dollars declined but increased per ton due to the lower volume, contributing to the lower operating income in 2002.\textsuperscript{58}

In the first five-year review, in 2007, U.S. production was lower by *** percent compared to 2002. U.S. shipment volumes were *** percent lower in 2007 when compared to 2002.\textsuperscript{59} In the current review, from 2007 to 2013, the U.S. industry reported a decline in production of *** percent and a similar reduction in U.S. shipment volume of *** percent.

\textsuperscript{53} Domestic Interested Parties’ Response to the Notice of Institution, December 23, 2008, p. 11.
\textsuperscript{54} Domestic Interested Parties’ Response to the Notice of Institution, April 2, 2013, p.21.
\textsuperscript{55} This decrease in capacity was entirely due to Anvil’s 2001 consolidation of pipe fittings capabilities into its Colombia, PA foundry concurrent with the sale of its Statesboro, GA facility. Malleable Iron Pipe Fittings From China: Inv. No. 731-TA-1021 (Final), USITC Publication 3649, December 2003, p. III-2; Inv. No. 731-TA-1021 (Final): Malleable Iron Pipe Fittings From China—Staff Report, INV-AA-171, November 7, 2003, p. III-2, fn. 2.
\textsuperscript{56} Ibid. p. III-4
\textsuperscript{57} Ibid. p. III-4.
\textsuperscript{58} Malleable Iron Pipe Fittings From China: Inv. No. 731-TA-1021 (Final), USITC Publication 3649, December 2003, p. VI-1-VI-2.
\textsuperscript{59} The Commission did not request 2007 financial data from the domestic interested parties.
U.S. IMPORTS AND APPARENT CONSUMPTION

U.S. imports

During the original investigation, 24 firms provided U.S. import data to the Commission. In the first expedited five-year review, the domestic interested parties listed the following seven companies that they believe to be importers of subject merchandise from China: B&K Industries, Inc.; JDH Pacific Inc.; LDR Industries, Inc.; Matco-Norca; PanNext Fittings Corp.; Smith-Cooper International; and Star Pipe Products Co.\textsuperscript{60} In their response to the current review, the domestic interested parties listed the same seven firms as current U.S. importers of the subject product from China.\textsuperscript{62}

Malleable fittings U.S. import data for annual periods 2000-2002, 2007, and 2013 are presented in table I-3. The volume of U.S. imports of malleable fittings from China increased by 54.2 percent from 2000 to 2002: declined slightly from 2000 to 2001, and then increased by 54.8 percent from 2001 to 2002. The trend was similar for the value of U.S. imports from China. The quantity of imports from nonsubject countries increased by 19.6 percent from 2000 to 2002, decreased by 5.4 percent from 2000 to 2001, but then increased by 26.5 percent in 2002. The value of imports from nonsubject countries increased by 65.8 percent from 2000 to 2002. Since the period of the original investigation, the volume of U.S. imports of malleable fittings from China increased by 37.6 percent, from 2003 to 2007, while the value of these imports increased by 91.2 percent. From 2003 to 2007, the quantity of imports from nonsubject countries decreased overall by 40.5 percent, and the value of imports from nonsubject countries decreased by 14.0 percent.

From 2007 to 2013, U.S. imports from China have increased slightly from the last sunset review, by 11.3 percent, while the value of the subject imports have approximately doubled, increased by 99.9 percent. From 2007 to 2013, quantity of the imported project from nonsubject countries decreased by 34.3 percent and the total value of imported product decreased by 14.3 percent.

\textsuperscript{60}Domestic Interested Parties' Response to the Notice of Institution, December 23, 2008, exh. 8.
\textsuperscript{62}Domestic Interested Parties' Response to the Notice of Institution, April 2, 2013, exh. 7.
Table 1-3


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>13,492</td>
<td>13,443</td>
<td>20,809</td>
<td>25,065</td>
<td>27,900</td>
</tr>
<tr>
<td>All Others</td>
<td>9,988</td>
<td>9,446</td>
<td>11,946</td>
<td>9,838</td>
<td>6,464</td>
</tr>
<tr>
<td>Total Imports</td>
<td>23,480</td>
<td>22,889</td>
<td>32,755</td>
<td>34,903</td>
<td>34,364</td>
</tr>
<tr>
<td>Value ($1,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>21,029</td>
<td>20,395</td>
<td>30,276</td>
<td>46,577</td>
<td>93,093</td>
</tr>
<tr>
<td>All Others</td>
<td>24,636</td>
<td>22,253</td>
<td>40,837</td>
<td>46,568</td>
<td>39,888</td>
</tr>
<tr>
<td>Total Imports</td>
<td>45,665</td>
<td>42,649</td>
<td>71,113</td>
<td>93,145</td>
<td>132,981</td>
</tr>
<tr>
<td>Unit Value (per short ton)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>$1,559</td>
<td>$1,517</td>
<td>$1,455</td>
<td>$1,858</td>
<td>3,336</td>
</tr>
<tr>
<td>All Others</td>
<td>$2,466</td>
<td>$2,356</td>
<td>$3,418</td>
<td>$4,734</td>
<td>6,170</td>
</tr>
<tr>
<td>Total Imports</td>
<td>$1,945</td>
<td>$1,863</td>
<td>$2,171</td>
<td>$2,669</td>
<td>3,867</td>
</tr>
<tr>
<td>Share of quantity (percent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>57.5</td>
<td>58.7</td>
<td>63.5</td>
<td>71.8</td>
<td>81.2</td>
</tr>
<tr>
<td>All Others</td>
<td>42.5</td>
<td>41.3</td>
<td>36.5</td>
<td>28.2</td>
<td>18.8</td>
</tr>
<tr>
<td>Total Imports</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The largest “other” sources and their respective shares of the total quantity of imported malleable fittings during 2007 include the following: Thailand (12.5 percent), Taiwan (4.8 percent), Mexico (4.3 percent), and Canada (3.3 percent).

Note.—Because of rounding, figures may not add to the totals shown.


Leading Nonsubject Source of Imports

During the period of the original investigation and the first five-year review, imports of malleable fittings entered the United States from a variety of sources. Canada, Korea, Mexico, Taiwan, and Thailand were the largest nonsubject sources of imports during 2000-07, together accounting for 26.0 percent of total U.S. imports and 92.3 percent of nonsubject U.S. imports during 2007. The single largest nonsubject source of malleable fittings during 2000-07 was Thailand, which accounted for the largest share of imports in every year, except 2005,63 and 12.5 percent of total U.S. imports of malleable fittings during 2007.

In 2013, U.S. imports from nonsubject countries included Thailand, Indonesia, Mexico, Israel, and Taiwan, which together comprised 16.0 percent of total U.S. imports and 76.6 percent of total U.S. imports from nonsubject countries. Thailand again was the largest nonsubject source of malleable pipe fittings in 2013, with 7.6 percent of total U.S. imports of the subject product.

63 Mexico accounted for the largest share of malleable fittings imports in 2005, 21.1 percent.
<table>
<thead>
<tr>
<th>Country</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>16,378</td>
<td>25,816</td>
<td>26,103</td>
<td>27,701</td>
<td>27,899</td>
</tr>
<tr>
<td>Thailand</td>
<td>1,780</td>
<td>4,559</td>
<td>2,632</td>
<td>3,104</td>
<td>2,608</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0</td>
<td>31</td>
<td>147</td>
<td>327</td>
<td>1,745</td>
</tr>
<tr>
<td>Mexico</td>
<td>687</td>
<td>833</td>
<td>1,627</td>
<td>1,359</td>
<td>605</td>
</tr>
<tr>
<td>Israel</td>
<td>4</td>
<td>6</td>
<td>324</td>
<td>184</td>
<td>308</td>
</tr>
<tr>
<td>Taiwan</td>
<td>678</td>
<td>627</td>
<td>301</td>
<td>304</td>
<td>240</td>
</tr>
<tr>
<td>All other imports (nonsubject)</td>
<td>1785</td>
<td>1683</td>
<td>2082</td>
<td>2364</td>
<td>1200</td>
</tr>
<tr>
<td>Total</td>
<td>20,634</td>
<td>32,928</td>
<td>32,915</td>
<td>35,039</td>
<td>34,365</td>
</tr>
</tbody>
</table>

**Landed Duty-Paid Value (1,000 dollars)**

<table>
<thead>
<tr>
<th>Country</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>39,467</td>
<td>67,190</td>
<td>75,828</td>
<td>93,406</td>
<td>93,094</td>
</tr>
<tr>
<td>Thailand</td>
<td>6,020</td>
<td>12,867</td>
<td>9,466</td>
<td>11,989</td>
<td>11,269</td>
</tr>
<tr>
<td>Mexico</td>
<td>8,264</td>
<td>9,967</td>
<td>20,594</td>
<td>11,807</td>
<td>8,677</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3</td>
<td>66</td>
<td>335</td>
<td>912</td>
<td>4,499</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>681</td>
<td>1,699</td>
<td>3,653</td>
<td>2,475</td>
<td>2,906</td>
</tr>
<tr>
<td>Israel</td>
<td>35</td>
<td>119</td>
<td>2,588</td>
<td>1,525</td>
<td>2,498</td>
</tr>
<tr>
<td>All other imports (nonsubject)</td>
<td>9302</td>
<td>11574</td>
<td>15,755</td>
<td>23,447</td>
<td>10,038</td>
</tr>
<tr>
<td>Total</td>
<td>63,772</td>
<td>103,482</td>
<td>128,219</td>
<td>145,561</td>
<td>132,981</td>
</tr>
</tbody>
</table>

**Unit Value (dollars per pound)**

<table>
<thead>
<tr>
<th>Country</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>0.41</td>
<td>0.38</td>
<td>0.34</td>
<td>0.30</td>
<td>0.30</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.30</td>
<td>0.35</td>
<td>0.28</td>
<td>0.26</td>
<td>0.23</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.00</td>
<td>0.47</td>
<td>0.44</td>
<td>0.36</td>
<td>0.39</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
<td>0.12</td>
<td>0.07</td>
</tr>
<tr>
<td>Israel</td>
<td>0.11</td>
<td>0.05</td>
<td>0.13</td>
<td>0.12</td>
<td>0.12</td>
</tr>
</tbody>
</table>

**Apparent U.S. consumption and market shares**

Apparent U.S. consumption and market shares are presented in table I-5. The volume of apparent U.S. consumption of malleable fittings declined by *** percent between 2000 and 2002. In 2007, the volume of apparent U.S. consumption was less than apparent U.S. consumption during the original period, 2000-02, and was *** percent less than apparent U.S. consumption in 2002. In 2013, the volume of apparent consumption was *** percent less than apparent consumption in 2007.
Table 1-5

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantity (short tons)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. producers' U.S. shipments</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>U.S. imports from-- China</td>
<td>13,492</td>
<td>13,443</td>
<td>20,809</td>
<td>25,065</td>
<td>27,900</td>
</tr>
<tr>
<td>Other sources</td>
<td>9,988</td>
<td>9,446</td>
<td>11,946</td>
<td>9,838</td>
<td>6,464</td>
</tr>
<tr>
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<td>23,480</td>
<td>22,889</td>
<td>32,755</td>
<td>34,903</td>
<td>34,364</td>
</tr>
<tr>
<td>Apparent U.S. consumption</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

| **Value (1,000)**                           |       |       |       |       |       |
| U.S. producers' U.S. shipments              | ***   | ***   | ***   | ***   | ***   |
| U.S. imports from-- China                   | 21,029| 20,395| 30,276| 46,577| 93,093|
| Other sources                               | 24,636| 22,253| 40,837| 46,568| 39,888|
| Total imports                               | 45,665| 42,649| 71,113| 93,145|132,981|
| Apparent U.S. consumption                   | ***   | ***   | ***   | ***   | ***   |

| **Share of consumption based on quantity (percent)** |       |       |       |       |       |
| U.S. producers' U.S. shipments                 | ***   | ***   | ***   | *     | ***   |
| U.S. imports from-- China                      | ***   | ***   | ***   | ***   | ***   |
| Other sources                                 | ***   | ***   | ***   | ***   | ***   |
| Total imports                                 | ***   | ***   | ***   | ***   | ***   |
| Apparent U.S. consumption                      | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

| **Share of consumption based on value (percent)** |       |       |       |       |       |
| U.S. producers' U.S. shipments                 | ***   | ***   | ***   | ***   | ***   |
| U.S. imports from-- China                      | ***   | ***   | ***   | ***   | ***   |
| Other sources                                 | ***   | ***   | ***   | ***   | ***   |
| Total imports                                 | ***   | ***   | ***   | ***   | ***   |
| Apparent U.S. consumption                      | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |


The domestic producers’ market share based on quantity fell from *** percent in 2000 to *** percent in 2001, decreased further to *** percent in 2002. The subject imports from China increased market share from *** percent in 2000 to *** percent in 2002. The domestic
malleable fittings industry in 2007 held an estimated *** percent of apparent U.S. consumption on the basis of quantity and an estimated *** percent on the basis of value. U.S. imports from China held a *** percent share of the U.S. market in 2007 on the basis of quantity and a *** percent share on the basis of value. U.S. imports from nonsubject countries held a *** percent share based on volume and *** percent share based on value.

In 2013, the domestic producer’s market share based on quantity decreased further from *** percent in 2007 to *** percent in 2013. The subject imports from China gained market share once again from *** percent in 2007 to *** in 2013.

Domestic demand for malleable fittings in the United States is derived from the demand for the systems that incorporate malleable fittings. The demand for systems that incorporate malleable fittings tends to follow demand for new and retrofit construction in the residential and commercial/industrial building markets.64

The domestic interested parties indicated in their response to the Commission’s notice of institution that competitive conditions in the domestic malleable fittings industry have changed little since the original investigation and the first five-year review. Pointing to the correlation between malleable fittings demand and construction, they credit the dramatic contraction of building markets with the decrease in demand for malleable fittings.65 The domestic producers’ data show the value of residential and non-residential construction spending decreased from 2006 to 2009 and remains held on the 2007 level.

THE INDUSTRY IN CHINA

In the original investigation, the Commission requested data from 14 firms believed to produce the subject fittings. The Commission received questionnaire responses from four manufacturing firms ((1) Jinan, (2) Pannext, (3) Shandong KM, and (4) Tangshan) and two from non-producing exporters ((1) SCE and (2) SLK). These producers’ exports of the subject merchandise to the United States accounted for approximately *** percent of total U.S. imports of malleable iron pipe fittings from China during 2002. The exact number of foundries in China was not provided to the Commission in the original investigation, nor was the number publicly available. Chinese producers that provided a response to the Commission’s questionnaire in the original investigation (Jinan Meide, Pannext, Shandong KM, and Tangshan) estimated that together they accounted for *** percent of total production of malleable iron pipe fittings in China during 2002. *** 66

In the first five-year, the domestic interested parties listed the following five firms in China that they believed to be the largest producers of the subject merchandise: (1) Beijing Sai Lin Ke Hardware Co., Ltd.; (2) Chengde Malleable Iron General Factory; (3) Jinan Meide Casting Co., Ltd. (“Jinan Meide”); (4) Langfang Pannext Pipe Fitting Co., Ltd.; and (5) SCE Co., Ltd.

64 Domestic Interested Parties’ Response to the Notice of Institution, April 2, 2014, pp. 4-5 and 23-25
65 Domestic Interested Parties’ Response to the Notice of Institution, December 23, 2008, p. 3.
Chinese producer Jinan Meide was described by the domestic interested parties in their response as “the largest pipe fittings manufacturer in the world” at the time.67

In their response to the Commission’s notice of institution for this five-year review, the domestic interested parties listed 48 Chinese producers of malleable iron pipe fittings. They argued that the Chinese producers are export oriented and since 2007, have significantly increased capacity.68

Table I-6 presents export shipments made by producers of malleable iron pipe fittings in China.

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68 Domestic Interested Parties’ Response to the Notice of Institution, April 2, 2014, p. 15-19. They claim over 200,000 metric tons in capacity expansion. The industry in China has undergone significant capacity expansions including:

(a) Jinan Meide completing a renovation of 20,000 metric ton metal pipe fitting surface treatment production line in 2013.

(b) In July 2013, Tianhe Casting Co., Ltd. was in the process of building a new plant that will add 30,000 metric tons of malleable cast iron pipe fittings capacity.

(c) Tangshan Daocheng Casting Co., Ltd. built a 35,000 metric ton malleable cast iron pipe fittings project in 2011.

(d) Hongliang Casting Co., Ltd. put into production a 6,000 metric ton malleable cast iron pipe fittings line in 2013.
In their response to the Commission’s notice of institution, the domestic producers reiterated the Commission’s finding in the original investigation that “China’s malleable fittings industry is export oriented,” and argued that the current dumping margins restrained the growth of Chinese imports and limited the ability of Chinese producers to increase capacity utilization, despite an attractive U.S. market for subject imports. Nevertheless, the domestic producers argued, that the Chinese industry is capable of greatly increasing exports due to several significant capacity expansion. The domestic producers provided bulleted list of six of these significant capacity expansions in the Chinese industry. Therefore, they conclude, in the absence of the dumping order imports from China will surge.  

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69 Domestic Interested Parties’ Response to the Notice of Institution, April 2, 2014, pp. 15-16
Antidumping or Countervailing Duty Orders in Third-Country Markets

Antidumping duties are currently imposed on malleable fittings by the governments of Argentina, the European Union, and Turkey. In November 2010, the Government of Argentina imposed antidumping duties of 295 percent. The European Union imposed duties ranging from 24.6 percent to 57.8 percent in May 2013. The Government of Turkey first imposed duties in 2010 and in May 2012, extended the duties at a rate of $800 per ton.70

Global Market

Table I-8 presents the largest global export sources of malleable fittings (as well as products outside of the scope including grooved-end fittings, threaded, etc.) from 2008-2013.

Table I-8
Cast iron fittings: Global exports, 2009-2013

<table>
<thead>
<tr>
<th>Country</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quantity (short tons)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>224,016</td>
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<td>270,998</td>
<td>270,206</td>
<td>266,374</td>
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<td>30,668</td>
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<td>Singapore</td>
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<td>15,558</td>
<td>14,779</td>
<td>16,392</td>
<td>19,152</td>
<td>21,550</td>
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<tr>
<td>Italy</td>
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<td>24,359</td>
<td>14,410</td>
<td>15,796</td>
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<td>Germany</td>
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<td>11,482</td>
<td>12,821</td>
<td>18,717</td>
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<td>Thailand</td>
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<td>18,591</td>
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<td>16,022</td>
<td>15,779</td>
<td>15,265</td>
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<td>8,346</td>
<td>6,551</td>
<td>11,469</td>
<td>11,079</td>
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<td>8,731</td>
<td>9,364</td>
<td>8,845</td>
<td>9,891</td>
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<tr>
<td>All others</td>
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<td>99,142</td>
<td>102,787</td>
<td>93,571</td>
<td>95,617</td>
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<tr>
<td>Total</td>
<td>446,600</td>
<td>510,761</td>
<td>529,147</td>
<td>538,340</td>
<td>541,671</td>
</tr>
</tbody>
</table>

Source: Global Trade Information Services Inc., “Global Trade Atlas” for HTS subheading 7307.19 and may include product outside the scope of this review such as ductile iron fittings, grooved couplings, etc.

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70 Domestic Interested Parties’ Response to the Notice of Institution, April 2, 2014, pp. 17-18
APPENDIX A

STATEMENT OF ADEQUACY
EXPLANATION OF COMMISSION DETERMINATION ON ADEQUACY

in

Malleable Iron Pipe Fittings from China
Inv. No. 731-TA-1021 (Second Review)

On June 6, 2014, the Commission unanimously determined to conduct an expedited review in the subject five-year review pursuant to section 751(c)(3)(B) of the Tariff Act of 1930, as amended, 19 U.S.C. § 1675(c)(3)(B).

The Commission received a response to the notice of institution that was jointly filed by two U.S. producers of malleable iron pipe fittings: Anvil International LLC (“Anvil”), and Ward Manufacturing (“Ward”). The Commission found the responses of Anvil and Ward to be individually adequate. Because the Commission received an adequate response from interested parties accounting for a substantial share of U.S. production of malleable iron pipe fittings in 2013, the Commission determined that the domestic interested party group response was adequate.

No respondent interested party responded to the notice of institution. Accordingly, the Commission determined that the respondent interested party group response was inadequate.

The Commission did not find any circumstances that would warrant conducting a full review. The Commission, therefore, decided to conduct an expedited review of this order.

A record of the Commissioners' votes is available from the Office of the Secretary and at the Commission's web site (www.usitc.gov).
APPENDIX B

SUMMARY DATA FROM ORIGINAL INVESTIGATION
Table C-1

<table>
<thead>
<tr>
<th>Item</th>
<th>Reported data</th>
<th>Period changes</th>
</tr>
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<tbody>
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<td></td>
<td></td>
</tr>
<tr>
<td>Amount</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Producers' share (1)</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Importers' share (1):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>All other sources</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total imports</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>U.S. consumption value:</td>
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<td></td>
</tr>
<tr>
<td>Amount</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Producers' share (1)</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Importers' share (1):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>All other sources</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total imports</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>U.S. imports from:</td>
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<td></td>
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<tr>
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<td>***</td>
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<td>All other sources:</td>
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<td>All sources:</td>
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<tr>
<td>U.S. producers':</td>
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</tr>
<tr>
<td>Average capacity quantity</td>
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</tr>
<tr>
<td>Production quantity</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Capacity utilization (1)</td>
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<td>***</td>
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<tr>
<td>U.S. shipments:</td>
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</tr>
<tr>
<td>Quantity</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Value</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Unit value</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Export shipments:</td>
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<td>Quantity</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Value</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Unit value</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Ending inventory quantity</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Inventories/total shipments (1)</td>
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<td>***</td>
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<tr>
<td>Production workers</td>
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<tr>
<td>Hours worked (1,000s)</td>
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<tr>
<td>Wages paid (1,000s)</td>
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<tr>
<td>Hourly wages</td>
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<td>***</td>
</tr>
<tr>
<td>Productivity (tons/1,000 hours)</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Unit labor costs</td>
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<tr>
<td>Net sales:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Value</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Unit value</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Cost of goods sold (COGS)</td>
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<td>***</td>
</tr>
<tr>
<td>Gross profit or (loss)</td>
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<td>***</td>
</tr>
<tr>
<td>SG&amp;A expenses</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Operating income or (loss)</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Capital expenditures</td>
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<td>***</td>
</tr>
<tr>
<td>Unit COGS</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Unit SG&amp;A expenses</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Unit operating income or (loss)</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>COGS/sales (1)</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Operating income or (loss)/ sales (1)</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>

(1) "Reported data" are in percent and "period changes" are in percentage points.

Note.—Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis. Because of rounding, figures may not add to the totals shown. Unit values and shares are calculated from the unrounded figures.

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