Certain Amorphous Silica Fabric from China

Investigation Nos. 701-TA-555 and 731-TA-1310 (Final)

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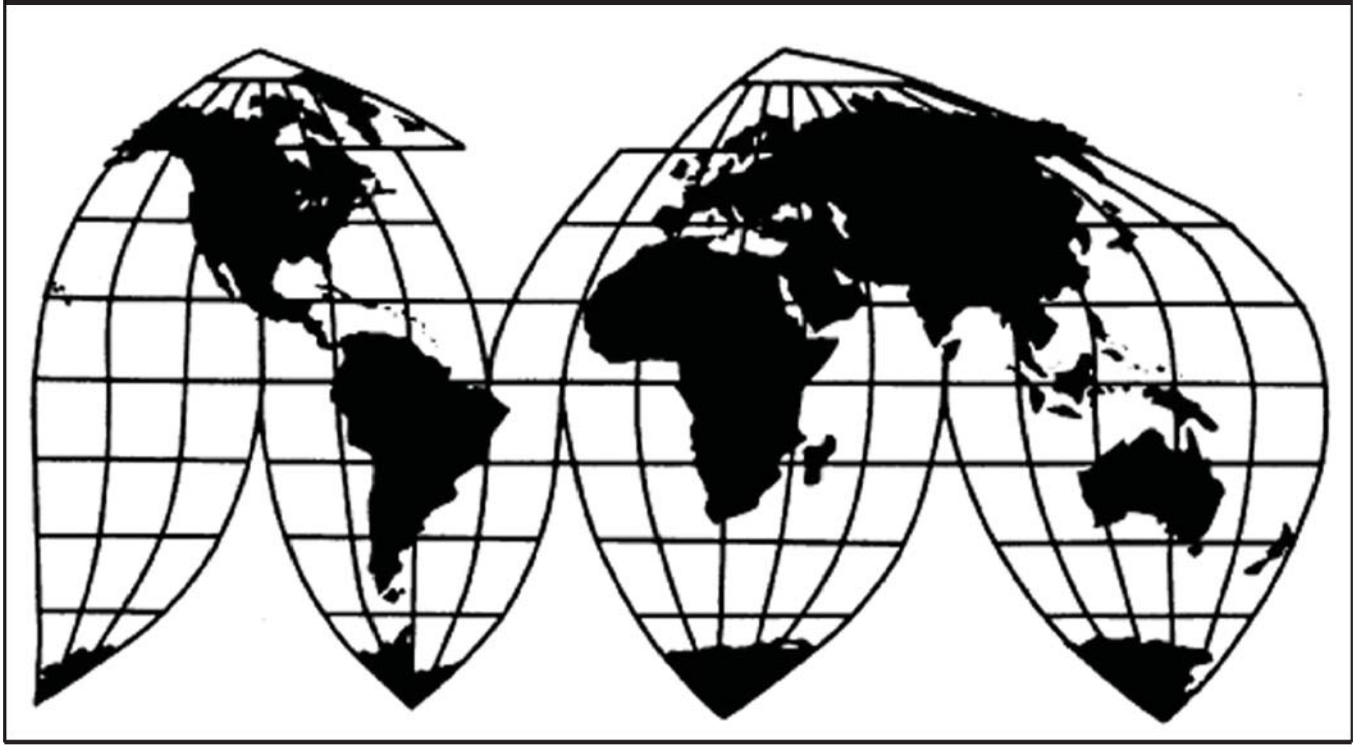
U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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CONTENTS

CONTENTS

CONTENTS

Page

Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-555 and 731-TA-1310 (Final)

Certain Amorphous Silica Fabric from China

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that an industry in the United States is materially injured by reason of imports of certain amorphous silica fabric from China,[2] provided for in subheadings 7019.59.40 and 7019.59.90 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce ("Commerce") to be sold in the United States at less than fair value ("LTFV"), and to be subsidized by the government of China. Because a minority of participating Commissioners made affirmative findings that imports subject to Commerce's affirmative critical circumstance determination are likely to undermine seriously the remedial effect of the antidumping duty order on certain amorphous silica fabric from China, the Commission has not made an affirmative critical circumstances finding with respect to such imports.[3]

BACKGROUND

The Commission, pursuant to sections 705(b) and 735(b) of the Act (19 U.S.C. 1671d(b) and 19 U.S.C. 1673d(b)), instituted these investigations effective January 20, 2016, following receipt of a petition filed with the Commission and Commerce by Auburn Manufacturing, Inc., Mechanic Falls, Maine. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of certain amorphous silica fabric from China were subsidized within the meaning of section 703(b) of the

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

[2] Chairman Schmidtlein, Vice Chairman Johanson, and Commissioner Williamson determine that the domestic industry is materially injured by reason of the subject imports. Commissioners Broadbent and Kieff determine that the domestic industry is threatened with material injury by reason of the subject imports, and that they would not have found material injury but for the suspension of liquidation. Commissioner Pinkert did not participate in the vote.

[3] Chairman Schmidtlein and Commissioner Williamson made affirmative critical circumstances findings. Vice Chairman Johanson made a negative critical circumstances finding. Commissioners Broadbent and Kieff, having determined that a domestic industry is not materially injured by reason of amorphous silica fabric from China sold at less than fair value, did not reach the issue of critical circumstances.

Act (19 U.S.C. 1671b(b)) and sold at LTFV within the meaning of 733(b) of the Act (19 U.S.C. 1673b(b)). Notice of the scheduling of the final phase of the Commission's investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* on September 14, 2016 (81 FR 63205). The hearing was held in Washington, DC, on January 18, 2017, and all persons who requested the opportunity were permitted to appear in person or by counsel.

Views of the Commission

Based on the record in the final phase of these investigations, we determine that an industry in the United States is materially injured by reason of imports of certain amorphous silica fabric ("ASF") from China found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value and subsidized by the government of China.[1]

I. Background

Auburn Manufacturing, Inc. ("AMI" or "petitioner"), a U.S. producer of ASF, filed the petitions in these investigations on January 20, 2016. Petitioner appeared at the hearing with counsel and submitted prehearing and posthearing briefs. HITCO Carbon Composites, Inc. ("HITCO"), a U.S. producer of ASF, supports the petitions and appeared at the hearing with counsel.

Only one respondent entity participated in the final phase of these investigations. Access China Industrial Textile, Inc. d/b/a ACIT (USA) Inc., an importer of subject merchandise, as well as its affiliates ACIT (Pinghu) Inc. and ACIT (Shanghai) Inc. (collectively "ACIT"), submitted a posthearing brief.[2]

U.S. industry data are based on the questionnaire responses from two firms that accounted for all known U.S. production of ASF in 2015. U.S. import data are based on questionnaire responses from seven firms that are estimated to account for a large majority of imports of ASF from China and Latvia, as well as official import statistics related to nonsubject imports from Latvia.[3] Information on the Chinese industry producing ASF are based on foreign producer questionnaire data from four firms (only one of which provided data in the final phase of the investigations), which reported accounting for a majority of production of subject merchandise.[4]

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[1] Commissioners Broadbent and Kieff determine that an industry in the United States is threatened with material injury by reason of imports of certain ASF from China that Commerce has found to be sold in the United States at less than fair value and subsidized by the government of China. *See* Separate Views of Commissioners Broadbent and Kieff. They join this opinion except where otherwise indicated.

[2] Several respondent entities that participated in the preliminary phase of these investigations did not participate in the final phase. AVS Industries, LLS ("AVS"), an importer and purchaser of subject merchandise, appeared at the staff conference and submitted a postconference brief. Lewco Specialty Products, Inc., a purchaser of ASF, appeared at the staff conference.

[3] The sources of nonsubject imports, as well as data regarding such imports, are addressed further in section IV.B.2.

[4] Confidential Report, Memorandum INV-PP-017 (Feb. 2, 2017) ("CR") at I-5 and VII-3; Public Report, *Amorphous Silica Fabric from China*, Inv. Nos. 701-TA-555 and 731-TA-1310 (Final), USITC Pub. 4672 (March 2017) ("PR") at I-4 and VII-3.

II. Domestic Like Product

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of subject merchandise, the Commission first defines the "domestic like product" and the "industry."[5] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[6] In turn, the Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation."[7]

The decision regarding the appropriate domestic like product in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[8] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[9] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[10] Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized or

[5] 19 U.S.C. § 1677(4)(A).

[6] 19 U.S.C. § 1677(4)(A).

[7] 19 U.S.C. § 1677(10).

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

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

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

sold at less than fair value,[11] the Commission determines what domestic product is like the imported articles Commerce has identified.[12]

B. Product Description

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

> The product covered by th{ese} investigation{s} is woven (whether from yarns or rovings) industrial grade amorphous silica fabric, which contains a minimum of 90 percent silica (SiO_2) by nominal weight, and a nominal width in excess of 8 inches. The investigation{s} cover{} industrial grade amorphous silica fabric regardless of other materials contained in the fabric, regardless of whether in roll form or cut-to-length, regardless of weight, width (except as noted above), or length. The investigation{s} cover{} industrial grade amorphous silica fabric regardless of whether the product is approved by a standards testing body (such as being Factory Mutual (FM) Approved), or regardless of whether it meets any governmental specification.
>
> Industrial grade amorphous silica fabric may be produced in various colors. Th{ese} investigation{s} cover{} industrial grade amorphous silica fabric regardless of whether the fabric is colored. Industrial grade amorphous silica fabric may be coated or treated with materials that include, but are not limited to, oils, vermiculite, acrylic latex compound, silicone, aluminized polyester (Mylar®) film, pressure-sensitive adhesive, or other coatings and treatments. The investigation{s} cover industrial grade amorphous silica fabric regardless of whether the fabric is coated or treated, and regardless of coating or treatment weight as a percentage of total product weight. Industrial grade amorphous silica fabric may be heat-cleaned. The investigation{s} cover{} industrial grade amorphous silica fabric regardless of whether the fabric is heat-cleaned.

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

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

Industrial grade amorphous silica fabric may be imported in rolls or may be cut-to-length and then further fabricated to make welding curtains, welding blankets, welding pads, fire blankets, fire pads, or fire screens. Regardless of the name, all industrial grade amorphous silica fabric that has been further cut-to-length or cut-to-width or further finished by finishing the edges and/or adding grommets, is included within the scope of the investigation{s}.

Subject merchandise also includes (1) any industrial grade amorphous silica fabric that has been converted into industrial grade amorphous silica fabric in China from fiberglass cloth produced in a third country; and (2) any industrial grade amorphous silica fabric that has been further processed in a third country prior to export to the United States, including but not limited to treating, coating, slitting, cutting to length, cutting to width, finishing the edges, adding grommets, or any other processing that would not otherwise remove the merchandise from the scope of the investigation{s} if performed in the country of manufacture of the in-scope industrial grade amorphous silica fabric.

Excluded from the scope of the investigation{s} {are} amorphous silica fabric that is subjected to controlled shrinkage, which is also called "pre-shrunk" or "aerospace grade" amorphous silica fabric. In order to be excluded as a pre-shrunk or aerospace grade amorphous silica fabric, the amorphous silica fabric must meet the following exclusion criteria: (1) the amorphous silica fabric must contain a minimum of 98 percent silica (SiO_2) by nominal weight; (2) the amorphous silica fabric must have an areal shrinkage of 4 percent or less; (3) the amorphous silica fabric must contain no coatings or treatments; and (4) the amorphous silica fabric must be white in color. For purposes of this scope, "areal shrinkage" refers to the extent to which a specimen of amorphous silica fabric shrinks while subjected to heating at 1800 degrees F for 30 minutes.

Also excluded from the scope are amorphous silica fabric rope and tubing (or sleeving). Amorphous silica fabric rope is a knitted or braided product made from amorphous silica yarns. Silica tubing (or sleeving) is braided into a hollow sleeve from amorphous silica yarns.

The subject imports are normally classified in subheadings 7019.59.4021, 7019.59.4096, 7019.59.9021, and 7019.59.9096 of the Harmonized Tariff Schedule of the United States (HTSUS), but may also enter under HTSUS subheadings 7019.40.4030, 7019.40.4060, 7019.40.9030, 7019.40.9060, 7019.51.9010, 7019.51.9090, 7019.52.9010, 7019.52.9021, 7019.52.9096 and 7019.90.1000. HTSUS subheadings are provided for convenience and

> customs purposes only; the written description of the scope of th{ese} investigation{s} {are} dispositive.[13]

Industrial grade ASF is a woven textile product composed of silica strands. Domestically produced industrial grade ASF typically contains at least 96 percent silica, but may range as low as 90 percent silica.[14] It possesses a number of properties that make it suitable for use in extreme heat applications, including thermal survivability, low thermal conductivity, chemical non-reactivity, flexibility, strength, abrasion resistance, and ease of handling. Specifically, industrial grade ASF may withstand heat up to 1,800 degrees Fahrenheit without sacrificing any of its other properties, and industrial grade ASF will remain in usable cloth form at temperatures of up to approximately 2,300 degrees Fahrenheit, albeit with some loss of flexibility.[15]

Industrial grade ASF is used to insulate and to resist extreme heat so as to conserve energy and protect people, materials, and machinery from potential injury or damage, especially during welding activities. Other uses include as shields for ducting and pipes, as protection from sparks and molten metal splash, as insulating blankets in heat-treating and high-temperature processing operations, and as refractory lining and furnace curtains. [16]

Customers may request industrial grade ASF to meet either military (MIL) or factory mutual (FM) standards relating to welding or hot-work applications. Military standard MIL-C-24576A is used by the U.S. Navy for welding protection during shipbuilding, maintenance, and repair, while FM 4950-certification ASF delineates the product's exposure and vertical or horizontal application capabilities.[17]

C. Domestic Like Product Analysis

In its preliminary determinations, the Commission defined a single domestic like product consisting of all industrial grade ASF that was coextensive with the scope of investigations. The Commission further found that aerospace grade ASF and ASF rope, tubing and tape, all of which are excluded from the scope, were not part of the domestic like product due to differences in

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[13] *Antidumping Duty Investigation of Certain Amorphous Silica Fabric from the People's Republic of China: Final Affirmative Determination of Sales at Less-Than-Fair-Value, and Final Affirmative Determination of Critical Circumstances*, 82 Fed. Reg. 8399 (Jan. 25, 2017) ("Commerce AD Determination"); *Countervailing Duty Investigation of Certain Amorphous Silica Fabric from the People's Republic of China: Final Affirmative Determination*, 82 Fed. Reg. 8405 (Jan. 25, 2017) ("Commerce CVD Determination"). The scope of investigation has not changed since the preliminary phase of these investigations.

[14] CR at I-11; PR at I-9. There is no known U.S. production of industrial grade ASF containing less than 96 percent silica. Respondent interested parties have also reported importation of "mid-silica fabric" from China, which has a silica content between 70-89 percent. There is no known U.S. production of mid-silica fabric. *Id*.

[15] CR at I-11-12; PR at I-9.

[16] CR at I-13; PR at I-10.

[17] CR at I-13; PR at I-11.

physical characteristics, manufacturing processes, channels of distribution, lack of interchangeability, and different customer perceptions.[18]

In the final phase of these investigations, no party contests the definition of the domestic like product. AMI argues that the Commission should continue to define a single domestic like product, coextensive with the scope of investigations, as it did in the preliminary determinations.[19] No interested party requested in its comments on the final phase questionnaires that the Commission seek data on alternative products,[20] and the only respondent interested party participating in the final phase of these investigations, ACIT, did not comment on the domestic like product definition in its posthearing brief.[21]

The record of the final phase of these investigations does not contain any information about the characteristics of ASF different from that in the preliminary phase.[22] In light of this and the lack of any contrary argument, we define a single domestic like product consisting of all industrial grade ASF that is coextensive with the scope of investigations.[23]

III. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[24] 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.

AMI argues that the Commission should define the domestic industry as encompassing all producers of ASF in the United States (which are AMI and HITCO), as it did in the preliminary determinations.[25] The record indicates that no domestic producer is a related party.[26] We consequently define a single domestic industry consisting of all U.S. producers of ASF.

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[18] *Certain Amorphous Silica Fabric from China*, Inv. Nos. 701-TA-555 and 731-TA-1310 (Preliminary), USITC Pub. 4598 (March 2016) at 7-10 ("Preliminary Determination").

[19] AMI Prehearing Br. at 7-10. While AMI also argues against the inclusion of mid-silica fabric in the domestic like product, no party has advocated its inclusion during the final phase of these investigations. *Id*. at 10.

[20] CR at I-22; PR at I-16.

[21] In the preliminary phase of these investigations, ACIT stated that it did not object to the domestic like product definition proposed by AMI. Preliminary Determination, USITC Pub. 4598 (March 2016) at 7.

[22] *See generally* CR at I-8-22; PR at I-7-18.

[23] For the purposes of this opinion, further references to "ASF" are to the industrial grade ASF encompassing the domestic like product, unless otherwise indicated.

[24] 19 U.S.C. § 1677(4)(A).

[25] AMI Prehearing Br. at 10-11.

[26] While U.S. producers reported no direct imports of subject merchandise, domestic producer *** purchased subject merchandise from ***. CR at III-9; PR at III-4 (reporting (Continued...)

IV. Material Injury by Reason of Subject Imports

Based on the record in the final phase of these investigations, we find that an industry in the United States is materially injured by reason of imports of ASF from China that Commerce has found to be sold in the United States at less than fair value and subsidized by the government of China.[27] [28]

A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or

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(…Continued)
purchases of *** kilograms from *** in 2013, *** kilograms from *** in 2014, and *** kilograms from *** in January-September ("interim") 2016). The Commission has previously concluded that a purchaser may be treated as a related party if it controls large volumes of subject imports. The Commission has found such control to exist when the domestic producer was responsible for a predominant proportion of an importer's purchases and these purchases were substantial. *See Iron Construction Castings from Brazil, Canada, and China*, Inv. No. 701-TA-249 and 731-TA-262-263, and 265 (Fourth Review), USITC Pub. 4655 at 11 (Dec. 2016).

***'s purchases from *** did not constitute a predominant portion of these parties' imports of subject merchandise. ***. Derived from CR at III-8; PR at III-3. Accordingly, we find that *** is not a related party.

[27] Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)). The statute further provides that subject imports from a single country which comprise less than 3 percent of total such imports of the product may not be considered negligible if there are several countries subject to investigation with negligible imports and the sum of such imports from all those countries collectively accounts for more than 7 percent of the volume of all such merchandise imported into the United States. 19 U.S.C. § 1677(24)(A)(ii). In the case of countervailing duty investigations involving developing countries (as designated by the United States Trade Representative), the statute indicates that the negligibility limits are 4 percent and 9 percent, rather than 3 percent and 7 percent. 19 U.S.C. § 1677(24)(B).

The record indicates subject imports of ASF from China exceeded the requisite statutory negligibility thresholds. During calendar year 2015, the 12-month period immediately preceding filing of the petitions, subject imports of ASF from China accounted for *** percent of total imports by quantity. CR/PR at Table IV-2. Consequently, we find that subject imports from China are not negligible.

[28] Commissioners Broadbent and Kieff determine that an industry in the United States is not materially injured by reason of imports of certain ASF from China that Commerce has found to be sold in the United States at less than fair value and subsidized by the government of China. They join the discussion of material injury except where otherwise indicated.

threatened with material injury by reason of the imports under investigation.[29] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[30] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[31] In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[32] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[33]

Although the statute requires the Commission to determine whether the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[34] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion.[35] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[36]

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[29] 19 U.S.C. §§ 1671d(b), 1673d(b). The Trade Preferences Extension Act of 2015, Pub. L. 114-27, amended the provisions of the Tariff Act pertaining to Commission determinations of material injury and threat of material injury by reason of subject imports in certain respects. We have applied these amendments here.

[30] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[31] 19 U.S.C. § 1677(7)(A).

[32] 19 U.S.C. § 1677(7)(C)(iii).

[33] 19 U.S.C. § 1677(7)(C)(iii).

[34] 19 U.S.C. §§ 1671d(a), 1673d(a).

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

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

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.[37] In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.[38] Nor does the "by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[39] It is clear that the existence of injury caused by other factors does not compel a negative determination.[40]

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

[38] SAA at 851-52 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports."); *Taiwan Semiconductor Industry Ass'n,* 266 F.3d at 1345 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports ... . Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports." (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int'l Trade 2002) ("{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury" or make "bright-line distinctions" between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that "{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e*., it is not an 'other causal factor,' then there is nothing to further examine regarding attribution to injury"), *citing Gerald Metals,* 132 F.3d at 722 (the statute "does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.").

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

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

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject imports" and the Commission "ensure{s} that it is not attributing injury from other sources to the subject imports."[41] [42] Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[43]

The Federal Circuit's decisions in *Gerald Metals, Bratsk*, and *Mittal Steel* all involved cases where the relevant "other factor" was the presence in the market of significant volumes of price-competitive nonsubject imports. The Commission interpreted the Federal Circuit's guidance in *Bratsk* as requiring it to apply a particular additional methodology following its finding of material injury in cases involving commodity products and a significant market presence of price-competitive nonsubject imports.[44] The additional "replacement/benefit" test looked at whether nonsubject imports might have replaced subject imports without any benefit to the U.S. industry. The Commission applied that specific additional test in subsequent cases, including the *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago* determination that underlies the *Mittal Steel* litigation.

Mittal Steel clarifies that the Commission's interpretation of *Bratsk* was too rigid and makes clear that the Federal Circuit does not require the Commission to apply an additional

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

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

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

542 F.3d at 878.

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

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

test nor any one specific methodology; instead, the court requires the Commission to have "evidence in the record" to "show that the harm occurred 'by reason of' the LTFV imports," and requires that the Commission not attribute injury from nonsubject imports or other factors to subject imports.[45] Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

The progression of *Gerald Metals, Bratsk*, and *Mittal Steel* clarifies that, in cases involving commodity products where price-competitive nonsubject imports are a significant factor in the U.S. market, the Court will require the Commission to give full consideration, with adequate explanation, to non-attribution issues when it performs its causation analysis.[46]

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard.[47] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[48]

B. Conditions of Competition and the Business Cycle

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

1. Demand Considerations

U.S. demand for ASF depends on the demand for downstream products in which ASF is used. The primary end uses of ASF are heat shields used in various industry sectors, such as ship building, ship maintenance and repair, and oil and gas.[49] Specific end uses for ASF include welding protection fabrics, fire blankets, safety clothing, and pipe and hose coverings.[50] ASF

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

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

[47] We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

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

[49] CR at II-13-16; PR at II-6.

[50] CR at II-13; PR at II-6.

accounts for a varying amount of the cost share in downstream products, ranging from *** percent to *** percent.[51] A majority of questionnaire respondents indicated that there are no substitute products for ASF.[52] While a minority of questionnaire respondents indicated that there were substitute products for which the intended end use had lower temperature ratings, all questionnaire respondents agreed that there were no substitute products for applications with higher temperature requirements.[53]

Most market participants reported that the ASF market was not subject to business cycles, and only one indicated that the market was seasonal.[54] Market participants provided mixed responses to the Commission's questions regarding demand trends for ASF in the United States since January 2013.[55] *** U.S. producers and four of 12 purchasers reported that demand had decreased, while a plurality of purchasers and half of importers reported that demand had fluctuated.[56] The information in the record[57] indicates that apparent U.S.

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[51] CR at II-13-14; PR at II-6-7.

[52] CR at II-17; PR at II-8. *** and 14 of 16 purchasers reported that there are no substitutes for ASF. *Id*. Further, only one purchaser, ***, reported *** purchases of mid-silica fabric since 2013. CR at II-19; PR at II-9.

[53] CR at II-17-19; PR at II-8-10. Four of five importers and two of 16 purchasers indicated that there could be substitutes for ASF where there were lower temperature ratings, but all such parties agreed that any such substitute products were limited by temperature requirements. *Id*.

[54] CR at II-14-15; PR at II-7. *** U.S. producer, three of 6 importers, and 14 of 16 purchasers indicated that the market was not subject to business cycles. Only *** reported seasonal cycles. *Id*.

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

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

[57] AMI argues that subject import data collected in the final phase of these investigations are unreliable and understate the actual volume and market share of subject imports, pointing to changes in reported volumes by individual importers between the preliminary and final phase and to export data reported to Commerce that exceeds the import data reported to the Commission. We find that the import data provided in the Commission's final report are reliable. Revisions to reported data between the preliminary phase and final phase are common as parties become more familiar with the definition of products under investigation and the Commission's reporting methodology, and they have more time to review their data and respond to the questionnaire in the final phase. Additionally, there were not large variations between the U.S. market shares for subject imports provided in the Commission report and those in the data set AMI advocated. *Compare* AMI Prehearing Br. Exh 4 *with* CR/PR at Table IV-4. We would also anticipate that export volumes reported to Commerce and import volumes reported to the Commission would differ because of the differences in timing; moreover, the import data reported to the Commission reflect actual volumes whereas the export data referenced by AMI are ranged data and not actual volumes. AMI Prehearing Br. at Exh. 9. Accordingly, we rely on information collected in the final phase questionnaires for the volume and market share of subject imports.

We have also considered AMI's arguments concerning the questionnaire data reported by JSC Valmiera Stikla Skiedra ("Valmiera") for nonsubject imports from Latvia. AMI contends that the data Valmiera reported are unreliable and overstate the actual presence of nonsubject imports in the U.S. market. We agree that data provided by Valmiera contain inconsistencies, and we have accordingly relied upon official import statistics for imports from Latvia, rather than the data reported by Valmiera, for the final phase of these investigations. *See* CR at I-5 n.6; PR at I-4 n.6. Valmiera cooperated with the Commission's requests for information, notwithstanding anomalies in its reported data, and Valmiera (Continued...)

consumption decreased over the January 2013-September 2016 period of investigation ("POI"), declining from *** kilograms in 2013 to *** kilograms in 2014, and then declining to *** kilograms in 2015. It was *** kilograms in interim 2015 and lower, at *** kilograms, in interim 2016.[58] These declines resulted from trends in two sectors: the decrease in military shipbuilding, maintenance, and repair resulting from decreased military funding, and the decrease in demand from the oil and gas sector resulting from low prices of those commodities.[59]

2. Supply Considerations

The domestic like product, subject imports, and imports from nonsubject sources all supplied the U.S. market over the POI.[60]

The domestic industry's market share was generally smaller than that for either subject imports or nonsubject imports, with the domestic industry market share exceeding that of nonsubject imports only in 2015.[61] The domestic industry's share of a shrinking U.S. market remained at *** percent in 2013 and 2014, increased to *** percent in 2015, and was *** percent in interim 2015 and lower, at *** percent, in interim 2016.[62] Domestic producers' combined annual capacity fluctuated over the POI but decreased overall,[63] and domestic producers retained unused capacity throughout the POI.[64]

(…Continued)
has indicated that it accounted for *** exports of ASF from Latvia to the United States and that ***. *Id*. Accordingly, record evidence indicates that official import statistics provide a reliable measure for the volume of ASF imports from Latvia. To the degree that AMI advocates discounting the presence of nonsubject imports in the U.S. market, we find that record evidence does not support such an inference. The Commission acknowledged that it did not have complete information when it identified only a *** presence of nonsubject imports in the preliminary determinations. Preliminary Determination, USITC Pub. 4598 at 17 (noting that record evidence indicated that nonsubject imports were likely present at greater levels than reflected in preliminary phase questionnaire data). Record evidence in the final phase supports the greater presence of nonsubject imports in the U.S. market, including data reported by Valmiera, official import statistics, and U.S. purchaser confirmation of nonsubject imports from Latvia in the U.S. market. *See, e.g.*, Purchaser Questionnaire, EDIS Doc. 595662, response to question II-1 (confirming purchases of ASF imports from Latvia); Purchaser Questionnaire, EDIS Doc. 595659, response to question III-11 (noting increasing presence of low-priced ASF imports from Latvia in U.S. market). Accordingly, we rely upon official import statistic for imports in evaluating nonsubject imports from Latvia, which we find to be the only source of nonsubject imports during the POI as explained in section IV.B.2. below.

[58] CR/PR at Table IV-4.
[59] Hearing Tr. at 28 (Leonard).
[60] CR/PR at Table IV-4.
[61] CR/PR at Table IV-4.
[62] CR/PR at Table IV-4.
[63] CR/PR at Table III-2.
[64] CR/PR at Table III-2.

Subject imports' market share fluctuated over the POI but increased overall, and subject imports accounted for the largest market share for ASF throughout the POI. The market share for U.S. shipments of subject imports declined from *** percent in 2013 to *** percent in 2014, then increased to *** percent in 2015. It was *** percent in interim 2015 and higher, at *** percent, in interim 2016.[65]

The record indicates that Latvia was the only source of nonsubject imports of ASF during the POI.[66] Nonsubject imports from Latvia accounted for the second largest share of apparent U.S. consumption for most of the POI, with U.S. producers' U.S. shipments exceeding those of nonsubject imports only in 2015. Nonsubject imports increased from *** percent in 2013 to *** percent in 2014, but decreased to *** percent in 2015, and were *** percent in interim 2015 and lower, at *** percent, in interim 2016.[67]

3. Substitutability and Other Conditions

We find that there is a high degree of substitutability between domestically produced ASF and subject imports.[68] *** U.S. producers reported that the domestic like product and subject imports were *** interchangeable, all purchasers reported that the products were always, frequently, or sometimes interchangeable, and four of five U.S. importers reported that the products were always or sometimes interchangeable.[69] Indeed, purchasers reported to the Commission that some of their ASF purchases that they had previously thought were of domestic origin were actually of Chinese origin,[70] which supports the view that purchasers cannot readily distinguish between the domestic like product and subject imports. Some purchases of ASF are subject to the Berry Amendment or Buy American Act and must be of U.S. origin.[71]

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[65] CR/PR at Table IV-4.

[66] CR at IV-3; PR at IV-2. The Commission issued questionnaires to firms identified as possible producers of ASF in Belarus, Russia, and the United Kingdom. Producers from Russia and Belarus did not respond, while Fothergill Engineered Fabrics Ltd. in the United Kingdom indicated ***. Proprietary customs data indicated that Latvia is the primary source for imports of ASF among these nonsubject countries. Belarus has in the past been a source of ASF imports, but such imports were subject to U.S. State Department sanctions in effect from May 2011 to October 2015. CR at VII-8-9; PR at VII-4-5.

[67] CR/PR at Table IV-4.

[68] CR at II-23; PR at II-12.

[69] CR/PR at Table II-10. One U.S. importer reported that the domestic like product and subject imports were never interchangeable.

[70] Purchaser Questionnaire, EDIC Doc. 597479, response to question 1(b) (indicating purchaser was unaware of origin of ASF at time of purchase).

[71] CR at II-23, II-30; PR at II-12, II-15. AMI contends that ASF sold directly to the military must be of U.S. origin but that sales to defense contractors are not required to be of U.S. origin in all circumstances. The Berry Amendment requires that funds appropriated to the Department of Defense for procurement of "synthetic fabric or coated synthetic fabric," among other items, shall be used only for procurement of such items produced in the United States, subject to certain exceptions. *See* 10 U.S.C. § 2533a. While AMI believes that defense contractor purchases of ASF should also be subject to (Continued...)

A majority or plurality of purchasers reported that the domestic like product and subject imports were comparable on all factors except price.[72] Factors listed by a majority of U.S. purchasers as "very important" in purchasing decisions include product consistency, availability and reliability of supply, delivery time, price, delivery terms, and fabric strength.[73] Purchasers also listed price or cost most frequently as one of their top three purchasing factors.[74] In light of this information, and reports that the subject imports and domestic like product are comparable with respect to other important purchasing factors, we find that price is important in purchasing decisions.

The record further indicates that U.S. producers manufacture a high-quality, abrasion-resistant ASF that competes with the fabrication grade ASF reported by AVS in the preliminary phase of these investigations.[75] AMI argues that the term "fabrication grade" is a marketing term adopted by AVS and not an industry standard, and this term applies to any type of ASF treated with coatings or special fabrics so as to offer abrasion resistance and greater textile strength at higher temperatures.[76] In responses to Commission questionnaires, both U.S. producers reported their equivalent product types and U.S. shipments of such "fabrication grade" ASF,[77] which appear comparable to products AVS markets as "fabrication grade."[78] Accordingly, we find that the domestic industry produces an abrasion resistant ASF that competes with fabrication grade ASF subject imports.[79]

(…Continued)
such requirements, it acknowledges that many defense contractors interpret the Berry Amendment in such a way that it does not. AMI Posthearing Br, Att. A, pg. 36; Hearing Tr. at 25-26 (Leonard); Hearing Tr. at 88-90 (Leonard); Research Material, EDIS Doc. 603063. Small purchases of ASF under $150,000 may also be subject to the Buy American Act, which requires that contracts for the construction, repair, or maintenance of public works in the United States use only materials manufactured in the United States, subject to certain exceptions. *See* 41 U.S.C. § 8303; *see also* Hearing Tr. at 25-26 (Leonard).

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

[73] CR/PR at Table II-7. At least 11 of 16 reporting U.S. purchasers listed each of these factors as very important in purchasing decisions.

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

[75] In the preliminary phase, importer and purchaser AVS argued that Chinese producers manufacture a high-quality, high-value "fabrication grade" ASF that the domestic industry neither produces nor competes with. *See* AVS Postconference Br. at 3-4; Conference Testimony at 123 (Sydow) and 127-28 (Sydow, Lebow).

[76] Hearing Tr. at 33-34 (Van Atta). We note that AVS did not otherwise provide information regarding "fabrication grade" ASF in the final phase of these investigations.

[77] U.S. Producer Questionnaire, EDIS Doc. 594946, response to question II-9; *see also* U.S. Producer Questionnaire, EDIS Doc. 594947, response to question II-9 (describing relevant abrasion resistant products and reporting U.S. shipments).

[78] Research Materials, EDIS Doc. 591153 (describing AVS' ASF product with "increased abrasion resistance and dimensional stability"); *see also* CR/PR at Table IV-5, statistical note.

[79] While respondent parties argued in the preliminary phase that out-of-scope mid-silica fabric imports from China served a growing portion of the U.S. market, we find that the record does not support this contention, as purchasers reported *** purchases of mid-silica fabric during the POI. *See* CR/PR at Table II-4.

Accordingly, we find that the domestic like product and subject imports are highly substitutable, that price is an important purchasing factor, and that the domestic like product and subject imports are comparable in purchasing factors other than price.

C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[80]

The volume of subject imports decreased during the POI, but apparent U.S. consumption decreased by a significantly greater amount. The quantity of subject imports declined from *** kilograms in 2013 to *** kilograms in 2014, and then to *** kilograms in 2015, and the quantity was higher in interim 2016, at *** kilograms, than interim 2015, *** kilograms.[81] As discussed above, subject imports were the largest supplier to the U.S. market during the POI. Notwithstanding their declining absolute quantities, their market share rose from 2013 to 2015 and was higher in interim 2016 than interim 2015. Their share of apparent U.S. consumption declined from *** percent in 2013 to *** percent in 2014, then increased to *** percent in 2015, and was *** percent in interim 2015 and *** percent in interim 2016.[82]

We find that the volume of subject imports is significant on an absolute basis and relative to consumption.

D. Price Effects of the Subject Imports

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

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
>
> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[83]

As explained in Section V.B.3. above, the record indicates that the domestic like product and subject imports are highly substitutable and that price is an important purchasing factor.

The questionnaires collected quarterly pricing data on three pricing products.[84] Both U.S. producers and two importers (***) provided usable pricing data for sales of the requested

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[80] 19 U.S.C. § 1677(7)(C)(i).

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

[82] CR/PR at Table IV-4.

[83] 19 U.S.C. § 1677(7)(C)(ii).

[84] The pricing products were:

Product 1.-- 18 ounce/yard^2, per MILC-24576;

(Continued...)

products, although not all firms reported pricing for all products for all quarters.[85] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' shipments of ASF and *** percent of U.S. shipments of subject imports in 2015 by value.[86]

The subject imports undersold the domestic like product in all 35 quarterly comparisons, involving approximately 1.8 million square yards of subject imports.[87] The margins of underselling ranged from 15.7 percent to 68.4 percent, and the average underselling margin was 36.8 percent.[88] Given the widespread underselling and the fact that price is an important consideration in purchasing decisions, we find the underselling to be significant.

These lower prices enabled subject imports to obtain substantial sales throughout the POI. Five responding purchasers reported purchasing subject imports rather than the domestic like product.[89] Among these purchasers, *** reported purchasing *** kilograms of subject imports rather than the domestic like product because of price,[90] and this firm's purchases of U.S. product declined *** percent between 2013 and 2015 while its purchases of subject imports increased *** percent.[91] In interim 2016, *** purchases of the domestic like product and purchased *** subject imports.[92] Purchaser *** also reported that *** of its purchases of *** kilograms of subject imports during the POI were purchased instead of the domestic like product because of the latter's higher prices.[93] While domestic producers reported compensating for these lost sales to subject imports with increased sales of low-volume orders to other customers for much of the POI,[94] the cumulative loss of large volume sales resulted in the domestic industry ceding market share to subject imports in interim 2016.[95]

(…Continued)

Product 2.-- 36 ounce/yard^2, per MILC-24576; and

Product 3.-- 24 ounce/yard^2, with cured silicone rubber on one side, nominal finished fabric weight 29.0 ounce/yard^2.

CR at V-9; PR at V-4-5. MILC-24576 is a military grade specification.

[85] CR at V-9-10; PR at V-4-5.

[86] CR at V-10; PR at V-5.

[87] CR at V-18; PR at V- 6; CR/PR at Table V-7.

[88] CR/PR at Table V-7.

[89] CR at V-20; PR at V-7-8. Purchasers *** all reported purchasing subject imports rather than the domestic like product.

[90] *** reported that all ASF purchases above the "micro-purchase" threshold are competed and awarded to the party offering the lowest price. Purchaser Questionnaire, EDIS Doc. 597479, response to question III-15. Accordingly, this reported volume represents *** of *** purchases of subject imports and indicates such products were lower priced than those offered by domestic producers.

[91] CR/PR at Table V-8 n.5.

[92] CR/PR at Table V-8 n.4.

[93] CR at V-20; PR at V-8. ***. CR at V-20 n.28; PR at V-8.

[94] Hearing Tr. at 91-92 (Dougan).

[95] CR/PR at Table IV-4. The market share for the domestic industry was lower in interim 2016, when it was *** percent, than interim 2015, when it was *** percent. By contrast, the market share for subject imports was higher in interim 2016, when it was *** percent, than in interim 2015, when it was *** percent. CR/PR at Table IV-4.

We do not find that subject imports depressed U.S. producers' prices to a significant degree.[96] Prices for domestically produced products 1 and 2 increased from the first quarter of 2013 to the third quarter of 2016, by *** percent and *** percent, respectively.[97] Prices for domestically produced product 3 decreased by *** percent over the POI,[98] but we note that there were no reported purchases of subject imports for this product until the second quarter of 2015, and the largest price decreases for the domestically produced product 3 occurred prior to this time, between the fourth quarter of 2014 and first quarter of 2015.[99] Thus, the record does not indicate that subject imports caused the observed price declines for this product.

We also do not find that subject imports prevented price increases for the domestic like product that otherwise would have occurred to a significant degree. As noted above, demand declined throughout the POI, and most firms reported that raw material prices declined as well.[100] In a period of declining demand and raw material costs, price increases beyond those observed for some pricing products would not otherwise be expected.[101]

Given the significant volumes of low-priced subject imports, we find that significant underselling by subject imports resulted in the domestic industry losing sales it would otherwise have achieved, and such underselling resulted in the domestic industry losing market share to subject imports in interim 2016. This significant underselling resulted in the significant effects described further below.

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[96] AMI has argued that there is price depression because it reduced prices it quoted to *** in unsuccessful sales offers. We have not relied upon such information because the record contains substantial pricing data reflecting actual sales of the domestic like product. CR/PR at Table V-3, V-4, and V-5 (listing quantities of sales for domestically produced pricing products during POI).

[97] CR/PR at Table V-6. AMI argues that the overall price increases during the POI resulted largely from price increases in the third quarter of 2016, following the imposition of provisional duties. However, we note that there were multiple price increases for each of the domestically produced pricing products even before the imposition of provisional duties. *See*, *e.g.*, CR/PR at Figure V-3 (showing general price increases for product 2 from the third quarter 2015 until the end of the POI).

[98] CR/PR at Table V-6.

[99] CR/PR at Table V-5.

[100] CR at V-1; PR at V-1. *** and three of six responding importers reported that raw material prices decreased between 2013 and 2015. For U.S. producers, raw materials as a share of the cost of goods sold ("COGS") decreased from *** percent in 2013 to *** percent in 2015, and was *** percent in interim 2015 and *** percent in interim 2016. *Id*.

[101] Commissioners Broadbent and Kieff do not join the remainder of the discussion of the price effects of subject imports. They concur with the Views of the Commission that underselling was significant. Although certain purchasers reported sourcing subject imports throughout the POI due to their low prices, sales of subject imports to these purchasers did not cause the domestic industry to lose substantial market share. The domestic industry's market share remained steady from 2013 to 2015 until decreasing slightly in interim 2016. Moreover, subject imports did not significantly depress or suppress U.S. prices.

E. Impact of the Subject Imports[102]

Section 771(7)(C)(iii) of the Tariff Act provides that examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry."[103] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debts, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[104]

Demand was declining throughout the POI, and the domestic industry's output and total shipments fluctuated while declining overall.

The domestic industry's capacity fluctuated during the POI but decreased overall, increasing from *** kilograms in 2013 to *** kilograms in 2014, and then decreasing to *** kilograms in 2015.[105] Capacity was *** kilograms in interim 2015 and lower, at *** kilograms, in interim 2016.[106] Production also fluctuated over the POI but decreased overall, increasing from *** kilograms in 2013 to *** kilograms in 2014, and then decreasing to *** kilograms in 2015.[107] Production was *** kilograms in interim 2015 and lower, at *** kilograms, in interim 2016.[108] Capacity utilization decreased from *** percent in 2013 to *** percent in 2014 and to *** percent in 2015, but was higher in interim 2016 (*** percent) compared to interim 2015

[102] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determination of sales at less value Commerce found antidumping duty margins of 162.47 percent for subject imports from China. *See Antidumping Duty Investigation of Certain Amorphous Silica Fabric from the People's Republic of China: Final Affirmative Determination of Sales at Less-Than-Fair-Value, and Final Affirmative Determination of Critical Circumstances,* 82 Fed. Reg. 8,399 (Jan. 25, 2017). We take into account in our analysis the fact that Commerce has found that all subject producers in China are selling subject imports in the United States at less than fair value. In addition to this consideration, our impact analysis has considered other factors affecting domestic prices. Our analysis of the significant underselling of subject imports and the effects of that underselling, described in both the price effects discussion and below, is particularly probative to an assessment of the impact of the subject imports.

[103] 19 U.S.C. § 1677(7)(C)(iii); *see also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

[104] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

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

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

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

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

(*** percent).[109] U.S. producers' U.S. shipments declined from *** kilograms in 2013 to *** kilograms in 2014 and *** kilograms in 2015. They were *** kilograms in interim 2015 and were lower, at *** kilograms, in interim 2016.[110] Total shipments also declined, fluctuating on an annual basis.[111] Inventories rose from *** kilograms in 2013 to *** kilograms in 2014, and then declined to *** kilograms in 2015, a level lower than that of 2013.[112] Inventories were *** kilograms in interim 2015 and were higher, at *** kilograms, in interim 2016.[113] The domestic industry's market share was *** percent in 2013 and 2014, rose to *** percent in 2015, and was lower in interim 2016 (*** percent) than in interim 2015 (*** percent).[114]

The number of production-related workers fluctuated within a narrow range over the POI.[115] Hours worked fluctuated over the POI but decreased overall,[116] while wages paid also fluctuated within a narrow range.[117] Productivity declined during the POI.[118]

The domestic industry's sales revenues increased slightly from 2013 to 2014 as sales quantities also increased slightly, but sales revenues and quantities declined from 2014 to 2015,[119] and average unit sales values ("AUVs") decreased from 2013 to 2015.[120] Sales revenues were lower in interim 2016 than in interim 2015, again reflecting decreases in sales quantities.[121] The industry's cost of goods sold ("COGS") displayed similar trends to sales revenues over the POI.[122] The domestic industry's gross profit declined for most of the POI,

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

[110] CR/PR at Table III-4.

[111] CR/PR at Table III-3. Total U.S. shipments increased from *** kilograms in 2013 to *** kilograms in 2014, and then declined to *** kilograms in 2015. Total shipments were lower in interim 2016, at *** kilograms, than interim 2015, at *** kilograms. While the domestic industry's exports increased over the POI, such increases did not offset larger decreases in U.S. shipments, resulting in the overall declines of shipments for domestic producers. *Id*.

[112] CR/PR at Table III-5.

[113] CR/PR at Table III-5.

[114] CR/PR at Table IV-4.

[115] There were *** production workers in 2013, 2015, and interim 2016, *** in 2014, and *** in interim 2015. CR/PR at Table III-6.

[116] The domestic industry reported a *** decrease in hours worked from 2013 to 2015, although hours worked were *** higher in interim 2016 (***) than interim 2015 (***). CR/PR at Table III-6.

[117] The domestic industry reported a *** increase in wages paid from 2013 to 2015, but wages paid were lower in interim 2016 than in interim 2015. CR/PR at Table III-6.

[118] Productivity declined in each reported period. CR/PR at Table III-6.

[119] The domestic industry's sales revenues were $*** in 2013, $*** in 2014, and $*** in 2015. *Id*. The domestic industry's sales quantities were *** kilograms in 2013, *** kilograms in 2014, and *** kilograms in 2015. CR/PR at Table VI-1.

[120] AUVs were $*** in 2013, $*** in 2014, and $*** in 2015. CR/PR at Table VI-1.

[121] Sales revenues were $*** in interim 2015 and $*** in interim 2016, and sales quantities were *** kilograms in interim 2015 and *** kilograms in interim 2016. CR/PR at Table VI-1. AUVs increased from $*** in interim 2015 to $*** in interim 2016. *Id*.

[122] COGS were $*** in 2013, $*** in 2014, and $*** in 2015, and were $*** in interim 2015 and $*** in interim 2016. CR/PR at Table VI-1.

although it was higher in interim 2016 than in interim 2015.[123] The domestic industry experienced operating losses throughout the POI that fluctuated, worsening from 2013 to 2015 but improving in interim 2016 compared to interim 2015.[124] The industry incurred net losses following similar trends.[125] The domestic industry's capital expenditures fluctuated over the POI but declined sharply in 2015 and were lower in interim 2016 than in interim 2015.[126] [127]

The widespread underselling of subject imports resulted in the domestic industry losing sales it otherwise would have obtained,[128] and the sales lost to subject imports ultimately resulted in subject imports taking market share from the domestic industry in interim 2016.[129] Because of the sales and market share lost to subject imports, the domestic industry made fewer shipments and obtained fewer revenues than it would have otherwise, exacerbating its poor financial performance throughout the POI. We therefore find that the subject imports had a significant impact on the domestic industry.

We have also considered whether there are other factors that may have had an impact on the domestic industry during the POI to ensure that we are not attributing injury from these other factors to subject imports. We acknowledge that declining U.S. demand for ASF during the POI contributed to the domestic industry's declines in production, output, and revenues. The record indicates, however, that the domestic industry lost large volumes of those

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[123] The domestic industry recorded gross profits of $*** in 2013, $*** in 2014, $*** in 2015, $*** in interim 2015, and $*** in interim 2016. CR/PR at Table VI-1.

[124] The domestic industry recorded an operating loss of $*** in 2013, $*** in 2014, and $*** in 2015, and $*** in interim 2015 and $*** in interim 2016. CR/PR at Table VI-1. The industry's ratio of operating income to net sales was *** percent in 2013, *** percent in 2014, *** percent in 2015, *** in interim 2015 and *** percent in interim 2016. *Id*.

[125] The domestic industry recorded a net loss of *** in 2013, *** in 2014, *** in 2015, *** in interim 2015 and *** in interim 2016. CR/PR at Table VI-1.

[126] The domestic industry's capital expenditures were $*** in 2013, $*** in 2014, and $*** in 2015, and were $*** in interim 2015 and $*** in interim 2016. CR/PR at Table VI-3. The domestic industry's research and development expenditures were $*** in 2013, $*** in 2014, and $*** in 2015, and were $*** in interim 2015 and $*** in interim 2016. CR/PR at Table VI-3.

[127] Commissioners Broadbent and Kieff do not join the remainder of this opinion. As discussed above, they determine that price underselling did not cause the domestic industry to lose market share or suffer adverse price effects. The industry's output and financial performance were adversely affected by declining demand within the market for ASF. Output indicators such as production, U.S. shipments, and net sales quantities declined over the POI, as did the hours worked of PRWs. However, these indicators declined to a lesser extent than apparent U.S. consumption. As U.S. demand declined, the industry had fewer domestic sales to cover its costs while its increasing export volumes were sold at lower prices, leading to a deterioration of the industry's financial performance between 2013 and 2015. Commissioners Broadbent and Kieff therefore determine that the domestic industry's condition is attributable to factors other than subject imports, and they determine that an industry in the United States is not materially injured by reason of subject imports of ASF from China that Commerce has found to be sold at less than fair value and subsidized by the government of China.

[128] As explained in the price effects section, purchasers reported purchasing large volumes of subject imports during the POI rather than domestic product because of price.

[129] CR/PR at Table IV-4.

remaining sales in the shrinking market to subject imports,[130] and that it would have obtained substantial additional shipments and revenues but for the subject imports. Indeed, although the domestic industry and subject imports both experienced declining shipments over the POI, those shipments of subject imports ultimately declined less than those of the domestic industry, resulting in the domestic industry having its lowest market share of the POI in interim 2016, when subject imports obtained their peak market share.[131]

We have also examined the role of nonsubject imports. While declines in shipments for nonsubject imports appear to have resulted in increased market shares for both the domestic industry and subject imports in 2015,[132] subject imports took market share from both nonsubject imports and the domestic industry in interim 2016.[133] Additionally, in responses to the lost sales / lost revenue survey, purchasers indicated that they would have purchased from the domestic industry but for lower-priced subject imports.[134] We therefore conclude that any adverse effects from nonsubject imports are distinguishable from those we have attributed to subject imports.

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

V. Conclusion

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

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[130] As noted above, purchaser *** reported purchasing *** kilograms of subject imports rather than the domestic like product because of price, and purchaser *** reported purchasing *** kilograms of subject imports rather than domestic product during the POI. CR/PR at Table V-8 n.4 & n.5. These totals represent approximately *** percent of total apparent U.S. consumption over the POI. The domestic industry's market share also declined *** percentage points in interim 2016 when the market share for subject imports was increasing. CR/PR at Table IV-4.

[131] CR/PR at Table IV-4.

[132] The market share for nonsubject imports fluctuated over the period but experienced large declines at the end of the POI, increasing from *** percent in 2013 to *** percent in 2014, and then decreasing to *** percent in 2015, and was lower in interim 2016 (*** percent) than interim 2015 (*** percent). CR/PR at Table IV-4.

[133] CR/PR at Table IV-4. Both nonsubject imports and the domestic industry reached their lowest market shares of the POI in interim 2016 (*** percent and *** percent respectively), while subject imports reached their highest level (*** percent). *Id*.

[134] CR/PR at Table V-9.

SEPARATE VIEWS OF VICE CHAIRMAN DAVID S. JOHANSON ON CRITICAL CIRCUMSTANCES

I make a negative critical circumstances determination with regard to subject imports in the antidumping duty investigation of ASF from China, for the reasons set forth below.

I. Legal Standards

In its final antidumping duty determination concerning ASF from China, Commerce found that critical circumstances exist with respect to all subject producers/exporters. Because I have determined that the domestic industry is materially injured by reason of subject imports from China, I must further determine "whether the imports subject to the affirmative {Commerce critical circumstances} determination ... are likely to undermine seriously the remedial effect of the antidumping {and/or countervailing duty} order{s} to be issued."[135] The Uruguay Round Agreements Act Statement of Administrative Action ("SAA") indicates that the Commission is to determine "whether, by massively increasing imports prior to the effective date of relief, the importers have seriously undermined the remedial effect of the order" and specifically "whether the surge in imports prior to the suspension of liquidation, rather than the failure to provide retroactive relief, is likely to seriously undermine the remedial effect of the order."[136] The legislative history for the critical circumstances provision indicates that the provision was designed "to deter exporters whose merchandise is subject to an investigation from circumventing the intent of the law by increasing their exports to the United States during the period between initiation of an investigation and a preliminary determination by {Commerce}."[137] An affirmative critical circumstances determination by the Commission, in conjunction with an affirmative determination of material injury by reason of subject imports, would normally result in the retroactive imposition of duties for those imports subject to the affirmative Commerce critical circumstances determination for a period 90 days prior to the suspension of liquidation.

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

> (I) the timing and the volume of the imports,
> (II) a rapid increase in inventories of the imports, and
> (III) any other circumstances indicating that the remedial effect of the {order} will be seriously undermined.[138]

In considering the timing and volume of subject imports, the Commission's practice is to consider import quantities prior to the filing of the petition with those subsequent to the filing

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[135] 19 U.S.C. §§ 1671d(b)(4)(A)(ii), 1673d(b)(4)(A)(ii).

[136] SAA, H.R. Rep. 103-316, vol. 1 at 877 (1994).

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

[138] 19 U.S.C. §§ 1671d(b)(4)(A)(ii), 1673d(b)(4)(A)(ii).

of the petition using monthly statistics on the record regarding those firms for which Commerce has made an affirmative critical circumstances determination.[139]

II. Analysis

As an initial matter, the parties dispute the time period that the Commission should apply for comparison of the pre- and post-petition volume of subject imports from China. Petitioner argues that the relevant comparison period is six months, August 2015-January 2016 (pre-petition) and February-July 2016 (post-petition), as compiled in the Staff Report.[140] Respondents contend that Petitioner's comparison inflates the post-petition increase in subject import volume because imports are *** in the calendar year, based on a comparison of monthly averages in the six months preceding the petition's filing with the monthly averages for full-year 2015 and interim 2015.[141]

I agree with Petitioner that there is insufficient data to test that imports are *** in the calendar year or to demonstrate a seasonal pattern that would render the Commission's traditional analysis unreliable.[142] I therefore apply the six-month time period advocated by Petitioner for comparing pre- and post-petition import volume.[143] I also compare end-of-period inventory levels for interim 2015 and interim 2016.[144]

Based on these data, imports of subject merchandise from China subject to affirmative critical circumstances findings in Commerce's antidumping duty investigation increased from *** kilograms for the six-month pre-petition period to *** kilograms for the six-month post-petition period, an increase of *** percent. [145] U.S. importers' inventories of subject imports were *** kilograms in September 2015 and were *** kilograms in September 2016, an increase of *** percent.[146]

As the relative volumes of the subject imports and subject importer inventories suggest, the vast majority of subject imports during the POI, including in the post-petition period, were commercially shipped in the United States during the POI. Importer inventories in general were

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

[140] Petitioner's Prehearing Br. at 59.

[141] Respondents' Posthearing Br. at 8-11.

[142] *See* CR at II-14-II-15, PR at II-7.

[143] CR/PR at Table IV-3. My conclusion on critical circumstances would be the same using a five-month time period for comparison.

[144] While Petitioner requested that the Commission collect monthly inventory data in the periods preceding and following the filing of the petitions, we declined to collect such information because most importers do not record inventory levels on such a basis, and the primary concern in a critical circumstances analysis is the starting and ending point of inventories rather than monthly fluctuations.

[145] CR/PR at Table IV-3 & Fig. IV-2.

[146] CR/PR at Tables VII-3 & C-1. End-of-period inventories were *** kilograms in 2013, *** kilograms in 2014, and *** kilograms in 2015. CR/PR at Table VII-3.

low in the ASF market because ASF is primarily produced to order rather than shipped from inventory.[147] In fact, the two largest importers of ASF from China, ***, reported that *** percent and *** of their imports, respectively, are produced to order.[148] Thus, even in interim 2016, when subject importer inventories increased from interim 2015, approximately *** of the subject imports from China were nonetheless commercially shipped in that period.[149]

The post-petition increase in subject imports and resulting increase in subject import commercial shipments and market share in interim 2016 directly contributed to our making an affirmative present material injury determination on this record, as discussed in the Views of the Commission. The issue for critical circumstances, however, requires a determination of whether the imports subject to the affirmative Commerce critical circumstances determination are likely "to undermine seriously" the remedial effect of Commerce's antidumping duty order.[150] The record fails to support such a conclusion with respect to increased inventory levels or subject import levels in the post-petition period. In fact, Petitioner reported an increase in domestic prices in the last quarter of the POI as a result of Commerce's preliminary determination and the imposition of provisional duties,[151] notwithstanding a decline in apparent U.S. consumption in comparing interim 2016 to interim 2015.[152] Petitioner also reported domestic industry improvements in operating income, COGS/net sales ratio, and profitability in interim 2016 due in part to the investigation and Commerce's preliminary determination.[153]

Accordingly, the domestic industry was already experiencing price increases and other improvements by the end of the POI notwithstanding the post-petition increase in imports and the fact that the vast majority of these imports were commercially shipped in this time period. The record therefore does not demonstrate that Commerce's final antidumping duty order will be seriously undermined by the post-petition increases in subject imports or subject importer inventories.

For all of these reasons, while I recognize the increase in subject imports and inventory levels, I do not find that the imports subject to the antidumping duty critical circumstances determination are likely to undermine seriously the remedial effect of the antidumping duty

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[147] CR at II-23, PR at II-12.

[148] CR at II-23-II-24, PR at II-12. The increase in end-of-period inventories in interim 2016 is attributable to U.S. importers *** and ***. CR at VII-7, PR at VII-4. *** in particular reported ***, CR at VII-7, PR at VII-4, but *** is the smallest U.S. importer of subject imports from China. CR/PR at Table IV-1.

[149] *See* and *compare* CR/PR at Tables IV-2, IV-4 & VII-3.

[150] 19 U.S.C. §1673d(b)(4)(A).

[151] *See, e.g.,* Petitioner's Posthearing Br. at 11-12; CR/PR at Tables V-3-V-4.

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

[153] *See, e.g.,* Petitioner's Posthearing Br. at 14 & Answers to Questions at 27; Petitioner's Prehearing Br. at 44, 46; CR/PR at Table C-1. I also note that Commerce maintained similar antidumping duty margins in its final determination as those in the preliminary determination. In its final determinations, it found antidumping duty margins of 162.47 percent for subject imports from China. When adjusted for export subsidies found in Commerce's countervailing duty determination, Commerce will apply cash deposit rates ranging from 151.71 to 151.93 percent. CR/PR at Table I-2.

order. There is no mathematical threshold to make such a showing, and each determination will be *sui generis* based on the record before the Commission, but the statute clearly contemplates the likelihood that the remedial effect of the order will be seriously undermined to warrant the retroactive relief. On this record, I do not find that the ASF from China that entered the United States after the petition's filing would likely seriously undermine the remedial effect of the antidumping duty order.

SEPARATE VIEWS OF CHAIRMAN RHONDA K. SCHMIDTLEIN AND COMMISSIONER IRVING A. WILLIAMSON REGARDING CRITICAL CIRCUMSTANCES

We have made affirmative critical circumstances findings with respect to dumped imports of ASF from China for which Commerce found critical circumstances, for the reasons below.[154]

A. Choice of Time Period

We first consider the appropriate period for comparison of pre-petition and post-petition levels of subject imports from China. In previous investigations, the Commission has relied on a shorter comparison period than the six-month period it typically examines when the timing of the first preliminary Commerce determination authorizing the imposition of provisional duties would have served to reduce subject import volume in the sixth month of the post-petition period.[155] That situation arises here with respect to subject imports from China, and we have thus determined to compare the volume of subject imports in the five months prior to the filing of the petition with the volume of subject imports in the five months after the filing of the petition in our critical circumstances analyses.[156]

B. Affirmative Critical Circumstances Determination

In its final antidumping duty critical circumstances determination for ASF from China, Commerce determined that critical circumstances existed for all producers/exporters of subject merchandise.[157] The monthly data for subject import volumes for the five-month period before and after the filing of the petition show an increase in volume of *** percent, from ***

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[154] For the relevant legal standards for the Commission's critical circumstances determination, please see Separate Views of Vice Chairman David S. Johanson on Critical Circumstances. *See also, e.g., Certain Hot-Rolled Steel Flat Products from Australia, Brazil, Japan, Korea, the Netherlands, Turkey, and the United Kingdom,* Inv. Nos. 701-TA-545-547 and 731-TA-1291-1297 (Final), USITC Pub. 4638 at 47-48 (Sept. 2016) (same).

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

[156] Notwithstanding our use of a five-month time period, we note that use of a six-month period would not have affected our analysis.

[157] *See Antidumping Duty Investigation of Certain Amorphous Silica Fabric from the People's Republic of China: Final Affirmative Determination of Sales at Less-Than-Fair-Value, and Final Affirmative Determination of Critical Circumstances,* 82 Fed. Reg. 8,399 (Jan. 25, 2017). Critical circumstances were not alleged in the countervailing duty investigation of ASF from China.

kilograms in the pre-petition period to *** kilograms in the post-petition period.[158] The increase was especially pronounced from April to June 2016, when monthly volumes were *** the highest monthly volume in the period preceding the petition.[159] We also compared end-of-period inventory levels for interim 2015 and interim 2016,[160] and importer inventories were more than *** as high in September 2016 as in September 2015.[161] Thus, the surge of subject imports resulted in a combination of increased inventories of Chinese ASF and lost market share by the domestic industry to subject imports in interim 2016.[162]

These increases in subject import volumes and inventory are magnified by the declining demand for ASF during the pertinent period, which indicates that these increases did not reflect rising apparent consumption in the U.S. market.[163] Subject import volumes in the five-month period following the filing of the petition were equivalent to *** percent of apparent U.S. consumption in interim 2016, and subject import inventory levels were equivalent to *** percent of apparent U.S. consumption during interim 2016.[164] [165] While ACIT argues that the increase in subject import inventories was small relative to apparent U.S. consumption, we note that the level of subject import inventories relative to apparent U.S. consumption more than doubled from interim 2015 to interim 2016.[166]

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

[159] The highest monthly volume preceding the filing of the petitions was *** kilograms in November 2015, whereas subject import volumes were *** kilograms in April 2016, *** kilograms in May 2016, and *** kilograms in June 2015. CR/PR at Table IV-3.

[160] As noted in the Separate Views of Vice Chairman David S. Johanson on Critical Circumstances, we declined to collect monthly inventory data as requested by AMI because most importers do not record inventory levels on such a basis, and the primary concern in a critical circumstances analysis is the starting and ending point of inventories rather than monthly fluctuations.

[161] CR/PR at Table VII-2. U.S. importers' inventories of subject imports were *** kilograms in September 2015 and were *** kilograms in September 2016. While ACIT argues that it does not hold significant inventory levels, we note ACIT's experience is not necessarily indicative of other U.S. importers. Indeed, U.S. importers *** and *** both reported *** in interim 2016, which resulted in higher inventory levels for these companies. *Id*.

[162] CR/PR at Table IV-4.

[163] Respondent ACIT argues that this surge in imports reflects a seasonal cycle in the ASF market, with inventories building up in the first nine months of the year and then sharply declining in the last three months. We find this argument unpersuasive. Only one responding party in these investigations indicated that there was seasonal demand in the ASF market, with other U.S. producers, importers, and purchasers not reporting such seasonality. CR at II-14-15, PR at II-7.

[164] Calculated from CR/PR at Tables IV-3, IV-4, and VII-3.

[165] Commissioner Williamson notes that the increase in subject import volumes after the filing of the petition was equivalent to *** percent of U.S. shipments of domestic producers in interim 2016, and subject import inventory levels in interim 2016 were equivalent to *** percent of U.S. shipments in interim 2016. Calculated from CR/PR at Table C-1.

[166] U.S. importer inventories of subject merchandise at the end of the interim period were equivalent to *** percent of apparent U.S. consumption in interim 2015 and *** percent in interim 2016. CR/PR at Table VII-3.

We conclude that the surge of imports subject to the antidumping duty critical circumstances determination that occurred between the filing of the petition and the imposition of provisional duties, as well as the corresponding increase in inventories, indicate that the imports subject to the determination are likely to undermine substantially the remedial effect of the antidumping duty order. Accordingly, we make an affirmative finding of critical circumstances with respect to such imports.

SEPARATE VIEWS OF COMMISSIONERS MEREDITH M. BROADBENT AND F. SCOTT KIEFF

Based on the record in the final phase of these investigations, we determine that an industry in the United States is threatened with material injury by reason of imports of ASF from China that Commerce has determined are sold in the United States at less than fair value and are subsidized by the government of China. Except as otherwise noted, we join sections I–IV of the Views of the Commission.

Our determination that an industry is not materially injured by reason of subject imports reflects several factors, including 1) the fact that the domestic industry did not lose significant market share to subject imports over the POI; 2) the Commission's finding that there was no price depression or suppression caused by subject import underselling; and 3) evidence that the domestic industry's decreasing output and financial performance was due to substantial declines in apparent U.S. consumption throughout the POI.[167]

Our determination that an industry is threatened with material injury by reason of subject imports is based on 1) a late-period increase of subject imports coincided with minor domestic industry market share losses; 2) a shift in market demand to certain price-sensitive purchasers which increasingly sourced from subject imports during the POI at the expense of U.S. producers; 3) the Chinese industry's high excess capacity and export orientation to the United States; 4) the likelihood of adverse price effects in the imminent future; and 5) the vulnerability of the domestic industry to material injury.

I. Threat of Material Injury

A. Legal Standard

Section 771(7)(F) of the Tariff Act directs the Commission to determine whether the U.S. industry is threatened with material injury by reason of the subject imports by analyzing whether "further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted."[168] The Commission may not make such a determination "on the basis of mere conjecture or supposition," and considers the threat factors "as a whole" in making its determination whether dumped or subsidized imports are imminent and whether material injury by reason of subject imports would occur unless an order is issued.[169] In making our determination, we consider all statutory threat factors that are relevant to these investigations.[170]

[167] *See* Views of the Commission, Part IV.

[168] 19 U.S.C. § 1677(7)(F)(ii).

[169] 19 U.S.C. § 1677(7)(F)(ii).

[170] These factors are as follows:

(Continued...)

B. Analysis[171]

1. Likely Volume

As discussed in the Views of the Commission, we determine that the volume of subject imports was significant both in absolute terms and relative to U.S. consumption during the POI.

(…Continued)

(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement) and whether imports of the subject merchandise are likely to increase,

(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,

(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,

(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices and are likely to increase demand for further imports,

(V) inventories of the subject merchandise,

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).

19 U.S.C. § 1677(7)(F)(i). To organize our analysis, we discuss the applicable statutory threat factors using the same volume/price/impact framework that applies to our material injury analysis. Statutory threat factors (I), (II), (III), (V), and (VI) are discussed in the analysis of likely subject import volume. Statutory threat factor (IV) is discussed in the analysis of likely subject import price effects. Statutory factors (VIII) and (IX) are discussed in the analysis of likely impact. Statutory factor (VII) concerning agricultural products is inapplicable to this investigation.

[171] The statute instructs the Commission to consider the "nature of the subsidy" in a countervailing duty proceeding as part of its consideration of the threat of material injury. 19 U.S.C. § 1677(7)(F)(i)(I). In its final countervailing duty determination, Commerce found five subsidy programs used by one or both mandatory respondents to be countervailable. 82 Fed. Reg. 8,405 (Jan. 25, 2017). It found one of these programs constituted a subsidy contingent upon export pursuant to section 771(5A)(B) of the Tariff Act. Issues and Decision Memorandum for the Final Affirmative Determination in the Countervailing Duty Investigation of Amorphous Silica Fabric from China (Jan. 25, 2017) at 21. Commerce identified countervailable subsidy rates 48.94 to 79.90 percent for mandatory respondents, and 165.39 percent for the "all others" rate. 82 Fed. Reg. 8,405 (Jan. 25, 2017). We note that these margins are not *de minimis* and consider them in the totality of our threat analysis.

However, the significant volume of subject imports did not result in the domestic industry losing substantial market share during the POI. Although certain purchasers reported sourcing ASF from importers of the subject merchandise due to the low price of subject imports throughout the POI,[172] U.S. producers were able to maintain their share of the declining U.S. market through sales to other customers.[173] As a result, subject imports primarily increased their market share at the expense of nonsubject imports, which declined rapidly during the POI.[174] For several reasons, however, we consider it likely that subject imports will continue to gain market share, and will increasingly do so at the expense of the domestic industry.

Although subject imports decreased between 2013 and 2015, they did so to a lesser degree than declines in apparent U.S. consumption, U.S. producers' U.S. shipments, and nonsubject imports.[175] After decreasing by *** percent between 2013 and 2014, subject imports only decreased by *** percent between 2014 and 2015, and then increased by *** percent between interim 2015 and interim 2016 despite a continued decrease in apparent U.S. consumption.[176] The increase in subject imports between interim periods led to a build-up of U.S. importer inventories, which reached a volume equivalent to *** percent of U.S. shipments of imports in interim 2016 compared to a level equivalent to only *** percent of U.S. shipments of imports in interim 2015.[177] As subject import trends have diverged from those of nonsubject imports and domestic producers' U.S. shipments, subject imports have increased their share of apparent U.S. consumption. After subject imports' market share decreased from *** percent in 2013 to *** percent in 2014, their market share increased to *** percent in 2015, with all of that increase coming at the expense of nonsubject imports. Subject imports' share of apparent U.S. consumption continued to rise in interim 2016 to *** percent, and for the first time during the POI, the domestic industry's market share fell below *** percent to *** percent in interim 2016.[178] Although the domestic industry's loss of market share was not substantial, these trends indicate that subject imports and U.S. shipments of subject imports are likely to continue to increase in the imminent future, with the domestic industry likely to lose additional market share as a result.

Subject imports are also likely to increase in the imminent future because demand has increasingly shifted toward a market segment where they compete directly with U.S. producers. According to petitioner, demand for ASF used in military shipbuilding and repair, a major end use, has been shifting from direct sales to the military to purchases by defense contractors.[179] As discussed in the Views of the Commission, AMI considers military purchases of ASF to be covered by the Berry Amendment and Buy American provisions, but sales to defense contractors are not required to be of U.S. origin in all circumstances.[180] Therefore, U.S.

[172] CR at V-20; PR at V-7-8.
[173] Hearing Tr. at 37-38 (Schade), 50, 91-92 (Dougan).
[174] CR/PR at Table IV-2 and IV-4.
[175] CR/PR at Table IV-2 and IV-4.
[176] CR/PR at Table IV-2 and IV-4.
[177] CR/PR at Table VII-3.
[178] CR/PR at Table IV-4.
[179] Petitioner's prehearing brief at 18; Hearing Tr. at 24, 29 (Leonard).
[180] CR at II-23, II-30; PR at II-12, II-15.

producers must increasingly compete with subject imports for an important end use market that has traditionally been protected by U.S. origin requirements. Such competition was particularly acute at the end of the POI, as one of AMI's largest defense contractor customers, ***, ceased purchasing from AMI altogether in interim 2016 after several years of slowly reducing its purchases of domestic product. *** substantially increased its purchases of subject imports to fulfill the vast majority of its demand in interim 2016 due to the lower price offered by subject imports.[181] The domestic industry is likely to lose additional defense contractor sales to subject imports due to underselling, which will lead to a further displacement of the domestic industry's overall market share.

Chinese foreign producer questionnaire data also indicate that the Chinese industry has the incentive and the ability to increase their exports to the United States in the imminent future.[182] The Chinese industry was considerably larger than the U.S. industry throughout the POI, and had excess capacity in 2015 equivalent to *** percent of apparent U.S. consumption in 2015.[183] Although Chinese excess capacity decreased between 2013 and 2015, the Chinese producers projected excess capacity to increase from *** kg in 2015 to approximately *** kg in 2016 and 2017 as a result of increased capacity, lower shipments to the Chinese home market, and lower production.[184] Chinese industry data also indicate that the industry was heavily reliant on exports to the United States, as exports to the United States accounted for *** percent of Chinese total shipments between 2013 and 2015.[185] We consider it likely that Chinese producers will continue to export significant volumes of subject merchandise to the United States, and will seek to satisfy demand for ASF in the U.S. market to the extent possible using their excess capacity.

In sum, although subject imports gained market share primarily at the expense of nonsubject imports throughout the POI, they began to gain market share from domestic producers in interim 2016. Coincident with the domestic industry's loss of market share in interim 2016, subject imports completely displaced U.S. producers' sales to one of the industry's largest customers based entirely on the low price of subject imports. Such lost sales will increasingly result in U.S. producers losing overall market share to subject imports as the market shifts toward sales to defense contractors as opposed to direct military purchases

[181] *** indicates that it primarily chooses its sources of ASF based on the lowest price offered. Purchaser Questionnaire, EDIS Doc. 597479, response to question III-15. Between 2013 and 2015, *** share of *** decreased from *** percent to *** percent, and then decreased to *** percent in interim 2016, with at least *** percent of the remainder going to subject imports.

[182] In the final phase of these investigations, the Commission received only one useable questionnaire response from a Chinese producer, ACIT, which had exports that accounted for *** percent of subject imports in 2015. However, during the preliminary phase which similarly covered the 2013-15 period, the Commission received useable questionnaire responses from four firms which together reported exports that exceeded the quantity of U.S. imports from China in 2015. CR at VII-3; PR at VII-. We therefore rely on the more complete data from the preliminary phase of these investigations to analyze the Chinese industry.

[183] CR/PR at Table VII-2 and Table C-1.

[184] CR/PR at Table VII-2.

[185] CR/PR at Table VII-2.

within the military shipbuilding and repair segment of the market. The Chinese industry, which has substantial excess capacity and export orientation toward the United States, will likely continue to gain sales with U.S. purchasers at the domestic industry's expense. We therefore determine that subject imports are likely to remain significant both absolutely and relative to U.S. consumption, and they will likely increase significantly relative to U.S. consumption.

2. Likely Price Effects

As discussed in the Views of the Commission, the record indicates that the domestic like product and subject imports are highly substitutable and that price is an important purchasing factor. We also find subject import underselling to be significant. However, significant underselling by subject imports did not cause price depression or price suppression during the POI, and the domestic industry did not lose significant market share to subject imports.

However, we determine that subject imports will likely cause adverse price effects in the imminent future. The Chinese industry is likely to continue to use underselling and aggressive pricing as a means to increase market share, given that subject and U.S.-produced ASF is highly substitutable. Because subject imports undersold domestically produced ASF to a significant degree throughout the period, we determine that underselling is likely to be significant in the imminent future. Underselling by subject imports is likely to increase the attractiveness of those imports to purchasers compared with domestic production, and will likely increase demand for further subject imports.

We also consider whether subject imports are likely to cause price depressing or suppressing effects. Despite significant underselling, U.S. producers were able to stabilize average sales prices during the POI by ceding certain contracts to low-priced subject imports and by maintaining sales prices and volumes with other customers.[186] However, steadily diminishing apparent U.S. consumption suggests that further increases in subject import volume will likely not be absorbed by increased demand in the U.S. market in the imminent future.[187] Both U.S. and Chinese producers have substantial excess capacity, and are likely to seek to fill that capacity to the extent possible as the market declines. In addition, as the market continues to shift from direct sales to military agencies covered by the Berry Amendment and Buy American Act to sales to defense contractors and other non-military end users,[188] U.S. producers are likely to compete vigorously based on price for these non-military sales. Indeed, a witness for the petitioner stated that AMI attempted to lower its sales prices to a major defense contractor in 2015 and 2016 in an effort to gain sales volumes, but was unsuccessful at gaining this business.[189]

As subject imports continue to gain market share in the United States, the domestic industry will continue to face the trade-off of whether to lose market share or accept lower prices. With demand declining and shifting toward more competitive channels of distribution, U.S. producers will increasingly find it challenging to maintain both their market position and

[186] Hearing Tr. at 36-38 (Schade), 50 (Dougan); Petitioner Posthearing Brief, Attachment 1 at 42-43.
[187] CR/PR at Table C-1.
[188] Petitioner prehearing brief at 18.
[189] Hearing Tr. at 27, 29 (Leonard).

their average sales prices. Therefore, we determine that subject imports are likely to enter the U.S. market at prices that will have a significant depressing effect on domestic prices for ASF.

3. Likely Impact

As discussed in the Views of the Commission, the domestic industry suffered declines in most of its indicia related to output and financial performance. As apparent U.S. consumption decreased by *** percent between 2013 and 2015, the domestic industry maintained its share of a declining market, and U.S. shipments, production, capacity utilization, and net sales values all declined along with the market.[190] As a result of U.S. producers' increasing reliance on lower-priced exports as well as their decline in sales to the U.S. market, the domestic industry's gross, operating, and net income decreased sharply between 2013 and 2015.[191] Although several indicators showed slight improvements in interim 2016 compared to interim 2015, the industry remained in a considerably deteriorated state compared to 2013 levels.[192] Accordingly, we find that the industry is vulnerable to material injury.

Subject imports are likely to continue to significantly undersell the domestic like product. As apparent U.S. consumption continues to remain low, subject imports will likely remain significant absolutely and increase significantly relative to U.S. consumption. Subject imports will exert additional pricing pressure on the domestic like product, particularly in competition with U.S. producers for sales to non-military purchasers. The combination of increased subject import underselling and increases in the supply of subject imports will likely lead U.S. producers to accept lower prices or losses of market share, which will likely erode the domestic industry's operating income margin further and leave the domestic industry in a weakened condition in the imminent future.

In addition, there will likely be significant actual or potential negative effects on the existing development and production efforts of the domestic industry. The domestic industry's capital expenditures and R&D expenses are already substantially lower than they were at the beginning of the POI.[193] Therefore, a further deterioration of the domestic industry's condition will impede its ability to invest in itself. Petitioner anticipates that, in the absence of trade relief, "it will become increasingly difficult for Auburn and the U.S. Industry producing ASF to continue making this product."[194]

We have also considered factors other than subject imports to ensure that we are not attributing any threat of material injury from other such factors to the subject imports. Nonsubject imports' market share decreased between 2013 and 2015, and between interim

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

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

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

[193] CR/PR at Table VI-3. The domestic industry's capital expenditures declined from $*** in 2013 and $*** in 2014 to $*** in 2015, and further declined to $*** in interim 2016. Similarly, the domestic industry's R&D expenses decreased from $*** in 2013 to $*** in 2014, and further to $*** in 2015 and only $*** in interim 2016.

[194] Hearing Tr. at 30 (Leonard).

periods.[195] Domestic producers AMI and HITCO both indicated that nonsubject imports have been increasingly absent in the U.S. market over the POI.[196] Given our determination that the volume of subject imports is likely to continue to increase significantly relative to U.S. consumption, we find the adverse effects of subject imports are distinct from any effects attributable to nonsubject imports.

We conclude that a likely significantly increased volume of subject imports relative to U.S. consumption, combined with likely price depressing effects of those subject imports, will likely result in material injury to the domestic industry producing ASF in the imminent future. We further determine, pursuant to U.S.C. § 1671d(b)(4)(B), that we would not have found material injury but for the suspension of liquidation of subject imports.

II. Conclusion

For the reasons stated above, we determine that an industry in the United States is threatened with material injury by reason of imports of ASF from China that are sold in the United States at less than fair value and are subsidized by the government of China.

[195] CR/PR at Table IV-4.

[196] Hearing Tr. at 80-81 (Leonard, Schade).

PART I: INTRODUCTION

BACKGROUND

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by Auburn Manufacturing, Inc. ("AMI"), Mechanic Falls, Maine, on January 20, 2016, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value ("LTFV") imports of certain amorphous silica fabric ("ASF") [1] from China. The following tabulation provides information relating to the background of these investigations.[2] [3]

Effective date	Action
January 20, 2016	Petitions filed with Commerce and the Commission; institution of Commission investigations (81 FR 4335, January 26, 2016)
February 16, 2016	Commerce's notice of initiation CVD (81 FR 8909, February 23, 2016) and AD (81 FR 8913, February 23, 2016)
March 7, 2016	Commission's preliminary determinations (81 FR 14128, March 16, 2016)
July 5, 2016	Commerce's preliminary countervailing duty determination and alignment with final antidumping duty investigation (81 FR 43579, July 5, 2016)
September 1, 2016	Commerce's preliminary antidumping duty determination, affirmative determination of critical circumstances, and postponement of final determination (81 FR 60341, September 1, 2016)
September 1, 2016	Scheduling of final phase of Commission's investigations (81 FR 63205, September 14, 2016)
January 18, 2017	Commission's hearing
January 25, 2017	Commerce's final antidumping duty determination and affirmative determination of critical circumstances, (82 FR 8399, January 25, 2017)
January 25, 2017	Commerce's final countervailing duty determination (82 FR 8405, January 25, 2017)
February 15, 2017	Commission's vote
March 10, 2017	Commission's views

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

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

[3] Appendix B lists those witnesses appearing at the hearing.

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

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

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

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[4]

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

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

negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—[5]

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

Organization of report

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

MARKET SUMMARY

ASF is generally used as a shield against heat, sparks, and molten metal splash, particularly in welding applications. The two known U.S. producers of ASF are Auburn Manufacturing, Inc. ("AMI") and HITCO Carbon Composites, Inc. ("HITCO"). The leading producers of ASF outside the United States include Access China Industrial Textile, Inc. ("ACIT" Pinghu), Huatek New Material Inc., NanJing Tianyuan Fiberglass Material Co., Ltd. of China; Fothergill Engineered Fabrics Ltd. of the United Kingdom; and JSC Valmiera Stikla Skiedra of Latvia and the United Kingdom. The leading U.S. importers of ASF from China are ***. *** companies *** reported imports from Latvia. The largest U.S. distributor is *** and the largest end user is ***.

Apparent U.S. consumption of ASF totaled approximately *** in 2015. U.S. producers' U.S. shipments of ASF totaled *** in 2015, and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from China totaled *** in 2015

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

and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from nonsubject sources totaled *** in 2015 and accounted for *** percent of U.S. consumption by quantity and *** percent by value.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, table C-1. U.S. industry data are based on questionnaire responses of two firms that accounted for all known U.S. production of ASF during 2015. U.S. imports are based on questionnaire responses from seven firms believed to account for the large majority of imports from China and Latvia and supplemented with official import statistics (with respect to imports from Latvia).[6]

PREVIOUS AND RELATED INVESTIGATIONS

On October 27, 1986, Haveg Division/Ametek and HITCO filed an antidumping petition concerning certain ASF from Japan. On July 27, 1987, Commerce determined that certain ASF from Japan was dumped.[7] The Commission issued an affirmative material injury determination in September 1987,[8] and later that month Commerce issued an antidumping duty order.[9] Commerce subsequently revoked the antidumping duty order on certain ASF from Japan on November 14, 1995.[10] The article subject to investigation in the 1986/87 proceeding was defined as "commercial grade woven fabric of glass (silica filaments), whether or not colored, containing not over 17 percent of wool by weight." Commerce included only "commercial" grade ASF in the scope of its investigation and the Commission found that the domestic like product included only commercial grade ASF.

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[6] Staff worked extensively with representatives of JSC Valmiera Stikla Skiedra, the exporter and *** of ASF from Latvia, as well as its U.S. subsidiary and ***, PD Valmiera. These representatives were cooperative, but ultimately the data provided were ***. However, because Valmiera accounted for *** exports of ASF from Latvia, and company representatives stated repeatedly that ***, Staff is using the official import statistics for imports from Latvia to represent import quantity and value.

[7] *Final Determination of Sales at Less Than Fair Value: Amophous {sic} Silica Filament Fabric from Japan*, 52 FR 28033, July 27, 1987.

[8] *Certain Silica Filament Fabric from Japan*, *Inv. No. 731-TA-355 (Final)*, USITC Publication 2015, September 1987.

[9] *Antidumping Duty Order: Amorphous Silica Filament Fabric from Japan*, 52 FR 35750, September 23, 1987.

[10] *Amorphous Silica Filament Fabric from Japan, Revocation of the Antidumping Duty Order*, 60 FR 57217, November 14, 1995.

NATURE AND EXTENT OF SUBSIDIES AND SALES AT LTFV

Subsidies

On January 25, 2017, Commerce published a notice in the *Federal Register* of its final determination of countervailable subsidies for producers and exporters of ASF from China.[11] Table I-1 presents Commerce's final affirmative determination. The programs found to be countervailable are as follows:

- Policy Loans to the Silica Fabric Industry
- Provision of Inputs for LTAR (Less Than Adequate Remuneration)
    - Electricity for LTAR
    - Provision of Fiberglass Cloth for LTAR
    - Provision of Fiberglass Yarn for LTAR
- Grant Programs
    - SME Science and Technology Innovation Fund
    - SME International Market Development Fund
- Export Buyer's Credits from the Export Import Bank of China

Sales at LTFV

On January 25, 2017, Commerce published a notice in the *Federal Register* of its final determination of sales at LTFV with respect to imports from China.[12] Table I-2 presents Commerce's final affirmative determination.

[11] *Countervailing Duty Investigation of Certain Amorphous Silica Fabric from the People's Republic of China: Final Affirmative Determination*, 82 FR 8405, January 25, 2017.

[12] *Antidumping Duty Investigation of Certain Amorphous Silica Fabric From the People's Republic of China: Final Affirmative Determination of Sales at Less-Than-Fair Value, and Final Affirmative Determination of Critical Circumstances*, 82 FR 8399, January 25, 2017.

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

Entity	Final countervailable subsidy margin (*percent*)
ACIT (Pinghu) Inc. and ACIT (Shanghai) Inc	48.94
Nanjing Tianyuan Fiberglass Material Co. Ltd	79.90
Unresponsive Companies Rates : Acmetex Co., Ltd.; Beijing Great Pack Materials, Co. Ltd.; Beijing Landingji Engineering Tech Co., Ltd.; Changshu Yaoxing Fiberglass Insulation Products Co., Ltd.; Changzhou Kingze Composite Materials Co., Ltd.; Changzhou Utek Composite Co.; Chengdu Chang Yuan Shun Co., Ltd.; China Beihai Fiberglass Co., Ltd.; China Yangzhou Guo Tai Fiberglass Co., Ltd.; Chongqing Polycomp International Corp.; Chongqing Yangkai Import & Export Trade Co., Ltd.; Cixi Sunrise Sealing Material Co., Ltd.; Fujian Minshan Fire-Fighting Co., Ltd.; Grand Fiberglass Co., Ltd.; Haining Jiete Fiberglass Fabric Co., Ltd.; Hebei Yuniu Fiberglass Manufacturing Co., Ltd.; Hebei Yuyin Trade Co., Ltd. Hengshui Aohong International Trading Co., Ltd.; Hitex Insulation (Ningbo) Co., Ltd.; Mowco Industry Limited; Nanjing Debeili New Materials Co., Ltd.; Ningbo Fitow High Strength Composites Co., Ltd.; Ningbo Universal Star Industry & Trade Limited; Ningguo BST Thermal Protection Products Co., Ltd.; Qingdao Feelongda Industry & Trade Co., Ltd.; Qingdao Shishuo Industry Co., Ltd.; Rugao City Ouhua Composite Material Co., Ltd.; Rugao Nebola Fiberglass Co., Ltd.; Shanghai Bonthe Insulative Material Co., Ltd.; Shanghai Horse Construction Co., Ltd.; Shanghai Liankun Electronics Material Co., Ltd.; Shanghai Suita Environmental Protection Technology Co., Ltd.; Shangqui Huanyu Fiberglass Co., Ltd.; Shengzhou Top-Tech New Material Co., Ltd.; Shenzhen Songxin Silicone Products Co., Ltd.; Taixing Chuanda Plastic Co., Ltd.; Taixing Vichen Composite Material Co., Ltd.; TaiZhou Xinxing Fiberglass Products Co., Ltd.; Tenglong Sealing Products Manufactory Yuyao; Texaspro (China) Company; Wallean Industries Co., Ltd.; Wuxi First Special-Type Fiberglass Co., Ltd.; Wuxi Xingxiao Hi-Tech Material Co., Ltd.; Yuyao Feida Insulation Sealing Factory; Yuyao Tianyi Special Carbon Fiber Co., Ltd.; Zibo Irvine Trading Co., Ltd.; Zibo Yao Xing Fire-Resistant and Heat-Preservation Material Co., Ltd.	165.39
All others	64.42

Source: 82 FR 8405, January 25, 2017.

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

Exporter	Producer	Final dumping margin (*percent*)	Cash deposit rates (percent)[1]
ACIT (Pinghu) Inc	ACIT (Pinghu) Inc	162.47	151.93
Nanjing Tianyuan Fiberglass Material Co., Ltd	Nanjing Tianyuan Fiberglass Material Co., Ltd	162.47	151.71
PRC-Wide Rate		162.47	151.93

[1] Adjusted cash deposit rates by the amount of export subsidies, where appropriate.

Source: 82 FR 8399, January 25, 2017.

THE SUBJECT MERCHANDISE

Commerce's scope[13]

Commerce has defined the scope of these investigations as follows:

The product covered by this investigation is woven (whether from yarns or rovings) industrial grade amorphous silica fabric, which contains a minimum of 90 percent silica (SiO2) by nominal weight, and a nominal width in excess of 8 inches. The investigation covers industrial grade amorphous silica fabric regardless of other materials contained in the fabric, regardless of whether in roll form or cut-to-length, regardless of weight, width (except as noted above), or length. The investigation covers industrial grade amorphous silica fabric regardless of whether the product is approved by a standards testing body (such as being Factory Mutual (FM) Approved), or regardless of whether it meets any governmental specification.

Industrial grade amorphous silica fabric may be produced in various colors. The investigation covers industrial grade amorphous silica fabric regardless of whether the fabric is colored. Industrial grade amorphous silica fabric may be coated or treated with materials that include, but are not limited to, oils, vermiculite, acrylic latex compound, silicone, aluminized polyester (Mylar®) film, pressure-sensitive adhesive, or other coatings and treatments. The investigation covers industrial grade amorphous silica fabric regardless of whether the fabric is coated or treated, and regardless of coating or treatment weight as a percentage of total product weight. Industrial grade amorphous silica fabric may be heat-cleaned. The investigation covers industrial grade amorphous silica fabric regardless of whether the fabric is heat-cleaned.

Industrial grade amorphous silica fabric may be imported in rolls or may be cut-to-length and then further fabricated to make welding curtains, welding blankets, welding pads, fire blankets, fire pads, or fire screens. Regardless of the name, all industrial grade amorphous silica fabric that has been further cut-to-length or cut-to-width or further finished by finishing the edges and/or adding grommets, is included within the scope of these investigations.

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[13] *Antidumping Duty Investigation of Certain Amorphous Silica Fabric From the People's Republic of China: Final Affirmative Determination of Sales at Less-Than-Fair Value, and Final Affirmative Determination of Critical Circumstances*, 82 FR 8399, January 25, 2017.

Subject merchandise also includes (1) any industrial grade amorphous silica fabric that has been converted into industrial grade amorphous silica fabric in China from fiberglass cloth produced in a third country; and (2) any industrial grade amorphous silica fabric that has been further processed in a third country prior to export to the United States, including but not limited to treating, coating, slitting, cutting to length, cutting to width, finishing the edges, adding grommets, or any other processing that would not otherwise remove the merchandise from the scope of the investigation if performed in the country of manufacture of the in-scope industrial grade amorphous silica fabric.

Excluded from the scope of the investigation is amorphous silica fabric that is subjected to controlled shrinkage, which is also called ''pre-shrunk'' or ''aerospace grade'' amorphous silica fabric. In order to be excluded as a pre-shrunk or aerospace grade amorphous silica fabric, the amorphous silica fabric must meet the following exclusion criteria: (1) The amorphous silica fabric must contain a minimum of 98 percent silica (SiO_2) by nominal weight; (2) the amorphous silica fabric must have an areal shrinkage of 4 percent or less; (3) the amorphous silica fabric must contain no coatings or treatments; and (4) the amorphous silica fabric must be white in color. For purposes of this scope, ''areal shrinkage'' refers to the extent to which a specimen of amorphous silica fabric shrinks while subjected to heating at 1800 degrees F for 30 minutes.[14]

Also excluded from the scope are amorphous silica fabric rope and tubing (or sleeving). Amorphous silica fabric rope is a knitted or braided product made from amorphous silica yarns. Silica tubing (or sleeving) is braided into a hollow sleeve from amorphous silica yarns.

The subject imports are normally classified in subheadings 7019.59.4021, 7019.59.4096, 7019.59.9021, and 7019.59.9096 of the Harmonized Tariff Schedule of the United States (HTSUS), but may also enter under HTSUS subheadings 7019.40.4030, 7019.40.4060, 7019.40.9030, 7019.40.9060, 7019.51.9010, 7019.51.9090, 7019.52.9010, 7019.52.9021, 7019.52.9096 and 7019.90.1000. HTSUS subheadings are provided for convenience and customs purposes only; the written description of the scope of this investigation is dispositive.

[14] Areal shrinkage is expressed as the following percentage: ((Fired Area, em^2-Initial Area, cm^2)/ Initial Area, cm^2) × 100 = Areal Shrinkage, %.

Tariff treatment

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations is normally classified in subheadings 7019.59.40 and 7019.59.90 (statistical reporting numbers 7019.59.4021, 7019.59.4096, 7019.59.9021, and 7019.59.9096) of the Harmonized Tariff Schedule of the United States (HTS). However, some subject goods may also be reported under HTS statistical reporting numbers 7019.40.4030, 7019.40.4060, 7019.40.9030, 7019.40.9060, 7019.51.9010, 7019.51.9090, 7019.52.9010, 7019.52.9021, 7019.52.9096, and 7019.90.1000. General duty rates for the applicable tariff rate lines are 7.3 percent ad valorem and 7.0 percent ad valorem, respectively; the alternate provisions listed above have general rates ranging from 4.8 percent to 7.3 percent. All of the cited HTS provisions are broader or residual categories that can include non-scope merchandise. Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

THE PRODUCT

Description and applications

Industrial grade ASF is a woven textile product composed of numerous fine, discrete silica strands and is principally used for welding protection. The domestically produced form typically contains a minimum of 96 percent silica, which is in the "amorphous," or noncrystalline, state. While ASF may range as low as 90 percent silica,[15] there is no known U.S. production in the lower portion of this range.[16]

Industrial grade ASF possesses a combination of chemical and physical properties, including thermal survivability, low thermal conductivity, chemical non-reactivity, flexibility, strength, abrasion resistance, and ease of handling.[17] [18] These properties make it useful in a number of industrial applications, especially to insulate and resist extreme heat.

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[15] The Chinese producer MOWCO Industry Limited produces and ASF with high temperature resistance that has a minimum silica content of 94 percent and Eastern European, principally Latvian, ASF is produced with a silica content of 94 percent. Petition, p. 13 and Conference transcript, p. 106 (Ao) and p. 138 (Grimson). Respondent parties also note a market for fabric with silica contents lower than 90 percent. Conference transcript, pp. 144-143 (Dill).

[16] Similarly, there is no known U.S. production of mid-silica fabric, comprising fabric with silica contents as low as 70 percent. Conference transcript, p. 133 (Ao).

[17] Importer AVS states that there is a qualitative difference between the high-strength fabrication grade ASF imports coming from China and industrial grade ASF produced in the United States. AVS states that the U.S. producers do not produce the fabrication grade ASF. The ASF types are differentiated by the content of silica fabrics and manufacturing process. AVS's postconference brief, pp. 3-4. Additional information in Conference transcript, p. 123 (Sydow), pp. 127-128 (Sydow, Lebow).

The thermal insulation characteristics of industrial grade ASF cover a wide range of temperatures. Specifically, industrial grade ASF is capable of withstanding heat up to 1,800 degrees Fahrenheit without sacrificing any of its other properties and will remain in usable cloth form up to approximately 2,300 degrees F, albeit with some loss of flexibility. Industrial grade ASF will continue to provide some protection up to its melting point over 3,000 degrees F.

Most industrial grade ASF is manufactured in two weights, lightweight (i.e., 18 ounces per square yard) and heavyweight (i.e., 36 ounces per square yard),[19] but may also include a medium weight (i.e., 24 ounces per square yard), a very light weight (12 ounces per square yard) or even a very heavyweight (40 ounces per square yard).[20] There are also a number of topical coatings and treatments that may be requested by the customer to enhance the product's characteristics for specialized uses and provide water or grease repellency.[21] These coatings include, but are not limited to, neoprene or silicone for water repellency and greater abrasion resistance, chrome compounds to maintain flexibility at particularly high temperatures, and aluminizing to increase heat reflectivity.

Industrial grade ASF is made predominantly in 36-inch and 60-inch widths, but may also be produced in other widths. Industrial grade ASF is used to insulate and to resist extreme heat so as to conserve energy and protect people, materials, and machinery from potential injury or damage. The principle use of industrial grade ASF is protection during welding or other hot-work activities (e.g., heat-treating).[22] Other specific applications of industrial grade ASF are as shields for ducting and pipes, as protection from sparks and molten metal splash, as insulating blankets in heat-treating and high-temperature processing operations, and as refractory lining and furnace curtains. High-strength or abrasion resistant ASF is used in protective garments, [23] welding protection, and as a substitute for ceramics in refractory applications.[24]

Industrial grade ASF meeting either military or Factory Mutual (FM) standards may be used by customers requiring specific ASF criteria for these welding or hot-work applications. Military standard MIL-C-24576A[25] is used by the U.S. Navy for welding protection during

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(…*continued*)

[18] According to testimony presented at the Commission's hearing, imported "high-strength" ASF competes with domestically-produced ASF that has been coated for abrasion resistance. Hearing transcript, pp. 33-34 (Van Atta).

[19] 18 ounce and 36 ounce ASF are the two military standard weights and therefore the most commonly produced. Conference transcript, p. 52 (Van Atta).

[20] Conference transcript, p. 73 (Leonard).

[21] Conference transcript, p. 64 (Van Atta).

[22] Conference transcript, p. 31 (Ferrin) and p. 52 (Leonard).

[23] AMI's prehearing brief, pp. 14.

[24] Information gathered from Auburn Manufacturing's specifications for Abrasion resistant cloth. AMI-SIL® (AS) Abrasion Resistant Cloth, http://www.auburnmfg.com/product/ami-sil-cas-cloth-3/ (retrieved February 1, 2017).

[25] This specification establishes the requirements for two types of woven cloth intended for use in protecting equipment and personnel from spatter from metal welding and cutting operations.

(*continued*...)

shipbuilding, maintenance, and repair.[26] FM 4950-certified ASF specifically delineates whether the ASF is a blanket, curtain, or pad and therefore its exposure and vertical or horizontal application capabilities. FM approved welding blankets and welding curtains are intended for light to moderate exposure such as from chipping, grinding, heat treating, sand blasting and light welding but in horizontal or vertical applications respectively; welding pads are designed for horizontal use with severe exposures such as from molten substances or heavy horizontal welding. [27]

Amorphous silica yarns may also be knitted or braided into nonsubject rope, tubing, and tape, or be woven into nonsubject aerospace grade ASF. ASF rope, tubing, and tape use a larger-diameter, heavier-weight texturized yarn than industrial grade ASF, which is woven with smaller diameter, lighter-weight yarns. Additionally, rope and tubing are round (as opposed to flat like the subject merchandise) and ASF tape is generally woven thicker than industrial grade ASF cloth.

Aerospace grade ASF shares some properties and production processes with industrial grade ASF. However, aerospace grade ASF undergoes an additional heat treatment process to limit its areal shrinkage to 4 percent or less (compared to industrial grade ASF, which has residual shrinkage of 14-16 percent). In addition, aerospace grade ASF has a minimum silica content of 98 percent, compared to industrial grade ASF which has a range of 90-96 percent silica. Finally, aerospace grade ASF typically has much lower breaking strength and abrasion resistance results than industrial grade ASF because of the elevated thermal exposure required to pre-shrink ASF and the absence of a binder or coating in the final product.

Manufacturing processes

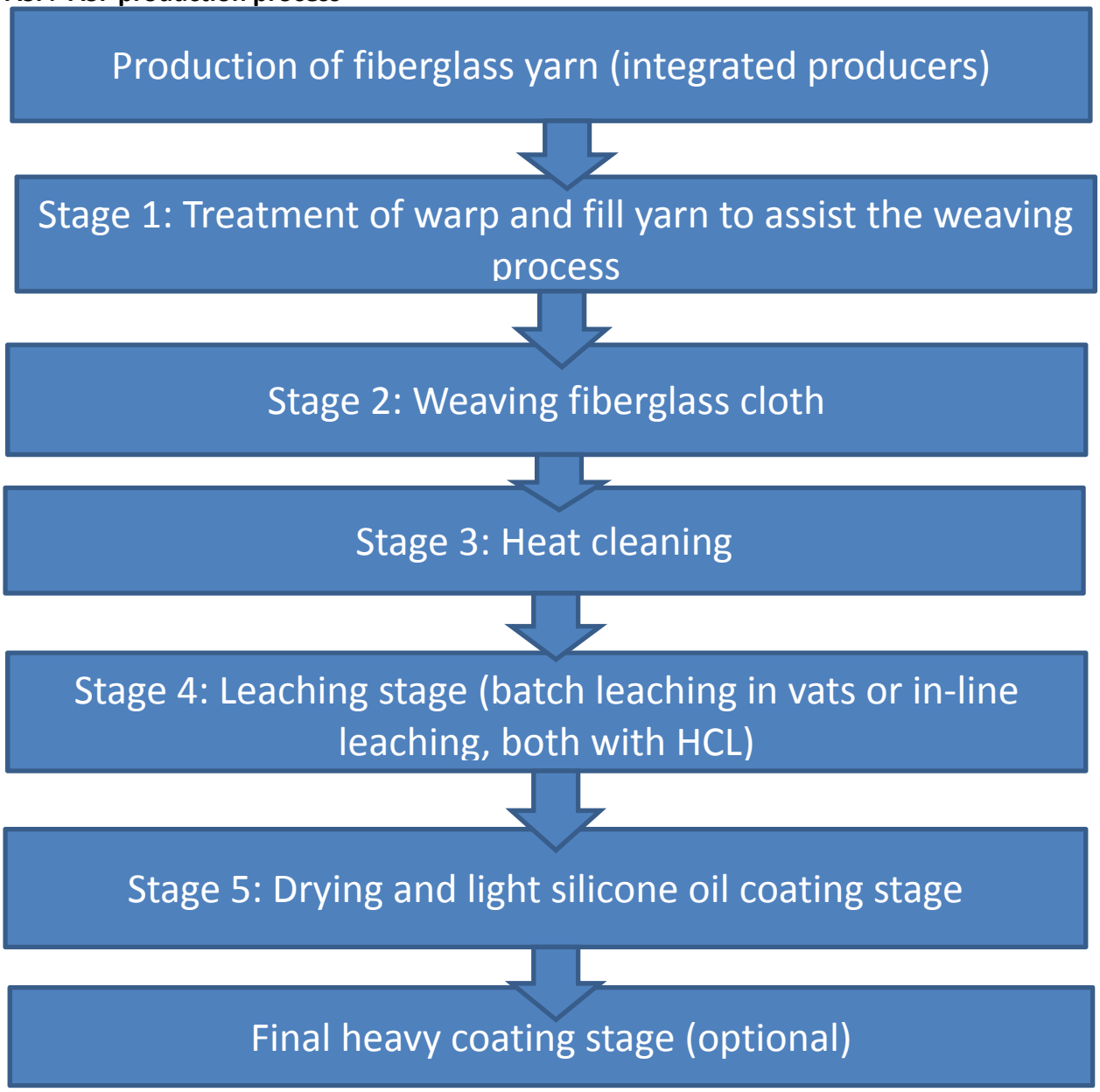
There are five major processing steps involved in the production of the basic industrial grade ASF for most producers, who are likely to begin with fiberglass yarn or sometimes fiberglass fabric. However, it is possible that there may be an integrated producer in China whose production process begins with the production of fiberglass yarn. Figure I-1 presents the ASF production process.

(…*continued*)
EverySpec, http://everyspec.com/MIL-SPECS/MIL-SPECS-MIL-C/MIL-C-24576A_37826/ (retrieved November 16, 2016).

[26] Conference transcript, p. 18 and p. 51 (Leonard).

[27] Welding Blankets, http://www.fmapprovals.com/products-we-certify/products-we-certify/other-materials/welding-blankets (retrieved November 16, 2016).

Figure I-1
ASF: ASF production process



An integrated producer of ASF must first make fiberglass yarn. The manufacturing process for glass fibers suitable for reinforcement uses large furnaces to melt silica sand, limestone, kaolin clay, fluorspar, colemanite, dolomite, boron, and other minerals gradually transforming them into to liquid form. The resulting mixture is then extruded through titanium bushings to produce fiberglass filaments. These filaments are sized (i.e., coated) with a chemical solution then bundled in large numbers to provide a twisted yarn (i.e., a soft strand of fiber that has been twisted, attenuated, and freed of foreign matter before it is converted into yarn). The diameter of the filaments, and the number of filaments in the yarn, determine its weight, typically expressed in one of two measurement systems (i.e., tex or cotton count). Fiberglass can then be formed into yarn much like wool or cotton.

For non-integrated producers, which include the vast majority of Chinese ASF manufacturers, production begins with yarn preparation.

Yarn preparation: Before the yarn can be woven, it must be prepared through various processes. Warp yarn used in the weaving process is first treated with a finish to facilitate the weaving process. It is then plied with like-size yarns and wound onto large stainless steel beams with the precise number of yarns required to weave a specific weight and width of fiberglass fabric. Alternatively, it can remain on the individual spools to be run from a creel[28] during weaving. Fill (or weft) yarn may also be plied, and then wound onto plastic bobbins. These bobbins are fed into the loom from the side.

Another yarn preparation process is called "texturizing." This process injects air into a plied yarn bundle, breaking various yarn strands and thereby increasing the yarn diameter. These yarns are also treated with a finish to facilitate the weaving process. Texturized yarns are then either wound onto beams or bobbins.

Weaving: Weaving occurs by means of automated looms. The yarn fed into the weaving process may be pulled from one of several different sources. Specifically, yarn may be drawn from bobbins on creels. Alternatively, warp yarn may be drawn from sectional beams (AMI uses four), with one bobbin to string a strand of weft or fill yarn cross-sectionally. Finally, warp yarn may be drawn from a warp beam, similarly with one bobbin used to string a strand of weft or fill yarn cross-sectionally. The cloth may be woven in various patterns, and may be woven to different widths. Standard widths are 60 inches and 36 inches. Most of the material produced by AMI is 36 inches wide. The woven cloth is woven with a selvage edge to prevent fraying. Beyond the selvage are ends of fill yarns that must be trimmed. The edge trimming, according to the petitioner, has no scrap value and therefore is treated as waste material. The

[28] A creel is a rack of bobbins from which the desired number of fiberglass filaments can unwind simultaneously for weaving.

finished cloth is wound onto a cardboard core, and then cut, for heat cleaning, which is the next processing stage. The woven cloth at this stage is white.[29]

Heat cleaning: At the heat cleaning stage, the cloth is unwound and run through a heat-cleaning oven at a temperature of approximately 1,300 degrees Fahrenheit. Through the heat cleaning process, the starches and oils present on the cloth are removed.[30] The cloth is rewound at the end of this stage, using a specifically designed PVC core containing holes. After finishing this process, the woven cloth is a light brown color. AMI believes that it is possible that some Chinese producers may forego this stage in the production process. In order to achieve the same visual effect, producers not engaging in heat cleaning may instead coat the cloth in a vermiculite solution.

Leaching: After heat cleaning, the spool of cloth is taken to the hydrochloric acid ("HCL") vats in the batch leaching process. The spools are attached by the PVC core to a batch-dip platform that normally holds 8 spools of 36"-wide fabric. Then, the platform is submerged into an HCL bath containing an HCL solution of between 15 and 17 percent. The HCL is heated to a temperature of approximately 120 degrees Fahrenheit. The HCL solution is also pumped into the PVC core to ensure that the entirety of the spool is leached evenly. The leaching process takes approximately seven hours, with the total time dictated by the nature of the chemical processes that take place.

AMI notes that while it uses a batch process to leach its woven cloth, it is also possible to leach the woven cloth through an in-line process.[31] As stated above, batch leaching is performed by submerging spools of ASF in a static bath of HCL, while in-line leaching is a continuous, open roll process through the HCL. Regardless, as stated, the chemical process involved dictates that the material spends approximately seven hours in the HCL solution to become 96 percent silica fabric. Prior to leaching, the woven cloth is approximately 55 percent silica.[32] After the leaching process, the silica content typically can be 93 percent or higher, with

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[29] While it is possible that some Chinese producers may not perform the weaving process (that is, their production may begin with the woven fiberglass cloth), AMI believes that the largest exporters are most likely also engaging in weaving. Petition, p. 16.

[30] These starches and oils are present on the fiberglass yarn in order to facilitate the weaving process. However, after the yarn has been turned into cloth, these starches and oils are no longer necessary, and can detract from the performance of the finished product, due to smoke evolution at operating temperatures. Petition, p. 16.

[31] According to the respondent, there are two known Chinese ASF manufacturers that use an in-line leaching process. While faster and less costly, this process is more difficult to control and results in product with a silica content range from 70 to 93 percent. Conference transcript, pp. 133-134 (Ao).

[32] AMI notes that the fiberglass yarn it purchases is normally approximately 55 percent silica. However, fiberglass yarn may range from about 50-55 percent silica. Petition, p. 17.

most industrial grade ASF containing at least 96 percent silica.[33] Less time spent leaching will lead to a lower silica content, but a stronger product.[34]

Prior to removing the material from the HCL vats, the spools are rinsed with water to remove the HCL. The leaching process involves storage of HCL in three separate tanks: (1) an HCL storage tank; (2) a neutralization tank; and (3) an acidic rinse water tank. In order to comply with environmental regulations, the production process at AMI incorporates a processing step at which the water is neutralized by the addition of lime prior to disposal.

Coating and drying: After the spools are removed from the leaching bath, they are unspooled and run through a drying and coating machine. At this stage, the product is dried through contact with a series of steam-heated cylindrical metal "cans." Next, the cloth runs through a trough containing an acrylic latex compound solution, which contains silicone oil. The silicone oil is applied to lubricate the material in order to prevent breakage. While AMI applies this light silicone oil coating by dipping, alternative techniques for applying the light silicone oil coating could include spraying or "kiss-rolling," in which one side of the cloth runs over the surface of the silicone oil liquid (i.e., the cloth "kisses" the surface).

AMI notes that abrasion resistant ("AR") ASF achieves its defining character by undergoing a second pass through the drying/coating stage, in which a heavier silicone oil coating is applied.[35] AR products are often tinted a different color, by adding a dye into the dip for the second pass, visually distinguishing the product.

ASF products are digitally printed or stenciled in accordance with military specifications, or with the proper FM approvals markings, as described below.

Final coatings: Industrial grade ASF may be finished after stage five. However, if the production order demands the application of a final coating, then the material must undergo an additional production step. Final coatings that may be applied to ASF include silicone, pressure-sensitive adhesive ("PSA"), and aluminum foil. The silicone coating used for the final coating process is not to be confused with the light silicone oil treatment at the previous stage. Rather, the silicone applied in this final coating stage is a highly viscous material that is applied to the surface of the cloth, after which the coated material is run through an oven to cure the material. Pigments are added to the silicone coating prior to application to the cloth, to achieve the final color. Industrial grade ASF may be silicone-coated on either one or both sides.

PSA may also be applied to industrial grade ASF in order to firmly affix the final product to a surface. PSA is only applied on one side. Finally, aluminum foil may be applied on one side of the industrial grade ASF.[36]

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[33] AMI's ASF product is generally 96 percent silica. Petition, p. 17.

[34] Conference transcript, p. 123 (Sydow).

[35] AMI's postconference brief, pp. 1-2.

[36] While aluminum foil can theoretically be applied on both sides of the cloth, AMI believes there is no current application for industrial grade ASF that would require that the product contain aluminum foil on both sides. *** Petition, pp. 18-19.

Labeling/packaging: After industrial grade ASF is manufactured, it is labeled and packaged for shipment. Industrial grade ASF is generally sold in rolls but may be referred to as cut-to-length if the fabric has been shortened from its original length after weaving.[37] Standard packaging includes spooling the finished product onto a cardboard core (i.e., roll forming); wrapping the spool in bubble wrap, covering that with Kraft paper, and then binding the spool with three plastic binding strips. The product is then placed in a cardboard box, which also includes cardboard filler at each end of the box. For the standard 36 inch product, usually the boxes are loaded 12 per pallet. AMI notes that the finished product generally would not simply be stacked, without packaging, into a container, because the finished fabric would likely be damaged during transit.[38]

Fabrication: Fabrication may occur before packaging and shipping. Fabrication includes cutting and sewing welding blankets, curtains, or pads or inserting grommets on a finished product. AMI noted that it may fabricate ASF to a customer's specifications, although it also sells subject ASF to downstream fabricators for finishing.[39]

DOMESTIC LIKE PRODUCT ISSUES

No issues with respect to domestic like product have been raised in these investigations. In the preliminary phase, respondent ACIT took the definition of the domestic like product in the petition "on its face," but "reserves the right to comment further on the domestic like product during the final phase of the investigation."[40] ACIT did not participate in the hearing, nor submit any briefs in the final phase investigation. Respondent AVS did not address the domestic like product directly in the preliminary phase, but did question the lower bound silica limit of 90 percent, in light of the higher silica content of U.S. suppliers and suppliers from nonsubject countries.[41] Petitioner AMI reiterated its support for a single domestic like product, industrial-grade ASF, co-extensive with the scope and distinct from both aerospace-grade ASF and mid-silica fabrics.[42]

The Commission issued draft questionnaires for comment on September 12, 2016. Neither respondent suggested questions regarding the domestic like product, or indeed filed any comments. Petitioner AMI likewise suggested no additional questions regarding the domestic like product.

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[37] For example, ***. Staff telephone interview with ***.

[38] The surface of industrial grade ASF generally is highly susceptible to significant marring through casual contact. It is for this reason that the finished spools are bubble-wrapped, covered in Kraft paper, and individually boxed.

[39] Conference transcript, pp. 85-86 (Leonard).

[40] ACIT's postconference brief, p. 2.

[41] AVS's postconference brief, p.2.

[42] AMI's postconference brief, pp. 2-10.

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

U.S. MARKET CHARACTERISTICS

ASF is mainly used as a heat shield to insulate and/or resist extreme temperatures to protect people, materials, and machinery from potential injury or damage. It is primarily used in welding and cutting operations in industrial sectors, as well as in shipbuilding, power generation, and general repair and maintenance that requires heat protection. Other uses include refractory linings, furnace curtains, rope, and covers (such as tubing or tape) for ducts and pipes.[1]

Apparent U.S. consumption of ASF decreased during 2013-15. Overall, apparent U.S. consumption in 2015 was *** percent lower than in 2013, and was *** percent lower in January-September 2016 compared to January-September 2015.

U.S. PURCHASERS

The Commission received 16 usable questionnaire responses from firms that have purchased ASF since 2013.[2] Nine responding purchasers are distributors, one is a military end user, three are military contractor end users, and four are other types of end users. Two firms also identified themselves as "other;" *** stated that ***, and *** indicated that ***. In general, responding U.S. purchasers were located in all regions of the contiguous United States except the Mountain region.[3] The responding purchasers represented firms involved in ship- or boat-building and/or other industries that require welding protection.

The largest distributor of ASF in 2015 was ***; the largest end user was ***. ***.[4] ***.

CHANNELS OF DISTRIBUTION

U.S. producers sold mainly to end users, while importers of subject ASF sold almost exclusively to distributors, as shown in tables II-1a and II-1b.

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[1] Conference transcript, pp. 33-34 (Ferrin); Hearing transcript, p. 32 (Van Atta).

[2] Of the 16 responding purchasers, seven reportedly purchased domestic ASF, five purchased imports of subject ASF from China, two purchased imports of nonsubject ASF from other sources (***), and one firm (***) reported that it did not know the source(s) of its purchases.

A number of firms initially misreported that the ASF they purchased from importers and/or distributors was domestically produced. ***. Additionally, ***. ***.

[3] The Mountain region includes Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming.

[4] ***.

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

* * * * * * *

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

* * * * * * *

AMI argues that ***.[5] [6]

GEOGRAPHIC DISTRIBUTION

U.S. producers and importers reported selling ASF to all regions in the contiguous United States (table II-2). At least half of the six responding importers reported selling to all regions besides other and the Mountain region,[7] while two reported selling to the Mountain region. For U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers sold *** percent within 100 miles of their U.S. point of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

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

Region	U.S. producers	Importers
Northeast	2	4
Midwest	2	3
Southeast	2	6
Central Southwest	2	3
Mountain	2	2
Pacific Coast	2	5
Other[1]	2	0
All regions (except Other)	2	2
Reporting firms	2	6

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

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

[5] AMI posthearing brief, pp. 6-8 and Exhibit 1 (Answers to Questions of Commissioners and Staff), pp. 5-9, 14-17.

[6] As noted above, the largest end user of ASF (***) purchased *** percent of its ASF from *** in 2015, and *** percent from *** in January-September 2016. ***.

[7] No importers reported selling to Alaska, Hawaii, Puerto Rico, or the Virgin Islands.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

Based on available information, U.S. producers of ASF have the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced ASF to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of a large amount of unused capacity, the existence of alternate markets, and some inventories. A factor that may mitigate the responsiveness of supply is a mixed ability to shift production to or from alternate products.

Industry capacity

Domestic capacity utilization decreased from *** percent in 2013 to *** percent in 2015, driven primarily by a decrease in overall production. AMI reported *** from *** percent in 2013 to *** percent in 2015. HITCO reported *** from 2013 to 2015. This relatively low level of domestic capacity utilization suggests that U.S. producers may have substantial ability to increase production of ASF in response to an increase in prices.

Alternative markets

U.S. producers' exports, as a percentage of total shipments, increased from 2013 to 2015. U.S. producers' export shipments rose from *** kilograms and *** percent of total shipments in 2013 to *** kilograms and *** percent of total shipments in 2015, indicating that U.S. producers have the ability to shift shipments between the U.S. market and other markets in response to price changes. U.S. producers' principal export markets were ***.

Inventory levels

U.S. producers' inventories declined *** from 2013 to 2015. Relative to total shipments, U.S. producers' inventory levels were *** percent in 2013, *** percent in 2014, and *** percent in 2015. U.S. producers' inventory levels were *** percent in January-September 2015 and *** percent in January-September 2016. These inventory levels suggest that U.S. producers have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

*** reported that ***, and indicated that ***. *** reported that ***.

Supply constraints

HITCO reported that *** AMI reported ***. AMI stated that ***. AMI explained that ***,[8] "***."[9]

Subject imports from China[10]

Based on available information, the responding producer of ASF from China (ACIT) has the ability to respond to changes in demand with moderate to large changes in the quantity of shipments of ASF to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of unused capacity, particularly in the short term, as well as some ability to shift shipments from alternate markets or inventories. A factor mitigating ACIT's responsiveness of supply is a limited ability to shift production to or from alternate products.

AMI argues that ACIT accounted for only *** percent of reported 2015 imports in the preliminary phase of this investigation, and that the data presented in the final phase of this investigation are not fully representative of the Chinese ASF industry. It argues that Chinese producers have large amounts of unused capacity, that Chinese producers have increased their penetration of the U.S. market, that Chinese producers are export-oriented, and that importers' inventories of Chinese ASF *** between January-September 2015 and January-September 2016.[11] Respondents argue that importer inventories are low when looked at in the context of the entire market, and that ***.[12]

Industry capacity[13]

ACIT's capacity utilization *** from 2013 to 2015, from *** percent to *** percent, and was at *** percent during January-September 2016. ACIT reported ***,[14] but reported ***. It also reported that ***. Overall, ACIT estimates its capacity utilization to be *** percent by the end of 2016 and *** percent in 2017. ACIT's *** suggests that it may have the ability to increase production of ASF in response to an increase in prices, ***.

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[8] ***.

[9] ***, email message to USITC staff, November 22, 2016.

[10] This section is based on the questionnaire response of one firm, ACIT. In its questionnaire response, ACIT estimated its share of total ASF production in China to be *** percent. For more data on ACIT's share of U.S. imports from China, please refer to Part I, "Summary Data and Data Sources."

[11] Hearing transcript, p. 53 (Dougan); AMI prehearing brief, pp. 51-56.

[12] ACIT posthearing brief, pp. 2-3.

[13] ***.

[14] ACIT reported ***.

Alternative markets

Shipments by ACIT to export markets other than the United States ***. As a share of total shipments, its shipments to non-U.S. markets increased *** from 2013 to 2015, from *** percent to *** percent. ACIT identified its principal non-U.S. export markets as ***. ACIT reported ***. These reported levels of shipments to non-U.S. markets indicate that ACIT *** to shift shipments from other export markets to the U.S. market in response to price changes.

ACIT projects *** to increase overall in 2016 and 2017. It also projects shipments to the U.S. market to increase, from ***.

Inventory levels

ACIT's inventory levels ***. It reported inventories of *** kilograms in 2013, *** kilograms in 2014, and *** kilograms in 2015. Relative to total shipments, its inventory levels ***. ACIT projected its inventory levels to ***, with a projected level in 2017 of ***. These inventory levels suggest that ACIT may have substantial ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

ACIT reported that ***.

Nonsubject imports[15]

Petitioner AMI reported that ASF is produced in nonsubject countries Latvia, Belarus, and the United Kingdom.[16] It stated that imports of ASF from Belarus were blocked due to U.S. State Department sanctions for much of 2013-15, but that these sanctions were lifted in early 2016.[17] AMI stated that it had an uptick in business after the sanctions on Belarus were put in place, but that this uptick could have been the result of other market forces, such as an improvement in the U.S. economy and enhanced competitiveness of exports due to the low value of the U.S. dollar.[18] According to respondents, ASF from Belarus may have been transshipped into the United States while Belarus was under sanctions.[19] There is no information indicating that there have been any imports from Belarus since the sanctions were removed, although one importer (***) reported arranging for the import of *** kilograms of ASF from Belarus during ***.[20]

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[15] The HTS provisions that include ASF are mixed categories, and therefore it is not possible to use these data to determine with accuracy the amount and source of nonsubject imports.

[16] Conference transcript, pp. 66 and 76 (Leonard).

[17] Conference transcript, pp. 76-77 (Leonard); Hearing transcript, pp. 80 (Leonard), 81 (Schade).

[18] Hearing transcript, p. 84 (Leonard).

[19] Respondent's postconference brief, pp. 10-11.

[20] None of the other responding importers or purchasers reported importing or purchasing ASF from Belarus during January 2013-September 2016.

Respondents argue that ASF from Latvia and Belarus competes more with imports from China than domestic ASF,[21] and that increases in imports from China have been offset by reductions in imports from Latvia.[22] *** reported that Latvia offers low prices in the U.S. market and sells direct to end users and through distribution. U.K.-based producer of ASF, ***, also indicated that there are "very competitive pricing levels offered by Eastern European silica manufacturers" in the United States.[23] [24] ACIT argues that the role of nonsubject imports in the U.S. market is significant, as the volume of nonsubject imports grew by a larger amount than imports from China when comparing January 2016 to January 2015, and the AUVs of nonsubject ASF was *** those of imports from China.[25]

New suppliers

Three of 16 purchasers indicated that new suppliers have entered the U.S. market since January 1, 2013. *** reported that there were two new producers in China, and *** named Chinese suppliers Nanjing Tianyuan, Cixi Sunrise Sealings, and Jiangsu Hengzhou, as new suppliers in the U.S. market. *** named *** as new suppliers.

U.S. demand

Based on available information, the overall demand for ASF is likely to experience small to moderate changes in response to changes in price. Responsiveness is likely to be moderate for most low-temperature industrial applications and low for high-temperature applications, and applications requiring military grade or FM approved product. The main contributing factor to this responsiveness of demand is the somewhat limited range of substitute products, particularly for high-temperature applications, as well as the relatively high cost share and limited scope of end use applications.

End uses and cost share

U.S. demand for ASF depends on the demand for U.S.-produced downstream products. The primary end uses of ASF are heat shields for use in maintenance, repair, and operations applications. Specific end uses include welding protection fabrics (such as curtains and

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[21] Conference transcript, pp. 145-146 (Knapp).

[22] Respondent's postconference brief, p. 16.

[23] ***, email message to USITC staff, December 5, 2016.

[24] In comparisons of Latvian pricing data with U.S. producer pricing data, prices for product 1 imported from Latvia were lower than prices for U.S.-produced product in all 15 instances. In comparisons of Latvian pricing data with subject country pricing data, prices for product 1 imported from Latvia were lower than prices for product 1 imported from China in 9 of 15 instances and higher in 6 of 15 instances. See also Appendix D of this report.

The only responding purchaser of Latvian ASF (***) did not respond to questions comparing U.S. and Latvian prices.

[25] ACIT posthearing brief, pp. 5-8.

blankets), fire blankets, heated and insulated blankets, safety clothing, pipe and hose coverings, pipe or valve insulation, and thermal gasketing and sealing applications.

ASF accounts for a varying degree of the cost shares of the downstream products in which it is used, and reported cost shares varied substantially. U.S. producer AMI reported that it considers the pads, blankets, and curtains that it produces from ASF to be its relevant end-use products, and that *** of the cost of such products is from ASF.[26] Other reported cost shares were as follows: welding blankets and curtains (25-60 percent), heated blankets (60 percent), ***[27] (51 percent), silicone-coated ASF (50 percent), fire proofing (50 percent), insulation (25-50 percent), insulated blankets (45 percent), thermal barriers and seals (30 percent), auto heat shields (10 percent), and hose/cap insulation (1 percent).[28]

Business cycles

***, 3 of 6 responding importers, and 2 of 16 responding purchasers indicated that the market was subject to business cycles or other conditions of competition. AMI reported that it sells directly to the U.S. government for use by the Navy, but that a significant portion of its direct sales of ASF to the Navy has shrunk, as sales have shifted to defense contractors.[29] AMI reported that ***. Importer *** reported that economic conditions surrounding the recession have affected the business cycles in the ASF market. *** reported that the ASF market has two cycles: an increase in demand in the spring and fall seasons due to power plant outages, and a reduction in demand at the end of the year driven by budget constraints and year-end financial reporting. Purchaser *** reported that the business cycles fluctuate according to construction trends.

***, two importers, and one purchaser reported changes in the business cycles or conditions of competition since January 2013. *** reported that defense budgets have stagnated or declined somewhat, and *** stated that the peak demand cycle has shortened causing a decrease in demand. Importer *** also reported that imports of silica cloth from Latvia and the United Kingdom affect the conditions of competition for ASF. Importer *** reported that the removal of sanctions on Belarus affects the conditions of competition, and that Russian and Belarusian producers will be more aggressive in the U.S. market if the Russian Ruble is low.

Demand trends

Firms' responses regarding U.S. demand for ASF were varied. *** U.S. producers reported that demand in the United States had decreased, as did 4 of 12 responding purchasers

[26] Conference transcript, p. 88 (Ferrin); Petitioner's postconference brief, Answers to staff questions, p. 24.

[27] ***. ***, email message to USITC staff, February 12, 2016. ***.

[28] Three firms (***) reported a cost share of 100 percent for welding protection and fire prevention applications.

[29] Hearing transcript, p. 24 (Leonard).

(table II-3). A plurality of purchasers and half of importers reported that demand in the United States had fluctuated. Only one importer, ***, reported that demand in the United States had increased.

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

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers	***	***	***	***
Importers	***	***	***	***
Purchasers	0	3	4	5
Demand outside the United States				
U.S. producers	1	1	0	0
Importers	2	2	1	1
Purchasers	0	3	2	2
Demand for purchasers' final products	0	5	1	2

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

AMI reported that the decrease in U.S. demand for industrial grade ASF was driven by a decrease in demand in two large sectors; shipbuilding, and ship maintenance and repair, and oil and gas. It stated that military funding for ship maintenance and repair had decreased, and there had been a drop in demand in the oil and gas sector due to low oil prices and high gasoline and distillate inventories. It stated that low commodity prices have also dampened demand from the mining sector, and that exports are down because of a strong U.S. dollar.[30] ***. *** reported a slight increase in demand due to the identification of new specialty markets. *** reported that demand in the U.S. had decreased, citing a drop in oil prices and a decrease in industry activity for heavy metals. Three of the four purchasers that reported a decrease in U.S. demand cited a slower economy, and *** reported that U.S. demand had decreased due to competition from manufacturers in China, Latvia, and Belarus.

*** reported no change in demand, but stated that there had been a decline in some shipbuilding and oil industry applications, and that this had decreased demand for domestically produced ASF. It also stated that demand had increased for some other manufactured products, such as thermal blankets for diesel vehicle emission reduction.

Substitute products

*** and 14 of 16 purchasers reported that there are no substitutes for ASF. Four of five importers and two purchasers reported that there are substitutes for ASF, mostly in welding protection applications. Reported substitutes for welding protection applications include mid-silica fabric, fiberglass cloth or fabric, coated fiberglass cloth, e-glass and s-glass fabrics, and basalt fabric. Reported substitutes in general industrial applications include ceramic fiber, high temperature treated glass, and alumina fiber. *** also reported that ceramic fiber, quartz fabric, and S2 fabric could be used as substitutes in "isolation." *** reported that mid-silica

[30] Hearing transcript, p. 28 (Leonard).

fabric, coated fiberglass cloth, and fiberglass fabric were less expensive than industrial grade ASF, and that changes in the price of these substitutes affected the price of ASF. *** stated that end users use the most economical raw material as long as the temperature resistance requirement is met. *** noted that while fiberglass is a substitute in welding applications, it has a lower temperature rating.

During the preliminary phase of these investigations, petitioners and respondents disagreed on the viability of substitutes, particularly on the importance of mid-silica fabric (silica fabric with a content of between 70 and 90 percent).[31] In the current phase of these investigations, firms were specifically asked about the substitutability of mid-silica fabric for industrial grade ASF, as well as the substitutability of fabrication grade/high strength ASF[32] for industrial grade ASF. They were also asked to elaborate on the applications for which they were and were not substitutable.

Regarding the substitutability of mid-silica fabric for industrial grade ASF, firms generally noted that it is substitutable in welding protection applications for which a lower temperature rating is sufficient, but not for applications that require higher temperature ratings. *** reported that mid-silica fabric is substitutable in applications for which fiberglass may have been used in the past, as mid-silica fabric and fiberglass are considered to have the same temperature resistance.[33] Three importers and four purchasers also reported that mid-silica fabric is substitutable in some welding protection applications, depending on the weight or thickness of the fabric. *** noted that it is substitutable for temperature applications of 800-900 degrees Celsius (1472-1652 degrees Fahrenheit). *** reported that mid-silica fabric is not substitutable for industrial grade ASF, explaining that its customers require *** to contain at least 96 percent silica. *** also reported that mid-silica fabric is not substitutable in applications for which higher temperature resistance is required. Two importers and nine purchasers reported that it is not substitutable, noting temperature requirements as a limitation to substitutability in some welding and fabrication applications, as well as for use in nuclear plants and in coke ovens.

In addition to their purchases of fabrication and other grades of ASF, purchasers were also asked to report their purchases of mid-silica fabric. Only one purchaser, ***, reported purchasing both ASF and mid-silica fabric (table II-4).

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[31] Mid-silica fabric is not within the scope of these investigations. Only amorphous silica fabric which contains at least 90 percent silica (SiO_2) by nominal weight is within the scope of these investigations. Neither U.S. producer reported producing mid-silica fabric.

[32] For the purposes of these investigations, "fabrication grade/high strength" ASF refers to any product that is marketed for enhanced abrasion resistance and dimensional stability for fabrication purposes.

[33] Hearing transcript, p. 34 (Van Atta).

Table II-4
ASF: Purchasers' reported purchases of fabrication grade ASF, other grades of ASF, and mid-silica fabric, 2013-15

Types of fabric	2013	2014	2015
	Kilograms		
Fabrication grade ASF	***	***	***
Other grades of ASF	***	***	***
Total ASF	***	***	***
Mid-silica fabric purchased by firms that also purchased ASF	***	***	***
Mid-silica fabric purchased by firms that responded to the questionnaire but only purchased mid-silica fabric[1]	***	***	***

[1] *** provided purchaser questionnaires in which they reported purchasing mid-silica fabric but no subject ASF.

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

Regarding the substitutability of fabrication grade/high strength ASF[34] for industrial grade ASF, firms generally reported that fabrication grade ASF could theoretically be used in all applications that require industrial grade ASF, but that its relatively higher cost is a limitation to substitution. ***, one importer, and four purchasers reported that fabrication grade ASF is substitutable for industrial grade ASF, with *** reporting that it can be used in non-MIL-C-SPEC-24576A applications, and *** noting that it could be used in all applications but that it costs more than industrial grade ASF depending on the weight of the fabric. One importer and five purchasers reported that fabrication grade ASF is not substitutable for industrial grade ASF, and *** reported that fabrication grade ASF is not substitutable in MIL-C-SPEC-24576A applications because the addition of strength-improving and tear-resistant coatings to the fabric would not meet the flame resistant requirements spelled out in MIL-C-SPEC-24576A table II.[35]

AMI argues that the volumes of fabrication grade ASF reported by importers and purchasers of Chinese product are inaccurate.[36] ***.

AMI also states that ***. AVS suggests, however, that ***.[37]

[34] AMI stated that the industry terminology for this type of fabric is typically "abrasion-resistant," and not "fabrication grade." Hearing transcript, pp. 66-67 (Leonard).

[35] Hearing transcript, pp. 34, 61-62 (Van Atta).

[36] AMI posthearing brief, pp. 2-6.

[37] ***, email message to USITC staff, January 25, 2017.

Supplier certification

There are two types of standards for ASF sold in the U.S. market: a military standard, MIL-C-24576 or MIL-C-24576A,[38] and an FM standard.[39] Most responding purchasers do not require their suppliers to become certified to either of these standards in order to sell ASF to their firm, ***. Five of 15 responding purchasers reported that they require their ASF to be certified to the MIL-C-24576 standard, and two purchasers (***) requires *** to be certified to the FM standard.[40]

Purchasers *** reported that they require *** percent of their ASF to be certified to the military standard;[41] *** reported that it requires *** percent of its ASF to be certified to the military standard; and *** reported that they require *** percent of their ASF to be certified to the military standard. Purchasers *** reported requiring *** of their ASF to be qualified in another way aside from the military or FM standards, with ***. *** also stated that it requires *** percent of its ASF to be qualified in another way aside from the military standard.[42] *** reported that it took *** days to qualify a new supplier to the military standard, and *** reported that it took *** days to qualify a new supplier ***.[43]

Two purchasers reported that a supplier had failed in its attempt to qualify product or had lost its approved status since 2013: *** reported that Chinese suppliers Cixi Sunrise Sealing and Jiangsu Hengzhou, as well as Hitex (also believed to be a Chinese supplier) had failed to be approved because the fabrics did not meet its standards, and *** reported that Claremont Sales Corporation, a U.S.-based insulation contractor for marine, aviation, and industrial applications, did not meet its standards because it did not address stencil markings or fire retardant requirements.

In response to additional questions, ***, but that this specification does not include any country of origin requirement.[44] *** also stated that the MIL-C-24576 specification does not include a country of origin requirement.[45]

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[38] "MIL-C-24576" is a military specification for the Naval Sea Systems Command that outlines the specification requirements for woven cloth used in protecting equipment and personnel from spatter from metal welding and cutting operations. MIL-C-24576(A), July 27, 1987. Available at http://everyspec.com/MIL-SPECS/MIL-SPECS-MIL-C/download.php?spec=MIL-C-24576A.037826.pdf, accessed December 6, 2016. MIL-C-24576 specifies that the silica content must be at least 96 percent. Hearing transcript, p. 60 (Van Atta).

[39] A product that has been certified to the "FM standard" refers to a product that conforms to certain safety and property loss standards. Such products are certified by FM Approvals, an independent testing arm of FM Global, a commercial insurance provider. See http://www.fmapprovals.com/, accessed December 6, 2016.

[40] ***.

[41] In response to additional questions, ***. ***, email message to USITC staff, November 29, 2016.

[42] *** reported that its qualification process includes ***.

[43] *** were the only purchasers that reported the length of time it took to qualify or certify a new supplier.

[44] ***, email message to USITC staff, December 2, 2016.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported ASF depends upon such factors as relative prices, quality (e.g., grade standards, reliability of supply, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, payment terms, product services, etc.). Based on available data, staff believes that there is a high degree of substitutability between domestically produced ASF and ASF imported from China. For firms that require domestic ASF under Buy American or Berry Amendment provisions, however, U.S.-produced and Chinese ASF are not substitutable.

Lead times

ASF is primarily produced-to-order. In 2015, *** percent of domestic producers' commercial shipments and *** percent of importers' commercial shipments were produced-to-order, with weighted average lead times of approximately *** and *** days, respectively. *** reported that *** percent of its ASF was produced-to-order with an average lead time of *** days, while *** reported that *** percent of its ASF was produced-to-order with an average lead time of *** days. The two largest importers of ASF from China, ***, reported that *** percent and *** percent of their imports are produced-to-order, with average lead times of *** days and *** days, respectively.[46]

For U.S. producers AMI and HITCO, *** percent of their commercial shipments came from inventories, with lead times averaging *** and *** days, respectively. For importers ***, which collectively account for the remaining *** percent of imports, *** percent of their commercial shipments came from inventories, with lead times averaging *** days. *** reporting shipments of ASF from a foreign manufacturer's inventory, ***.

Knowledge of country sources

Eleven purchasers indicated they had marketing/pricing knowledge of domestic product, six of Chinese product, and six of product from nonsubject countries. Nonsubject countries for which purchasers reported having pricing knowledge were Latvia and Belarus (3 firms each); Japan, Russia, and Taiwan (2 firms each); and Australia, Canada, Germany, Korea, Mexico, U.A.E., and the United Kingdom (one firm each).

As shown in table II-5, a plurality of purchasers "never" make purchasing decisions based on the country of origin, while the majority of their customers "never" do. Most purchasers' customers also "never" make purchasing decisions based on the producer, though seven of 15 purchasers either "always" or "usually" do. Among the firms that reported either "always" or "usually" making decisions based on the producer, ***, and ***. *** also reported

(…*continued*)

[45] ***, email message to USITC staff, November 22, 2016; ***, email message to USITC staff, December 2, 2016; and ***, email message to USITC staff, November 29, 2016.

[46] *** accounted for *** percent and *** accounted for *** percent of reported imports from China in 2015.

that it "sometimes" makes purchases based on the country of origin when it is required to due to the Buy America Act or the Berry Amendment, and *** reported that some of its customers "sometimes" makes purchases based on the country of origin and ***. The sole responding military end user, ***, reported that it "usually" makes purchasing decisions based on the producer and country of origin, and that its customers "never" do. Of the *** firms that reported being ***, *** reported that ***, *** reported that ***, and *** reported that ***.

Table II-5
ASF: Purchasing decisions based on producer and country of origin

Purchaser/Customer Decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	3	4	3	5
Purchaser's customers make decision based on producer	1	3	1	8
Purchaser makes decision based on country	2	2	4	7
Purchaser's customers make decision based on country	0	1	2	8

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

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for ASF were price or total cost (14 firms), availability (11 firms), and quality (9 firms) as shown in table II-6. Availability and quality were the most frequently cited first-most important factors (cited by five firms each), followed by price (cited by two firms); price was the most frequently reported second-most important factor and third-most important factor (cited by 8 firms and four firms, respectively).

Table II-6
ASF: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Factor	First	Second	Third	Total
Price/total cost	2	8	4	14
Availability/supply	5	3	3	11
Quality	5	3	1	9
Range of product line	1	0	2	3
Other[1]	3	2	5	10

[1] Other factors include meeting military spec/requirements, contracts, extension of credit, product offering, terms, technical expertise, delivery schedule, past performance, that the supplier is domestic, and that the supplying firm is the traditional supplier.

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

A plurality of purchasers (6 of 16) reported that they "sometimes" purchase the lowest-priced product, while four reported that they "usually" do, four reported that they "never" do, and two reported that they "always" do.

When asked if they purchased ASF from one source although a comparable product was available at a lower price from another source, seven purchasers reported reasons. *** reported that it purchased Chinese instead of Latvian or Belarussian ASF because the Chinese product worked better in high temperature applications. *** reported that it supports a domestic source because it is more dependable. *** cited quality, availability, and product range as relevant non-price factors. *** cited availability and quality as potential non-price

factors. *** reported that it does not import because it does not sell enough volume.[47] *** reported that it purchases Chinese product because that is the part number its customer specifies. Finally, *** reported that it was unaware of there being other suppliers.[48]

Only one of the responding purchasers (***) reported that certain types of product were only available from a single source, stating that China was the only producer of 18 oz. 60-inch and 36 oz. 60-inch wide high strength silica. ***.[49] AMI stated that ***.[50]

Importance of specified purchase factors

Purchasers were asked to rate the importance of 18 factors in their purchasing decisions (table II-7). The factors rated as very important by a majority of responding purchasers were product consistency (all 16 firms), availability and reliability of supply (15 firms each), delivery time (14 firms), price (13 firms), delivery terms (12 firms), and fabric strength (11 firms). Factors rated as not important by at least half of responding purchasers included quality meets military standards and quality meets FM standards.

Table II-7
ASF: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Very important	Somewhat important	Not important
Availability	15	1	0
Delivery terms	12	4	0
Delivery time	14	2	0
Discounts offered	7	7	2
Extension of credit	6	7	2
Fabric strength	11	5	0
Minimum quantity requirements	4	9	3
Packaging	2	12	2
Price	13	3	0
Product consistency	16	0	0
Product range	7	7	2
Quality meets FM standards	6	2	8
Quality meets military standards	5	1	10
Quality exceeds industry standards	6	9	1
Reliability of supply	15	1	0
Surface finish	5	7	4
Technical support/service	5	7	4
U.S. transportation costs	4	8	4

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

[47] ***.

[48] ***.

[49] ***, email message to USITC staff, January 25, 2017.

[50] AMI prehearing brief, pp. 14-16; AMI posthearing brief, pp. 2-5 and Exhibit 1 (Answers to Questions of Commissioners and Staff), pp. 2-3.

Buy American/Berry Amendment

In the preliminary phase of these investigations, AMI stated that it believed purchases of ASF by the Navy and by contractors for the Navy to be covered by "Buy American" or "Berry Amendment" requirements, as applicable, and that such provisions should limit these firms' purchases to materials produced in the United States.[51] ***.[52] It reported ***, "***."

***,[53] ***. ***.[54] ***.

AMI argues that AVS intentionally misleads its customers by promoting a "don't ask, don't tell" policy with regard to the origin of its product, and that AVS does not divulge the source of its ASF unless a customer specifically asks.[55] ***.[56]

Importance of purchasing domestic product

The majority of responding purchasers (10 of 13) reported that purchasing U.S.-produced product was not an important factor for at least some of their purchasing decisions; in total, purchasers reported that *** percent of their purchases in 2015 had no domestic requirement. Two purchasers (***) reported that domestic product was required by law (for *** percent of their purchases, respectively); in total, only *** percent of reported purchases in 2015 were required by law to be domestic. Two purchasers (***) reported that domestic product was required by their customers (for *** percent of their purchases, respectively); these purchases represent *** percent of reported purchases in 2015. Three purchasers (***) reported other preferences for domestic product, accounting for *** percent of their purchases, respectively, and representing *** percent of all reported purchases in 2015. ***.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since January 2013 (table II-8). Most firms reported either constant or fluctuating purchases. One firm reported decreasing domestic purchases due to the economy, and two firms reported decreasing purchases of imports from China, citing lost market share and a customer buying less. Only two of 16 purchasers reported that they had changed suppliers since January 2013. *** reported that it ***, and *** reported that it ***. Three purchasers

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[51] The Buy American policy and Berry Amendment restrict purchases of synthetic fabrics, among other materials, using funds made available by the Department of Defense to exclusively U.S.-produced material. AMI stated that the Buy American policy applies to contracts below $150,000 and the Berry Amendment applies to contracts of $150,000 and above. Conference transcript, p. 18 (Leonard); Hearing transcript, pp. 25 (Leonard), 87-88 (Heffner).

[52] ***, email message to USITC staff, November 21, 2016. "***." ***.

[53] *** questions posed by Commission staff, December 2, 2016.

[54] Staff telephone interview with ***, November 22, 2016.

[55] Conference transcript, pp. 131-132 (Sydow); Hearing transcript, pp. 26, 29 (Leonard), 41 (Heffner), 78-79 (Heffner).

[56] AMI prehearing brief, pp. 12-13.

reported new suppliers since January 2013: *** named ***; *** reported "***;" and *** named ***.

Table II-8
ASF: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	4	2	1	5	3
China	8	2	0	2	1
Other	10	0	0	2	1
Sources unknown	12	0	0	1	0

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

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing ASF produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 18 factors (table II-9) for which they were asked to rate the importance. Most responding purchasers reported that ASF from the United States and China were comparable for the majority of factors. However, three of five responding purchasers rated the United States as inferior to China on price.

When comparing U.S. product with nonsubject product, most responding purchasers reported that U.S. and nonsubject product were comparable for all factors except price (for which two purchasers rated the U.S. and nonsubject countries as comparable and two reported the U.S. as inferior). The two responding purchasers that compared Chinese and nonsubject ASF reported that they were comparable for 13 of the 18 factors. On availability, delivery terms, delivery time, and extension of credit, one purchaser reported that Chinese product was superior to nonsubject product, and one reported that they were comparable. No purchaser rated nonsubject countries as superior to Chinese product for any of the factors listed.

Table II-9
ASF: Purchasers' comparisons between U.S.-produced and imported product

Factor	U.S. vs. China			U.S. vs. Nonsubject			China vs. Nonsubject		
	S	C	I	S	C	I	S	C	I
Availability	2	2	1	0	4	0	1	1	0
Delivery terms	2	2	1	1	3	0	1	1	0
Delivery time	2	2	1	1	3	0	1	1	0
Discounts offered	0	3	1	0	2	1	0	1	0
Extension of credit	1	3	0	1	3	0	1	1	0
Fabric strength	1	3	1	0	3	1	0	2	0
Minimum quantity requirements	1	4	0	0	4	0	0	2	0
Packaging	1	4	0	0	4	0	0	2	0
Price[1]	1	1	3	0	2	2	0	2	0
Product consistency	2	3	0	0	3	1	0	2	0
Product range	1	3	1	0	4	0	0	2	0
Quality meets FM standards	1	4	0	0	4	0	0	2	0
Quality meets military standards	1	4	0	1	3	0	0	2	0
Quality exceeds industry standards	2	3	0	0	4	0	0	2	0
Reliability of supply	1	2	1	0	4	0	0	2	0
Surface finish	2	2	1	0	3	1	0	2	0
Technical support/service	2	2	1	0	3	1	0	2	0
U.S. transportation costs[1]	2	3	0	0	4	0	0	2	0

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

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

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

Comparison of U.S.-produced and imported ASF

In order to determine whether U.S.-produced ASF can generally be used in the same applications as imports from China, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-10, *** U.S. producers reported that ASF from all sources was frequently interchangeable. Most responding importers reported that Chinese ASF was sometimes interchangeable with both U.S. and nonsubject ASF. Most purchasers reported that product from all country pairs was either always or frequently interchangeable.

Table II-10
ASF: Interchangeability between ASF produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries: U.S. vs. China	***	***	***	***	1	0	3	1	2	2	1	0
Nonsubject countries comparisons: U.S. vs. nonsubject	***	***	***	***	0	2	3	0	0	4	1	1
China vs. nonsubject	***	***	***	***	0	0	3	0	1	2	0	0

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

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

As seen in table II-11, seven of 11 responding purchasers reported that domestically produced product always met minimum quality specifications and four reported that it usually did. Four of six responding purchasers reported that Chinese ASF always met minimum quality specifications and two reported that it usually did.

Table II-11
ASF: Ability to meet minimum quality specifications, by source[1]

Source	Always	Usually	Sometimes	Rarely or never
United States	7	4	0	0
China	4	2	0	0
Other	3	2	0	0

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

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

In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of ASF from the United States, subject, or nonsubject countries. As seen in table II-12, U.S. producers reported that differences other than price were either sometimes or never significant between ASF from all sources.

Table II-12
ASF: Significance of differences other than price between ASF produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries: U.S. vs. China	0	0	1	1	2	0	2	0	3	0	1	1
Nonsubject countries comparisons: U.S. vs. nonsubject	0	0	1	1	1	1	3	0	2	0	3	0
China vs. nonsubject	0	0	1	0	1	0	2	0	2	0	1	0

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

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

Importer and purchaser responses were more varied. Two importers reported that differences other than price were always significant when comparing U.S. and Chinese ASF, and two reported that they sometimes were. Most responding importers reported that differences other than price were sometimes significant when comparing U.S. and nonsubject ASF as well as Chinese and nonsubject ASF. Most responding purchasers reported that differences other than price were always significant when comparing U.S. and Chinese ASF as well as Chinese and nonsubject ASF. When comparing U.S. and nonsubject ASF, most responding purchasers reported that differences other than price were sometimes significant.

ELASTICITY ESTIMATES[57]

U.S. supply elasticity

The domestic supply elasticity[58] for ASF measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of ASF. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced ASF. Analysis of these factors above indicates that the U.S. industry has the ability to greatly increase or decrease shipments to the U.S. market; an estimate in the range of 3 to 6 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for ASF measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of ASF. This estimate depends on factors discussed above such as the existence, availability, and commercial viability of substitute

[57] No party commented on these estimates in their prehearing or posthearing briefs.
[58] A supply function is not defined in the case of a non-competitive market.

products, as well as the component share of the ASF in the production of any downstream products. Based on the available information, the aggregate demand for ASF is likely to be relatively inelastic; a range of -0.2 to -1 is suggested.[59]

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[60] Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (e.g., availability, sales terms / discounts / promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced ASF and imported ASF is likely to be in the range of 3 to 5.[61]

[59] Demand elasticity for high-temperature applications or applications which require military grade certification is likely to be at the lower end of the range.

[60] The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

[61] For firms that require domestic products under the Buy American or Berry Amendment provisions, the substitution elasticity would be zero.

PART III: U.S. PRODUCERS' PRODUCTION, SHIPMENTS, AND EMPLOYMENT

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of two firms that accounted for all known U.S. production of ASF during 2015.

U.S. PRODUCERS

The Commission issued a U.S. producer questionnaire to three firms based on information contained in the petition and obtained in the preliminary phase of the investigations. Two firms, AMI and HITCO, provided useable data on their productive operations and one, ***, responded that it did not produce ASF. Staff believes that AMI's and HITCO's responses represent all U.S. production of ASF during 2015.[1]

Table III-1 lists U.S. producers of ASF, their production locations, positions on the petition, and shares of total production. Neither firm reported direct imports. AMI reported ***. This was ***. This plan was part of an AMI strategic plan ***. Additionally, ***.

[1] Former U.S .producer and petitioner in the prior ASF investigation Haveg (a division of Ametek since 1980) no longer produces ASF. According to its corporate history, "{i}n 2003, the Haveg business experienced a massive flood which led to the relocation of the business to Nesquehoning, PA. The new business operates as AMETEK Fluoropolymer Products, indicating its focus on Fluoropolymer Heat Exchangers, Tubing, and Pipe. The Haveg component and Siltemp textile product lines were discontinued at this time." Ametek, "Company Overview", http://www.ametekfpp.com/about-us/index.aspx, retrieved on January 31, 2017.

According to witness testimony at the Commission's staff conference, several former Ametek/Haveg employees formed AVS in 2004. AVS reportedly "engineered the manufacture of ASF with a joint partner in China to the same specifications as Siltemp," and trademarked 84CH and 188CH, the product codes under which Ametek/Haveg formerly manufactured ASF. Conference transcript, pp. 44-45 (Leonard), p. 96 (Knapp), and pp. 111-113 (Sydow).

Table III-1
ASF: U.S. producers of ASF, their positions on the petition, production locations, and shares of reported production, 2015

Firm	Position on petition	Production location(s)	Share of production (percent)
AMI	Support	Mechanic Falls, ME Auburn, ME	***
HITCO[1]	Support	Gardena, CA	***
Total			100.0

[1] HITCO is ***.

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

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-2 and table III-3 present U.S. producers' production, capacity, and capacity utilization. AMI bases its production capacity on ***.[2] HITCO bases its production capacity on ***.[3] AMI produces *** industrial grade ASF whereas HITCO's overall production is approximately *** between industrial grade ASF and other products (***).

Table III-2
ASF: U.S. producers' capacity, production, and capacity utilization, 2013-15, January-September 2015, and January-September 2016

* * * * * * *

Table III-3
ASF: U.S. producers' overall capacity and production on the same equipment as subject production, 2013-15, January-September 2015, and January-September 2016

* * * * * * *

AMI's total capacity is based on ***.[4] AMI's weaving looms ***.[5]

HITCO has the ability to produce "***" using the same equipment ASF.[6] HITCO reported it is capable of *** when needed to manufacture these products. HITCO's manufacturing

[2] "***."
[3] "***."
[4] AMI's response to Commission questionnaires; question II-3.
[5] Ibid.
[6] HITCO's response to Commission questionnaires; question II-3.

process differs from AMI's, as HITCO utilizes a continuous line process versus a batch process. Therefore, when it begins a manufacturing campaign it ***.[7]

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

Table III-3 presents U.S. producers' U.S. shipments (AMI accounted for *** of all commercial shipments in 2015), export shipments (***), and total shipments.[8]

Table III-3
ASF: U.S. producers' U.S. shipments, export shipments, and total shipments, 2013-15, January to September 2015, and January to September 2016

* * * * * * *

U.S. shipments, by weight, declined by *** percent in 2014, by *** percent in 2015, and were *** percent lower in January-September 2016 than in in January-September 2015. U.S. shipments, by value, exhibited similar trends, while average unit values were less volatile.[9] *** experienced declining U.S. shipment quantities during 2013-15. In January-September 2016, ***. With respect to export shipments, ***.

Table III-4 presents U.S. producers' U.S. shipments by type. Fabrication grade for AMI is "Amorphous Silica with an Abrasion Resisting Coating (AR), AS1800, AS2400, and AS3600" and for HITCO is "UC100 series of silica cloth with abrasion resistant coatings and silicone and neoprene coated materials."

Table III-4
ASF: U.S. producers' U.S. shipments, by type, 2013-15, January to September 2015, and January to September 2016

* * * * * * *

[7] Email correspondence from ***.

[8] There are three distinct categories (defined in the *American National Standard for Evaluating Welding Pads, Welding Blankets and Welding Curtains for Hot Work Operations*, ANSI FM 4950-2007 (R2013), February 2013) with specific acceptance criteria for each of the applications most likely to be encountered. The three categories in this standard are welding pads, welding blankets, and welding curtains. AMI sells *** percent of its ASF certified to FM standards, while HITCO sells *** percent FM certified.

[9] Average unit values can reflect product mix. Based on data from the preliminary phase of the investigations, FM-rated blankets had an average unit value of $*** in 2015, compared to $*** for curtains and $*** for pads

U.S. PRODUCERS' INVENTORIES

Table III-5 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments**.** *** reported maintaining ASF inventories. *** higher inventory levels in 2014 were worked down in 2015 by *** reducing production and increasing exports to offset decreasing U.S. shipments. Higher levels of inventory in 2016 were consistent with diminished U.S. and export shipments, and occurred despite *** lower production levels.

Table III-5
ASF: U.S. producers' inventories, 2013-15, January to September 2015, and January to September 2016

* * * * * * *

U.S. PRODUCERS' IMPORTS AND PURCHASES

U.S. producers reported no direct imports. HITCO reported ***.[10]

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-6 presents U.S. producers' employment-related data. ASF-related employment has fluctuated since 2013. The number of production and related workers rose between 2013 and 2014, as ***.[11] HITCO maintained employment levels, working in conjunction with its union and re-training workers formerly dedicated to ASF production.[12] The firm ***.[13] While aggregate employment was generally stable at *** (2014 excepted), hours worked declined between 2013 and 2015, as did hours per worker. Wages paid, in contrast, increased between 2013 and 2015, while hourly wages fluctuated, with a decline in 2014 consistent with the ***. Productivity levels declined in each comparison period, a trend which, in conjunction with wage trends, contributed to a net increase in labor costs by 2015.

Table III-6
ASF: U.S. producers' employment related data, 2013-15, January to September 2015, and January to September 2016

* * * * * * *

[10] ***.
[11] ***.
[12] Hearing transcript, p. 38 (Schade)
[13] HITCO reported that ***.

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

U.S. IMPORTERS

The Commission issued importer questionnaires to 30 firms believed to be importers of subject ASF, as well as to all U.S. producers of ASF.[1] Usable questionnaire responses were received from seven companies, believed to represent the majority of U.S. imports from China and Latvia in 2015.[2] Table IV-1 lists all responding U.S. importers of ASF from China and other sources, their locations, and their shares of U.S. imports, in 2015.

Table IV-1
ASF: U.S. importers by source, 2015

Firm	Headquarters	Share of imports by source (percent)		
		China	All other sources	Total imports
Access China Industrial Textile, Inc., d/b/a ACIT (USA), Inc.	Seattle, WA	***	***	***
ACMETEX INC.	Mississauga, ON	***	***	***
AVS INDUSTRIES	New Castle, DE	***	***	***
Lewco Specialty Products	Baton Rouge, LA	***	***	***
McAllister Mills	Independence, VA	***	***	***
PD Valmiera	Dublin, GA	***	***	***
Steiner Industries, Inc.	Chicago, IL	***	***	***
Total		100.0	100.0	100.0

Source: Compiled from data submitted in response to Commission questionnaires and official import statistics.

[1] The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by ***, may have accounted for more than one percent of total imports under HTS statistical reporting numbers 7019.59.4021, 7019.59.4096, 7019.59.9021, and 7019.59.9096 in 2015. However, because these import statistics are based on basket categories and include non-ASF products, data for "other sources" may be overstated.

[2] Newtex Industries did not supply a questionnaire response in the final phase. In the preliminary phase it reported its ***.

U.S. IMPORTS

Table IV-2 and figure IV-1 present data for U.S. imports of ASF from China and all other sources.[3]

Table IV-2
ASF: U.S. imports by source, 2013-15, January-September 2015, and January –September 2016

* * * * * * *

Figure IV-1
ASF: U.S. import volumes and prices, 2013-15, January to September 2015, and January to September 2016

* * * * * * *

Because of the broad nature of the relevant HTS statistical reporting numbers and the fact that several importers of record were non-U.S. domiciled entities, questionnaires were issued to firms believed to produce ASF in Belarus (JSC "Polotsk-Steklovolokno), Latvia (JSC Valmieras stikla skiedra), Russia (NPO Stekloplastic), and the United Kingdom (Fothergill Engineered Fabrics Ltd.). Producers from Latvia and the United Kingdom responded and indicated production (***). The Latvian and UK producers mentioned that imports were possible from Eastern European sources. Latvia was identified from proprietary Customs data as an active source of imports; in some cases ***. Imports from Belarus may increase in the near future due to the expiration of sanctions on Belarussian ASF producers. No response was received from the Belarussian or Russian producers.

CRITICAL CIRCUMSTANCES

On January 25, 2017, Commerce issued its final determination that "critical circumstances" exist with regard to dumped imports from China of ASF from ACIT, Nanjing Tianyuan Fiberglass Material Co., Ltd. (Nanjing Tianyuan), and the PRC-wide entity.[4] In these

[3] Imports from "other sources" reflect imports from Latvia. PD Valmeira *** of ASF from Latvia. The data presented above are based on official import statistics, in contrast with the company's reporting, which ***. While the 2013-15 quantity in both datasets are generally consistent, the timing of entries differ year by year.

[4] *Antidumping Duty Investigation of Certain Amorphous Silica Fabric from the People's Republic of China: Final Affirmative Determination of Sales at Less-Than-Fair Value, and Final Affirmative Determination of Critical Circumstances*, 82 FR 8399, January 25, 2017, referenced in app. A. When petitioners file timely allegations of critical circumstances, Commerce examines whether there is a reasonable basis to believe or suspect that (1) either there is a history of dumping and material injury by reason of dumped imports in the United States or elsewhere of the subject merchandise, or the person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the subject merchandise at LTFV and that there was likely to be material injury by

(*continued*...)

investigations, if both Commerce and the Commission make affirmative final critical circumstances determinations, certain subject imports may be subject to antidumping duties retroactive by 90 days from September 1, 2016, the effective date of Commerce's preliminary affirmative LTFV determination. Table IV-3 and figure IV-2 present monthly import data.

U.S. importers' inventories of ASF have *** from September 2015 to 2016. September 2015 inventories of Chinese ASF were *** kilograms. September 2016 inventories of Chinese ASF were *** kilograms. The ratio of inventory to U.S. imports increased from *** percent in interim 2015 to *** percent by interim 2016.

Table IV-3
ASF: U.S. imports from China subject to Commerce's critical circumstances finding, August 2015 through July 2016

* * * * * * *

Figure IV-2

ASF: Monthly U.S. imports for Commerce's affirmative critical circumstances finding for China, August 2015 through July 2016

* * * * * * *

NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[5] Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[6] Imports from China accounted for *** percent of all reported imports of ASF by quantity during 2015 and *** percent of all reported imports of ASF by value during calendar year 2015 (the most recent 12 month period prior to the filing of the petition).

(…*continued*)
reason of such sales; and (2) there have been massive imports of the subject merchandise over a relatively short period.

[5] Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

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

APPARENT U.S. CONSUMPTION AND U.S. MARKET SHARES

Table IV-4 and figure IV-3 present data on apparent U.S. consumption and U.S. market shares for ASF. Reported U.S. shipments of imports of ASF from China accounted for the largest share of apparent U.S. consumption (by quantity) in each full and partial year period. Table IV-5 presents importers' reported U.S. shipments of ASF by grade.

Table IV-4
ASF: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2013-15, January-September 2015, and January-September 2016

* * * * * * *

Figure IV-3

ASF: Apparent U.S. consumption, 2013-15, January-September 2015, and January-September 2016

* * * * * * *

Table IV-5
ASF: U.S. importers' U.S. shipments, by type, 2013-15, January to September 2015, and January to September 2016

* * * * * * *

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

Fiberglass yarn is the primary raw material input used to make ASF. U.S. producer AMI reported that in addition to fiberglass yarn, *** are the other major raw materials inputs used in its production of ASF, and that these other materials accounted for approximately *** of the final cost of its industrial grade ASF.[1] U.S. producer HITCO reported that ***. Industrial grade ASF also requires the use of various vinyl coatings, primarily silicone, as a separate step.[2]

For U.S. producers, raw materials as a share of the cost of goods sold ("COGS") decreased from *** percent in 2013 to *** percent in 2015.[3] During January-September 2016, raw materials as a share of COGS was *** percent, compared to *** percent during the same period in 2015.

Most firms reported that raw material prices have decreased since January 2013. *** reported that raw material prices have decreased, stating that ***. Three of six responding importers also reported that raw material prices had decreased. *** stated that ***, *** stated that while raw material prices had decreased ***, and *** reported lower costs resulting from a technological change (***). Two importers reported that raw material prices had not changed, and one reported that prices had fluctuated. Only one firm, ***, reported that raw material prices have increased.

Transportation costs to the U.S. market

Transportation costs for ASF shipped from China to the United States averaged 6.5 percent during 2015. These estimates were derived from official import data and represent the transportation and other charges on imports.[4]

U.S. inland transportation costs

Most responding firms (*** and five of six responding importers) reported that they typically arrange transportation to their customers. U.S. producer AMI reported that its U.S.

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[1] AMI's postconference brief, Answers to staff questions, p. 6.

[2] Conference transcript, p. 62 (Van Atta).

[3] ***.

[4] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2015 and then dividing by the customs value based on the HTS subheadings 7019.59.4021, 7019.59.4096, 7019.59.9021, and 7019.59.9096. ASF may also enter under subheadings 7019.90.1000 or 7019.90.5050; these are even broader basket categories, however, so transportation costs calculated for them would tend to be less characteristic of ASF.

inland transportation costs were *** percent of the total delivered cost of its ASF, and importers reported costs of *** percent.[5]

PRICING PRACTICES

Pricing methods

***. ***. Of the seven importers, *** reported selling on a transaction-by-transaction basis, *** reported selling through contracts, and *** reported set price lists (table V-1). Three importers (***) reported using multiple methods, with ***, ***, and ***. *** also reported selling ***.

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

Method	U.S. producers	Importers
Transaction-by-transaction	***	***
Contract	***	***
Set price list	***	***
Other	***	***
Responding firms	2	7

[1] The sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

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

For U.S. producers, *** were the most common type of sales (table V-2). ***.[6] ***.[7] Importers sold the majority of their ASF from China in the spot market (*** percent), with the remaining *** percent sold ***.[8] No importers reported selling through annual or long-term contracts.

[5] ***.

[6] ***. ***, email message to USITC staff, December 22, 2016.

[7] ***

[8] ***.

Table V-2
ASF: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2015

Type of sale	U.S. producers	Importers
Long-term contracts	***	***
Annual contracts	***	***
Short-term contracts	***	***
Spot sales	***	***
Total	100.0	100.0

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

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

***. ***. ***.[9]

One purchaser reported that it purchases ASF weekly, three purchase monthly, six purchase quarterly, and one purchases annually.[10] Two firms also reported purchasing on an as needed basis, and one reported purchasing twice a month. One purchaser reported purchasing only once; *** reporting purchasing ***.[11] Most responding purchasers (10 of 16) reported that their purchasing frequency had not changed since January 2013. Five of the six firms that reported changes in purchasing frequency cited a decrease in demand or a slower domestic economy, and one firm that cited fluctuating demand indicated that its purchasing frequency was based upon the build cycles of the ships in manufacturing.

A plurality (6 of 14 reporting) purchasers reported contacting up to three suppliers before making a purchase. Four purchasers reported contacting two firms, four reported contacting only one firm, and one reported contacting up to five suppliers.

Requests for quotation and bids

Requests for quotation (RFQs) and bids are often used to buy and sell ASF in the domestic market. During the preliminary phase of the investigations, AMI stated that it had lost sales to two large Chinese producers despite lowering its bids,[12] and specifically stated ***. ***. In this final phase of these investigations, U.S. producers and importers were asked a number of questions about the quoting and bidding process, including how often they were allowed the opportunity to bid, whether firms discussed the quotes or bids of other companies in order to get a lower price, how often they were excluded from the quoting and/or bidding process, and how often their quotes and/or bids include services. The Commission also sent an additional purchaser questionnaire to ***, requesting information on the conditions of and changes in its purchases.

[9] ***.

[10] ***. No purchasers reported that they purchase product daily.

[11] ***.

[12] Conference transcript, pp. 10, 42-43 (Heffner, Leonard).

*** reported that *** allowed more than one chance to provide a quote or bid on a particular sales agreement. ***. *** reported that their customers *** discuss the quotes or bids of competing firms in order to get a lower quote/bid price, while *** reported that *** did. *** reported that they were *** excluded from providing a quote or bidding for sales, while *** and ***.

. ***, "." In *** response to the additional questionnaire, it reported ***. It ***. It also reported that ***.

Sales terms and discounts

***. Four importers reported only quoting prices on an f.o.b. basis,[13] one reported quoting prices only on a delivered basis, and one reported quoting on both a delivered and/or an f.o.b. basis depending on the size of the order and customer location. ***. ***. It reported that ***.[14] ***.

Five of seven responding importers reported offering quantity discounts, three reported offering total volume discounts, and four reported no discount policy.[15] Among the firms that reported multiple discount policies, *** reported offering discounts on ***. Three importers (***) reported sales terms of ***, ***. The other three importers (***) reported offering sales terms of ***.

Price leadership

Six purchasers named firms that they considered price leaders in the ASF market. Two firms, (***) named Newtex as a price leader.[16] *** named U.S. producer AMI, stating that they have "***," and *** naming both U.S. producers AMI and HITCO, stating that ***. One firm named AVS, stating ***, and one firm (***) named Valmiera Glass, stating that ***.[17]

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following ASF products shipped to unrelated U.S. customers during January 2013-September 2016.

Product 1.--18 ounce/yard^2, per MILC-24576[18]

Product 2.--36 ounce/yard^2, per MILC-24576

---

[13] One identified the f.o.b. point as *** and the other ***.

[14] ***.

[15] Only two of these firms (***) indicated that they had no discount policy, and did not report offering discounts. The other two, ***, reported no discount policy but reported offering discounts.

[16] *** stated that Newtex ***.

[17] ***.

[18] MILC-24576 is a military grade specification.

Product 3.--**24 ounce/yard^2, with cured silicone rubber on one side, nominal finished fabric weight 29.0 ounce/yard^2**

Both U.S. producers and two importers (***) provided usable pricing data for sales of the requested products, although not all firms reported pricing for all quarters.[19] [20] Pricing data reported by these firms accounted for approximately 74.8 percent of U.S. producers' shipments of ASF and 43.6 percent of U.S. shipments of subject imports from China in 2015 by value.

Price data for products 1-3 are presented in tables V-3 to V-5 and figures V-2 to V-4.

Table V-3
ASF: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarter, January 2013-September 2016

* * * * * * *

Table V-4
ASF: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarter, January 2013-September 2016

* * * * * * *

Table V-5
ASF: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarter, January 2013-September 2016

* * * * * * *

Figure V-2
ASF: Weighted-average prices and quantities of domestic and imported product 1, by quarter, January 2013-September 2016

* * * * * * *

Figure V-3
ASF: Weighted-average prices and quantities of domestic and imported product 2, by quarter, January 2013- September 2016

* * * * * * *

[19] Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

[20] ***.

Figure V-4
ASF: Weighted-average prices and quantities of domestic and imported product 3, by quarter, January 2013- September 2016

* * * * * * *

Price trends

For products 1 and 2, prices increased for both domestic and imported ASF from China during January 2013 through September 2016. For product 3, domestic prices decreased.[21] Table V-6 summarizes the price trends, by country and by product. As shown in the table, domestic price increases for products 1 and 2 were *** percent and *** percent, respectively, while the domestic price decrease for product 3 was *** percent during January 2013-September 2016. Prices for products 1 and 2 imported from China increased by *** percent and *** percent, respectively.

Table V-6
ASF: Summary of weighted-average f.o.b. prices for products 1-3 from the United States and China

Item	Number of quarters	Low price (*per square yard*)	High price (*per square yard*)	Change in price[1] (*percent*)
Product 1				
United States	15	$***	$***	***
China	15	***	***	***
Product 2				
United States	15	***	***	***
China	15	***	***	***
Product 3				
United States	15	***	***	***
China	5	***	***	***

[1] Percentage change from the first quarter of 2013 to the third quarter of 2016.

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

Price comparisons

As shown in table V-7, prices for ASF imported from China were below those for U.S.-produced product in all 35 instances (approximately 1.8 million square yards); margins of underselling ranged from 15.7 to 68.4 percent.

[21] For product 3 from China, prices increased by *** percent between the second quarter of 2015 and the second quarter of 2016.

Table V-7
ASF: Instances of underselling by imports ASF from China and the range and average of margins, by pricing product, January 2013-September 2016

Pricing product	Underselling				
	Number of quarters	Quantity[1] (*square yards*)	Average margin (*percent*)	Margin range (*percent*)	
				Min	Max
Product 1	15	***	***	***	***
Product 2	15	***	***	***	***
Product 3	5	***	***	***	***
Total	35	1,764,848	36.8	15.7	68.4

[1] These data include only quarters in which there is a comparison between the U.S. and subject product.

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

AMI stated that ***. AMI stated that ***, it would have "***." AMI argues that the depressive impact of underselling by Chinese product is masked by the beneficial effect of the preliminary duties imposed in the third quarter of 2016, the reduction in its sales to larger, more price-sensitive customers, and the increase in the COGS to sales ratio from 2013 to 2015.[22]

LOST SALES AND LOST REVENUE

In the preliminary phase of these investigations, the Commission requested U.S. producers of ASF to report purchasers where they experienced instances of lost sales or revenue due to competition from imports of ASF from China during January 2013 to April 2016. *** submitted ***.[23] ***.[24] ***.

In the final phase of these investigations, *** reported that *** had to roll back announced price increases, *** reported that *** had lost sales. AMI reported that it had to reduce prices, and stated that it has lost $3 million dollars in sales from one defense contractor alone since 2014.[25] HITCO also stated that it lost sales to importers of Chinese ASF, highlighting a large direct customer and a longstanding distributor to which it lost bids.[26]

Staff contacted 45 purchasers and received responses from 16 purchasers.[27] Responding purchasers reported purchasing 698,084 kilograms of ASF during 2015 (table V-8). Among the responding purchasers, five reported purchasing imported ASF from China instead of U.S.-

[22] Hearing transcript, pp. 49-51, 72-73, 91-92, 96 (Dougan), 96 (Leonard); AMI's prehearing brief, pp. 40-44 and Exhibit 13; AMI posthearing brief, pp. 11-12 and Exhibit 1 (Answers to Questions of Commissioners and Staff), pp. 18-20, 23-27, 41-46, Exhibits 8-12.

[23] ***. Staff telephone interview with ***, January 26, 2017.

[24] ***, email message to USITC staff, January 25, 2017.

[25] Hearing transcript, p. 27 (Leonard).

[26] Hearing transcript, pp. 36-37 (Schade).

[27] In addition, four firms responded that they did not purchase ASF.

produced product since 2013.[28] Four of these purchasers reported that subject import prices were lower than U.S.-produced product.[29] Two of these purchasers (***) reported that price was a primary reason for purchasing imported product rather than U.S.-produced product. One purchaser (***) estimated that it had purchased *** kilograms of Chinese imports instead of U.S.-produced ASF because of the higher price of U.S. product. Although *** reported the source of all of its purchases as "unknown" in its purchaser questionnaire, it estimated shifting *** kilograms of ASF from domestic to imported ASF in its supplemental questionnaire response regarding RFQs/bids.[30] As a share of all reported purchases, the share of domestic product decreased by *** percentage points from 2013 to 2015, while the share of imported ASF from China increased by *** percentage points (table V-8). Reported non-price reasons for purchasing imported rather than U.S.-produced product were quality and customer specification of brand.

Of the 16 responding purchasers, one (***) reported that U.S. producers had reduced prices in order to compete with lower-priced imports from China (table V-10); seven reported that U.S. producers had not reduced prices, and eight reported that they did not know. *** estimated that U.S. producers reduced their prices by *** percent in order to compete with imports of ASF from China.

Table V-8
ASF: Purchasers' responses to purchasing patterns

* * * * * * *

[28] *** reported purchasing Chinese ASF instead of U.S.-produced ASF, but reported no purchases of U.S.-produced ASF during 2013-15. ***. ***.

[29] *** reported switching to Chinese ASF, but did not respond to the question comparing U.S. and Chinese prices.

[30] ***; AMI prehearing brief, pp. 38-39.

Table V-9
ASF: Purchasers' responses to shifting supply sources

Purchaser	Purchased imports instead of domestic (Y/N)	If purchased imports instead of domestic, was price a primary reason		
		Y/N	If Yes, quantity purchased instead of domestic (kilograms)	If No, non-price reason
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
***	***	***	***	***
Totals	**5 Yes/ 9 No**	**2 Yes/ 2 No**	**104,754**	

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

Table V-10
ASF: Purchasers' responses to U.S. producer price reductions

Purchaser	U.S. producers reduced priced to compete with subject imports (Y/N)	If U.S. producers reduced prices	
		Estimated U.S. price reduction (percent)	Additional information, if available
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
Totals	**1 Yes/ 7 No/ 8 DK**	*******	***

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

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

INTRODUCTION

U.S. producers AMI and HITCO provided financial data on their operations on ASF. These producers are believed to account for all U.S. production of ASF in 2015. *** reported some sales as *** which accounted for ***.[1] These data are included but not shown separately in this section of the report. Both firms reported a fiscal year end of December 31.

OPERATIONS ON ASF

Income-and-loss data for U.S. producers of ASF are presented in table VI-1, while selected financial data, by firm, are presented in table VI-2.[2] The reported profitability of the U.S. industry declined from 2013 to 2015. The reported aggregate net sales quantity declined by *** percent during this time, while the aggregate net sales value declined by *** percent. Collectively, the aggregate cost of goods sold ("COGS") and selling, general, and administrative ("SG&A") expenses declined by *** percent during this period. As a result of the larger decline in revenue as compared to operating costs and expenses, the *** in 2015 than in either 2013 or 2014. Gross and net profitability followed generally similar trends during this period.[3]

In January-September 2016 compared to January-September 2015, the reported aggregate net sales quantity was *** percent lower and the aggregate net sales value was *** percent lower. Operating costs and expenses were *** percent lower in interim 2016 compared to interim 2015. As a result of the larger decline in operating costs and expenses compared to revenue, the aggregate gross, operating, and net income were higher.[4]

Table VI-1
ASF: Results of operations of U.S. producers, 2013-15, January-September 2015, and January-September 2016

* * * * * * *

[1] ***. Email from ***, February 8, 2016. Part III provides additional details regarding internal consumption.

[2] The financial data provided by AMI were examined at Commission offices. Revisions were made to COGS and asset data throughout the period for which data were requested, and are incorporated in this final report.

[3] From 2013 to 2015, gross profit continually declined but was ***, while operating and net income somewhat improved from 2013 to 2014 before *** declining in 2015. Operating and net ***.

[4] In January-September 2016 compared to January-September 2015, gross profit was higher, and the operating and net losses were lower. ***. Reported net income is impacted by ***, included in table VI-1 as "other income or (expense), net."

Table VI-2
ASF: Selected results of operations of U.S. producers, by firm, 2013-15, January-September 2015, and January-September 2016

* * * * * * *

On a per-kilogram basis, the net sales value continually declined from 2013 to 2015.[5] Per-kilogram raw material costs decreased,[6] direct labor and other factory costs increased,[7] and SG&A expenses decreased from 2013 to 2015. As a ratio to net sales, all components of COGS generally increased, largely due to the decline in net sales value. In January-September 2016 compared to January-September 2015, the per-kilogram net sales value was higher. Per-kilogram raw material costs were higher, direct labor and other factory costs were lower, and SG&A expenses were higher on lower volume. As a ratio to net sales, all components of COGS and SG&A expenses were generally lower as the net sales value improved relative to costs.[8]

Raw material costs accounted for an average *** percent of total COGS for the reporting period, and had a notable impact on the increase or decrease in COGS during this time. SG&A expenses accounted for an average *** percent of total operating costs and expenses for the reporting period, and also had an impact on the industry's reported profitability. The U.S. industry experienced positive *** from January 2013 to September 2016; however, *** occurred in all full and partial years as SG&A expenses ***.[9]

Capital expenditures, research and development expenses, total assets, and return on assets

The responding firms' aggregate data on capital expenditures, research and development ("R&D") expenses, total assets, and return on assets ("ROA") are shown in table VI-3. *** reported capital expenditure data, and *** reported research and development ("R&D") expenses. Aggregate capital expenditures *** from 2013 to 2015, and *** in January-September 2016 than in January-September 2015. ***.[10] The total assets utilized in the production, warehousing, and sale of ASF declined irregularly from $*** in 2013 to $*** in 2015, and the ROA declined from *** percent in 2013 to *** percent in 2015.[11]

---

[5] ***. Email from ***, December 2, 2016.

[6] ***. Postconference brief of AMI, Answers to Commission Staff Questions, p. 6.

***. Email from ***, February 19, 2016. Further, ***. ***.

[7] ***. Email from ***, February 19, 2016. ***.

[8] ***. Email from ***, December 2, 2016.

[9] As a ratio to sales, ***. Email from ***, February, 8, 2016, and staff examination of AMI's financial data.

[10] U.S. producers' questionnaire response of ***, question III-13. In 2013 and 2014, *** accounted for *** percent, respectively, of total reported capital expenditures. ***. Email from ***, December 2, 2016.

[11] The return on assets is calculated as operating income divided by total assets. With respect to a firm's overall operations, the total asset value reflects an aggregation of a number of assets which are

(*continued*...)

Table VI-3
ASF: Capital expenditures, R&D expenses, total assets, and ROA of U.S. producers, 2013-15, January-September 2015, and January-September 2016

* * * * * * *

Capital and investment

The Commission requested that U.S. producers of ASF describe any negative effects of imports of ASF from China on their firms' return on investment or the scale of capital investments, as well as any negative effects on their firms' growth, ability to raise capital, or existing development and production efforts. Responses are shown in tables VI-4a and VI-4b.

Table VI-4a
ASF: Negative effects of imports as reported by U.S. producer AMI, by factor

* * * * * * *

Table VI-4b
ASF: Negative effects of imports as reported by U.S. producer HITCO, by factor

* * * * * * *

(…*continued*)
generally not product specific. Thus, high-level allocations are generally required in order to report a total asset value for the subject product.

PART VII: THREAT CONSIDERATIONS AND INFORMATION ON NONSUBJECT COUNTRIES

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

> *In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

---

[1] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition."

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

(VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

Information on the nature of the subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

[2] Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

THE INDUSTRY IN CHINA

The Commission issued questionnaires to 60 firms thought to produce and/or export ASF from China.[3] Four firms submitted useable responses (in the preliminary phase of these investigations) to the Commission's questionnaires: ACIT (Pinghu) Inc.,[4] Huatek New Material Inc., NanJing Tianyuan Fiberglass Material Co., Ltd., and Qingdao Junfeng Industry Co. Ltd.[5] ACIT estimates that it is the *** producer of ASF in China as well as the *** exporter of ASF from China to the United States. NanJing Tianyuan estimates that it accounted for *** percent of ASF production in China. Huatek and Qingdau Junfeng did not provide estimates of their shares of ASF production in China. *** of these firms reported exports of ASF to the United States; the reported quantity of such exports in 2015 exceeded the quantity of U.S. imports of ASF reported by U.S. importers.

In the final phase of the investigations only ACIT (Pinghu) submitted a questionnaire response. ACIT (Pinghu) accounted for *** percent of currently reported imports from China in 2015 in the final phase. Table VII-1 presents information on the ASF operations of ACIT.

Table VII-1
ASF: Data for ACIT in China 2013-15, January-September 2015, January-September 2016, and projections for calendar years 2016 and 2017

* * * * * * *

ACIT reported that the "***." In addition, "***." Table VII-2 presents information on the ASF operations of the responding producers and exporters in the preliminary phase of these investigations. Four firms submitted useable responses to the Commission's questionnaires in the preliminary phase: ACIT (Pinghu) Inc.,[6] Huatek New Material Inc., NanJing Tianyuan Fiberglass Material Co., Ltd., and Qingdao Junfeng Industry Co. Ltd.

Table VII-2
ASF: Data for producers in China, 2013-15 and projections for calendar years 2016 and 2017

* * * * * * *

[3] These firms were identified through a review of information submitted in the petition and contained in ***.

[4] According to ACIT's questionnaire response, ***.

[5] Qingdao Junfeng Industry Co. Ltd. reported that it *** but reported no details.

[6] As noted previously, ***.

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-3 presents data on U.S. importers' reported inventories of ASF. While inventories declined between December 2013 and December 2015, inventories were higher in September 2016 than in September 2015. The higher level in 2016 reflects holdings by *** and ***.[7] *** reported *** in interim 2016. *** reported *** in interim 2016.

Table VII-3
ASF: U.S. importers' inventories, 2013-15, January-September 2015, and January-September 2016

* * * * * * *

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of ASF from China after September 30, 2016. No importer reported arranged imports from China from October 2016 through September 2017. Two importers, *** reported arranging shipments during ***.

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

There are no known antidumping or countervailing duty orders currently in effect concerning ASF in third-country markets.

INFORMATION ON NONSUBJECT COUNTRIES

ASF is currently produced in four nonsubject countries: Belarus, Latvia, Russia, and the United Kingdom. Only Latvia is believed to be a substantial source of ASF exports to the United States, although according to the respondents the industry in Latvia produces a lower silica product (94 percent silica rather than 96 percent).[8] Belarus was, in past, a substantial source of exports to the United States and reportedly produces ASF with 98 percent silica content.[9] Sanction exceptions that had been in effect for two U.S. companies to transact with Polotsk-Steknovolokno, the Belarusian silica fabric manufacturer,[10] were not renewed on May 31, 2011, which prohibited further U.S. imports of silica fabric from Belarus. However, effective October 30, 2015, U.S. transactions were again permitted with the company,[11] imports under relevant

[7] ACIT states that it holds no inventories. ACIT's posthearing brief, Exhibit 1.
[8] Conference transcript, p. 107 (Ao).
[9] Conference transcript, p. 107 (Ao).
[10] Polotsk-Steklovolokno website, http://eng.polotsk-psv.by/production/catalog/silica/ (accessed February 26, 2016).
[11] *Federal Register*, Vol. 75, No. 229, November 30, 2010, p. 73958; U.S. Department of the Treasury, Office of Foreign Assets Control, *Belarus Sanctions Regulations 31 C.F.F. Part 548*, October 29, 2015.

HTS provisions have resumed at very low levels. The Russian company JSC NPO Stekloplastic is a producer of lower silica content fabric (95 percent silica).[12] The two leading exporters of ASF from the United Kingdoms are Fothergill Engineered Fabrics Ltd. and Valmiera Glass UK Ltd. In 2013, P-D Interglas Technologies Ltd. was acquired by JSC Valmieras stikla skiedra and renamed Valmiera Glass UK Ltd.

Table VII-4 presents the largest global export sources of other woven fabrics of glass fibers (HS 7019.59) during 2013-15. HS 7019.59 is substantially broader than the subject HTS provisions, which are themselves broad product categories, and therefore contains many nonsubject articles. However, China is the largest global exporter of these woven glass fiber fabrics by value in every year from 2013 to 2015.

[12] *Techtextil* "JSC NPO Stekloplastic Exhibitor and Products 2015," January 30, 2015. http://www.techtextil.messefrankfurt.com/frankfurt/en/besucher/ausstellersuche.exhibitordetails.html/jsc-npo-stekloplastic.html?nc.

Table VII-4
ASF woven fabrics of glass fibers: Global exports by exporting country, 2013-15

Item	Calendar year		
	2013	2014	2015
	Value (1,000 dollars)		
United States	126,381	119,841	129,073
China	208,452	231,354	226,438
All other major exporting countries.-- Germany	181,508	177,300	152,009
Czech Republic	122,499	123,176	105,843
Taiwan	102,735	81,456	76,296
France	65,256	76,791	71,907
Latvia	66,045	66,436	61,737
United Kingdom	56,064	71,221	60,311
Belgium	33,648	49,513	41,237
Netherlands	37,841	43,624	39,332
South Korea	17,494	15,104	29,510
Italy	29,280	29,834	25,571
All other exporting countries	298,016	290,647	255,959
Total global exports	1,345,222	1,376,299	1,275,222
	Share of value (percent)		
United States	9.4	8.7	10.1
China	15.5	16.8	17.8
All other major exporting countries.-- Germany	13.5	12.9	11.9
Czech Republic	9.1	8.9	8.3
Taiwan	7.6	5.9	6.0
France	4.9	5.6	5.6
Latvia	4.9	4.8	4.8
United Kingdom	4.2	5.2	4.7
Belgium	2.5	3.6	3.2
Netherlands	2.8	3.2	3.1
South Korea	1.3	1.1	2.3
Italy	2.2	2.2	2.0
All other exporting countries	22.2	21.1	20.1
Total global exports	100.0	100.0	100.0

Note.--Quantity data are not reported since there is no consistent unit used across reporting countries. Some report in square meters, others in weight measures such as metric tons.

Source: Official export statistics under HS subheading 7019.59 as reported by various national statistical authorities in the GTIS/GTA database, accessed November 29, 2016.

APPENDIX A

FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
81 FR 4335 January 26, 2016	*Certain Amorphous Silica Fabric From China; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2016-01-26/pdf/2016-01423.pdf
81 FR 8909 February 23, 2016	*Certain Amorphous Silica Fabric From the People's Republic of China: Initiation of Countervailing Duty Investigation*	https://www.gpo.gov/fdsys/pkg/FR-2016-02-23/pdf/2016-03751.pdf
81 FR 8913 February 23, 2016	*Certain Amorphous Silica Fabric From the People's Republic of China: Initiation of Less-Than-Fair-Value Investigation*	https://www.gpo.gov/fdsys/pkg/FR-2016-02-23/pdf/2016-03756.pdf
81 FR 14128 March 16, 2016	*Certain Amorphous Silica Fabric From China; Determinations*	https://www.gpo.gov/fdsys/pkg/FR-2016-03-16/pdf/2016-05888.pdf
81 FR 43579 July 5, 2016	*Countervailing Duty Investigation of Certain Amorphous Silica Fabric From the People's Republic of China: Preliminary Determination and Alignment of Final Determination With Final Antidumping Duty Determination*	https://www.gpo.gov/fdsys/pkg/FR-2016-07-05/pdf/2016-15729.pdf
81 FR 60341 September 1, 2016	*Antidumping Duty Investigation of Certain Amorphous Silica Fabric From the People's Republic of China: Affirmative Preliminary Determination of Sales at Less-Than-Fair Value, Preliminary Affirmative Determination of Critical Circumstances, and Postponement of Final Determination*	https://www.gpo.gov/fdsys/pkg/FR-2016-09-01/pdf/2016-21095.pdf

Citation	Title	Link
81 FR 63205 September 14, 2016	*Certain Amorphous Silica Fabric From China; Scheduling of the Final Phase of Countervailing Duty and Antidumping Duty Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2016-09-14/pdf/2016-22096.pdf
82 FR 8399, January 25, 2017	*Antidumping Duty Investigation of Certain Amorphous Silica Fabric From the People's Republic of China: Final Affirmative Determination of Sales at Less-Than-Fair Value, and Final Affirmative Determination of Critical Circumstances*	https://www.gpo.gov/fdsys/pkg/FR-2017-01-25/pdf/2017-01636.pdf
82 FR 8405, January 25, 2017	*Countervailing Duty Investigation of Certain Amorphous Silica Fabric From the People's Republic of China: Final Affirmative Determination*	https://www.gpo.gov/fdsys/pkg/FR-2017-01-25/pdf/2017-01635.pdf

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

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

Subject: Certain Amorphous Silica Fabric from China

Inv. Nos.: 701-TA-555 and 731-TA-1310 (Final)

Date and Time: January 18, 2017 - 9:30 am

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

CONGRESSIONAL APPEARANCES:

The Honorable Angus S. King, Jr., United States Senator, Maine

The Honorable Bruce Poliquin, U.S. Representative, 2nd District, Maine

In Support of the Imposition of Antidumping and Countervailing Duty Orders:

Drinker Biddle & Reath LLP
Washington, DC
on behalf of

Auburn Manufacturing, Inc. ("AMI")

Kathie Leonard, President *and* Chief Executive Officer, AMI

Garrett VanAtta, Vice President, Innovation Engineering, AMI

James Dougan, Vice President, Economic Consulting Services, LLC

RoseAnna Harrison, Economist, Economic Consulting Services, LLC

Douglas J. Heffner)
) – OF COUNSEL
Richard P. Ferrin)

ADDITIONAL WITNESS IN SUPPORT:

Law Office of William Silverman
Washington, DC
on behalf of

HITCO Carbon Composites, Inc.

Jeff Schade, Senior Vice President, HITCO Carbon Composites, Inc.

William Silverman) – OF COUNSEL

APPENDIX C

SUMMARY DATA

Table C-1
ASF: Summary data concerning the U.S. market, 2013-15, January to September 2015, and January to September 2016

* * * * * * *

Table C-2
ASF: Official imports for subject and top nonsubject countries

Item	Calendar year			January-September	
	2013	2014	2015	2015	2016
	Quantity (kilograms)				
China	3,672,805	5,173,157	5,434,533	4,324,266	4,374,282
United Kingdom	178,019	295,839	575,982	412,950	324,169
Korea	267,704	696,598	538,329	362,587	353,711
Canada	397,006	372,670	351,671	293,286	301,503
Germany	371,542	415,342	324,040	261,879	228,372
Latvia	449,827	477,359	178,330	145,434	122,105
Taiwan	156,470	192,716	145,836	121,706	38,859
Mexico	66,230	81,765	84,508	58,765	75,697
Croatia	-	-	65,797	44,701	42,566
Czech Republic	9,773	21,789	61,261	39,318	32,825
Netherlands	33,415	59,072	53,309	29,718	77,173
All other sources	129,931	267,547	168,751	124,274	116,158
Subtotal, nonsubject sources	2,059,917	2,880,697	2,547,814	1,894,618	1,713,138
Total	5,732,722	8,053,854	7,982,347	6,218,884	6,087,420
	Value (1,000 dollars)				
China	14,743	18,351	18,823	14,882	15,337
United Kingdom	3,126	4,533	7,505	5,165	6,007
Korea	2,495	4,564	3,583	2,359	2,450
Canada	3,323	4,057	4,382	3,534	3,315
Germany	4,215	5,362	4,424	3,381	3,700
Latvia	6,179	5,486	2,127	1,878	1,392
Taiwan	1,038	1,481	1,484	1,261	297
Mexico	604	722	768	536	744
Croatia	-	-	664	451	422
Czech Republic	40	93	493	325	201
Netherlands	2,012	2,821	3,086	2,142	3,290
All other sources	3,399	7,141	4,251	3,183	2,847
Subtotal, nonsubject sources	26,430	36,262	32,767	24,216	24,666
Total	41,173	54,613	51,591	39,098	40,003
	Unit value (dollars per kilogram)				
China	4.01	3.55	3.46	3.44	3.51
United Kingdom	17.56	15.32	13.03	12.51	18.53
Korea	9.32	6.55	6.66	6.51	6.93
Canada	8.37	10.89	12.46	12.05	10.99
Germany	11.34	12.91	13.65	12.91	16.20
Latvia	13.74	11.49	11.93	12.91	11.40
Taiwan	6.63	7.69	10.17	10.36	7.63
Mexico	9.12	8.83	9.08	9.12	9.83
Croatia	---	---	10.09	10.10	9.92
Czech Republic	4.06	4.29	8.05	8.27	6.13
Netherlands	60.22	47.76	57.88	72.09	42.63
All other sources	26.16	26.69	25.19	25.61	24.51
Subtotal, nonsubject sources	12.83	12.59	12.86	12.78	14.40
Total	7.18	6.78	6.46	6.29	6.57
	Share of total import quantity (percent)				
China	64.1	64.2	68.1	69.5	71.9
United Kingdom	3.1	3.7	7.2	6.6	5.3
Korea	4.7	8.6	6.7	5.8	5.8
Canada	6.9	4.6	4.4	4.7	5.0
Germany	6.5	5.2	4.1	4.2	3.8
Latvia	7.8	5.9	2.2	2.3	2.0
Taiwan	2.7	2.4	1.8	2.0	0.6
Mexico	1.2	1.0	1.1	0.9	1.2
Croatia	0.0	0.0	0.8	0.7	0.7
Czech Republic	0.2	0.3	0.8	0.6	0.5
Netherlands	0.6	0.7	0.7	0.5	1.3
All other sources	2.3	3.3	2.1	2.0	1.9
Subtotal, nonsubject sources	35.9	35.8	31.9	30.5	28.1
Total	100.0	100.0	100.0	100.0	100.0

Source: Official Commerce statistics under HTS statistical reporting numbers 7019.59.4021, 7019.59.4096, 7019.59.9021, and 7019.59.9096, accessed January 19 and November 18, 2016

APPENDIX D

NONSUBJECT COUNTRY PRICE DATA

*** reported price data for Latvia for product 1. Price data reported by *** accounted for *** percent of U.S. shipments of imports from Latvia in 2015 by value. These price items and accompanying data are comparable to those presented in tables V-3 to V-5. Price and quantity data for Latvia are shown in table D-1 and figure D-1 (with domestic and subject sources).

In comparing nonsubject country pricing data with U.S. producer pricing data, prices for product 1 imported from Latvia were lower than prices for U.S.-produced product in all 15 instances. In comparing nonsubject country pricing data with subject country pricing data, prices for product 1 imported from Latvia were lower than prices for product 1 imported from China in nine instances (*** square yards) and higher in six instances (*** square yards). A summary of price differentials is presented in table D-2.

Table D-1

ASF: Weighted-average f.o.b. prices and quantities of imported product 1, by quarter, January 2013-September 2016

* * * * * * *

Figure D-1

ASF: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, by quarter, January 2013- September 2016

* * * * * * *

Table D-2

ASF: Summary of underselling/(overselling), by country, January 2013-September 2016

Comparison	Total number of comparisons	Latvia lower than the comparison source		Latvia higher than the comparison source	
		Number of quarters	Quantity (*square yards*)	Number of quarters	Quantity (*square yards*)
Nonsubject vs United States: Latvia vs. United States	15	15	***	0	***
Nonsubject vs Subject: Latvia vs. China	15	9	***	6	***

Note.--In nonsubject vs United States comparisons, U.S. prices serve as the benchmark for comparison (e.g., how much lower or higher are nonsubject prices compared to U.S. prices), while subject country prices serve as the benchmark for nonsubject vs. subject country comparisons (e.g., how much lower or higher are nonsubject prices compared to individual subject country prices).

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