Aluminum Extrusions from China

Investigation Nos. 701-TA-475 and 731-TA-1177 (Second Review)

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-475 and 731-TA-1177 (Second Review)

Aluminum Extrusions from China

DETERMINATIONS

On the basis of the record¹ developed in the subject five-year reviews, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that revocation of the antidumping and countervailing duty orders on aluminum extrusions from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted these reviews on March 1, 2022 (87 FR 11470) and determined on June 6, 2022 that it would conduct expedited reviews (87 FR 57518, September 20, 2022).

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

Views of the Commission

Based on the record in these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Tariff Act"), that revocation of the antidumping and countervailing duty orders on aluminum extrusions from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. Background

Original Investigations. The Commission instituted the original investigations on March 31, 2010, pursuant to antidumping and countervailing duty petitions filed by the Aluminum Extrusions Fair Trade Committee ("AEFTC") and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union ("USW") regarding imports of aluminum extrusions from China. In May 2011, the Commission determined that an industry in the United States was materially injured by reason of imports of certain aluminum extrusions from China other than certain finished heat sinks ("FHS") that the U.S. Department of Commerce ("Commerce") had found to be sold in the United States at less than fair value and subsidized by the government of China. The Commission, however, determined that the domestic FHS industry was not materially injured or threatened with material injury by reason of imports of FHS from China. On May 26, 2011, Commerce issued antidumping and countervailing duty orders with respect to imports of certain aluminum extrusions from China other than FHS.

¹ Certain Aluminum Extrusions From China, 75 Fed. Reg. 17436 (Apr. 6, 2010).

² Certain Aluminum Extrusions from China, Inv. Nos. 701-TA-475 and 731-TA-1177 (Final), USITC Pub. 4229 at 1 (May 2011) ("Original Determinations").

³ Original Determinations, USITC Pub. 4229 at 1. The Commission's Views reflected the opinion of Commissioners Pinkert, Aranoff, Okun, and Pearson. *Id.* at 1, n.3. Commissioners Williamson and Lane determined that there was one domestic like product consisting of all aluminum extrusions, including FHS, corresponding to the scope of the investigations. *Id.* at 31. They determined that the corresponding domestic industry was materially injured by reason of subject imports from China. *Id.* at 31.

⁴ Aluminum Extrusions from the People's Republic of China: Antidumping Duty Order, 76 Fed. Reg. 30650 (May 26, 2011); Aluminum Extrusions From the People's Republic of China: Countervailing Duty Order, 76 Fed. Reg. 30653 (May 26, 2011). The U.S. Court of International Trade ("CIT") upheld Commerce's revision of the scope language to reflect the exclusion of FHS. Aluminum Extrusions Fair Trade Committee v. United States, 968 F. Supp. 2d 1244 (Ct. Int'l Trade 2014).

First Reviews. On April 1, 2016, the Commission instituted the first five-year reviews.⁵ On March 27, 2017, after conducting full reviews,⁶ the Commission determined that revocation of the antidumping and countervailing duty orders on aluminum extrusions from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.⁷ Commerce issued a notice of continuation of the orders on April 25, 2017.⁸

Current Reviews. The Commission instituted these second five-year reviews on March 1, 2022. The Aluminum Extruders Council ("AEC") and AEFTC jointly filed the sole response to the Commission's notice of institution. No respondent party responded to the notice of institution or participated in these reviews. On June 6, 2022, the Commission determined that the domestic interested party group response to the notice of institution was adequate and that the respondent interested party group response was inadequate. Finding that no other circumstances warranted conducting full reviews, the Commission determined to conduct expedited reviews of the orders. On September 19, 2022, AEC filed final comments with the Commission pursuant to 19 C.F.R. § 207.62(d). 12

U.S. industry data are based on the data submitted by AEC in its response to the notice of institution, which included data from *** domestic producers that accounted for

⁵ Certain Aluminum Extrusions From China; Institution of Five-Year Reviews, 81 Fed. Reg. 18884 (Apr. 1, 2016).

⁶ Certain Aluminum Extrusions From China; Notice of Commission Determination To Conduct Full Five-Year Reviews, 81 Fed. Reg. 45304 (July 13, 2016).

⁷ Certain Aluminum Extrusions from China, Inv. Nos. 701-TA-475 and 731-TA-1177 (Review), USITC Pub. 4677 at 1 (Mar. 2017) ("First Reviews Determinations").

⁸ Aluminum Extrusions From the People's Republic of China: Continuation of Antidumping and Countervailing Duty Orders, 82 Fed. Reg. 19025 (Apr. 25, 2017).

⁹ Aluminum Extrusions From China; Institution of Five-Year Reviews, 87 Fed. Reg. 11470 (Mar. 1, 2022).

¹⁰ See Confidential Substantive Response to the Notice of Institution, EDIS Doc. 767004 (Mar. 30, 2022) ("Response"); Confidential Supplement to Substantive Response to the Notice of Institution, EDIS Doc. 769138 (Apr. 25, 2022) ("Supplemental Response"). The AEFTC is an ad hoc coalition of six domestic aluminum extrusions manufacturers, all of which are members of the AEC, a trade association of U.S. aluminum extruders with over 60 members. Supplemental Response at 2. Accordingly, both the AEFTC and the AEC will herein be collectively referred to as AEC unless otherwise indicated.

¹¹ Aluminum Extrusions From China; Scheduling of Expedited Five-Year Reviews, 87 Fed. Reg. 57518 (Sept. 20, 2022).

¹² Confidential Final Comments, EDIS Doc. 780561 (Sept. 19, 2022).

approximately *** percent of domestic production of aluminum extrusions in 2021.¹³ U.S. import data and related information are based on Commerce's official import statistics.¹⁴ Foreign industry data and related information are based on information provided by AEC in its response to the notice of institution and on publicly available information gathered by the Commission.¹⁵ Eleven U.S. purchasers of aluminum extrusions responded to the Commission's adequacy phase questionnaire.¹⁶

II. Domestic Like Product and Industry

A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the "domestic like product" and the "industry."¹⁷ The Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle."¹⁸ The Commission's practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.¹⁹

Commerce has defined the scope of the orders in the current reviews as follows:

{A}luminum extrusions which are shapes and forms, produced by an extrusion process, made from aluminum alloys having metallic elements corresponding to the alloy series designations published

¹³ Confidential Report, Memorandum INV-UU-058 (May 25, 2022) ("CR"); *Aluminum Extrusions from China*, Inv. Nos. 701-TA-475 and 731-TA-1177 (Second Review), USITC Pub. 5375 (Oct. 2022) ("PR") at I-5, at I-2 n.5, Table I-2, I-22.

¹⁴ CR/PR at Tables I-6 and I-7.

¹⁵ See CR/PR at Tables I-8–10.

¹⁶ CR/PR at D-3–5.

¹⁷ 19 U.S.C. § 1677(4)(A).

¹⁸ 19 U.S.C. § 1677(10); see, e.g., Cleo Inc. v. United States, 501 F.3d 1291, 1299 (Fed. Cir. 2007); NEC Corp. v. Commerce, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); Torrington Co. v. United States, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991); see also S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

¹⁹ See, e.g., Internal Combustion Industrial Forklift Trucks from Japan, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); Crawfish Tail Meat from China, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); Steel Concrete Reinforcing Bar from Turkey, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

by The Aluminum Association commencing with the numbers 1, 3, and 6 (or proprietary equivalents or other certifying body equivalents). Specifically, the subject merchandise made from aluminum alloy with an Aluminum Association series designation commencing with the number 1 contains not less than 99 percent aluminum by weight. The subject merchandise made from aluminum alloy with an Aluminum Association series designation commencing with the number 3 contains manganese as the major alloying element, with manganese accounting for not more than 3.0 percent of total materials by weight. The subject merchandise is made from an aluminum alloy with an Aluminum Association series designation commencing with the number 6 contains magnesium and silicon as the major alloying elements, with magnesium accounting for at least 0.1 percent but not more than 2.0 percent of total materials by weight, and silicon accounting for at least 0.1 percent but not more than 3.0 percent of total materials by weight. The subject aluminum extrusions are properly identified by a four-digit alloy series without either a decimal point or leading letter. Illustrative examples from among the approximately 160 registered alloys that may characterize the subject merchandise are as follows: 1350, 3003, and 6060.

Aluminum extrusions are produced and imported in a wide variety of shapes and forms, including, but not limited to, hollow profiles, other solid profiles, pipes, tubes, bars, and rods. Aluminum extrusions that are drawn subsequent to extrusion (drawn aluminum) are also included in the scope.

Aluminum extrusions are produced and imported with a variety of finishes (both coatings and surface treatments), and types of fabrication. The types of coatings and treatments applied to subject aluminum extrusions include, but are not limited to, extrusions that are mill finished (i.e., without any coating or further finishing), brushed, buffed, polished, anodized (including brightdip anodized), liquid painted, or powder coated. Aluminum extrusions may also

be fabricated, i.e., prepared for assembly. Such operations would include, but are not limited to, extrusions that are cut-to-length, machined, drilled, punched, notched, bent, stretched, knurled, swedged, mitered, chamfered, threaded, and spun. The subject merchandise includes aluminum extrusions that are finished (coated, painted, etc.), fabricated, or any combination thereof. Subject aluminum extrusions may be described at the time of importation as parts for final finished products that are assembled after importation, including, but not limited to, window frames, door frames, solar panels, curtain walls, or furniture. Such parts that otherwise meet the definition of aluminum extrusions are included in the scope. The scope includes the aluminum extrusion components that are attached (e.g., by welding or fasteners) to form subassemblies, i.e., partially assembled merchandise unless imported as part of the finished goods 'kit' defined further below. The scope does not include the non-aluminum extrusion components of subassemblies or subject kits.

Subject extrusions may be identified with reference to their end use, such as fence posts, electrical conduits, door thresholds, carpet trim, or heat sinks (that do not meet the finished heat sink exclusionary language below). Such goods are subject merchandise if they otherwise meet the scope definition, regardless of whether they are ready for use at the time of importation.

The following aluminum extrusion products are excluded: aluminum extrusions made from aluminum alloy with an Aluminum Association series designations commencing with the number 2 and containing in excess of 1.5 percent copper by weight; aluminum extrusions made from aluminum alloy with an Aluminum Association series designation commencing with the number 5 and containing in excess of 1.0 percent magnesium by weight; and aluminum extrusions made from aluminum alloy with an Aluminum Association series designation commencing with the number 7 and containing in excess of 2.0 percent zinc by weight.

The scope also excludes finished merchandise containing aluminum extrusions as parts that are fully and permanently assembled and completed at the time of entry, such as finished windows with glass, doors with glass or vinyl, picture frames with glass pane and backing material, and solar panels. The scope also excludes finished goods containing aluminum extrusions that are entered unassembled in a "finished goods kit." A finished goods kit. is understood to mean a packaged combination of parts that contains, at the time of importation, all of the necessary parts to fully assemble a final finished good and requires no further finishing or fabrication, such as cutting or punching, and is assembled "as is" into a finished product. An imported product will not be considered a "finished goods kit" and therefore excluded from the scope of the Order merely by including fasteners such as screws, bolts, etc. in the packaging with an aluminum extrusion product.

The scope also excludes aluminum alloy sheet or plates produced by other than the extrusion process, such as aluminum products produced by a method of casting. Cast aluminum products are properly identified by four digits with a decimal point between the third and fourth digit. A letter may also precede the four digits. The following Aluminum Association designations are representative of aluminum alloys for casting: 208.0, 295.0, 308.0, 355.0, C355.0, 356.0, A356.0, A357.0, 360.0, 366.0, 380.0, A380.0, 413.0, 443.0, 514.0, 518.1, and 712.0. The scope also excludes pure, unwrought aluminum in any form.

The scope also excludes collapsible tubular containers composed of metallic elements corresponding to alloy code 1080A as designated by the Aluminum Association where the tubular container (excluding the nozzle) meets each of the following dimensional characteristics: (1) length of 37 millimeters ("mm") or

62 mm, (2) outer diameter of 11.0 mm or 12.7 mm, and (3) wall thickness not exceeding 0.13 mm.

Also excluded from the scope of this Order are finished heat sinks. Finished heat sinks are fabricated heat sinks made from aluminum extrusions the design and production of which are organized around meeting certain specified thermal performance requirements and which have been fully, albeit not necessarily individually, tested to comply with such requirements.

Also excluded from the scope of the order{s} is certain rectangular wire produced from continuously cast rolled aluminum wire rod, which is subsequently extruded to dimension to form rectangular wire. The product is made from aluminum alloy grade 1070 or 1370, with no recycled metal content allowed. The dimensions of the wire are 5 mm (+/- 0.05 mm) in width and 1.0 mm (+/- 0.02 mm) in thickness. Imports of rectangular wire are provided for under HTSUS category 7605.19.000.

Imports of the subject merchandise are provided for under the following categories of the Harmonized Tariff Schedule of the United States (HTSUS): 6603.90.81.00, 7604.21.00.00, 7604.21.00.10, 7604.21.00.90, 7604.29.10.00, 7604.29.10.10, 7604.29.10.90, 7604.29.30.10, 7604.29.30.50, 7604.29.30.60, 7604.29.30.90, 7604.29.50.30, 7604.29.50.60, 7604.29.50.50, 7604.29.50.90, 7606.12.30.91, 7606.12.30.96, 7608.20.00.30, 7608.20.00.90, 7609.00.00, 7610.10.00, 7610.90.00, 7615.10.20.15, 7615.10.20.25, 7615.10.30, 7615.10.30.15, 7615.10.30.25, 7615.10.50.20, 7615.10.50.40, 7615.10.71, 7615.10.71.55, 7615.10.71.80, 7615.10.71.25, 7615.10.71.30, 7615.10.91, 7615.10.91.00, 7615.19.10, 7615.19.30, 7615.19.50, 7615.19.70, 7615.19.90, 7615.20.00, 7615.20.00.00, 7616.10.90.90, 7616.99.10, 7616.99.50, 7616.99.51. 8302.10.30.00, 8302.10.60.30, 8302.10.60.60, 8302.10.60.90, 8302.20.00.00, 8302.30.30.10, 8302.30.30.60,

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8302.41.30.00,
                8302.41.60.15, 8302.41.60.45,
                                                8302.41.60.50,
8302.41.60.80,
                8302.42.30.10,
                                8302.42.30.15,
                                                 8302.42.30.65,
8302.49.60.35,
                8302.49.60.45,
                                8302.49.60.55,
                                                8302.49.60.85,
8302.50.00.00,
                8302.60.90.00,
                                8305.10.00.50,
                                                8306.30.00.00,
8414.59.60.90,
                8415.90.80.45,
                                8418.99.80.05,
                                                8418.99.80.50,
8418.99.80.60,
                8419.90.10.00,
                                8422.90.06.40,
                                                 8424.90.90.80,
8473.30.20.00,
                  8473.30.51.00,
                                    8479.89.94,
                                                    8479.89.98,
8479.90.85.00,
                               8481.90.90.60,
                 8479.90.94,
                                                 8481.90.90.85,
8486.90.00.00,
                8487.90.00.80,
                                8503.00.95.20,
                                                 8508.70.00.00,
8513.90.20,
               8515.90.20.00,
                                8516.90.50.00,
                                                 8516.90.80.50,
8517.70.00.00,
                8529.90.73.00,
                                8529.90.97.60,
                                                8536.90.80.85,
8538.10.00.00,
                8541.90.00.00,
                                8543.90.88.80,
                                                 8543.90.88.85,
8708.10.30.50,
                8708.29.50.60,
                                8708.29.51.60,
                                                 8708.80.65.90,
8708.99.68.90,
                8803.30.00.60,
                                9013.90.50.00,
                                                 9013.90.90.00,
9031.90.90.95,
                9031.90.91.95,
                                9401.90.50.81,
                                                 9401.99.90.81,
9403.10.00,
               9403.20.00,
                              9403.90.10.40,
                                                 9403.90.10.50,
9403.90.10.85,
                9403.90.25.40,
                                9403.90.25.80,
                                                 9403.90.40.05,
9403.90.40.10,
                9403.90.40.60,
                                9403.90.50.05,
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                9403.90.70.10,
                                9403.90.70.80,
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9403.90.80.15,
                9403.90.80.20,
                                9403.90.80.41,
                                                 9403.90.80.51,
9403.90.80.61,
                9403.99.10.40,
                                9403.99.90.10,
                                                 9403.99.90.15,
9403.99.90.20,
                9403.99.90.41,
                                9405.99.40.20,
                                                 9506.11.40.80,
9506.51.40.00,
                9506.51.60.00,
                                9506.59.40.40,
                                                 9506.70.20.90,
9506.91.00.10,
                9506.91.00.20,
                                9506.91.00.30,
                                                 9506.99.05.10,
9506.99.05.20,
                9506.99.05.30,
                                9506.99.15.00,
                                                 9506.99.20.00,
9506.99.25.80,
                9506.99.28.00,
                                9506.99.55.00,
                                                 9506.99.60.80,
9507.30.20.00,
                9507.30.40.00, 9507.30.60.00,
                                                 9507.30.80.00,
9507.90.60.00, and 9603.90.80.50.
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The subject merchandise entered as parts of other aluminum products may be classifiable under the following additional Chapter 76 subheadings: 7610.10, 7610.90, 7615.19, 7615.20, and 7616.99, as well as under other HTSUS chapters. In addition, fin evaporator coils may be classifiable under HTSUS numbers: 8418.99.80.50 and

8418.99.80.60. While HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of the Order is dispositive.²⁰

The scope definition set out above has changed since the first reviews to exclude certain rectangular wire pursuant to the final results of Commerce's changed circumstances reviews.²¹

The scope of these reviews includes various shapes and forms of aluminum extrusions that may be produced and imported with various finishes (coatings, surface treatments) and/or types of fabrication except as otherwise specified.²² It also includes aluminum extrusion components that are attached in some way to form subassemblies, but the scope does not

Also excluded from the scope of the *Orders* is certain rectangular wire, *imported in bulk rolls or precut strips and* produced from continuously cast rolled aluminum wire rod, which is subsequently extruded to dimension to form rectangular wire *with or without rounded edges*. The product is made from aluminum alloy grade 1070 or 1370, with no recycled metal content allowed. The dimensions of the wire are *2.95 mm* to 6.05 mm in width, and 0.65 mm to 1.25 mm in thickness. Imports of rectangular wire are provided for under HTSUS categories 7605.19.000, 7604.29.1090, or 7616.99.5190.

Compare id. at 40181 (emphasis added) with First Reviews Determinations, USITC Pub. 4677 at 9–10.

²⁰ Aluminum Extrusions From the People's Republic of China: Final Results of the Expedited Second Sunset Review of the Countervailing Duty Order, 87 Fed. Reg. 40501 (July 7, 2022); Issues and Decision Memorandum for the Final Results of the 2022 Expedited Sunset Review of the Countervailing Duty Order on Aluminum Extrusions from the People's Republic of China (June 29, 2022) at 2–5; Aluminum Extrusions From the People's Republic of China: Final Results of the Expedited Second Sunset Review of the Antidumping Duty Order, 87 Fed. Reg. 40509 (July 7, 2022); Issues and Decision Memorandum for the Final Results of the Expedited Second Sunset Review of the Antidumping Duty Order on Aluminum Extrusions from the People's Republic of China (June 29, 2022) at 2–5.

²¹ See Aluminum Extrusions From the People's Republic of China: Final Results of Changed Circumstances Reviews, and Revocation, in Part, of the Antidumping and Countervailing Duty Orders, 87 Fed. Reg. 40179 (July 6, 2022). The revisions to the scope language, which applied to all unliquidated entries effective April 30, 2021, for purposes of the antidumping duty order, and January 1, 2021, for purposes of the countervailing duty order, is as follows:

²² CR/PR at I-13-14.

cover the non-aluminum extrusion components of those subassemblies.²³ The scope also includes the aluminum components of fin evaporator coil systems.²⁴

Aluminum extrusions have a wide variety of end-use applications, such as use in building and construction (such as use in windows, doors, railings, high-rise curtainwalls, highway and bridge construction, and framing members), transportation (such as use in automotive applications, heavy rail, light rail and other mass transit vehicles, recreational vehicles, aircraft, aerospace, and marine applications), and engineered products (such as use in air conditioners, appliances, furniture, lighting, sports equipment, personal watercraft, electrical power units, heat sinks, coaxial cables, bus bars, machinery and equipment, food displays, refrigeration and medical equipment, display structures, and laboratory equipment and apparatus).²⁵

Aluminum extrusions are principally produced from an aluminum billet which is heated prior to extrusion to produce the desired shape by being forced through a precision opening or die.²⁶ After extrusion and/or molding, the extrusion is cooled and may be further processed through, but not limited to, stretching, cutting, or aging.²⁷ After an extrusion has been aged, it can be sold as is or finished through processes such as painting or anodizing, or by fabrication, through processes such as drilling, cutting, crimping, or welding.²⁸

Original Investigations. In its domestic like product analysis in the original investigations, the Commission considered whether to define the following four domestic like products separately from other aluminum extrusions corresponding to the scope: (1) FHS; (2) shower knock-down units; (3) jewelry-grade shower door extrusions; and (4) organic photoreceptor/photoconductor tubes.²⁹ Based on the traditional domestic like product factors,

²³ First Reviews Determinations, USITC Pub. 4677 at 10.

²⁴ CR/PR at I-13. The scope excludes finished goods containing aluminum extrusions that are imported in finished form and also excludes aluminum alloy sheet or plates produced by methods other than the extrusion process; aluminum products produced by the casting method; pure, unwrought aluminum in any form; and aluminum extrusions falling within certain alloy series designations of the Aluminum Association. *Id.* at I-13–14. Also excluded from the scope are FHS and certain rectangular wire. *Id.* at I-14; see Aluminum Extrusions From the People's Republic of China: Final Results of Changed Circumstances Reviews, and Revocation, in Part, of the Antidumping and Countervailing Duty Orders, 87 Fed. Reg. 40179 (July 6, 2022).

²⁵ CR/PR at I-14-15.

²⁶ CR/PR at I-18.

²⁷ CR/PR at I-18. The aging process, which can be done at room temperature (natural aging) or through controlled heating in an aging oven (artificial aging), ensures the uniform precipitation of fine particles through the metal, producing an alloy with maximum strength, hardness, and elasticity. *Id*.

²⁸ CR/PR at I-19.

²⁹ Original Determinations, USITC Pub. 4229 at 6–11.

the Commission defined FHS as a separate domestic like product, but found no basis to define shower knock-down units, jewelry-grade shower door extrusions, or organic photoreceptor/photoconductor tubes as separate domestic like products.³⁰

First Reviews. In the full first reviews, the Commission considered whether to define as separate domestic like products: (1) kitchen appliance components (or certain kitchen appliance door handles), (2) fin evaporator coil systems (or the aluminum extrusions components thereof), and (3) fittings for engine cooling systems.³¹ Based on an analysis of its traditional domestic like product factors, the Commission found that the three products in question and other in-scope aluminum extrusions included a variety of products of different shapes and forms that are subjected to varying amounts of finishing and fabrication processes, but are manufactured in overlapping plants using the same processes and employees at least at the extrusion stage and in some cases at additional stages of finishing and fabrication.³² It also found that all in-scope aluminum extrusions, including the three products in question, shared similar general features and common channels of distribution with other in-scope merchandise.³³ Finding that the record did not support defining any of the three products in question as a separate domestic like product, the Commission defined a single domestic like product coextensive with the scope.³⁴

³⁰ Original Determinations, USITC Pub. 4229 at 9–11. The Commission found that there was a clear dividing line separating FHS from other aluminum extrusions based primarily on: (1) the customized thermal resistance properties of FHS; (2) the unique design, testing, and production processes of FHS; (3) the differences in the channels of distribution through which FHS are sold; (4) customer and producer perceptions that the thermal management industry is distinct from the general aluminum extrusion industry; and (5) the higher price of FHS as compared to most other aluminum extrusions. Id. at 9. With respect to shower knock-down units, the Commission found that, despite differences in the channels of distribution and differing end uses from other in-scope aluminum extrusions, no other factor set them apart from in scope merchandise. Id. at 9-10. With respect to jewelry-grade shower door extrusions, the Commission found that common channels of distribution, manufacturing processes and production facilities, and pricing between jewelry-grade shower door extrusions and other in-scope merchandise weighed against its definition as a separate domestic like product. Id. at 10. Finally, with respect to organic photoreceptor/photoconductor tubes, the Commission found that a lack of interchangeability and their associated precision manufacturing process did not sufficiently distinguish organic photoreceptor/photoconductor tubes from other in-scope extrusions to warrant their definition as a separate domestic like product. *Id.* at 10–11.

³¹ First Reviews Determinations, USITC Pub. 4677 at 10–30.

³² First Reviews Determinations, USITC Pub. 4677 at 29–30.

³³ First Reviews Determinations, USITC Pub. 4677 at 29–30.

³⁴ First Reviews Determinations, USITC Pub. 4677 at 29–30.

Current Reviews. In the current expedited reviews, AEC agrees with the domestic like product definition the Commission utilized in the original investigations.³⁵ The record contains no new information suggesting that the characteristics and uses of domestically produced aluminum extrusions have changed since the first reviews.³⁶ We therefore again define a single domestic like product consisting of aluminum extrusions, coextensive with the scope.

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."³⁷ 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.

Original Investigations. In the original investigations the Commission defined the pertinent domestic industry as consisting of all domestic producers of in-scope aluminum extrusions other than FHS, with the exception of one domestic producer excluded pursuant to the related parties provision.³⁸ The Commission also found that firms solely engaged in the fabrication and finishing of aluminum extrusions engaged in sufficient production-related activity to be deemed domestic producers.³⁹

First Reviews. In the full first reviews, the Commission defined the domestic industry to include all domestic producers of the domestic like product, including firms solely engaged in the finishing and fabrication of aluminum extrusions.⁴⁰ The Commission also found that

³⁵ Response at 27.

³⁶ See generally CR/PR at I-13–21.

³⁷ 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

³⁸ Original Determinations, USITC Pub. 4229 at 11. The Commission found that appropriate circumstances existed to exclude *** from the domestic industry definition pursuant to 19 U.S.C. § 1677(4)(B) because it clearly accrued a substantial benefit from its importation of subject merchandise. *Id.*; Confidential Original Determinations, EDIS Doc. 769883 at 14.

³⁹ Original Determinations, USITC Pub. 4229 at 11.

⁴⁰ First Reviews Determinations, USITC Pub. 4677 at 30–31.

appropriate circumstances did not exist to exclude any firm from the domestic industry definition pursuant to the related parties provision.⁴¹

Current Reviews. In the current expedited reviews, AEC agrees with the Commission's domestic industry definition from the original investigations.⁴² There are no issues under the related parties provision in these reviews.⁴³ As the record contains no new information to suggest that firms solely engaged in the fabrication and finishing of aluminum extrusions have changed their operations since the first reviews, we continue to find that these firms engage in sufficient production-related activity to be deemed domestic producers. Accordingly, consistent with our pertinent definition of the domestic like product in the original investigations and first reviews, we again define the domestic industry as all domestic producers of aluminum extrusions.

III. Revocation of the Antidumping and Countervailing Duty Orders Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time." The Uruguay Round Agreements Act Statement of Administrative Action ("SAA") states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must

⁴¹ First Reviews Determinations, USITC Pub. 4677 at 30–31 and n.127.

⁴² Response at 27.

⁴³ Response at 25. AEC initially reported that Extrusion North America at Hydro ("Hydro") (formerly Hydro Aluminum North America, Inc., before its merger with Sapa Extrusions, Inc., in 2013) ***. Response at 2, 25. Hydro later clarified that ***. Supplemental Response at 4. AEC also reported that Hydro is a business unit within Norsk Hydro, "a foreign producer of both subject and non-subject merchandise," but did not indicate that Norsk Hydro is either a Chinese producer or related to a Chinese producer. *See* Response at 25, Exh. 14 (listing of known Chinese producers and exporters does not include ***).

⁴⁴ 19 U.S.C. § 1675a(a).

decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports."⁴⁵ Thus, the likelihood standard is prospective in nature.⁴⁶ The CIT has found that "likely," as used in the five-year review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.⁴⁷

The statute states that "the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time." According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations."

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended

⁴⁵ SAA, H.R. Rep. 103-316, vol. I at 883-84 (1994). The SAA states that "{t}he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed." *Id.* at 883.

⁴⁶ While the SAA states that "a separate determination regarding current material injury is not necessary," it indicates that "the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

⁴⁷ See NMB Singapore Ltd. v. United States, 288 F. Supp. 2d 1306, 1352 (Ct. Int'l Trade 2003) ("'likely' means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)"), aff'd mem., 140 Fed. App. 268 (Fed. Cir. 2005); Nippon Steel Corp. v. United States, 26 CIT 1416, 1419 (2002) (same); Usinor Industeel, S.A. v. United States, 26 CIT 1402, 1404 nn.3, 6 (2002) ("more likely than not" standard is "consistent with the court's opinion;" "the court has not interpreted 'likely' to imply any particular degree of 'certainty'"); Indorama Chemicals (Thailand) Ltd. v. United States, 26 CIT 1059, 1070 (2002) ("standard is based on a likelihood of continuation or recurrence of injury, not a certainty"); Usinor v. United States, 26 CIT 767, 794 (2002) ("'likely' is tantamount to 'probable,' not merely 'possible'").

⁴⁸ 19 U.S.C. § 1675a(a)(5).

⁴⁹ SAA at 887. Among the factors that the Commission should consider in this regard are "the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities." *Id*.

investigation is terminated."⁵⁰ It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).⁵¹ The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination.⁵²

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.⁵³ In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) the potential for product shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.⁵⁴

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

⁵⁰ 19 U.S.C. § 1675a(a)(1).

⁵¹ 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings in its expedited sunset review of the orders. *See Aluminum Extrusions From the People's Republic of China: Final Results of the Expedited Second Sunset Review of the Antidumping Duty Order*, 87 Fed. Reg. 40509 (July 7, 2022) and Issues and Decision Memorandum for the Final Results of the 2022 Expedited Sunset Review of the Countervailing Duty Order on Aluminum Extrusions from the People's Republic of China at 8 (June 29, 2022).

⁵² 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

⁵³ 19 U.S.C. § 1675a(a)(2).

⁵⁴ 19 U.S.C. § 1675a(a)(2)(A-D).

United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.⁵⁵

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.⁵⁶ All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the order under review and whether the industry is vulnerable to material injury upon revocation.⁵⁷

No respondent interested party participated in these expedited reviews. The record, therefore, contains limited new information with respect to the aluminum extrusions industry in China. There also is limited information on the aluminum extrusion industry in the United States during the current period of review. Accordingly, for our determinations, we rely as appropriate on the facts available from the original investigations and first reviews, and the limited new information on the record in these expedited second reviews.

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors

⁵⁵ See 19 U.S.C. § 1675a(a)(3). The SAA states that "{c}onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices." SAA at 886.

⁵⁶ 19 U.S.C. § 1675a(a)(4).

⁵⁷ The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission "considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885.

"within the context of the business cycle and conditions of competition that are distinctive to the affected industry." The following conditions of competition inform our determination.

1. Original Investigations and First Five-Year Reviews

Demand. In the original investigations, the Commission found that aluminum extrusions are used in a wide variety of applications, including use in building and construction, transportation, and engineered products.⁵⁹ The Commission observed that the main drivers of U.S. demand for aluminum extrusions were employment, housing starts, and U.S. gross domestic product.⁶⁰ During the original investigations, apparent U.S. consumption of aluminum extrusions declined from 1.33 million short tons in 2008 to 1.12 million short tons in 2009 and then increased to 1.27 million short tons in 2010.⁶¹

In the first reviews, the Commission found that aluminum extrusions continued to be used in a wide variety of applications including building and construction, transportation, and engineered products. ⁶² It found that demand for aluminum extrusions was derived from demand for its various end uses and generally tracked U.S. gross domestic product. ⁶³ Apparent U.S. consumption of aluminum extrusions increased from 1.3 million short tons in 2013, to 1.4 million short tons in 2014, and to 1.5 million short tons in 2015; it was higher in interim 2016 (1.18 million short tons) than in interim 2015 (1.16 million short tons). ⁶⁴

Supply. In the original investigations, the AEFTC identified 104 potential U.S. producers.⁶⁵ The Commission characterized the domestic industry as moderately concentrated, with one producer (Sapa) accounting for more than *** of domestic production, the six leading domestic producers accounting for more than *** percent of reported production, and 38 of the responding producers individually accounting for less than one percent of reported domestic production.⁶⁶ Although some firms expanded or upgraded production facilities during

⁵⁸ 19 U.S.C. § 1675a(a)(4).

⁵⁹ Original Determinations, USITC Pub. 4229 at 18.

⁶⁰ Original Determinations, USITC Pub. 4229 at 18.

⁶¹ Original Determination, USITC Pub. 4229 at 18, Table C-1.

⁶² First Reviews Determinations, USITC Pub. 4677 at 35–36.

⁶³ First Reviews Determinations, USITC Pub. 4677 at 36.

⁶⁴ First Reviews Determinations, USITC Pub. 4677 at 36.

⁶⁵ Original Determinations, USITC Pub. 4229 at 19.

⁶⁶ Original Determinations, USITC Pub. 4229 at 19; Confidential Original Determinations, EDIS Doc. 769883 at 24.

the original investigations, nine firms reported closing a total of 20 plants.⁶⁷ The domestic industry was the largest supplier to the U.S. market throughout the original investigations, with its share of apparent U.S. consumption falling from 83.7 percent in 2008 to 75.0 percent in 2010.⁶⁸ Subject imports were consistently the second largest supply of aluminum extrusions to the U.S. market, with their share of apparent U.S. consumption increasing from 6.7 percent in 2008 to 15.8 percent in 2010.⁶⁹ Nonsubject imports, most of which originated from Canada, held a declining share of apparent U.S. consumption.⁷⁰

In the first reviews, the Commission found that the domestic industry had continued to consolidate, with 25 responding U.S. producers believed to account for *** percent of domestic production of aluminum extrusions in 2015.⁷¹ The Commission noted that, since the orders were imposed, the domestic industry had closed some facilities, while also investing in production upgrades, capacity expansions, and new facilities.⁷² The domestic industry remained the largest source of supply, accounting for at least 86.0 percent of apparent U.S. consumption during the period of review.⁷³ Subject imports were the smallest source of supply to the U.S. market during the period of review, accounting for 0.4 percent of apparent U.S. consumption in 2015.⁷⁴ Nonsubject imports, primarily from Canada, Mexico, Indonesia, and Vietnam, were the second largest source of supply to the U.S. market during the period of review and accounted for 13.3 percent of apparent U.S. consumption in 2015.⁷⁵

Substitutability and Other Conditions. During the original investigations, the Commission found that there was a high degree of substitutability between subject imports and the domestic like product and that price, along with quality, were important purchasing considerations. The Commission explained that primary aluminum is the main raw material used to manufacture aluminum extrusions and that raw material costs accounted for approximately 66.2 percent of the domestic industry's total cost of goods sold during the

⁶⁷ Original Determinations, USITC Pub. 4229 at 19.

⁶⁸ Original Determinations, USITC Pub. 4229 at 19, Table C-1.

⁶⁹ Original Determinations, USITC Pub. 4229 at 19, Table C-1.

⁷⁰ Original Determinations, USITC Pub. 4229 at 19.

⁷¹ First Reviews Determinations, USITC Pub. 4677 at 37; Confidential First Reviews Determinations, EDIS Doc. 769888 at 50.

⁷² First Reviews Determinations, USITC Pub. 4677 at 37.

⁷³ First Reviews Determinations, USITC Pub. 4677 at 37.

⁷⁴ First Reviews Determinations, USITC Pub. 4677 at 37.

⁷⁵ First Reviews Determinations. USITC Pub. 4677 at 39.

⁷⁶ Original Determinations, USITC Pub. 4229 at 21.

period of investigation.⁷⁷ It found that domestic producers had little ability to negotiate or change their costs of primary aluminum so their price negotiations with purchasers tended to focus on the extrusion or "conversion" costs.⁷⁸

In the first reviews, the Commission found that subject imports and the domestic like product were moderately to highly substitutable, ⁷⁹ and that price and quality continued to play an important role in purchasing decisions. ⁸⁰ As in the original investigations, the Commission found that primary aluminum was the main raw material used to manufacture aluminum extrusions and that raw material costs accounted for approximately two thirds of the domestic industry's cost of goods sold ("COGS"). ⁸¹ The Commission also highlighted the AEFTC's assertion that most of the domestic industry utilized a pricing formula for aluminum extrusions consisting of a base aluminum price indexed to the London Metal Exchange, a delivery charge to obtain the aluminum, and the cost to convert the aluminum billet into the desired extrusion. ⁸²

2. The Current Five-Year Reviews

Demand. There is no information in the record of these reviews indicating any changes in the drivers of demand for aluminum extrusions from those that the Commission found in the prior proceedings.⁸³ U.S. demand for aluminum extrusions, which is derived from demand for its various end uses, generally tracks U.S. gross domestic product.⁸⁴ AEC claims that the COVID-19 pandemic initially decreased U.S. demand for aluminum extrusions in early 2020, but that demand "ramped up again" toward the end of 2020.⁸⁵ Apparent U.S. consumption of aluminum extrusions was approximately *** short tons in 2021, which is higher than in the final year of the original investigations but lower than in the final year of the first reviews.⁸⁶

⁷⁷ Original Determinations, USITC Pub. 4229 at 20.

⁷⁸ Original Determinations, USITC Pub. 4229 at 20.

⁷⁹ First Reviews Determinations, USITC Pub. 4677 at 40.

⁸⁰ First Reviews Determinations, USITC Pub. 4677 at 39–40.

⁸¹ First Reviews Determinations, USITC Pub. 4677 at 40.

⁸² First Reviews Determinations, USITC Pub. 4677 at 40–41.

⁸³ AEC did not identify any changes in the end use applications for aluminum extrusions. *See* Response at 21. *** purchasers that responded to the Commission's questionnaire *** in the end uses or applications for aluminum extrusions. CR/PR at D-3–5.

⁸⁴ First Reviews Determinations, USITC Pub. 4677 at 36; CR/PR at I-14–15.

⁸⁵ Response at 27.

⁸⁶ CR/PR at Table I-7. Apparent U.S. consumption was 1.3 million short tons in 2010, and 1.5 million short tons in 2015. *Id*.

*** responding U.S. purchasers reported that demand had increased at various points during the period of review.⁸⁷ *** responding purchasers reported that they anticipated significant changes in demand for aluminum extrusions in the foreseeable future.⁸⁸

Supply. In the current reviews, AEC identified 133 domestic producers of aluminum extrusions.⁸⁹ The domestic industry was the largest source of supply in 2021; its share of apparent U.S. consumption was *** percent that year, which was *** than in the final years of the periods examined in the original investigations and first reviews.⁹⁰ Two new domestic aluminum extrusions plants were announced in 2021 and 2022, including one by a new entrant into the U.S. aluminum extrusions industry.⁹¹

Subject imports were the smallest source of supply in 2021; they accounted for *** percent of apparent U.S. consumption that year, which was *** than in the final years of the periods examined in the original investigations and first reviews.⁹²

Nonsubject imports were the second largest source of supply in 2021, accounting for *** percent of apparent U.S. consumption that year, which was higher than in the final years of the periods examined in the original investigations and first reviews.⁹³ In 2021, Canada was the largest source of nonsubject imports.⁹⁴

*** responding U.S. purchasers reported significant changes in conditions affecting the U.S. supply of aluminum extrusions since January 1, 2016.⁹⁵ *** responding purchasers

⁸⁷ CR/PR at D-3–4. *** reported that *** and *** reported ***. The remaining purchasers *** report significant changes in demand during the period of review. *Id*.

⁸⁸ CR/PR at D-5. *** reported anticipating ***, *** reported anticipating that ***, and *** reported anticipating ***. *Id*.

⁸⁹ Response at Exh. 12; CR/PR at I-22. Since the filing of the petition in 2010, the composition of the AEFTC has changed. Aerolite Extrusion Company, Benada Aluminum of Florida, Inc., and Profile Extrusion Company are no longer members. In early 2017, William L. Bonnell Company, Inc. acquired original petitioning member Futura Industries Corporation. Original petitioning member Frontier Aluminum Corporation changed its name to Merit Aluminum but remains the same corporate entity. Also, as discussed above, Sapa and Hydro merged in 2013 and Hydro has taken Sapa's and Hydro Aluminum North America, Inc.'s place on the AEFTC. CR/PR at I-3.

⁹⁰ CR/PR at Table I-7. The domestic industry's share of apparent U.S. consumption was 75.0 percent in 2010 and 86.3 percent in 2015. *Id*.

⁹¹ CR/PR at Table I-4.

⁹² CR/PR at Table I-7. The share of apparent U.S. consumption held by subject imports was 15.8 percent in 2010 and 0.4 percent in 2015. *Id*.

⁹³ CR/PR at Table I-7. The share of apparent U.S. consumption held by nonsubject imports was 9.2 percent in 2010 and 13.3 percent in 2015. *Id*.

⁹⁴ CR/PR at Table I-6.

⁹⁵ CR/PR at D-3–4. *** reported ***; *** reported ***; and *** reported changes ***. *Id*.

reported that they anticipated changes to the conditions affecting the U.S. supply of aluminum extrusions in the foreseeable future. 96

Substitutability and Other Conditions. AEC argues that domestically produced aluminum extrusions and subject imports remain highly substitutable and that price remains an important factor in purchasing decisions, as the Commission found in the original investigations.⁹⁷ There is no new information on the record of these reviews indicating that the substitutability between the domestic like product and subject imports or the importance of price has changed since the first reviews.⁹⁸ Accordingly, we again find that subject imports and the domestic like product are moderately to highly substitutable, and that price is an important factor in purchasing decisions.

Determinations by U.S. Customs and Border Protection ("CBP") indicate that efforts to circumvent the antidumping and countervailing duty orders have persisted since the first reviews, with multiple firms transshipping subject merchandise through the Dominican Republic and Malaysia during the current period of review.⁹⁹ In 2019, Commerce also determined that aluminum extrusions exported from Vietnam, but produced from aluminum previously extruded in China, were circumventing the orders.¹⁰⁰

Effective September 1, 2019, certain aluminum extrusions from China became subject to an additional 15 percent *ad valorem* duty under Section 301 of the Trade Act of 1974 (19 U.S.C. § 2411) ("Section 301 duties"); the rate was lowered to 7.5 percent in February 2020.¹⁰¹ On March 23, 2018, aluminum extrusions from China became subject to additional 10 percent *ad valorem* duties under Section 232 the Trade Expansion Act of 1962 (19 U.S.C. §1862) ("Section 232 duties"); certain aluminum extrusions were excluded from these additional Section 232 duties through a General Approved Exclusion in December 2020.¹⁰²

⁹⁶ CR/PR at D-5. *** reported that ***; *** reported anticipating ***; *** reported that it ***; and *** reported anticipating that ***. *Id*.

⁹⁷ Response at 14.

⁹⁸ Response at 12.

⁹⁹ CR/PR at Table I-6, note.

¹⁰⁰ Aluminum Extrusions from the People's Republic of China: Final Affirmative Determination of Circumvention of the Antidumping Duty and Countervailing Duty Orders, and Partial Rescission, 84 Fed. Reg. 39805 (Aug. 12, 2019).

 $^{^{101}}$ CR/PR at I-12. The duties applied to imports that entered into the United States under HTS 8-digit subheadings 7604.21.00, 7604.29.10, 7604.29.30, 7604.29.50 and 7608.20.00. *Id*.

¹⁰² CR/PR at I-12. The duties applied to imports that entered into the United States under HTS headings 7604 and 7608. *Id.* U.S. imports of certain aluminum articles originating in Australia, Canada,

C. Likely Volume of Subject Imports

1. The Original Investigations and First Five-Year Reviews

Original Investigations. During the original investigations, the Commission found that the volume of subject imports from China increased from 89,043 short tons in 2008 to 211,705 short tons in 2009 and fell somewhat to 200,192 short tons in 2010; subject imports' share of apparent U.S. consumption increased from 6.7 percent in 2008 to 19.0 percent in 2009 and fell to 15.8 percent in 2010, a level still well above that of 2008. As apparent U.S. consumption declined between 2008 and 2009, subject imports increased their market share mostly at the expense of the domestic industry, which lost 10.5 percentage points of market share compared to 1.8 percentage points lost by nonsubject imports. Although subject imports held a lower market share in 2010 than in 2009, the Commission observed that subject imports *** their 2009 market share gains. The volume of subject imports from China was substantially larger in the first nine months of 2010, before Commerce announced its preliminary countervailing duty determination, than in the first nine months of 2009. The Commission attributed the decline in the volume of subject imports in the final three months of 2010 to the pendency of the investigations. It concluded that the volume of subject imports and the increase in that volume relative to apparent U.S. consumption and production was significant.

First Reviews. In the first reviews, the Commission found that aluminum extrusion production in China consistently exceeded China's consumption between 2013 and 2015, indicating that the subject industry in China had the ability to export significant volumes of subject merchandise to the United States.¹⁰⁹ The Commission also found that the Chinese

and Mexico are exempt from Section 232 duties; imports originating in Argentina are exempt from Section 232 duties within annual quota limits; imports originating in European Union ("EU") member countries are exempt from Section 232 duties subject to tariff rate quotas; and imports from all other countries are subject to 10 percent additional duties. *Id.* at n.28.

¹⁰³ Original Determinations, USITC Pub. 4229 at 20, Table C-1.

¹⁰⁴ Original Determinations, USITC Pub. 4229 at 21, Table C-1.

¹⁰⁵ Original Determinations, USITC Pub. 4229 at 21; Confidential Original Determinations, EDIS Doc. 769883 at 27.

¹⁰⁶ Original Determinations, USITC Pub. 4229 at 21.

¹⁰⁷ Original Determinations, USITC Pub. 4229 at 21.

¹⁰⁸ Original Determinations, USITC Pub. 4229 at 21.

¹⁰⁹ First Reviews Determinations, USITC Pub. 4677 at 42.

industry had an incentive to increase their exports to the United States after revocation. Recognizing the restraining effect of the orders, the Commission observed that subject imports had maintained a presence in the U.S. market at lower levels than in the original investigations. It found that softening demand in China, the high export orientation of the Chinese industry, the existence of trade barriers in third country markets, and the industry's ability to shift exports from one export market to another, provided incentives for the subject industry to increase its exports to the U.S. market after revocation. As further evidence of the continued attractiveness of the U.S. market to Chinese producers, the Commission noted Commerce's 2016 preliminary determination that subject producers had circumvented the orders with "later developed merchandise." In light of the above considerations, and given the demonstrated ability of the subject producers to increase exports to the United States during the original investigations, the Commission found that the likely volume of subject imports from China, both absolutely and relative to U.S. production and consumption, would be significant if the orders were revoked. 113

2. The Current Five-Year Reviews

The record in these reviews shows that subject imports have maintained a presence in the U.S. market during the period of review, albeit at reduced volumes compared to those that prevailed during the original investigations. The volume of subject imports ranged from a low of 2,833 short tons in 2020 to a high of 7,266 short tons in 2016, and was 3,342 short tons in 2021, which was equivalent to *** percent of apparent U.S. consumption that year. In 2021, the volume of subject imports in the U.S. market was lower than in the final year of the periods examined in the original investigations and first reviews.

¹¹⁰ First Reviews Determinations, USITC Pub. 4677 at 42–43.

¹¹¹ First Reviews Determinations, USITC Pub. 4677 at 43.

¹¹² First Reviews Determinations, USITC Pub. 4677 at 44.

¹¹³ First Reviews Determinations, USITC Pub. 4677 at 44.

¹¹⁴ CR/PR at Tables I-6 and I-7. The volume of subject imports was 7,266 short tons in 2016, 6,570 short tons in 2017, 4,268 short tons in 2018, 3,680 short tons in 2019, 2,833 short tons in 2020, and 3,342 short tons in 2021. *Id.* at Table I-6.

short tons in 2015. *Id.* Subject import volume during the current period of review may be understated as CBP determined that imports of aluminum extrusions from China were transshipped through Dominican Republic and Malaysia during the current period of review. CR/PR at Table I-6, note. Commerce also determined that aluminum extrusions exported from Vietnam, produced from

Due to the expedited nature of these reviews, the record contains limited information on the aluminum extrusions industry in China. The information available, however, indicates that subject producers have the ability and incentive to export significant volumes of subject merchandise to the United States if the orders were revoked. In particular, the available information indicates that the subject industry in China remains large. AEC provided a list of 353 possible producers of aluminum extrusions in China. Public information submitted by AEC indicates that the aluminum extrusion industry in China has continued to expand its production capacity since the original investigations, resulting in approximately 61.1 million short tons of production capacity in 2021. As further evidence of the subject industry's increased production capacity, AEC claims that China's primary aluminum capacity, which is primarily used to produce aluminum extrusions according to AEC, has more than doubled since 2010 and is not expected to peak until 2024. In the primary aluminum capacity in the primary aluminum capacity in the primary aluminum capacity.

In addition, while under the disciplining effects of the orders, subject imports maintained a presence in the U.S. market throughout the period of review, indicating that subject producers have retained ready distribution networks and customers in the U.S. market. Furthermore, CBP and Commerce have made determinations that Chinese producers circumvented the orders during the period of review by shipping subject merchandise through third-countries, reflecting the Chinese producers' strong continued interest in serving the U.S. market. The aluminum extrusion industry in China continues to export large volumes of aluminum extrusions under HS subheadings 7604.21, 7604.29, and 7608.20, product categories that include in-scope aluminum extrusions as well as out-of-scope merchandise, and was the world's largest exporter of this merchandise, by far, during each year of the period of review. Moreover, Colombia and the EU maintain antidumping duties, and Australia and Canada maintain antidumping and countervailing duties, on imports of aluminum

aluminum previously extruded in China, are circumventing the orders. *Aluminum Extrusions from the People's Republic of China: Final Affirmative Determination of Circumvention of the Antidumping Duty and Countervailing Duty Orders, and Partial Rescission*, 84 Fed. Reg. 39805 (Aug. 12, 2019).

¹¹⁶ CR/PR at I-29.

¹¹⁷ Response at 17 *citing Basic Data of China's Aluminum Industry in 2021*, Brightstar Aluminum Machinery (2021) (Exh. 3).

¹¹⁸ Response at 18.

¹¹⁹ CR/PR at Table I-6.

¹²⁰ CR/PR at Table I-6, note; *Aluminum Extrusions from the People's Republic of China: Final Affirmative Determination of Circumvention of the Antidumping Duty and Countervailing Duty Orders, and Partial Rescission*, 84 Fed. Reg. 39805 (Aug. 12, 2019).

¹²¹ CR/PR at Table I-9.

extrusions from China, providing a further incentive for subject producers to target exports to the United States if the orders were revoked. 122

Given the significant volume and increasing market share of subject imports during the original investigations, the continued presence of subject imports in the U.S. market during the period of review, the subject industry's substantial production capacity and exports, and the attractiveness of the United States as an export market, we find that the volume of subject imports would likely be significant, both in absolute terms and relative to consumption in the United States, if the orders were revoked.¹²³

D. Likely Price Effects

1. The Original Investigations and First Five-Year Reviews

Original Investigations. In the original investigations, the Commission found that subject imports and the domestic like product were highly substitutable and that price was an important factor in purchasing decisions. ¹²⁴ It found that subject imports pervasively undersold the domestic like product, in 43 of 58 (or 74.1 percent of) quarterly comparisons at margins ranging from 1.6 to 66.1 percent, in order to increase their share of the U.S. market at the domestic industry's expense. ¹²⁵ The Commission also relied on evidence confirming that purchasers shifted \$22.7 million in sales (15.4 million pounds) from the domestic industry to lower-priced subject imports. ¹²⁶ Because pervasive underselling by subject imports allowed them to take market share and sales volume from the domestic industry, the Commission found that subject imports had significant price effects. ¹²⁷

¹²² CR/PR at I-31.

¹²³ We observe that the record in these expedited reviews contains no information concerning inventories of the subject merchandise or the potential for subject producers to shift production from out-of-scope to in-scope merchandise.

Neither AEC nor any responding U.S. purchaser reported that the current Section 301 duties have had an effect on either the supply of or demand for subject imports or that they anticipated such effects in the reasonably foreseeable future. CR/PR at D-3–5.

¹²⁴ Original Determinations, USITC Pub. 4229 at 21.

¹²⁵ Original Determinations, USITC Pub. 4229 at 22. The Commission collected quarterly pricing data on six products. *Id*.

¹²⁶ Original Determinations, USITC Pub. 4229 at 22.

¹²⁷ Original Determinations, USITC Pub. 4229 at 22. The Commission found that there was no clear evidence that underselling by subject imports resulted in suppression or depression of prices for the domestic like product. *Id*.

First Reviews. In the full first reviews, the Commission found that subject imports and the domestic like product were moderately to highly substitutable and that price remained an important factor in purchasing decisions. Although the Commission requested quarterly pricing data and purchase cost data for six products, the only data it received from importers was purchase cost data for one product reported by one importer, showing that such purchase costs were consistently lower by a wide differential than the domestic industry's sales values for the same product. Based on the preceding factors, as well as the likely significant volume of subject imports and the importer and purchaser responses anticipating lower subject import prices in the event of revocation, the Commission found that subject import underselling would likely be significant if the orders were revoked, forcing domestic producers to either cut prices or lose sales. The Commission concluded that in the event of revocation, the likely significant volume of subject imports from China would likely undersell the domestic like product to a significant degree to gain market share and enter the U.S. market at prices that otherwise would have a significant depressing and/or suppressing effect on prices of the domestic like product. 131

2. The Current Five-Year Reviews

As previously discussed in Section III.B.2., we have found that subject imports and the domestic like product are moderately to highly substitutable and that price is an important factor in purchasing decisions.

Due to the expedited nature of these reviews, the record does not contain new product-specific pricing information or purchase cost data. Based on the available information, including the pervasive underselling of the domestic like product by subject imports observed during the original investigations, we find that subject imports are likely to undersell the domestic like product to a significant degree after revocation as a means of gaining market share. In light of the moderate to high degree of substitutability between subject imports and the domestic like product and the importance of price to purchasing decisions, the significant volumes of low-priced subject imports that are likely after revocation would force the domestic industry to either reduce prices or forego necessary price increases to compete with subject imports or lose sales and market share. Accordingly, we find that if the orders were revoked subject imports would likely have significant price effects.

¹²⁸ First Reviews Determinations, USITC Pub. 4677 at 45.

¹²⁹ First Reviews Determinations, USITC Pub. 4677 at 45.

¹³⁰ First Reviews Determinations, USITC Pub. 4677 at 46.

¹³¹ First Reviews Determinations, USITC Pub. 4677 at 46.

E. Likely Impact

1. The Original Investigations and First Five-Year Reviews

Original Investigations. In the original investigations, the Commission found that many of the performance indicators (including capacity, production, capacity utilization, U.S. shipments, and net sales quantities) for the domestic industry producing aluminum extrusions other than FHS declined between 2008 and 2009, during which time the domestic industry lost 10.5 percentage points of market share to subject imports from China. Although these performance indicators improved somewhat between 2009 and 2010, they remained at lower levels in 2010 than in 2008. The domestic industry's employment indicators declined steeply, and its financial performance also was poor during much of this period. The Commission found that subject imports from China increased their market share substantially between 2008 and 2010 by pervasively underselling the domestic like product and had a significant impact on the domestic industry's condition. The commission is significant impact on the domestic industry's condition.

First Reviews. In the full first reviews, the Commission observed that a number of the domestic industry's performance indicators had improved overall since the original investigations, including its production, U.S. shipments, capacity utilization, net sales, market share, and employment.¹³⁶ It found that many of the domestic industry's financial indicators had also improved, although its operating margins remained modest.¹³⁷ The Commission

¹³² Original Determinations, USITC Pub. 4229 at 23, Table C-1.

¹³³ Original Determinations, USITC Pub. 4229 at 23.

¹³⁴ Original Determinations, USITC Pub. 4229 at 23.

other than subject imports so as to not attribute injury from other sources to subject imports. While recognizing that the general economic downturn played a role in the domestic industry's deteriorating performance, the Commission found that the magnitude of the domestic industry's declines exceeded the decline in apparent U.S. consumption. The Commission also considered the role of nonsubject imports, finding that they held a small and declining share of the U.S. market, including in 2009, the worst year for the domestic industry's performance indicators, and were generally priced higher than subject imports and the domestic like product. It concluded that other factors did not sever the causal link between subject imports and the domestic industry's condition. *Id.* at 23–24.

¹³⁶ First Reviews Determinations, USITC Pub. 4677 at 47. The Commission observed that, while the domestic industry's improvements in its output, capacity utilization, U.S. shipments, market share, net sales, and employment reduced its vulnerability, its modest operating performance tended to increase it. *Id.* at 48. It did not, however, render a finding on whether the domestic industry was vulnerable to the recurrence or continuation of injury by subject imports.

¹³⁷ First Reviews Determinations, USITC Pub. 4677 at 48 and n.233.

highlighted reports by domestic producers that imposition of the orders had encouraged investments, expansions, and upgrades by domestic producers and noted that the domestic industry's highest research and development and capital expenditures occurred in 2015. ¹³⁸ Based on its findings from the original investigations, and its findings that a significant volume of low-priced subject imports would likely have adverse price effects on the domestic industry after revocation, the Commission found that, if the orders were revoked, subject imports would likely have an adverse impact on the production, shipments, sales, market share, and revenues of the domestic industry, ¹³⁹ leading to declines in the industry's profitability, employment, and ability to raise capital and maintain necessary capital investments. ¹⁴⁰ Accordingly, the Commission concluded that revocation of the orders would likely have a significant impact on the domestic industry within a reasonably foreseeable time. ¹⁴¹

2. The Current Five-Year Reviews

Due to the expedited nature of these reviews, the record contains limited information on the domestic industry's performance since the first reviews.

The information available indicates that, while the domestic industry's trade metrics have *** since the prior proceedings, its financial performance has generally ***. 142 These data show that, in 2021, the domestic industry's production capacity was *** short tons, its production was *** short tons, and its capacity utilization rate was *** percent. 143 Its U.S. shipments in 2021 totaled *** short tons which had a value of \$***. 144 In 2021, its reported net sales totaled \$***, its COGS totaled \$***, and its operating income totaled \$***, resulting

¹³⁸ First Reviews Determinations, USITC Pub. 4677 at 47–48 and n.232.

¹³⁹ First Reviews Determinations, USITC Pub. 4677 at 48.

¹⁴⁰ First Reviews Determinations, USITC Pub. 4677 at 48.

¹⁴¹ First Reviews Determinations, USITC Pub. 4677 at 48–49. In its non-attribution analysis, the Commission found that, despite the increasing presence of nonsubject imports during the period of review, the domestic industry's performance improved. It also found that the presence of nonsubject imports would not preclude subject imports from taking market share from and having a significant impact on the domestic industry. *Id.* at 49.

¹⁴² See CR/PR at Table I-5.

 $^{^{143}}$ CR/PR at Table I-5. The domestic industry's production capacity was *** in 2021 than in 2010 (1.7 million short tons) and 2015 (1.7 million short tons). Its production was *** in 2021 than in 2010 (1.0 million short tons) but *** than in 2015 (1.4 million short tons). The industry's capacity utilization was *** in 2021 than in 2010 (58.4 percent) and 2015 (80.9 percent). *Id*.

¹⁴⁴ CR/PR at Table I-5. Its quantity of U.S. shipments was *** in 2021 than in 2010 (950,638 short tons) but *** than in 2015 (1.3 million short tons). The value of the domestic industry's U.S. shipments, however, was *** in 2021 than in both 2010 (\$3.6 billion) and 2015 (\$5.3 billion). *Id*.

in an operating income margin of *** percent. This limited information is insufficient for us to make a finding as to whether the domestic industry is vulnerable to the continuation or recurrence of material injury in the event of revocation of the orders.

Based on the information available in these reviews, as explained above we find that revocation of the orders would likely result in significant volumes of subject imports that would undersell the domestic like product to a significant degree. Given the moderate to high degree of substitutability between subject imports and the domestic like product and the importance of price to purchasing decisions, significant volumes of low-priced subject imports would likely cause the domestic industry to either lose sales and market share or cut its prices or forego needed price increases to maintain sales, thereby significantly depressing or suppressing prices for the domestic like product. Accordingly, we find that the likely significant volume of subject imports and their likely price effects would likely have a significant adverse impact on the production, shipments, sales, market share, and revenues of the domestic industry. These declines would, in turn, adversely impact the industry's profitability, employment, and ability to raise capital and maintain capital investments.

We have also considered the role of factors other than subject imports, including the presence of nonsubject imports, so as not to attribute injury from other factors to the subject imports. Although nonsubject imports were the second largest source of aluminum extrusions in the U.S. market in 2021, accounting for *** percent of apparent U.S. consumption that year, the record does not provide any indication that the presence of nonsubject imports would prevent subject imports from entering the U.S. market in significant volumes through significant underselling, and adversely affecting the domestic industry's prices and/or taking market share from the industry after revocation of the orders. He Given that the domestic industry supplied nearly ***, of apparent U.S. consumption in 2021, the moderate to high level of substitutability between subject imports and the domestic like product, and the importance of price to purchasers, we find that the likely increase in low-priced subject imports would come at least in part at the expense of the domestic industry. In light of these considerations, we find that the likely impact of subject imports on the domestic industry would be distinguishable from any impact by nonsubject imports if the orders were revoked.

¹⁴⁵ CR/PR at Table I-5. The domestic industry's net sales, COGS, operating income, and operating income margin were all *** in 2021 than in 2010 (\$3.7 billion, \$3.4 billion, \$79.9 million, and 2.1 percent, respectively) and 2015 (\$5.0 billion, \$4.5 billion, \$236.3 million, and 4.7 percent, respectively). *Id*.

¹⁴⁶ CP/PR at Table I-7.

¹⁴⁷ CR/PR at Table I-7.

Accordingly, we conclude that if the antidumping and countervailing duty orders on aluminum extrusions from China were revoked, subject imports would likely have a significant impact on the domestic industry within a reasonably foreseeable time.

IV. Conclusion

For the above reasons, we determine that revocation of the antidumping and countervailing duty orders on aluminum extrusions from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

Information obtained in these reviews

Background

On March 1, 2022, the U.S. International Trade Commission ("Commission") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"), ¹ that it had instituted reviews to determine whether revocation of the antidumping and countervailing duty orders on aluminum extrusions from China would likely lead to the continuation or recurrence of material injury to a domestic industry. ² All interested parties were requested to respond to this notice by submitting certain information requested by the Commission. ^{3 4} Table I-1 presents information relating to the background and schedule of this proceeding:

Table I-1
Aluminum extrusions: Information relating to the background and schedule of this proceeding

Effective date	Action
March 1, 2022	Notice of initiation by Commerce (87 FR 11416, March 1, 2022)
March 1, 2022	Notice of institution by Commission (87 FR 11470, March 1, 2022)
June 6, 2022	Commission's vote on adequacy
July 7, 2022	Commerce's results of its expedited reviews
October 17, 2022	Commission's determinations and views

² 87 FR 11470, March 1, 2022. In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of five-year reviews of the subject antidumping and countervailing duty orders. 87 FR 11416, March 1, 2022. Pertinent Federal Register notices are referenced in app. A, and may be found at the Commission's website (www.usitc.gov).

¹ 19 U.S.C. 1675(c).

³ As part of their response to the notice of institution, interested parties were requested to provide company-specific information. That information is presented in app. B. Summary data compiled in the original investigations and subsequent full reviews are presented in app. C.

⁴ Interested parties were also requested to provide a list of three to five leading purchasers in the U.S. market for the domestic like product and the subject merchandise. Presented in app. D are the responses received from purchaser surveys transmitted to the purchasers identified in this proceeding.

Responses to the Commission's notice of institution

Individual responses

The Commission received one submission in response to its notice of institution in the subject reviews. It was filed on behalf of the following entities: the Aluminum Extruders Council ("AEC"), a trade association that is comprised of over 60 members that represent the *** of U.S. production of aluminum extrusions;⁵ and the Aluminum Extrusions Fair Trade Committee ("AEFTC"), an ad hoc coalition of six domestic producers of aluminum extrusions, all of which are also members of the AEC.⁶

A complete response to the Commission's notice of institution requires that the responding interested party submit to the Commission all the information listed in the notice. Responding firms are given an opportunity to remedy and explain any deficiencies in their responses. A summary of the number of responses and estimates of coverage for each is shown in table I-2.

Table I-2
Aluminum extrusions: Summary of completed responses to the Commission's notice of institution

Interested party	Туре	Number of firms	Coverage
U.S. trade associations	Domestic	2	***%

Note: The U.S. trade associations' coverage figure presented is the domestic interested parties' estimate of their share of total U.S. shipments of aluminum extrusions during 2021.

Note: The coverage figure for the AEFTC is *** percent, calculated as the quantity of reported U.S. shipments in 2021, (*** short tons) divided by the estimated total U.S. shipments of aluminum extrusions (*** short tons), in the same year. All six AEFTC members provided trade and financial data in response to the notice of institution.

Note: The coverage figure of *** percent is the estimated share of total U.S. shipments of aluminum extrusions in 2021 accounted for by the *** AEC members that provided trade and financial data in the response to the notice of institution. The estimate was calculated as the quantity of reported U.S.

⁵ The AEC is a trade association dedicated to servicing the needs of U.S. aluminum extruders with over 60 members. The following *** members of the AEC that provided data in response to the notice of institution are as follows: ***. Domestic interested parties' supplemental response to the notice of institution, April 25, 2022, p. 2.

⁶ The members of the AEFTC are as follows: Alexandria Extrusion Company; William L. Bonnell Company, Inc.; Extrusion North America at Hydro (Hydro Extrusion USA, LLC); Kaiser Aluminum Corporation; Merit Aluminum Inc.; and Western Extrusions Corporation. All six firms, which are also members of the AEC, provided data in the response to the notice of institution. Domestic interested parties' response to the notice of institution, March 30, 2022, exh. 1, and domestic interested parties' supplemental response to the notice of institution, April 25, 2022, p. 2.

shipments in 2021 totaling (*** short tons) divided by the estimated total U.S. shipments of aluminum extrusions (*** short tons), in the same year.

The coverages for the six members of the AEFTC and the *** of the AEC that provided data are not additive given that the six members that comprise the AEFTC are also members of the AEC. Thus, the coverage figure of *** percent represents the coverage for the *** firms that provided data across both U.S. trade associations.

Party comments on adequacy

The Commission received party comments on the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews from the AEC and the AEFTC. The AEC and the AEFTC request that the Commission conduct expedited reviews of the antidumping and/or countervailing duty orders on aluminum extrusions.⁷

The original investigations and subsequent reviews

The original investigations

The original investigations resulted from petitions filed on March 31, 2010, with Commerce and the Commission by the Aluminum Extrusions Fair Trade Committee ("Committee")⁸ and the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union ("USW").⁹ On April 4, 2011, Commerce determined that imports of aluminum extrusions from China were being sold at less

⁷ Domestic interested parties' comments on adequacy, May 13, 2022, p. 1.

⁸ The original members of the Committee included the following members: Aerolite Extrusion Company; Alexandria Extrusion Company; Benada Aluminum of Florida, Inc.; William L. Bonnell Company, Inc.; Frontier Aluminum Corporation; Futura Industries Corporation; Hydro Aluminum North America, Inc.; Kaiser Aluminum Corporation; Profile Extrusion Company; Sapa Extrusions, Inc.; and Western Extrusions Corporation, which accounted for a significant majority of U.S. production of soft alloy aluminum extrusions. Certain Aluminum Extrusions from China, Inv. Nos. 701-TA-475 and 731-TA-1177 (Final), USITC Publication 4229, May 2011 ("Original publication"), p. I-1.

⁹ Since the filing of the petition in 2010, the composition of the AEFTC has changed. Aerolite, Benada, and Profile are no longer members. In early 2017, Bonnell acquired original petitioning member Futura, and Futura is now a wholly-owned subsidiary of Bonnell. Original petitioning member Frontier changed its name to Merit Aluminum but remains the same corporate entity. Finally, Hydro and Sapa merged in late 2013, and Hydro's extrusion assets were organized under Sapa's ownership in that merger. Since then, Norsk Hydro ASA gained full ownership of Sapa AS, which changed its name to Hydro Extruded Solutions AS and is now a business unit within Norsk Hydro. Accordingly, Extrusion North America at Hydro has taken Hydro and Sapa's original spots on the AEFTC. Domestic interested parties' response to the notice of institution, p. 2.

than fair value ("LTFV") and subsidized by the Government of China. ¹⁰ The Commission determined on May 13, 2011, that the domestic industry was materially injured by reason of LTFV and subsidized imports of aluminum extrusions other than finished heat sinks from China. ¹¹ On May 26, 2011, Commerce issued its antidumping and countervailing duty orders with the final weighted-average dumping margins ranging from 32.79 to 33.28 percent and net subsidy rates ranging from 8.02 to 374.15 percent. ¹²

The first five-year reviews

On July 5, 2016, the Commission determined that it would conduct full reviews of the antidumping and countervailing duty orders on aluminum extrusions from China. On August 5, 2016, Commerce determined that revocation of the antidumping and countervailing duty orders on aluminum extrusions from China would be likely to lead to continuation or recurrence of dumping and subsidization. March 27, 2017, the Commission determined that material injury would be likely to continue or recur within a reasonably foreseeable time. Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective April 25, 2017, Commerce issued a continuation of the antidumping and countervailing duty orders on imports of aluminum extrusions from China.

Previous and related investigations

Aluminum extrusions have not been the subject of any prior related antidumping or countervailing duty investigations in the United States. In 2016, the Commission instituted a section 332 investigation regarding aluminum.¹⁷ On January 17, 2017, the Office of the United

¹⁰ 76 FR 18524 and 76 FR 18521, April 4, 2011.

¹¹ The Commission further determined that an industry in the United States was not materially injured or threatened with material injury, or that the establishment of an industry in the United States was not materially retarded, by reason of imports of finished heat sinks from China. 76 FR 29007, May 19, 2011.

¹² 76 FR 30650 and 76 FR 30653, May 26, 2011.

¹³ 81 FR 45304, July 13, 2016.

¹⁴ 81 FR 51855, August 5, 2016.

¹⁵ 82 FR 15716, March 30, 2017.

¹⁶ 82 FR 19025, April 25, 2017.

¹⁷ Following receipt of a request dated February 24, 2016, from the U.S. House of Representatives, Committee on Ways and Means under section 332(g) of the Tariff Act of 1930 (19 U.S.C. § 1332(g)), the Commission instituted an investigation. Aluminum: Competitive Conditions Affecting the U.S. Industry, Inv. No. 332-557, 81 FR 21591, April 12, 2016. See also Publication 4703, June 2017.

States Trade Representative requested WTO consultations with the government of China regarding overcapacity in its aluminum industry. 18

On April 18, 2016, the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union ("USW") submitted a petition under the Trade Act of 1974 requesting that the Commission conduct a global safeguard investigation on imports of primary unwrought aluminum. On April 22, 2016, the USW withdrew this petition.¹⁹

Commerce's five-year reviews

Commerce announced that it would conduct expedited reviews with respect to the orders on imports of aluminum extrusion from China with the intent of issuing the final results of these reviews based on the facts available not later than June 29, 2022. Commerce publishes its Issues and Decision Memoranda and its final results concurrently, accessible upon publication at http://enforcement.trade.gov/frn/. Issues and Decision Memoranda contain complete and up-to-date information regarding the background and history of the order, including scope rulings, duty absorption, changed circumstances reviews, and anticircumvention, as well as any decisions that may have been pending at the issuance of this report. Any foreign producers/exporters that are not currently subject to the antidumping and/or countervailing duty orders on imports of aluminum extrusions from China are noted in the sections titled "The original investigations" and "U.S. imports," if applicable.

¹⁸ Japan, Canada, Russia, and the European Union, respectively requested to join the consultations in late January of 2017. For more information, see https://www.wto.org/english/tratop e/dispu e/cases e/ds519 e.htm, retrieved April 20, 2022.

¹⁹ Primary Unwrought Aluminum, Inv. No. 201-TA-74. Certain Aluminum Extrusions from China, Inv. Nos. 701-TA-475 and 731-TA-1177 (Review), USITC Publication 4677, March 2017 ("First review publication"), p. I-3.

²⁰ Letter from Alex Villanueva, Senior Director, AD/CVD Operations, Enforcement and Compliance, U.S. Department of Commerce to Nannette Christ, Director of Investigations, April 20, 2022.

The product

Commerce's scope

Commerce has defined the scope as follows:

The merchandise covered by the orders is aluminum extrusions which are shapes and forms, produced by an extrusion process, made from aluminum alloys having metallic elements corresponding to the alloy series designations published by The Aluminum Association commencing with the numbers 1, 3, and 6 (or proprietary equivalents or other certifying body equivalents). Specifically, the subject merchandise made from aluminum alloy with an Aluminum Association series designation commencing with the number 1 contains not less than 99 percent aluminum by weight. The subject merchandise made from aluminum alloy with an Aluminum Association series designation commencing with the number 3 contains manganese as the major alloying element, with manganese accounting for not more than 3.0 percent of total materials by weight. The subject merchandise is made from an aluminum alloy with an Aluminum Association series designation commencing with the number 6 contains magnesium and silicon as the major alloying elements, with magnesium accounting for at least 0.1 percent but not more than 2.0 percent of total materials by weight, and silicon accounting for at least 0.1 percent but not more than 3.0 percent of total materials by weight. The subject aluminum extrusions are properly identified by a fourdigit alloy series without either a decimal point or leading letter. Illustrative examples from among the approximately 160 registered alloys that may characterize the subject merchandise are as follows: 1350, 3003, and 6060.

Aluminum extrusions are produced and imported in a wide variety of shapes and forms, including, but not limited to, hollow profiles, other solid profiles, pipes, tubes, bars, and rods. Aluminum extrusions that are drawn subsequent to extrusion (drawn aluminum) are also included in the scope.

Aluminum extrusions are produced and imported with a variety of finishes (both coatings and surface treatments), and types of fabrication. The types of coatings and treatments applied to subject aluminum extrusions include, but are not limited to, extrusions that are mill finished (i.e., without any coating or further finishing), brushed, buffed, polished, anodized (including brightdip anodized), liquid painted, or powder coated. Aluminum extrusions may also be fabricated, i.e., prepared for assembly. Such operations would include, but are not limited to, extrusions that are cut-to-length, machined, drilled, punched, notched, bent, stretched, knurled, swedged, mitered, chamfered, threaded, and spun. The subject merchandise includes aluminum extrusions that are finished (coated, painted, etc.), fabricated, or any combination thereof. Subject aluminum extrusions may be described at the time of importation as parts for final finished products that are assembled after importation, including, but not limited to, window frames, door frames, solar panels, curtain walls, or furniture. Such parts that otherwise meet the definition of aluminum extrusions are included in the scope. The scope includes the aluminum extrusion components that are attached (e.g., by welding or fasteners) to form subassemblies, i.e., partially assembled merchandise unless imported as part of the finished goods 'kit' defined further below. The scope does not include the non-aluminum extrusion components of subassemblies or subject kits.

Subject extrusions may be identified with reference to their end use, such as fence posts, electrical conduits, door thresholds, carpet trim, or heat sinks (that do not meet the finished heat sink exclusionary language below). Such goods are subject merchandise if they otherwise meet the scope definition, regardless of whether they are ready for use at the time of importation. The following aluminum extrusion products are excluded: Aluminum extrusions made from aluminum alloy with an Aluminum Association series designations commencing with the number 2 and containing in excess of 1.5 percent copper by weight; aluminum extrusions made from aluminum alloy with an Aluminum Association series designation commencing with the number 5 and containing in excess of 1.0 percent magnesium by weight; and aluminum extrusions

made from aluminum alloy with an Aluminum Association series designation commencing with the number 7 and containing in excess of 2.0 percent zinc by weight.

The scope also excludes finished merchandise containing aluminum extrusions as parts that are fully and permanently assembled and completed at the time of entry, such as finished windows with glass, doors with glass or vinyl, picture frames with glass pane and backing material, and solar panels. The scope also excludes finished goods containing aluminum extrusions that are entered unassembled in a "finished goods kit." A finished goods kit is understood to mean a packaged combination of parts that contains, at the time of importation, all of the necessary parts to fully assemble a final finished good and requires no further finishing or fabrication, such as cutting or punching, and is assembled "as is" into a finished product. An imported product will not be considered a "finished goods kit" and therefore excluded from the scope of the investigation merely by including fasteners such as screws, bolts, etc. in the packaging with an aluminum extrusion product.

The scope also excludes aluminum alloy sheet or plates produced by other than the extrusion process, such as aluminum products produced by a method of casting. Cast aluminum products are properly identified by four digits with a decimal point between the third and fourth digit. A letter may also precede the four digits. The following Aluminum Association designations are representative of aluminum alloys for casting: 208.0, 295.0, 308.0, 355.0, C355.0, 356.0, A356.0, A357.0, 360.0, 366.0, 380.0, A380.0, 413.0, 443.0, 514.0, 518.1, and 712.0. The scope also excludes pure, unwrought aluminum in any form.

The scope also excludes collapsible tubular containers composed of metallic elements corresponding to alloy code 1080A as designated by the Aluminum Association where the tubular container (excluding the nozzle) meets each of the following dimensional characteristics: (1) Length of 37 millimeters ("mm") or 62 mm, (2) outer diameter of 11.0 mm or 12.7 mm, and (3) wall thickness not exceeding 0.13 mm.

Also excluded from the scope of these orders are finished heat sinks. Finished heat sinks are fabricated heat sinks made from aluminum extrusions the design and production of which are organized around meeting certain specified thermal performance requirements and which have been fully, albeit not necessarily individually, tested to comply with such requirements.²¹

²¹ 82 FR 19025, April 25, 2017.

U.S. tariff treatment

Aluminum extrusions are currently imported under Harmonized Tariff Schedule of the United States ("HTS") statistical reporting numbers 7604.21.0010, 7604.21.0090, 7604.29.1010, 7604.29.1090, 7604.29.3060, 7604.29.3090, 7604.29.5050, 7604.29.5090, 7608.20.0030 and 7608.20.0090.^{22 23} Commerce also noted that the subject merchandise imported as parts of other aluminum products may be imported under the following additional Chapter 76 subheadings: 7610.10, 7610.90, 7615.19, 7615.20, and 7616.99 as well as other HTS chapters.²⁴ In addition, Commerce noted that fin evaporator coils may be imported under statistical reporting numbers 8418.99.8050 and 8418.99.8060.²⁵ Since the issuance of the orders, imports

²² In its notices issuing the antidumping and countervailing duty orders for the original investigations and the continuation orders for the first reviews, Commerce indicated that subject merchandise is imported under the following provisions of the "HTS": 7604.21.0000, 7604.29.1000, 7604.29.3010, 7604.29.3050, 7604.29.5030, 7604.29.5060, 7608.20.0030, and 7608.20.0090. Effective January 1, 2020, statistical reporting number 7604.21.0000 was annotated to 7604.21.0010 and 7604.21.0090 and statistical reporting number 7604.29.1000 was annotated to 7604.29.1010 and 7604.29.1090. Effective July 1, 2019, HTS statistical reporting numbers 7604.29.3010, 7604.29.3050, 7604.29.5030, and 7604.29.5060 were discontinued, and HTS statistical reporting numbers 7604.29.3030, 7604.29,3060, 7604.29.3090, 7604.29.5020, 7604.29.5050, and 7604.29.5090 were established. See USITC, HTS Change Record 2020. Staff did not include HTS statistical reporting numbers 7604.29.3030 and 7604.29.5020 as provisions under which aluminum extrusions are currently imported because these HTS statistical reporting numbers refer to aluminum containing by weight 7.0 percent or less of copper or 10.0 percent or less of zinc, and/or are designated as series 2xxx or 7xxx (except 7072) in the Aluminum Association's specifications of registered alloys. According to Commerce's scope, the following items are excluded: aluminum extrusions made from aluminum alloy with an Aluminum Association series designations commencing with the number 2 and containing in excess of 1.5 percent copper by weight; aluminum extrusions made from aluminum alloy with an Aluminum Association series designation commencing with the number 5 and containing in excess of 1.0 percent magnesium by weight; and aluminum extrusions made from aluminum alloy with an Aluminum Association series designation commencing with the number 7 and containing in excess of 2.0 percent zinc by weight.

²³ In response to Commission questionnaires in the preliminary phase of the original investigations, U.S. importers indicated that over 90 percent of their imports of subject merchandise fell under HTS subheadings 7604.21, 7604.29, and 7608.20, while approximately 6 percent of their imports of subject merchandise fell under the "secondary HTS" subheadings that were listed in Commerce's scope (i.e., 7610.10, 7610.90, 7615.19, 7615.20, and 7616.99), and the remaining 4 percent of imports came in under "other HTS" subheadings not explicitly identified in Commerce's scope. Further, according to U.S. importers, the secondary and other HTS numbers represent basket categories that include large amounts of nonsubject merchandise but nonetheless do contain some amount of imports of products that match Commerce's scope. Original publication, p. I-8.

²⁴ HTS subheading 7615.19 was discontinued and transferred to 7615.10. Pres. Proc. 8771, 77 FR 413, February 3, 2012.

²⁵ Aluminum Extrusions from the People's Republic of China: Antidumping Duty Order, 76 FR 30650, (continued...)

listed under a number of other HTS provisions have been found to be within Commerce's scope.²⁶ Table I-3 presents the column-1 general duty rates for aluminum extrusions from China by HTS 8-digit subheading in which the product was imported under.

May 26, 2011. Aluminum Extrusions from the People's Republic of China: Countervailing Duty Order, 76 FR 30653, May 26, 2011.

²⁶ In its most recently completed administrative review of the antidumping duty order on aluminum extrusions from China, Commerce indicated that imports of subject merchandise are imported under the following HTS subheadings: 7604.29.3060, 7604.29.3090, 7604.29.5050, 7604.29.5090, 8541.90.00.00, 8708.10.30.50, 8708.99.68.90, 6603.90.8100, 7616.99.51, 8479.89.94, 8481.90.9060, 8481.90.9085, 9031.90.9195, 8424.90.9080, 9405.99.4020, 9031.90.9095, 7616.10.9090, 7609.00.00, 7610.10.00, 7610.90.00, 7615.10.30, 7615.10.71, 7615.10.91, 7615.19.10, 7615.19.30, 7615.19.50, 7615.19.70, 7615.19.90, 7615.20.00, 7616.99.10, 7616.99.50, 8479.89.98, 8479.90.94, 8513.90.20, 9403.10.00, 9403.20.00, 7604.21.0000, 7604.29.1000, 7604.29.3010, 7604.29.3050, 7604.29.5030, 7604.29.5060, 7608.20.0030, 7608.20.0090, 8302.10.3000, 8302.10.6030, 8302.10.6060, 8302.10.6090, 8302.20.0000, 8302.30.3010, 8302.30.3060, 8302.41.3000, 8302.41.6015, 8302.41.6045, 8302.41.6050, 8302.41.6080, 8302.42.3010, 8302.42.3015, 8302.42.3065, 8302.49.6035, 8302.49.6045, 8302.49.6055, 8302.49.6085, 8302.50.0000, 8302.60.9000, 8305.10.0050, 8306.30.0000, 8414.59.6090, 8415.90.8045, 8418.99.8005, 8418.99.8050, 8418.99.8060, 8419.90.1000, 8422.90.0640, 8473.30.2000, 8473.30.5100, 8479.90.8500, 8486.90.0000, 8487.90.0080, 8503.00.9520, 8508.70.0000, 8515.90.2000, 8516.90.5000, 8516.90.8050, 8517.70.0000, 8529.90.7300, 8529.90.9760, 8536.90.8085, 8538.10.0000, 8543.90.8880, 8708.29.5060, 8708.80.6590, 8803.30.0060, 9013.90.5000, 9013.90.9000, 9401.90.5081, 9403.90.1040, 9403.90.1050, 9403.90.1085, 9403.90.2540, 9403.90.2580, 9403.90.4005, 9403.90.4010, 9403.90.4060, 9403.90.5005, 9403.90.5010, 9403.90.5080, 9403.90.6005, 9403.90.6010, 9403.90.6080, 9403.90.7005, 9403.90.7010, 9403.90.7080, 9403.90.8010, 9403.90.8015, 9403.90.8020, 9403.908041, 9403.90.8051, 9403.90.8061, 9506.11.4080, 9506.51.4000, 9506.51.6000, 9506.59.4040, 9506.70.2090, 9506.91.0010, 9506.91.0020, 9506.91.0030, 9506.99.0510, 9506.99.0520, 9506.99.0530, 9506.99.1500, 9506.99.2000, 9506.99.2580, 9506.99.2800, 9506.99.5500, 9506.99.6080, 9507.30.2000, 9507.30.4000, 9507.30.6000, 9507.90.6000, and 9603.90.8050. U.S. Department of Commerce, Issues and Decisions Memorandum for the Final Results of the Antidumping Duty Administrative Review: Aluminum Extrusions from the People's Republic of China; 2019-2020, February 2, 2022.

Table I-3
Aluminum extrusions: Column-1 general duty rates for aluminum extrusions from China by HTS 8-digit subheading

HTS 8-digit subheading	Duty rate
7604.21.00	1.5 percent ad valorem
7604.29.10	5 percent ad valorem
7604.29.30	2.6 percent ad valorem
7604.29.50	3 percent ad valorem
7608.20.00	5.7 percent ad valorem
7610.10.00	5.7 percent ad valorem
7610.90.00	5.7 percent ad valorem
7615.20.00	3.8 percent ad valorem
7616.99.10	"Free"
7616.99.51	2.5 percent ad valorem
8418.99.80	"Free"

Source: Harmonized Tariff Schedule of the United States, 2022 Basic Edition, Revision 4, accessed April 7, 2022.

Effective September 1, 2019, Aluminum extrusions produced in China and imported under HTS 8-digit subheadings 7604.21.00, 7604.29.10, 7604.29.30, 7604.29.50 and 7608.20.00 are subject to additional 7.5 percent ad valorem duties under section 301 of the Trade Act of 1974.²⁷ On March 23, 2018, aluminum extrusions produced in China, imported under HTS headings 7604 and 7608 became subject to additional 10 percent ad valorem duty under section 232 of the Trade Expansion Act of 1962, as amended.²⁸ However, effective December 14, 2020 certain aluminum extrusions have been excluded from additional section 232 duties through a General Approved Exclusion.²⁹ Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

²⁷ Additional 301 tariffs were initially imposed at 15 percent, before being lowered to 7.5 percent in February 2020. See 84 FR 43304, August 20, 2019; 84 FR 45821, August 30, 2019; and 85 FR 3741, January 22, 2020.

²⁸ 83 FR 11619, March 15, 2019. Currently, U.S. imports of certain aluminum articles originating in Australia, Canada, Mexico are exempt from Section 232 duties; imports originating in Argentina are exempt from Section 232 duties within annual quota limits; imports originating in European Union member countries are exempt from Section 232 duties subject to tariff rate quotas; and imports from all other countries are subject to 10 percent additional duties. 83 FR 11619, March 15, 2018; 83 FR 13355, March 28, 2018; 83 FR 25849, June 5, 2018; 84 FR 23983, May 23, 2019; 85 FR 68709, October 27, 2020; 87 FR 1, January 3, 2022.

²⁹ 85 FR 81060, December 14, 2020. See also, Domestic interested parties' response to the notice of institution, March 30, 2022, pp. 14-15.

Description and uses³⁰

The products covered by these reviews, as defined by Commerce are aluminum extrusions. These products are shapes and forms produced via an extrusion process, of aluminum alloys having metallic elements falling within the alloy series designations commencing with the numbers 1, 3, and 6, as published by the Aluminum Association (or proprietary equivalents or other certifying body equivalents). Aluminum extrusions are produced and imported in a wide variety of shapes and forms, including, but not limited to, hollow profiles, other solid profiles, pipes, tubes, bars, and rods. Aluminum extrusions that are subsequently drawn are also included in the scope, as are aluminum extrusions that have been subjected to one or more finishing or fabrication processes, as specified in the scope language. Figures I-1, I-4 and I-5 present examples of some of the aluminum extrusions subject to these reviews. Commerce determined that the aluminum components of the fin evaporator coil systems (or "FECS") presented in Figures I-2 and I-3 are also aluminum extrusions subject to these reviews.

Figure I-1



Note: Images from left to right: extruded aluminum tubing, window profiles, hollow profiles.

Source: Global Metals, "Aluminum Tubing," accessed April 1, 2022. https://www.globalmetals.com/aluminum-tubestubing.html; OkOrder.com, "Aluminum Alloy Profile Extrusion for Windows and Doors Frame," accessed April 1, 2022. https://www.okorder.com/p/aluminum-alloy-profile-extrusion-for-windows-and-doors-frame_563989.html; IndiaMart, "Aluminium Profiles," accessed April 1, 2022. https://www.indiamart.com/global-aluminium/aluminium-profiles.html.

The scope excludes final finished goods containing aluminum extrusions that are imported in finished form, that is, fully and permanently assembled, such as finished window frames, doorframes, picture frames, and solar panels. The scope also excludes unassembled

³⁰ Unless otherwise noted, this information is based on the first review publication, pp. I-20-I-25.

final finished goods containing aluminum extrusions. Additionally, the scope excludes aluminum alloy sheet or plates produced by methods other than the extrusion process; aluminum products produced by the casting method; pure, unwrought aluminum in any form; and aluminum extrusions falling within alloy series designations of the Aluminum Association commencing with the numbers 2, 5, and 7.³¹ Also excluded from the scope are finished heat sinks, in light of the Commission's negative determination in the original investigations.³²

Extrusion is one the most widely used aluminum forming processes. Aluminum is one of the easiest materials to process through an extrusion press due to the relatively low temperatures (600-700 degrees Celsius) at which aluminum extrudes. Manufacturers produce aluminum extrusions from heated aluminum alloy billets forced under pressure through a metal die by a hydraulic extrusion press. The pressure capacity of the extrusion press determines the size of the extrusion it can produce, and the die inserted in the press matches precisely the profile of the shape produced. Common extrusion shapes include bar, rod, pipe, and tube, hollow profiles and solid profiles such as angles, tees, I-beams, H-beams, channels, tracks, rails, mullions, stiles, gutters, and other shapes. After the extrusion process, the aluminum extrusion can be sold as "mill finished," without any further surface treatment or it can be further fabricated, that is, cut-to-length, machined, drilled, punched, notched, bent, stretched, and assembled into a finished product by welding or fastening. Surface finishes for extrusions include mechanical finishes such as brushing, buffing, polishing, sanding, anodizing, and other chemical and paint finishes.³³

Aluminum extrusions have a wide variety of finished goods applications. Major end-use applications for aluminum extrusions as defined by the Aluminum Extruders Council³⁴ include:

- <u>Building and Construction.</u> Windows, doors, railings, high-rise curtainwall, highway and bridge construction, framing members, other various structures;
- <u>Transportation.</u> Automotive (cars, buses, trucks, trailer/van/container vehicles), heavy rail, light rail and other mass transit vehicles, recreational vehicles, aircraft, aerospace, marine; and

³¹ Also known as "hard alloys," these extrusions possess high strength over a wide range of temperatures and are used in aerospace, aircraft, and competitive sporting equipment applications.

³² 76 FR 29007, May 19, 2011.

³³ Anodizing is an electrochemical process that enhances aluminum's natural oxide surface layer by forming an even more durable oxide film that can accept a variety of largely translucent colors. "Bright dipping" is a specialized anodizing process that yields a bright, mirror-like finish.

³⁴ Aluminum Extruders Council (AEC), "Applications," accessed April 1, 2022. https://www.aec.org/page/extrusion-applications.

 Engineered Products. Consumer and commercial products - air conditioners, appliances, furniture, lighting, sports equipment, personal watercraft; electrical power units, heat sinks, coaxial cables, bus bars; machinery and equipment, food displays, refrigeration, medical equipment, display structures, laboratory equipment and apparatus.

While there are a variety of soft alloy extrusions with differences in physical characteristics³⁵ and distinct end uses based on sector and specific end user requirements,³⁶ all subject extrusions share general physical characteristics and a range of tolerances and are all used as inputs (i.e., an intermediate product) in the production of downstream products. In response to the notice of institution of the previous five-year reviews, Crowell & Moring LLP on behalf of Electrolux Home Products, Inc. and Electrolux Home Care Products, Inc. and Drinker Biddle LLP on behalf of Adams Thermal Systems, Inc. suggested that certain subject products may be considered separate domestic like products. These products are: FECS; fittings for engine cooling systems; and kitchen appliance door handles and kitchen appliance trim kits ("kitchen appliance components").

FECS are major components of refrigerators and air-conditioning/HVAC units. Extruded evaporator coils evaporate a recirculating cooling chemical liquid into a gas, which absorbs heat in the process and cools the air that passes over the coil system. Fins attached to the extruded coils improve the efficiency of the cooling system by directing hot air closer to the coils and expanding the surface area of the evaporator system.³⁷ Figures I-2 and I-3 present images of fin evaporator coil systems.

³⁵ Examples of physical characteristics of soft alloy extrusions include different metal strengths (based on the length of the baking process used), appearances (based on the customer's preference of finish), extrusion shapes (as required by the specific purchaser), and specific fabrications (provided for end users).

³⁶ For example, product used for automotive applications may be more "engineered" than commodity type extrusions used as building and construction materials.

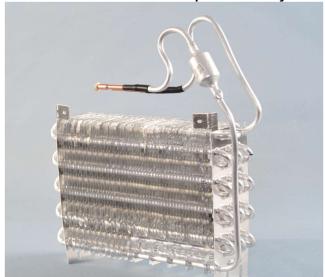
³⁷ Air Experts, "What are Evaporator and Condenser Coils and How Do They Help Cool Your Home?" April 17, 2015, accessed April 1, 2022. https://yourairexperts.com/article/what-are-evaporator-and-condenser-coils-and-how-do-they-help-cool-your-home; Frigidaire, "FAQs," accessed April 1, 2022. https://www.frigidairehvac.com/buyers-guide/hvac-101/faqs/

Figure I-2
Aluminum extrusions: Fin evaporator coil system for HVAC



Source: Goodman Air Conditioning and Heating, "Products," accessed April 1, 2022. https://www.goodmanmfg.com/products/air-handlers-and-coils/coils/cauf-series.

Figure I-3 Aluminum extrusions: Fin evaporator coil systems for refrigeration with copper fittings.



Source: Alibaba, "Aluminum Fin Evaporator for No Frost Refrigerator Heat Exchange System," accessed April 1, 2022. https://www.alibaba.com/product-detail/Aluminum-Fin-Evaporator-for-No-Frost_60624357455.html.

Fittings for engine cooling systems are engine parts used for on- and-off-highway vehicles with properties that allow for leak free and structurally robust flow of oil or refrigerant fluids or mounting of heat exchangers. These fittings include, (1) aluminum fittings for oil coolers; (2) aluminum fittings for condensers; (3) aluminum fittings for radiators; (4) aluminum

plugs for oil coolers; (5) aluminum mounting pins for oil coolers; and (6) aluminum fasteners for oil coolers. Images of examples of these fittings are shown in figures I-4 and I-5.

Figure I-4 Aluminum extrusions: Aluminum fittings for a condenser, oil cooler, and radiator (from left to right)

* * * * * * *

Source: First review publication, p. I-31.

Figure I-5
Aluminum extrusions: Aluminum mounting pin, plug, and fastener for oil cooler (left to right)

* * * * * * *

Source: First review publication, p. I-31.

Kitchen appliance components are aluminum extrusions used as door handles or trim kits for kitchen appliances (i.e., ovens, freezers, and refrigerators). The door handles are brushed and anodized aluminum extrusions with holes drilled to attach the handles to an appliance. Some door handles include plastic injection molded caps at each end. Trim kits consist of an aesthetic frame of extruded 6XXX series alloy aluminum forms for the perimeter of a refrigerator or freezer and a hexagonal wrench and fasteners for installation.

Manufacturing process³⁸

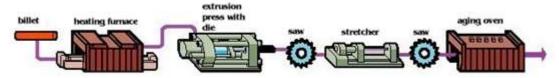
Aluminum extrusions are principally produced from an aluminum billet in a heating furnace that softens the billet to the necessary temperature before extrusion (figure I-6). Under the direct extrusion process, the heated billet enters a hydraulic extrusion press where a ram pushes a dummy block to force the softened metal through a precision opening, or die, to produce the desired shape. As pressure is applied against the die, the billet becomes shorter and wider until its expansion is restricted by full contact with the container walls. As the pressure increases, the softened metal begins to squeeze out through the shaped orifice of the die and emerges as a fully formed profile. Under indirect extrusion, the die is contained within the hollow ram, which moves into the stationary billet forcing the metal to flow into the ram, acquiring the shape of the die as it proceeds. In either process, the aluminum exiting the die acquires the same cross-sectional shape as the die.

After emerging from the die, the extrusion cools, either naturally or through air or water quenching. The following steps usually occur after cooling:

- <u>Stretching</u>. A stretcher and/or straightener may be used to straighten the extrusion and correct any twisting that may have occurred during and after the extrusion process.
- Cutting. The profile is cut in order to reduce it to the specified commercial length.
- Aging. Certain extrusion alloys reach optimal strength through the process of aging, or, age-hardening. The aging process ensures the uniform precipitation of fine particles through the metal, producing an alloy with maximum strength, hardness, and elasticity. Natural aging occurs at room temperature and artificial aging occurs through controlled heating in an aging oven. Non-heat-treatable aluminum alloys, including 3000 series alloys utilizing manganese, are subject to natural aging. Artificial aging, also known as precipitation heat-treating, occurs through controlled heating in an aging oven.

³⁸ Unless otherwise noted, this information is based on the first review publication, pp. I-25-I-28.

Figure I-6
Aluminum extrusions: Aluminum extrusion manufacturing process



Source: Aluminum Extruders Council (AEC), "Aluminum Extrusion Process Basics," https://www.aec.org/page/aluminum-extrusion-process-basics, accessed April 19, 2022.

In the case of drawn aluminum tubing (also included within the scope of these investigations), an extruded hollow shape, after cooling, is subsequently drawn over a mandrel to create a hollow profile and this hollow profile may then be subject to natural aging or artificial age-hardening to improve strength characteristics.

After an extrusion is aged, it is considered a mill-finished product. Mill-finished products can be sold as is, but the extruded profiles are typically further finished (e.g., painted or anodized) or further fabricated (e.g., drilled, cut-to-length, crimped, welded, etc.). As Commerce has explained, the subject aluminum extrusions may undergo one or more of the following finishing and fabricating processes and unless otherwise specifically excluded from the scope of the investigations are considered subject merchandise:

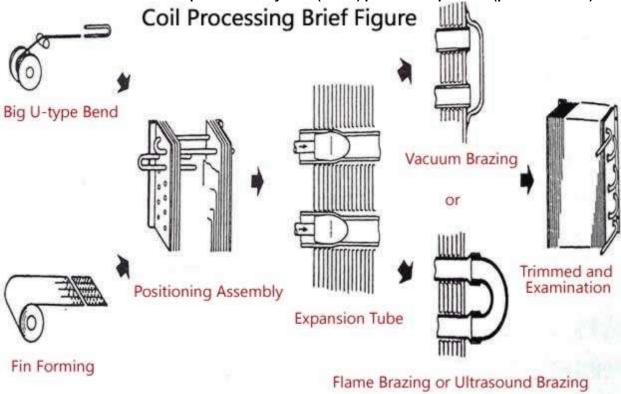
- Mechanical finishes. These processes include buffing and burnishing to achieve a smooth finish, and blasting or scoring to achieve a rough finish. Mechanical finishes are accomplished using specific types of equipment. Other mechanical finishes include sanding, polishing, and tumbling.
- Anodizing. This process involves the use of electrolysis to encourage oxygen ions to combine with aluminum to form a hard aluminum oxide film or seal, thus enhancing the durability and appearance of the profile. Pretreatment steps to the anodizing process may include alkaline cleaning to remove organic contaminants and acid cleaning to remove inorganic contaminants. The extrusion profile is immersed in a tank containing an acid-based electrolyte solution. Electric current is passed through the solution while the temperature is carefully controlled. The electric current releases oxygen ions from the electrolyte solution and draws the ions to the surface of the aluminum profile, which serves as an anode.
- <u>Bright dipping</u>. This is a type of anodizing process. The aluminum extrusion is first polished to remove fine scratches and then submerged typically in a phosphoric acid and nitric acid bath and heated to an elevated temperature. It is then anodized to protect the surface finish and to apply color to the profile.

- Brushed nickel. This describes the finishing process that provides a unique aesthetic appearance to an extrusion (such as extrusions used in shower doors). The extruded profile or aluminum extrusion is run through a mechanical brushing machine that etches specific brush patterns into the face of the extruded surface. A customer normally determines the brush pattern and depth of etching. Brush pads applied to the metal under controlled process pressure and speeds facilitate etching and brushing patterns. The metal is then cleaned and anodized with a "nickel" color to match the customer's color specification.
- Etching. Under chemical etching, the aluminum profile passes through a caustic solution bath, rinses, and then immerses in another bath to dissolve unwanted alloy surface impurities.
- Painting. Both specialty liquid paints and powder coatings may be applied to the aluminum profile. Thermoplastic or thermoset, polymer powder-coatings are applied using an electrostatic gun to impart a positive electric charge to the powder. The powder is accelerated toward and adheres to the negatively charged aluminum profile. After the powder is applied, the profile is baked in an oven where the powder particles are melted to a liquid state, which then fuses with the profile to form a homogeneous surface finish. The surface is then cooled to form a hard coating.
- <u>Fabrication</u>. Fabrication processes generally include machine-tooling operations such as cutting to precision lengths, machining, drilling, hole-punching, notching, bending, and stretching to prepare the profile for its final use.

With respect to FECS, the manufacturing process starts with an aluminum billet extruded into a tube of a designated diameter, wall thickness and length, then shaped into a bent or "hairpin" profile. Next, producers insert the bent tubing into a stack of fins stamped from rolled aluminum sheet. Once inserted into the fins, the bent tubes expand in order to secure thermal contact with the fin. Aluminum or copper u-bends connect the unbent ends of the tubes to each other and the fins through different brazing techniques.³⁹ Figure I-7 presents a diagram of this process.

³⁹ Polestar, "Aluminum Heat Exchanger," https://www.polestarind.com/Aluminium Heat Exchanger.html, accessed April 19, 2022.

Figure I-7
Aluminum extrusions: Fin evaporator coil system (FECS) production process (post extrusion)



Source: Guchen, "Bus Air Conditioning Coil Processing Technology," https://www.guchen.com/company-news/bus-airconditioning-coil-technology.html, accessed April 19, 2022.

The industry in the United States

U.S. producers

During the final phase of the original investigations, the Commission received U.S. producer questionnaires from 54 firms, which accounted for the vast majority of production of aluminum extrusions in the United States during 2010.⁴⁰ During the first five-year reviews, the Commission received U.S. producer questionnaires from 25 firms, which accounted for approximately *** percent of production of aluminum extrusions in the United States during 2015.⁴¹

⁴⁰ Original publication, p. III-1.

⁴¹ Investigation Nos. 701-TA-475 and 731-TA-1177 (Review): Certain Aluminum Extrusions from China, Confidential Report, INV-PP-025, February 23, 2017, as revised in INV-PP-029, March 1, 2017, "First review confidential report," p. III-1.

In response to the Commission's notice of institution in these current reviews, domestic interested parties provided a list of 133 known and currently operating U.S. producers of aluminum extrusions. The *** firms providing U.S. industry data in response to the Commission's notice of institution accounted for approximately *** percent of U.S. shipments of aluminum extrusions in the United States during 2021.⁴²

Recent developments

Since the Commission's last five-year reviews, several developments have occurred in the aluminum extrusions industry. According to the domestic interested parties' response to the notice of institution, the domestic industry has seen decreased supply of subject imports since the imposition of orders following the last five-year reviews. In response to the COVID-19 pandemic, the domestic industry also saw an initial decrease in demand in early 2020, and a subsequent demand increase in late 2020. According to some purchasers, ***. The domestic interested parties claim that nonsubject imports have increased market share in 2020 and 2021. Meanwhile, domestic producer's costs have increased in recent years, which the domestic interested parties' attribute to inflation. In addition to these events, and the events listed in table I-4, two additional events have impacted the industry generally. First, the March 2018 imposition of section 232 duties on U.S. aluminum imports included aluminum extrusions. Section 301 duties on imports from China also included aluminum extrusions.

⁴² Domestic interested parties' response to the notice of institution, March 30, 2022, p. 2 and exh. 16, and domestic interested parties' supplemental response to the notice of institution, April 25, 2022, exh. 2.

⁴³ Domestic interested parties' response to the notice of institution, March 30, 2022, pp. 27.

⁴⁴ See appendix D.

⁴⁵ Domestic interested parties' response to the notice of institution, March 30, 2022, pp. 15, 27.

⁴⁶ Since December 14, 2020, certain aluminum extrusions have been approved for general exclusion from the additional section 232 tariffs. See "Tariff Treatment" for more information on section 232 tariffs.

⁴⁷ See "Tariff Treatment" for more information on section 301 tariffs.

Table I-4 presents events in the U.S. industry since the last five-year reviews.

Table I-4
Aluminum extrusions: Recent developments in the U.S. industry

Item	Firm	Event
Acquisition	Bonnell	In 2017, petitioning firm Bonnell acquired petitioning firm Futura. Futura is now a wholly owned subsidiary of Bonnell.
Price increase	Bonnell	In October 2020, Bonnell announced a price increase of \$0.035 per pound on aluminum extrusions, and an additional 5 percent increase on fabrications and finishing services. The announcement cites continuous cost pressures in freight, labor, and supplies.
Plant opening	Aluminum Insights	In November 2021, Aluminum Insights announced the construction of a new aluminum extrusions facility in Syracuse, Indiana. The \$17.5 million facility was set to open in April 2022.
Plant opening	Bunting Inc.	In April 2022, Bunting Inc. announced it would be joining the aluminum extrusions industry and investing \$17 million in a new aluminum extrusions facility in New Castle, Pennsylvania.

Source: Domestic response to the notice of institution, p. 2; Bonnell Aluminum, "Bonnell Aluminum Announces Price Increase on Aluminum Extrusions, Fabrications, and Finishing Services," October 8, 2020, https://www.bonnellaluminum.com/news-events/bonnell-aluminum-announces-price-increase-on-aluminum-extrusions-fabrications-and-finishing-services/; Greater Fort Wayne Business Weekly, "Start-up Aluminum Company Investing \$17.5M in New Plant, Equipment," November 9, 2021, https://www.fwbusiness.com/fwbusiness/article-a4ee4114-fa78-5d6b-aa34-d490c8642cf8.html; Thomasnet, "Pennsylvania Manufacturer Announces \$17 Million Aluminum Extrusion Mill," April 13, 2022, https://www.thomasnet.com/insights/pennsylvania-manufacturer-announces-17-million-aluminum-extrusion-mill/.

U.S. producers' trade and financial data

The Commission asked domestic interested parties to provide trade and financial data in their response to the notice of institution in the current five-year reviews.⁴⁸ Table I-5 presents a compilation of the trade and financial data submitted from all responding U.S. producers in the original investigations and subsequent five-year reviews.

⁴⁸ Individual company trade and financial data are presented in app. B.

Table I-5
Aluminum extrusions: Trade and financial data submitted by U.S. producers, by period

Quantity in short tons; value in 1,000 dollars; unit value in dollars per short ton; ratio is in percent

Item	Measure	2010	2015	2021
Capacity	Quantity	1,747,124	1,709,753	***
Production	Quantity	1,019,535	1,382,446	***
Capacity utilization	Ratio	58.4	80.9	***
U.S. shipments	Quantity	950,638	1,310,914	***
U.S. shipments	Value	3,557,906	5,276,471	***
U.S. shipments	Unit value	3,743	4,025	***
Net sales	Value	3,726,451	4,977,675	***
COGS	Value	3,374,194	4,465,141	***
COGS to net sales	Ratio	90.5	89.7	***
Gross profit or (loss)	Value	352,257	512,534	***
SG&A expenses	Value	272,407	276,211	***
Operating income or (loss)	Value	79,850	236,323	***
Operating income or (loss) to net sales	Ratio	2.1	4.7	***

Source: For the years 2010 and 2015, data are compiled using data submitted in the Commission's original investigations (table C-1, including finished heat sinks) and first five-year reviews. For the year 2021, data are compiled using data submitted by domestic interested parties. Domestic interested parties' response to the notice of institution, March 30, 2022, exh. 16 and supplemental response to the notice of institution, April 25, 2022, exh. 2.

Note: U.S. production data from the original investigations (2010) include a small number of firms (primarily shower door and finished heat sink manufacturers) that do not extrude aluminum. These firms accounted for less than *** percent of total U.S. production quantity reported in 2010.

Note: For a discussion of data coverage, please see "U.S. producers" section.

Note: Because of rounding, figure may not add to total shown.

Definitions of the domestic like product and domestic industry

The domestic like product is defined as the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the subject merchandise. The domestic industry is defined as the U.S. producers as a whole of the domestic like product, or those producers whose collective output of the domestic like product constitutes a major proportion of the total domestic production of the product. Under the related parties' provision, the Commission may exclude a U.S. producer from the domestic industry for purposes of its injury determination if "appropriate circumstances" exist.⁴⁹

In its original determinations, the Commission found two domestic like products: (1) finished heat sinks and (2) all other aluminum extrusions corresponding to Commerce's scope of the investigations. However, the Commission determined that an industry in the United States was not materially injured or threatened with material injury, or that the establishment of an industry in the United States was not materially retarded, by reason of imports of finished heat sinks from China. Therefore, the antidumping and countervailing duty orders pertain to one domestic like product on which the Commission made affirmative determinations in the original investigations: Aluminum extrusions other than finished heat sinks corresponding to Commerce's scope of the orders. In its full first five-year review determinations, the Commission defined a single domestic like product consisting of the aluminum extrusions corresponding to Commerce's scope. States of the aluminum extrusions corresponding to Commerce's scope.

In its original affirmative final determinations, the Commission found one domestic industry consisting of all domestic producers of certain aluminum extrusions other than finished heat sinks, except for one producer which the Commission excluded as a related party. In its full first five-year review determinations, the Commission defined a single domestic industry as all U.S. producers of the domestic like product.⁵²

⁴⁹ Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B).

⁵⁰ Certain Commissioners in their dissenting views defined a single domestic like product consisting of all aluminum extrusions within the scope and found present material injury with respect to the domestic industry producing that product. Original publication, p. 31.

⁵¹ 87 FR 11470. March 1, 2022.

⁵² Ibid.

U.S. importers

During the final phase of the original investigations, the Commission received U.S. importer questionnaires from 45 firms, which accounted for approximately 93.3 percent of total U.S. imports of aluminum extrusions from China during 2010.⁵³ Import data presented in the original investigations are based on official Commerce statistics.

During the first five-year reviews, the Commission received U.S. importer questionnaires from 16 firms, which accounted for approximately *** percent of total U.S. imports of aluminum extrusions from China during 2015.⁵⁴ Import data presented in the first reviews are based on official Commerce statistics responses.

Although the Commission did not receive responses from any respondent interested parties in these current reviews, in its response to the Commission's notice of institution, the domestic interested parties provided a list of 502 potential U.S. importers of aluminum extrusions.⁵⁵ 56

U.S. imports

Table I-6 presents the quantity, value, and unit value of U.S. imports from China as well as the other top sources of U.S. imports (shown in descending order of 2021 imports by quantity).

⁵³ Original publication, p. IV-1, fn. 2.

⁵⁴ First review confidential report, p. IV-1.

⁵⁵ Domestic interested parties' response to the notice of institution, March 30, 2022, exh. 13.

⁵⁶ The list of possible U.S. importers submitted by domestic interested parties likely overstates the actual number of U.S. importers of aluminum extrusions because it includes numerous freight forwarding and logistics firms. Domestic interested parties' response to the notice of institution, March 30, 2022, exh. 13.

Table I-6
Aluminum extrusions: U.S. imports, by source and period

Quantity in short tons; value in 1.000 dollars; unit value in dollars per short tons

U.S. imports from	Measure	2016	2017	2018	2019	2020	2021
China	Quantity	7,266	6,570	4,268	3,680	2,833	3,342
Canada	Quantity	76,447	87,705	91,217	78,600	85,810	109,501
All other sources	Quantity	137,025	174,895	201,237	166,193	174,983	263,722
Nonsubject sources	Quantity	213,472	262,600	292,454	244,793	260,792	373,223
All import sources	Quantity	220,738	269,170	296,722	248,473	263,625	376,564
China	Value	34,240	33,946	25,516	24,484	19,987	25,267
Canada	Value	306,667	391,025	437,794	357,074	349,396	521,437
All other sources	Value	567,246	725,187	909,811	737,486	708,156	1,136,087
Nonsubject sources	Value	873,914	1,116,213	1,347,605	1,094,559	1,057,552	1,657,524
All import sources	Value	908,153	1,150,158	1,373,121	1,119,043	1,077,540	1,682,791
China	Unit value	4,712	5,167	5,978	6,653	7,056	7,561
Canada	Unit value	4,011	4,458	4,799	4,543	4,072	4,762
All other sources	Unit value	4,140	4,146	4,521	4,438	4,047	4,308
Nonsubject sources	Unit value	4,094	4,251	4,608	4,471	4,055	4,441
All import sources	Unit value	4,114	4,273	4,628	4,504	4,087	4,469

Source: Compiled from official Commerce statistics for HTS statistical reporting numbers 7604.21.0000, 7604.21.0010, 7604.21.0090, 7604.29.1000, 7604.29.1010, 7604.29.1090, 7604.29.3010, 7604.29.3050, 7604.29.3060, 7604.29.3090, 7604.29.5030, 7604.29.5050, 7604.29.5060, 7604.29.5090, 7608.20.0030, 7608.20.0090, accessed April 11, 2022.

Note: Effective July 1, 2019, HTS statistical reporting number 7604.29,3050 was discontinued and replaced with three new HTS statistical reporting numbers: 7604.29,3030, 7604.29.3060, and 7604.29.3090, and HTS statistical reporting number 7604.29.5060 was discontinued and replaced with three new HTS statistical reporting numbers: 7604.29,5020, 7604.29.5050, and 7604.29.5090. As mentioned in footnote 22, staff do not believe that in-scope merchandise is imported under the newly established HTS statistical reporting numbers 7604.29.3030 and 7604.29.5020, and thus, are not included in table I-6. By quantity, products imported under these two HTS categories accounted for between 1.0 percent (in 2021) and 2.0 percent (in 2020) of total U.S. imports, and for between 3.6 percent (in 2019) and 4.5 percent (in 2020) of U.S. imports from China during 2019-21 imported under all HTS statistical reporting numbers (i.e., the HTS numbers included in table I-6 plus the two excluded HTS statistical reporting numbers).

Note: U.S. imports of aluminum extrusions from China are likely understated based on Customs and Border Protection (CBP) determinations made during the current period of review (2016-21) that imports of Chinese-origin aluminum extrusions had been transshipped through the Dominican Republic and Malaysia and duties evaded. For more information, see EAPA Case No.7227: Sun Bright International Corporation and Fair Importing Corporation, (Determination as to Evasion, December 11, 2018); EAPA Case No.7251: Worldwide Door Components, Inc, (Determination as to Evasion, September 18, 2019); EAPA Case No. 7348: Florida Aluminum Extrusion, LLC, Hialeah Aluminum Supply, Inc.; Global Aluminum Distributor, LLC.(Determination as to Evasion, November 2, 2020); EAPA Case No. 7550: Kingtom Aluminio SRL (Determination as to Evasion, February 5, 2022).

Note: Because of rounding, figure may not add to total shown.

Apparent U.S. consumption and market shares

Table I-7 presents data on U.S. producers' U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares.

Table I-7
Aluminum extrusions: Apparent U.S. consumption and market shares, by source and period

Quantity in short tons; value in 1,000 dollars; shares in percent

Source	Measure	2010	2015	2021
U.S. producers	Quantity	950,638	1,310,914	***
China	Quantity	200,192	6,127	3,342
Canada	Quantity	69,802	81,988	109,501
All other sources	Quantity	46,819	120,657	263,722
Nonsubject	Quantity	116,621	202,645	373,223
All import sources	Quantity	316,814	208,772	376,564
Apparent U.S. consumption	Quantity	1,267,452	1,519,686	***
U.S. producers	Value	3,557,906	5,276,471	***
China	Value	537,498	31,100	25,267
Canada	Value	255,930	323,637	521,437
All other sources	Value	255,052	544,883	1,136,087
Nonsubject	Value	510,982	868,520	1,657,524
All import sources	Value	1,048,479	899,619	1,682,791
Apparent U.S. consumption	Value	4,606,386	6,176,090	***
U.S. producers	Share of quantity	75.0	86.3	***
China	Share of quantity	15.8	0.4	***
Canada	Share of quantity	5.5	5.4	***
All other sources	Share of quantity	3.7	7.9	***
Nonsubject	Share of quantity	9.2	13.3	***
All import sources	Share of quantity	25.0	13.7	***
U.S. producers	Share of value	77.2	85.4	***
China	Share of value	11.7	0.5	***
Canada	Share of value	5.6	5.2	***
All other sources	Share of value	5.5	8.8	***
Nonsubject	Share of value	11.1	14.1	***
All import sources	Share of value	22.8	14.6	***

Source: For the years 2010 and 2015, U.S. producers' U.S. shipments are compiled using data submitted in the Commission's original investigations (table C-1, including finished heat sinks) and first five-year reviews, and import data are from official Commerce statistics (supplemented by questionnaire data in the original investigation). For the year 2021, U.S. producers' U.S. shipments are compiled from the domestic interested parties' response to the Commission's notice of institution and U.S. imports are compiled using official Commerce statistics under HTS statistical reporting numbers 7604.21.0000, 7604.21.0010, 7604.29.1000, 7604.29.1010, 7604.29.1090, 7604.29.3010, 7604.29.3050, 7604.29.3060, 7604.29.5030, 7604.29.5030, 7604.29.5050, 7604.29.5060, 7604.29.5090, 7608.20.0030, 7608.20.0090, accessed April 11, 2022.

Note: Share of quantity is the share of apparent U.S. consumption by quantity in percent; share of value is the share of apparent U.S. consumption by value in percent.

Note: Imports' share of apparent U.S. consumption is derived from U.S. imports, while U.S. producers' share is derived from U.S. shipments.

Note: For a discussion of data coverage, please see "U.S. producers" and "U.S. importers" sections.

The industry in China

During the final phase of the original investigations, the Commission received foreign producer/exporter questionnaires from eight firms, which accounted for approximately 6 percent of U.S. imports of aluminum extrusions from China during 2010.⁵⁷ During the first five-year reviews, the Commission received foreign producer/exporter questionnaires from two firms, which accounted for less than *** percent of production of aluminum extrusions in China during 2015.⁵⁸

Although the Commission did not receive responses from any respondent interested parties in these five-year reviews, the domestic interested parties provided a list of 353 possible producers of aluminum extrusions in China.⁵⁹

⁵⁷ Original publication, pp. I-3 and VII-2.

⁵⁸ First review confidential report, p. I-5. The two foreign producers collectively reported *** short tons compared to *** estimate of *** million short tons of aluminum extrusions produced in China during 2015. Ibid.

⁵⁹ Domestic interested parties' response to the notice of institution, March 30, 2022, exh. 14.

According to the domestic interested parties' response to the notice of institution, between 2011 and 2021, China's global exports have increased by *** percent.⁶⁰ Table I-8 presents events in the Chinese industry since the last five-year reviews.

Table I-8

Item	Firm	Event
Acquisition	China	In September 2017, China Zhongwang acquired ALUnna, an aluminum
	Zhongwang	extrusion producer based in Germany.
Market entry	Kingtom	In April 2018, Kingtom Aluminio SRL, a Chinese-owned aluminum extrusion
	Aluminio	producer, opened a plant in the Dominican Republic.

Source: Zhongwang Group, "China Zhongwang Acquires ALUnna First Overseas Acquisition to Strengthen Foothold Globally," September 13, 2017, http://en.zhongwang.com/news/new-detail-11903.htm; EFE, "D.R. Welcomes its First Chinese-Owned Company," April 11, 2018, https://www.efe.com/efe/english/business/d-r-welcomes-its-first-chinese-owned-company/50000265-3579995.

Table I-9 presents export data for aluminum extrusions and out-of-scope products from China (by export destination in descending order of quantity for 2021).

Table I-9
Aluminum extrusions: Quantity of exports from China, by destination and period

Quantity in short tons

Destination market	2016	2017	2018	2019	2020	2021
Vietnam	563,808	78,069	113,446	140,859	90,616	79,717
Philippines	48,328	52,244	58,848	65,406	56,449	75,933
Nigeria	27,539	38,245	38,281	47,948	46,815	65,650
Australia	45,626	58,561	65,026	60,288	52,919	61,211
Thailand	19,207	23,222	25,035	35,519	41,455	54,849
Mexico	22,459	25,214	35,727	36,835	39,725	50,228
South Africa	36,619	42,383	40,182	44,078	45,321	50,118
Malaysia	29,992	30,885	47,748	43,261	32,557	46,523
United Kingdom	42,818	53,999	56,532	54,394	36,031	45,215
Israel	28,900	29,666	31,968	34,855	36,923	39,399
All other markets	555,681	589,929	664,146	703,342	611,466	610,595
All markets	1,420,976	1,022,417	1,176,940	1,266,784	1,090,276	1,179,436

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

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheadings 7604.21, 7604.29, 7608.20. Accessed April 12, 2022. These data may be overstated as HS subheading 7604.29 contains products outside the scope of these reviews.

⁶⁰ Domestic interested parties' response to the notice of institution, March 30, 2022, p. 20.

Third-country trade actions

In May 2017, the European Union set antidumping duties between 21.2 percent and 31.2 percent on aluminum extrusions from China.⁶¹ In October 2017, Columbia extended antidumping duty orders on aluminum extrusions from China and Venezuela.⁶² In August 2019, Canada continued antidumping and countervailing duty orders on certain aluminum extrusions from China.⁶³ In February 2020, Australia also continued antidumping and countervailing duty orders on aluminum extrusions from China.⁶⁴

The global market

Table I-10 presents global export data for aluminum extrusions and some out-of-scope products (by source in descending order of quantity for 2021). China, representing 22.8 percent of global export volumes in 2021, is the largest global exporter, with exports of nearly 1.2 million short tons. The next four leading exporters in 2021, by volume, were Turkey, Germany, Spain, and Italy. Paired with China, these five countries represented 53.0 percent of global export volume in 2021.

⁶¹ Domestic response to the notice of institution, exh. 10D.

⁶² Domestic response to the notice of institution, exh. 10C.

⁶³ Domestic response to the notice of institution, exh. 10A.

⁶⁴ Domestic response to the notice of institution, exh. 10B.

Table I-10
Aluminum extrusions: Quantity of global exports by country and period

Quantity in short tons

Exporting country	2016	2017	2018	2019	2020	2021
China	1,420,976	1,022,417	1,176,940	1,266,784	1,090,276	1,179,436
Turkey	166,521	185,905	225,507	263,566	309,691	458,977
Germany	327,183	364,550	382,889	368,072	353,963	432,711
Spain	217,736	248,901	281,456	282,374	271,779	383,338
Italy	212,085	242,321	258,313	250,998	227,694	283,968
United States	627,055	205,755	231,255	220,424	178,919	200,641
Belgium	143,328	144,852	165,180	159,201	159,507	182,066
Austria	147,356	158,869	158,576	150,726	139,769	163,141
Poland	94,073	96,483	105,846	112,977	126,252	147,595
Greece	82,485	85,379	99,172	104,425	115,366	125,642
All other exporters	4,241,014	1,796,667	1,846,065	1,671,702	1,506,263	1,604,954
All exporters	7,679,813	4,552,101	4,931,199	4,851,250	4,479,481	5,162,470

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheadings 7604.21, 7604.29, and 7608.20. These data may be overstated as HS subheadings 7604.29 may contain products outside the scope of this/these reviews.

Note: Because of rounding, figures may not add to total shown.

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
87 FR 11416	Initiation of Five-Year (Sunset)	https://www.govinfo.gov/content/pkg/FR-
March 1, 2022	Reviews	2022-03-01/pdf/2022-04283.pdf
87 FR 11470	Aluminum Extrusions From China;	https://www.govinfo.gov/content/pkg/FR-
March 1, 2022	Institution of Five-Year Reviews	2022-03-01/pdf/2022-04195.pdf

APPENDIX B COMPANY-SPECIFIC DATA

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APPENDIX C SUMMARY DATA COMPILED IN PRIOR PROCEEDINGS

Table C-1

Aluminum extrusions: Summary data concerning the U.S. market, 2013-15, January to September 2015, and January to September 2016

(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent—exceptions noted)

_		Calendar year	Reported data	January to Se	entember .		Period ch Calendar year	anges	Jan-Sept
	2013	2014	2015	2015	2016	2013-15	2013-14	2014-15	2015-16
U.S. consumption quantity:									
Amount	1,303,457	1,427,417	1,519,686	1,159,593	1,180,459	16.6	9.5	6.5	1.8
Producers' share (fn1) Importers' share (fn1):	87.5	86.7	86.3	86.5	86.0	(1.2)	(8.0)	(0.5)	(0.5)
China	0.8	0.8	0.4	0.4	0.5	(0.4)	0.0	(0.4)	0.0
Canada	5.4	5.4	5.4	5.3	4.9	0.0	0.1	(0.1)	(0.4)
All others sources	6.4	7.1	7.9	7.8	8.7	1.6	0.7	0.9	0.9
Nonsubject sources	11.8	12.5	13.3	13.1	13.6	1.6	0.7	0.8	0.5
All import sources	12.5	13.3	13.7	13.5	14.0	1.2	0.8	0.5	0.5
U.S. consumption value:	5,277,626	5,858,787	6,176,090	4,787,336	4,516,004	17.0	11.0	5.4	/E 7
Amount Producers' share (fn1)	86.4	86.0	85.4	4,767,330 85.7	84.9	(1.0)	(0.4)	(0.5)	(5.7) (0.7)
Importers' share (fn1):	00.1	00.0	00.1	00.7	01.0	(1.0)	(0.1)	(0.0)	(0
China	0.8	0.9	0.5	0.5	0.6	(0.3)	0.1	(0.4)	0.1
Canada	5.0	5.1	5.2	5.2	5.1	0.2	0.1	0.1	(0.1
All others sources	7.8	8.1	8.8	8.6	9.4	1.1	0.3	0.8	0.8
Nonsubject sources	12.8 13.6	13.2 14.0	14.1 14.6	13.8 14.3	14.5 15.1	1.3 1.0	0.4 0.4	0.9 0.5	0.7 0.7
All import sources	13.0	14.0	14.0	14.3	15.1	1.0	0.4	0.5	0.7
U.S. imports from (fn3):									
China:									
Quantity	9,824	11,068	6,127	4,772	5,343	(37.6)	12.7	(44.6)	12.0
Value	41,709 \$4,246	50,196 \$4,535	31,100 \$5,076	24,988 \$5,236	25,958	(25.4) 19.5	20.3 6.8	(38.0)	3.9
Unit value Ending inventory quantity	φ4,∠40 ***	\$4,035 ***	\$5,U/O ***	\$5,236	\$4,858 ***	19.5	6.8	11.9	(7.2)
Canada									
Quantity	70,139	77,739	81,988	61,720	57,739	16.9	10.8	5.5	(6.4)
Value	264,977	299,590	323,637	247,876	229,906	22.1	13.1	8.0	(7.2
Unit value	\$3,778	\$3,854	\$3,947	\$4,016	\$3,982	4.5	2.0	2.4	(0.9
All other sources:									
Quantity	83,241	100,861	120,657	90,414	102,575	44.9	21.2	19.6	13.5
Value	409,931	471,812	544,883	412,576	424,129	32.9	15.1	15.5	2.8
Unit value Nonsubject sources:	\$4,925	\$4,678	\$4,516	\$4,563	\$4,135	(8.3)	(5.0)	(3.5)	(9.4)
Quantity	153,379	178,600	202,645	152,134	160,314	32.1	16.4	13.5	5.4
Value	674.908	771,402	868,520	660,452	654,035	28.7	14.3	12.6	(1.0)
Unit value	\$4,400	\$4,319	\$4,286	\$4,341	\$4,080	(2.6)	(1.8)	(0.8)	(6.0
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity	163,203	189,667	208,772	156,906	165,658	27.9	16.2	10.1	5.6
Value	716,617	821,598	899,619	685,441	679,993	25.5	14.6	9.5	(0.8)
Unit value	\$4,391	\$4,332	\$4,309	\$4,368	\$4,105	(1.9)	(1.3)	(0.5)	(6.0)
Ending inventory quantity									
Average capacity quantity	1,631,243	1,682,077	1,709,753	1,288,358	1,332,941	4.8	3.1	1.6	3.5
Production quantity	1,220,407	1,326,825	1,382,446	1,054,863	1,074,316	13.3	8.7	4.2	1.8
Capacity utilization (fn1)	74.8	78.9	80.9	81.9	80.6	6.0	4.1	2.0	(1.3)
U.S. shipments:									
Quantity	1,140,254	1,237,750	1,310,914	1,002,687	1,014,801	15.0	8.6	5.9	1.2
Value	4,561,009	5,037,189	5,276,471	4,101,895	3,836,011	15.7	10.4	4.8	(6.5)
Unit value Export shipments:	\$4,000	\$4,070	\$4,025	\$4,091	\$3,780	0.6	1.7	(1.1)	(7.6)
Quantity	68,551	69,224	66,309	51,439	53,411	(3.3)	1.0	(4.2)	3.8
Value	258,585	265,767	259,652	207,069	188,343	0.4	2.8	(2.3)	(9.0
Unit value	\$3,772	\$3,839	\$3,916	\$4,026	\$3,526	3.8	1.8	2.0	(12.4
Ending inventory quantity	63,623	77,151	73,510	72,485	76,307	15.5	21.3	(4.7)	5.3
Inventories/total shipments (fn1)	5.3	5.9	5.3	5.2	5.4	0.1	0.6	(0.6)	0.2
Production workers	13,677	14,526	15,201	15,248	16,057	11.1	6.2	4.6	5.3
Hours worked (1,000s)	27,764	29,938	31,573	24,095	25,566	13.7	7.8	5.5	6.1
Wages paid (\$1,000)	604,558 \$21.77	665,284 \$22.22	725,044 \$22.96	543,604 \$22.56	578,822 \$22.64	19.9 5.5	10.0 2.1	9.0 3.3	6.5 0.4
Hourly wages (dollars) Productivity (short tons per 1,000 hours)	44.0	44.3	43.8	\$22.56 43.8	\$22.64 42.0	(0.4)	0.8	3.3 (1.2)	(4.0)
Unit labor costs	\$495.37	\$501.41	\$524.46	\$515.33	\$538.78	5.9	1.2	4.6	4.6
Net sales:	*	*******	**	***************************************	*******				
Quantity	1,155,666	1,251,874	1,319,322	1,014,705	1,024,773	14.2	8.3	5.4	1.0
Value	4,299,437	4,762,885	4,977,675	3,900,072	3,575,975	15.8	10.8	4.5	(8.3)
Unit value	\$3,720	\$3,805	\$3,773	\$3,844	\$3,490	1.4	2.3	(0.8)	(9.2
Cost of goods sold (COGS)	3,872,102	4,300,544	4,465,141	3,472,763	3,170,276	15.3	11.1	3.8	(8.7
Gross profit or (loss)	427,335 245,369	462,341 275,379	512,534 276,211	427,309 202,722	405,699 208,812	19.9 12.6	8.2 12.2	10.9 0.3	(5.1) 3.0
Operating income or (loss)	181,966	186,962	236,323	224,587	196,887	29.9	2.7	26.4	(12.3)
Net income or (loss)	151,540	153,665	203,215	202,210	172,587	34.1	1.4	32.2	(14.6)
Capital expenditures	124,171	124,028	174,557	112,127	97,554	40.6	(0.1)	40.7	(13.0
Unit COGS	\$3,351	\$3,435	\$3,384	\$3,422	\$3,094	1.0	2.5	(1.5)	(9.6
Unit SG&A expenses	\$212	\$220	\$209	\$200	\$204	(1.4)	3.6	(4.8)	2.0
Unit operating income or (loss)	\$157	\$149	\$179	\$221	\$192	13.8	(5.2)	19.9	(13.2)
Unit net income or (loss)	\$131	\$123	\$154	\$199	\$168	17.5	(6.4)	25.5	(15.5)
COGS/sales (fn1)	90.1	90.3	89.7	89.0	88.7	(0.4)	0.2	(0.6)	(0.4)
Operating income or (loss)/sales (fn1) Net income or (loss)/sales (fn1)	4.2 3.5	3.9	4.7	5.8	5.5	0.5 0.6	(0.3)	0.8	(0.3)
	3.5	3.2	4.1	5.2	4.8	U.6	(0.3)	0.9	(0.4)

Source: Compiled from data submitted in response to Commission questionnaires and official import statistics using HTS statistical reporting numbers 7604.21.0000, 7604.29.1000, 7604.29.3010, 7604.29.3050, 7604.29.5030, 7604.29.5060, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.00300, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.0030, 7608.20.00300, 7608.20.0030, 7608.20.0030, 7608.20.00300, 7608.20.00300, 760

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined or not meaningful.
fn3.--Imports are likely slightly understated because they may not include all fin evaporator coil systems or fittings for engine cooling systems.

Table C-1 Aluminum extrusions: Summary data concerning the U.S. market, 2008-10

(Quantity=short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per short ton; period changes=percent, except where noted)

-		Reported data		Period changes		
Item	2008	2009	2010	2008-10	2008-09	2009-10
U.S. consumption quantity:						
Amount	1,329,528	1,116,235	1,267,452	-4.7	-16.0	13.5
Producers' share (1)	83.7	73.1	75.0	-8.7	-10.5	1.9
Importers' share (1):						
China	6.7	19.0	15.8	9.1	12.3	-3.2
Canada	6.0	5.2	5.5	-0.5	-0.8	0.3
All other sources	3.6	2.7	3.7	0.1	-1.0	1.0
Total imports	16.3	26.9	25.0	8.7	10.5	-1.9
U.S. consumption value:						
Amount	5,706,626	3,796,295	4,606,386	-19.3	-33.5	21.3
Producers' share (1)	83.1	76.1	77.2	-5.8	-7.0	1.1
Importers' share (1):						
China	5.9	14.4	11.7	5.8	8.6	-2.8
Canada	5.8	5.3	5.6	-0.3	-0.5	0.2
All other sources	5.2	4.1	5.5	0.3	-1.1	1.4
Total imports	16.9	23.9	22.8	5.8	7.0	-1.1
U.S. imports from:						
China:						
Quantity	89,043	211,705	200,192	124.8	137.8	-5.4
Value	335,530	547,968	537,498	60.2	63.3	-1.9
Unit value	\$3,768	\$2,588	\$2,685	-28.7	-31.3	3.7
Ending inventory quantity	***	***	***	***	***	***
Canada:						
Quantity	79,885	58,457	69,802	-12.6	-26.8	19.4
Value	333,234	201,876	255,930	-23.2	-39.4	26.8
Unit value	\$4,171	\$3,453	\$3,666	-12.1	-17.2	6.2
Ending inventory quantity	***	***	***	***	***	***
All other sources:						
Quantity	48,283	29,625	46,819	-3.0	-38.6	58.0
Value	297,272	157,506	255,052	-14.2	-47.0	61.9
Unit value	\$6,157	\$5,317	\$5,448	-11.5	-13.6	2.5
Ending inventory quantity	***	***	***	***	***	***
All sources:						
Quantity	217,212	299,788	316,814	45.9	38.0	5.7
Value	966,036	907,350	1,048,479	8.5	-6.1	15.6
Unit value	\$4,447	\$3,027	\$3,309	-25.6	-31.9	9.3
Ending inventory quantity	***	***	***	***	***	***

Table continued on next page.

Table C-1--Continued Aluminum extrusions: Summary data concerning the U.S. market, 2008-10

(Quantity=short tons, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per short ton; period changes=percent, except where noted)

		Reported data	Acept where h	Period changes		
Item	2008	2009	2010	2008-10	2008-09	2009-10
U.S. producers':						
Average capacity quantity	1,802,365	1,725,729	1,747,124	-3.1	-4.3	1.2
Production quantity	1,167,286	848,569	1,019,535	-12.7	-27.3	20.1
Capacity utilization (1)	64.8	49.2	58.4	-6.4	-15.6	9.2
U.S. shipments:						
Quantity	1,112,316	816,447	950,638	-14.5	-26.6	16.4
Value	4,740,590	2,888,945	3,557,906	-24.9	-39.1	23.2
Unit value	\$4,262	\$3,538	\$3,743	-12.2	-17.0	5.8
Export shipments:						
Quantity	36,965	30,493	40,052	8.4	-17.5	31.3
Value	142,483	109,350	156,376	9.8	-23.3	43.0
Unit value	\$3,855	\$3,586	\$3,904	1.3	-7.0	8.9
Ending inventory quantity	48,689	39,224	51,059	4.9	-19.4	30.2
Inventories/total shipments (1).	4.2	4.6	5.2	0.9	0.4	0.5
Production workers	12,217	9,793	9,703	-20.6	-19.8	-0.9
Hours worked (1,000s)	25,740	20,085	20,371	-20.9	-22.0	1.4
Wages paid (\$1,000s)	494,207	384,143	403,442	-18.4	-22.3	5.0
Hourly wages	\$19.20	\$19.12	\$19.81	3.2	-0.4	3.6
Productivity (tons/1,000 hours).	45.7	42.5	50.3	10.2	-7.0	18.4
Unit labor costs	\$421.10	\$450.37	\$394.05	-6.4	7.0	-12.5
Net sales:						
Quantity	1,134,788	824,773	955,696	-15.8	-27.3	15.9
Value	5,120,665	2,955,826	3,726,451	-27.2	-42.3	26.1
Unit value	\$4,512	\$3,584	\$3,899	-13.6	-20.6	8.8
Cost of goods sold (COGS)	4,834,600	2,757,457	3,374,194	-30.2	-43.0	22.4
Gross profit or (loss)	286,065	198,370	352,257	23.1	-30.7	77.6
SG&A expenses	318,188	277,171	272,407	-14.4	-12.9	-1.7
Operating income or (loss)	(32,123)	(78,802)	79,850	(2)	-145.3	(2)
Capital expenditures	187,452	111,313	100,812	-46.2	-40.6	-9.4
Unit COGS	\$4,260	\$3,343	\$3,531	-17.1	-21.5	5.6
Unit SG&A expenses	\$280	\$336	\$285	1.7	19.9	-15.2
Unit operating income or (loss).	(\$28)	(\$96)	\$84	(2)	-237.5	(2)
COGS/sales (1)	94.4	93.3	90.5	-3.9	-1.1	-2.7
sales (1)	(0.6)	(2.7)	2.1	2.8	-2.0	4.8

^{(1) &}quot;Reported data" are in percent and "period changes" are in percentage points.

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

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

⁽²⁾ Undefined.

APPENDIX D

PURCHASER QUESTIONNAIRE RESPONSES

As part of their response to the notice of institution, interested parties were asked to provide a list of three to five leading purchasers in the U.S. market for the domestic like product. A response was received from domestic interested parties and it provided emails for the following 49 firms as top purchasers of aluminum extrusions: ***. Purchaser questionnaires were sent to these 49 firms and eleven firms (***) provided responses, which are presented below.

1. Have there been any significant changes in the supply and demand conditions for aluminum extrusions that have occurred in the United States or in the market for aluminum extrusions in China since January 1, 2016?

Purchaser	Yes / No	Changes that have occurred
***	***	***
***	***	***
***	***	***
***	***	***
Purchaser	Yes / No	Changes that have occurred
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***

2. Do you anticipate any significant changes in the supply and demand conditions for aluminum extrusions in the United States or in the market for aluminum extrusions in China within a reasonably foreseeable time?

Purchaser	Yes / No	Anticipated changes
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***
***	***	***