Grain-Oriented Silicon Electrical Steel From Italy and Japan

Investigation No. 701-TA-355 (Preliminary) and
Investigations Nos. 731-TA-659 and 660 (Preliminary)

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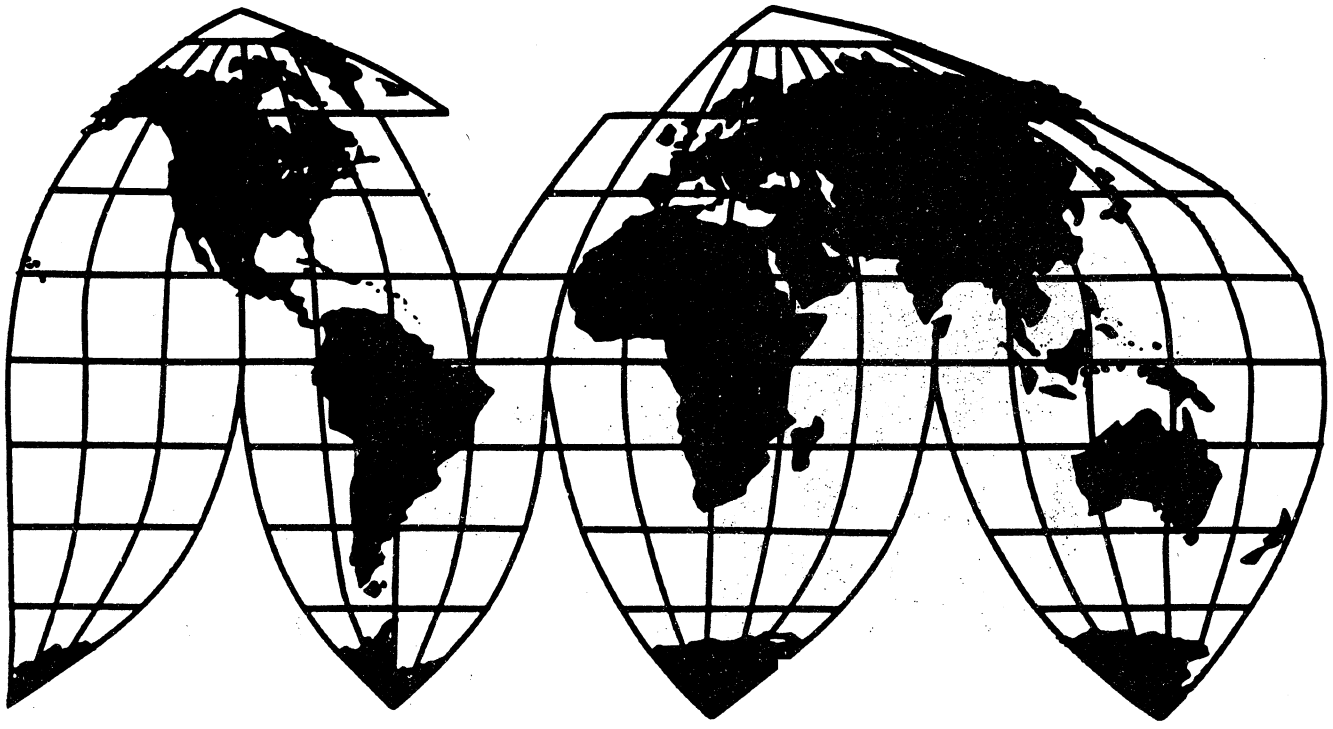
U.S. International Trade Commission



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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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

PART I

DETERMINATIONS AND VIEWS OF THE COMMISSION

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 701-TA-355 (Preliminary)
Investigations Nos. 731-TA-659 and 660 (Preliminary)

GRAIN-ORIENTED SILICON ELECTRICAL STEEL FROM ITALY AND JAPAN

Determinations

On the basis of the record[1] developed in the subject investigations, the Commission determines,[2] pursuant to section 703(a) of the Tariff Act of 1930 (19 U.S.C. § 1671b(a)), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from Italy of grain-oriented silicon electrical steel[3] that are alleged to be subsidized by the Government of Italy. The Commission also determines,[4] pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from Italy and Japan of grain-oriented silicon electrical steel that are alleged to be sold in the United States at less than fair value (LTFV).

Background

On August 26, 1993, petitions were filed with the Commission and the Department of Commerce by counsel on behalf of Allegheny Ludlum Corp., Pittsburgh, PA; Armco, Inc., Butler, PA; the Butler Armco Independent Union, Butler, PA; the United Steelworkers of America, Pittsburgh, PA; and the Zanesville Armco Independent Union, Zanesville, OH. The petitions allege that an industry in the United States is being materially injured and is threatened with further material injury by reason of allegedly subsidized imports from Italy and allegedly LTFV imports from Italy and Japan[5] of grain-oriented silicon electrical steel. Accordingly, effective August 26, 1993, the Commission instituted countervailing duty investigation No. 701-TA-355 (Preliminary) and antidumping investigations Nos. 731-TA-659 and 660 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of September 2, 1993 (58 F.R. 46650). The conference was held in Washington, DC, on September 16, 1993, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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

[2] Vice Chairman Watson did not participate in the investigation concerning Italy.

[3] The products covered by Commerce's investigations are grain-oriented silicon electrical steel, which are flat-rolled alloy steel products containing by weight at least 0.6 percent of silicon, not more than 0.08 percent of carbon, not more than 1.0 percent of aluminum, and no other element in an amount that would give the steel the characteristics of another alloy steel, of a thickness of no more than 0.560 millimeters, in coils of any width, or in straight lengths which are of a width measuring at least 10 times the thickness. The subject products are provided for in subheadings 7225.10.00, 7225.30.70, 7225.40.70, 7225.50.80, 7225.90.00, 7226.10.10, 7226.10.50, 7226.91.70, 7226.91.80, 7226.92.50, 7226.92.70, 7226.92.80, 7226.99.00, 7228.30.80, 7228.60.60, and 7229.90.10 of the Harmonized Tariff Schedule of the United States (HTS).

[4] Vice Chairman Watson did not participate in the investigation concerning Italy.

[5] Armco, the Butler Armco Independent Union, and the Zanesville Armco Independent Union are not petitioners in the antidumping investigation concerning Japan.

VIEWS OF THE COMMISSION[1]

On the basis of the record developed in these investigations, we determine that there is a reasonable indication that the industry in the United States producing grain-oriented silicon electrical steel ("grain-oriented steel") is materially injured by reason of imports of the subject merchandise from Japan and Italy allegedly sold in the United States at less than fair value (LTFV).[2] We also determine that there is a reasonable indication that the industry in the United States producing grain-oriented steel is materially injured by reason of allegedly subsidized imports of the subject merchandise from Italy.[3]

I. THE LEGAL STANDARD FOR PRELIMINARY DETERMINATIONS

The legal standard in preliminary antidumping and countervailing duty investigations requires the Commission to determine, based upon the best information available at the time of the preliminary determinations, whether there is a reasonable indication that a domestic industry is materially injured or threatened with material injury by reason of the subject imports.[4] In applying this standard, the Commission weighs the evidence to determine whether "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of material injury and (2) no likelihood exists that any contrary evidence will arise in a final investigation."[5] The U.S. Court of Appeals for the Federal Circuit has held that this interpretation of the standard "accords with clearly discernible legislative intent and is sufficiently reasonable."[6]

II. LIKE PRODUCT

A. In General

In making its required determinations, the Commission must first define the "like product" and the "industry." Section 771(4)(A) of the Tariff Act of 1930 ("the Act") defines the relevant industry as the "domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product..."[7] In turn, the Act defines "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..."[8] The Commission's like product determinations are factual, and the Commission applies the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[9]

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[1] Vice Chairman Watson did not participate in the determinations with respect to Italy.
[2] 19 U.S.C. § 1673b(a).
[3] 19 U.S.C. § 1671b(a).
[4] 19 U.S.C. § 1671b(a) and § 1673b(a). See also American Lamb Co. v. United States, 785 F.2d 994 (Fed. Cir. 1986); Calabrian Corp. v. United States, 794 F. Supp. 377, 386 (Ct. Int'l Trade 1992).
[5] American Lamb, 785 F.2d at 1001; See also Torrington Co. v. United States, 790 F. Supp. 1161, 1165 (Ct. Int'l Trade 1992).
[6] American Lamb, 785 F.2d 994 at 1004.
[7] 19 U.S.C. § 1677(4)(A).
[8] 19 U.S.C. § 1677(10).
[9] Asociacion Colombiana de Exportadores de Flores et al. v. United States, 693 F. Supp. 1165, 1169 (Ct. Int'l Trade 1988). In analyzing like product issues, the Commission considers a number of factors including: (1) physical characteristics and uses; (2) interchangeability of the products; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) the use of common

(continued...)

The Department of Commerce has identified the articles subject to these investigations as:

> [G]rain-oriented silicon electrical steel, which are flat-rolled alloy steel products containing by weight at least 0.6 percent of silicon, not more than 0.08 percent of carbon, not more than 1.0 percent of aluminum, and no other element in an amount that would give the steel the characteristics of another alloy steel, of a thickness of no more than 0.560 millimeters, in coils of any width, or in straight lengths which are of a width measuring at least 10 times the thickness....[10]

The subject merchandise is thus a flat-rolled specialty steel product sold in strip or sheet form, characterized by low carbon content in which the magnetic characteristics, principally low core loss[11] and high-permeability,[12] are achieved by relatively high silicon content and the use of special processing.[13] The processing techniques also determine whether the electrical steel product is grain-oriented or non-oriented.[14]

Grain-oriented steel is produced in a number of different grades that are distinguished based on their relative efficiency in conducting electricity. The more efficient, high-permeability grades are characterized by a lower core loss and higher market prices.

B. Like Product

In these investigations we have considered whether high-permeability and conventional grades of grain-oriented steel constitute one or two like products.[15] As

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[9] (...continued)
manufacturing facilities and production employees; and (6) where appropriate, price. Calabrian Corp. v. United States, 794 F. Supp. at 382, n.4 (Ct. Int'l Trade 1992). The Commission looks for clear dividing lines among possible like products, and disregards minor variations. See S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979); 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).

[10] 58 Fed. Reg. at 49017 and letter from the Department of Commerce to Chairman Newquist dated October 4, 1993.

[11] Core loss refers to the amount of electrical energy lost as heat when magnetic flux flows through the steel.

[12] Permeability refers to the relative ability of different types of steel to conduct an electrical current. If a particular category of steel possesses high-permeability, this means that the steel is an efficient conductor of electricity.

[13] Report at II-4.

[14] Oriented steel is steel in which processing has achieved a comparatively uniform molecular arrangement which permits the metal to conduct electricity in a single direction. It is more efficient to use oriented steel in such products as transformers where it is desirable for the electrical flow to be in a single direction. Conversely, non-oriented steel is preferred in such uses as motors because its magnetic properties are approximately the same in all directions.

[15] Both domestic manufacturers argue that all grades of grain-oriented steel comprise a single like product because they share the same physical and performance characteristics, are sold in the same channels of distribution, and are produced using predominantly common manufacturing facilities. Petition at 115-125.

Nippon Steel Corporation (Nippon Steel) and Kawasaki Steel Corporation (Kawasaki), the two Japanese producers/exporters, contend that there are two separate like products consisting of, respectively, high-permeability and conventional grades of grain-oriented steel. Kawasaki Post-conference Brief ("Kawasaki's Brief") at 4-14; Nippon Steel Post-conference Brief ("Nippon Steel's Brief") at 1. The Japanese respondents assert that a finding of two separate like products is warranted (continued...)

explained below, we determine that the similar physical characteristics and uses, interchangeability, common U.S. production processes and facilities as well as common channels of distribution, all indicate that there are no clear dividing lines among the different grades of grain-oriented steel. Therefore, we find that grain-oriented steel is a single like product.

1. Physical characteristics and uses

All grades of grain-oriented steel are similar in terms of chemical composition and share the same general physical properties. For example, the various grades are all relatively efficient conductors of electricity and will conduct electricity in a single direction.[16] As with many other "graded" products, each grade does not have the identical performance characteristics.[17] High-permeability grain-oriented steel is thinner, generally has a higher silicon content,[18] and generally provides a lower core loss in most applications, i.e., is a more efficient electrical conductor[19] than the so-called conventional grades of grain-oriented steel.

2. Interchangeability

The degree to which conventional grain-oriented steel may be substituted for high-permeability grades is disputed by the parties. Petitioners agree that there is a small market segment in which high-permeability grain-oriented steel alone may be used.[20] However, petitioners contend that various forms of grain-oriented steel, including both high-

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[15] (...continued)
by alleged differences in physical characteristics, the lack of interchangeability in end uses for the different grades of grain-oriented steel, and the alleged existence of different manufacturing facilities and production employees for those products. Kawasaki's Brief at 4-14.

[16] Petition at 5-6; Report at II-4.

[17] In the recently concluded flat-rolled carbon steel cases, the Commission rejected arguments that different grades of steel, within such broad categories as cold-rolled and hot-rolled, should be considered separate like products. See Certain Flat-Rolled Carbon Steel Products from Argentina, et al., USITC Pub. 2664 (August 1993) at 11-12.

[18] Petition at 140. Grain-oriented steel typically contains about 3 percent silicon, but can contain more than 6 percent silicon. The melt typically is made by adding silicon to the molten steel together with certain other alloying elements. The steel is then cast, hot-rolled, annealed, wheelabrated, pickled, and oiled. Id. at 6. Grain-oriented steel is generally subject to at least two cold reductions, three anneals, coating operations, and a final high temperature anneal treatment. Id.

[19] Petitioners claim that high-permeability grain-oriented steel may have higher core loss and be less efficient, however, at certain electrical induction levels. Petitioners' Post-conference Brief ("Petitioners' Brief") at 9-10.

[20] Petitioners' Brief at Attachment 1, pp. 18-21. Petitioners claim that the market segment that can use only high-permeability grain-oriented steel is *** percent of the total market and that total sales of high-permeability grades account for *** percent of U.S. consumption of all grain-oriented steel, suggesting that there is a substantial area in which high-permeability and conventional categories compete against one another. Information confirming these estimates will be sought in any final investigations.

One purchaser statement submitted by the Japanese respondents appears to corroborate petitioners' estimate. That purchaser stated that *** percent of its grain-oriented steel purchases was from the domestic industry and that it only looked to high-permeability grades for *** percent of its requirements and filled those with imports of the subject merchandise. Kawasaki's Brief, Exhibit 3.

permeability and conventional grades, are interchangeable to a substantial degree.[21] Information provided by the petitioners pertaining to contract bids prepared by transformer manufacturers for their utility customers supports the claim of interchangeability.[22] ILVA USA, Inc., the importer of the subject merchandise from Italy, ***.[23] Although the Japanese producers/exporters and the National Electrical Manufacturers Association (NEMA), which represents transformer and generator manufacturers, stated that conventional grades cannot be substituted in equipment requiring low-core-loss efficiencies, these respondents did not provide information regarding the size or significance of this segment of the overall market.[24]

3. Channels of distribution

The parties, with the exception of ILVA, S.p.A. and ILVA USA, Inc. (collectively "ILVA"), agree that all grades of grain-oriented steel are sold in the same distribution channels with end users (mostly transformer manufacturers) purchasing directly from the grain-oriented steel manufacturers.[25] ILVA, however, reportedly sells largely to so-called "stampers" that punch the grain-oriented steel into laminated pieces which are then sold to transformer manufacturers.[26]

4. Common manufacturing facilities, production processes, and production employees

Allegheny Ludlum Corporation (Allegheny) produces only conventional grades of grain-oriented steel.[27] Armco, Inc. (Armco) produces conventional grades, but also produces high-permeability grain-oriented steel, and uses most of the same equipment, processes and employees to manufacture both product types.[28]

5. Customer or producer perceptions

The information in the record on customer perceptions comes primarily from statements provided by members of NEMA. Based on these customer comments, it appears that the different conventional grades are readily substitutable for one another for most end

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[21] Petitioners' Brief at 5-6, 34-35, Exhibit 1. According to petitioners, use of a less efficient grade in a high-performance transformer will require that a transformer manufacturer make certain trade-offs with respect to other components of the finished transformer. Information supplied by the petition-ers suggests that the necessary balancing of performance can be achieved within a relatively narrow cost range. Petitioners' Brief at Exhibit 1.

[22] Petitioners' Brief at Exhibit 1.

[23] ILVA USA, Inc.'s questionnaire response at p. 23A.

[24] Transcript of Staff Conference ("Transcript") at 98-100. Individual NEMA members also provided supporting statements indicating that conventional grain-oriented steel could not be used in certain equipment, but did not estimate the relative size of this particular usage. Nor did NEMA or individual purchasers indicate whether high-permeability grades were substituted for conventional grades in situations in which the performance requirements did not necessitate use of the low-core-loss, high-permeability product.

[25] Report at II-13. Both high-permeability and conventional grades of grain-oriented steel often are sold to the same manufacturers for use in their various transformer products.

[26] ILVA Post-conference Brief ("ILVA's Brief") at 15.

[27] Report at II-11.

[28] Petitioners' Brief at 5. There are certain manufacturing processes that are unique to the production of the high-permeability grain-oriented steel. Report at II-7. For example, the different chemistries of high-permeability and conventional grain-oriented steel are partly achieved at the vacuum degassing stage of production in which certain alloys are added to the molten steel. Id.

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uses. However, the performance of the final products, such as transformers, may be affected by the grade of grain-oriented steel used and whether other components of the electrical equipment are adjusted to compensate for changes in the type of grain-oriented steel incorporated in the equipment. Petitioners also indicate that purchasers substitute among the conventional grades of grain-oriented steel for specific end uses.[29]

Although some purchasers stated that they classify high-permeability grain-oriented steel as a distinct category,[30] there may be substitution between high-permeability and conventional grades.[31] In addition, a number of purchasers indicated that they confined their purchases for certain types of transformers to certain high-permeability grades.[32] The record, however, does not reveal the relative magnitude of such purchases as a proportion of total consumption of grain-oriented steel, and the Commission will seek data relating to this subject in any final investigations.

6. Price

Petitioners stated that they attempt to maintain prices that parallel the degree of permeability of the steel, with the highest prices for the highest permeability grain-oriented steel (which also is generally more costly to produce). Data collected in these preliminary investigations support petitioners' assertions that a hierarchical price structure exists that reflects the relative value of the different grades of grain-oriented steel.[33]

Our analysis of the foregoing factors leads us to find a single like product in these preliminary investigations. This finding is consistent with the Commission's reluctance to fragment its like product definitions where a continuum of products or grades exist.[34] Further inquiry into the definition of like product, however, will be pursued in any final investigations.

III. DOMESTIC INDUSTRY AND RELATED PARTIES

In light of our like product determination, we find that there is a single industry, comprised of domestic producers of grain-oriented steel. This industry consists of two domestic producers, Armco and Allegheny. The principal issue in defining the domestic industry in these preliminary investigations is whether Armco is a related party by virtue of its joint venture with Vicksmetals, a subsidiary of Sumitomo Corporation which is an importer of the subject merchandise from Japan. Under section 771(4)(B), producers who are related to exporters or importers,[35] or who are themselves importers of the subject

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[29] Petitioners' Brief at 5-6.

[30] Nippon Steel's Brief, Exhibits 2 and 3 (statements by ***).

[31] Petitioners' Brief at 5-6; ILVA questionnaire response at p. 23A.

[32] Nippon Steel's Brief at Exhibits 2 and 3.

[33] Report at II-26 through II-27. Japanese producers also asserted (and the record corroborates) that the price trend lines for high-permeability and conventional grade products *** during the period of investigation. Nippon Steel's Brief at 6-7.

[34] See New Steel Rails from Japan, Luxembourg, and the United Kingdom, USITC Pub. 2524 (June 1992); Polyethylene Terephthalate Film, Sheet, and Strip from Japan and the Republic of Korea, Invs. Nos. 731-TA-458 and 459 (Final), USITC Pub. 2383 (May 1991); Granular Polytetrafluorethylene Resin, Invs. Nos. 731-TA-385 and 386 (Final), USITC Pub. 2112 (August 1988).

[35] Neither the term "related" nor the term "importer" is defined by the statute or explained in the legislative history. Thus, the Commission, as the agency charged with the administration of this provision, is responsible for filling in any "interpretational gap" in the statute. See, e.g., Suramerica, 966 F.2d at 665 (Fed. Cir. 1992).

merchandise, may be excluded from the domestic industry in appropriate circumstances.[36] As discussed below, we are satisfied that Armco is not a related party.

Armco's joint venture does not import or purchase the subject merchandise, but instead offers slitting services to both domestic manufacturers and importers of grain-oriented steel.[37] The joint venture simply charges a fee for the slitting service that it provides and never takes title to any of the grain-oriented steel that it processes.[38] Armco does not possess a financial or other ownership interest in an importer or exporter of the subject merchandise based on the record before us.[39] Given these facts, we find that Armco is not a related party.

IV. CONDITION OF THE INDUSTRY

When determining whether there is material injury to a domestic industry by reason of the subject imports, the Commission considers all relevant economic factors that have a bearing on the state of the industry in the United States. These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital and research and development. No single factor is determinative, and the Commission considers all relevant factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[40] Much of our analysis of the foregoing factors is redacted in the discussion that follows to protect the confidentiality of the underlying data, given that only two producers account for all domestic production and sales of the like product.[41]

One condition of competition relevant to this industry is the decline in purchases of electrical equipment by utilities.[42] Both the U.S. recession and energy conservation efforts have contributed to reduced growth in demand for electricity and a concomitant reduction in utility equipment requirements, including fewer transformer purchases.[43] Moreover,

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[36] 19 U.S.C. § 1677(4)(B). The Commission traditionally has examined at least three factors in deciding whether appropriate circumstances exist to exclude a related party. Those factors are:

> (1) the percentage of domestic production attributable to the related producers;
> (2) the reason why importing producers choose to import the articles under investigation--to benefit from unfair trade practice or to enable them to continue production and compete in the domestic market; and
> (3) the position of the related producers vis-a-vis the rest of the industry, i.e., whether exclusion of the related party will skew the data for the rest of the industry.

See, e.g., Torrington Co. v. United States, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992).

[37] Petitioners' Brief at 14-15.

[38] Id.

[39] Information recently collected in Certain Flat-Rolled Carbon Steel Products from Argentina et al., USITC Pub. 2664, Volume I (August 1993) at 96, indicated that Armco and Kawasaki operate certain joint production facilities in connection with hot-rolled, cold-rolled, and corrosion-resistant steel products. In any final investigations, the parties should address the question of whether any of those operations were involved in the production of grain-oriented steel.

[40] 19 U.S.C. § 1677(7)(C)(iii). No argument addressing a business cycle was raised by any of the parties to these investigations, nor did the Commission receive any information relevant to such a consideration.

[41] Chairman Newquist notes his concern over the considerable amount of confidential information omitted from the public version of these views. In particular, he questions whether sufficient information is provided which allows the general public to understand the factual bases for the Commission's decisions in these investigations.

[42] Transcript at 65-66, 99, and 110.

[43] Id.

respondents have argued that there has been a trend toward more efficient transformers which may favor sales of high-permeability products.[44] We have examined the various indicators of the domestic industry's performance in light of these conditions of competition.

Apparent U.S. consumption of grain-oriented steel decreased from 287,815 tons in 1990 to 248,844 tons in 1991 and recovered in 1992 to 250,335 tons; interim (January-June) 1993 consumption was slightly lower than during the comparable period in 1992.[45]

Domestic production *** from *** tons in 1990 to *** tons in 1991 and *** in 1992 to *** tons.[46] During interim 1993, domestic production *** as compared to interim 1992.[47] Average annual capacity to produce grain-oriented steel *** during the entire period of investigation.[48] Capacity utilization, *** percent in 1990 to *** percent in 1991 and *** in 1992 to *** percent. Interim 1993 capacity utilization was *** than in the comparable 1992 period.[49]

The domestic industry's U.S. shipments ***, whether measured on a volume or value basis, from 1990 to 1992. Domestic producers' U.S. shipments, which equalled *** tons in 1990, *** to *** tons in 1991 and *** tons in 1992. The value of domestic shipments *** between 1990 and 1992. The value of shipments was *** in the interim period in 1993 than in the comparable period of 1992, *** the volume of shipments showed a ***.[50] The average unit value of the domestic industry's U.S. shipments *** from *** per ton in 1990 to *** per ton in 1991, but then *** in 1992 to *** per ton and *** in the interim period of 1993 than in the comparable period of 1992.[51]

The domestic industry's end-of-period inventories of grain-oriented steel *** from *** tons in 1990 to *** tons in 1991 and then *** in 1992 to *** tons. Inventories were *** during interim 1993 when compared to interim 1992. End-of-period inventories in relation to production *** within a *** between 1990 and 1992. The *** reported level of inventories, *** percent, occurred during the interim period of 1993.[52]

The average number of production and related workers producing grain-oriented steel *** in 1990 to *** in 1992, *** in interim 1993 than in interim 1992.[53] Hours worked also *** from 1990 to 1991 from ***, then *** through the end of the investigatory period.[54]

Net sales *** in 1990 to *** in 1992.[55] The *** sales value resulted in a *** in gross profits, operating income, and net income for the domestic industry from 1990 to 1991, and a *** in 1992.[56] Gross profits, which equalled *** in 1990, *** in 1991, and to *** in 1992. Operating income *** in 1990 to *** in 1991 and *** in 1992. The operating income during the interim period of 1993 was *** than during interim 1992. Net income *** in 1990 to *** in 1992. The industry's *** in interim 1993 than in interim 1992.[57]

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[44] Transcript at 99.
[45] Report at II-14, Table 1.
[46] Report at II-15, Table 2.
[47] Petitioners claim that this *** is the result of ***. The *** production was ***. Report at II-15.
[48] Report at II-15, Table 2.
[49] See footnote 46, supra. The *** may be a consequence of ***.
[50] Report at II-15, Table 3.
[51] Id.
[52] Report at II-16, Table 4.
[53] Report at II-16, Table 5.
[54] Id.
[55] Report at II-17, Table 7. A *** in export shipments contributed to the *** in sales during the period of investigation. U.S. producers' exports of grain-oriented steel *** overall from *** tons in 1990 to *** tons in 1992, *** in interim 1992 as compared to interim 1993.
[56] Report at II-17, Table 7.
[57] Id.

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Cash flow *** throughout the period, *** from *** in 1990 to *** in 1991, and *** in 1992.[58] The industry's cash flow was *** in the interim period of 1993 than in the comparable period of 1992.

Capital investment by the domestic industry *** throughout the period of investigation *** in 1990 to *** in 1992. Domestic investment, however, was *** in interim 1993 than in interim 1992.[59] Research and development expenditures by the domestic industry *** from *** in 1990 to *** in 1992. However, in the interim periods, research and development expenses *** in 1993 than in the comparable period of 1992.[60] [61]

V. CUMULATION

In determining whether there is a reasonable indication of material injury by reason of the subject imports, the Commission is required to assess cumulatively the volume and price effects of imports from two or more countries of products subject to investigation if such imports compete with each other and with like products of the domestic industry in the U.S. market.[62]

There is no dispute that imports from Italy and Japan are subject to investigation, have been marketed in the United States throughout the period of investigation, and compete with the domestic like product in the U.S. market.[63] The record also indicates that most Japanese imports are sold directly to independent end users in the same distribution channels as domestic products and that domestic and Italian imports are sold to some of the same customers.[64] The only cumulation issue raised in these preliminary investigations is whether the imports from Italy and Japan compete with one another.[65] Only a "reasonable overlap" of competition is required.[66]

With regard to whether the subject imports compete with each other and the domestic like product, the Commission generally has considered four factors.[67] Based on our

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[58] Id.

[59] Report at II-18, Table 10.

[60] Report at II-19, Table 11.

[61] Based upon the foregoing, Chairman Newquist and Commissioner Rohr determine that there is a reasonable indication that the domestic grain-oriented steel industry is materially injured.

[62] 19 U.S.C. § 1677(7)(C)(iv)(I); see Chaparral Steel Co. v. United States, 901 F.2d 1097, 1105 (Fed. Cir. 1990). However, the Commission has discretion not to cumulate imports from a particular country that are "negligible" and have no discernible adverse impact on the domestic industry. See 19 U.S.C. § 1677(7)(C)(v).

[63] Kawasaki's Brief at 2; ILVA's Brief at 3-4.

[64] Petitioners' Brief at 14-15.

[65] The Japanese and Italian producers/exporters allege that cumulation of imports is inappropriate because the products from Italy, which consist of certain conventional grades of grain-oriented steel, do not compete with the majority of products imported from Japan, which consists of high-permeability grades. Kawasaki's Brief at 21-22; ILVA's Brief at 3-5.

[66] See Wieland Werke, AG, 718 F. Supp. at 52 (completely overlapping markets are not required); Granges Metallverken AB, 716 F. Supp. at 21-22 (The Commission need not track each sale of individual sub-products and their counterparts to show that all imports compete with all other imports and all domestic like products... the Commission need only find evidence of reasonable overlap in competition); Florex, 705 F. Supp. at 592 (completely overlapping markets are not required).

[67] These factors are:

> (1) the degree of fungibility between the imports from different countries and between imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;

(continued...)

application of these factors, we find that the imported and domestic products compete with one another.[68]

The record supports a finding that there is a reasonable overlap of competition between the imports from Italy and Japan. Although imports from Italy are concentrated in the less-efficient grades, whereas imports from Japan are primarily high-efficiency grades, there have been imports from both countries in both the mid- and low-efficiency grades.[69] Information collected in these preliminary investigations indicates that at least *** percent of the subject imports from Japan consisted of conventional grades.[70] The nature of those overlaps will be explored in any final investigations.[71] Similarly, there is evidence in the record of displacement of conventional grades by the high-permeability grades. We will seek more information on the extent to which this has occurred from the parties and from purchasers of grain-oriented steel in any final investigations.[72]

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[67] (...continued)
(2) the presence of sales or offers to sell in the same geographical markets of imports from different countries and the domestic like product;
(3) the existence of common or similar channels of distribution for imports from different countries and the domestic like product; and
(4) whether the imports are simultaneously present in the market.

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

While no single factor is determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the imports compete with each other and with the domestic like product. See Wieland Werke, AG v. United States, 718 F. Supp. 50 (Ct. Int'l Trade 1989); Granges Metallverken AB v. United States, 716 F. Supp. 17 (Ct. Int'l Trade 1989); Florex v. United States, 705 F. Supp. 582 (Ct. Int'l Trade 1989).

[68] In the case of Italy, for example, at least one purchaser stated that it imports in order to establish an alternative source of supply. Report at II-30. In the instance of Japan, there also appears to be a reasonable overlap in competition with the domestic product.

[69] Report at II-27. See Armco Advanced Materials Company letter dated October 5, 1993 to Ms. Mary Messer, Office of Investigations. Conventional grades of grain-oriented steel are denominated in relative levels of core loss, i.e., efficiency, ranging from the M-6 category, which is the least efficient, to M-2, which is the most efficient.

[70] Report at II-22. The petitioners estimate the proportion to be closer to *** percent. It appears that the *** number derived by the petitioners was the result of their inclusion of a higher permeability product that was sold as a conventional grade because the manufacturer was unwilling to guarantee its performance at the higher specifications. Petitioners' Brief at 17-18.

[71] In his view, Chairman Newquist believes that once a like product determination is made, that determination establishes some inherent level of fungibility within that like product. Thus only in exceptional circumstances could he anticipate finding products to be "like," and then turn around and find that, for purposes of cumulation, they do not "compete" because they are not sufficiently fungible and thus there is "no reasonable overlap." See Chairman Newquist's additional and dissenting views in the Flat-Rolled Carbon Steel investigations (USITC Pub. 2664).

[72] Significantly, the Commission generally has cumulated imports even when there were alleged differences between the imported and domestically produced products. See, e.g., Silicon Metal from the People's Republic of China, Inv. No. 731-TA-472 (Final), USITC Pub. 2385 at 22-24 (June 1991). The Commission has considered perceived quality differences to be less important than other factors in determining whether a reasonable overlap in competition exists. For example, the Commission has emphasized sales in a similar segment of the market or simultaneous presence in the market, Polyethylene Terephthalate Film, Sheet, and Strip from Japan and the Republic of Korea, Invs. Nos. 731-TA-358 and 359 (Final), USITC Pub. 2383 at 26 (May 1991), and sales in a similar geographic market. Industrial Nitrocellulose from Brazil, Japan, the People's Republic of China, the Republic of Korea, the United Kingdom, and West Germany, Invs. Nos. 731-TA-439-444 (June 1990), USITC Pub. 2295 at 12-13 (June 1990).

VI. REASONABLE INDICATION OF MATERIAL INJURY BY REASON OF ALLEGEDLY LTFV AND SUBSIDIZED IMPORTS

In making preliminary determinations in countervailing and antidumping duty investigations, the Commission is to determine whether there is a reasonable indication that an industry in the United States is materially injured "by reason of" the imports under investigation.[73] The Commission must consider the volume of imports, their effect on prices for the like product, and their impact on domestic producers of the like product, but only in the context of U.S. production operations.[74] Although the Commission may consider causes of injury other than the allegedly LTFV or subsidized imports, it is not to weigh causes.[75] [76] [77] For the reasons discussed below, we find that there is a reasonable indication that the domestic grain-oriented steel industry is materially injured by reason of cumulated imports of grain-oriented steel.

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[73] 19 U.S.C. § 1671b(a) and § 1673b(a).

[74] 19 U.S.C. § 1677(7)(B)(i).

[75] See e.g., Citrosuco Paulista, S.A. v. United States, 704 F. Supp. at 1101.

Chairman Newquist, Commissioner Rohr, and Commissioner Nuzum further note that the Commission need not determine that imports are "the principal, a substantial, or a significant cause of material injury." S. Rep. No. 249, at 57, 74. Rather, a finding that imports are a cause of material injury is sufficient. See, e.g., Metallverken Nederland B.V. v. United States, 728 F. Supp. 730, 741 (Ct. Int'l Trade 1989); Citrusoco Paulista, SA. v. United States, 704 F. Supp. at 1101.

[76] Vice Chairman Watson notes that the courts have interpreted the statutory requirement that the Commission consider whether there is material injury "by reason of" the subject imports in a number of different ways. Compare United States Engineering & Forging v. United States, 779 F. Supp. 1375, 1391 (Ct. Int'l Trade 1991)("[I]t must determine whether unfairly-traded imports are contributing to such injury to the domestic industry...Such imports, therefore, need not be the only cause of harm to the domestic industry")(citations omitted) with Metallverken Nederland B.V. v. United States, 728 F.Supp. at 741 (affirming a determination by two Commissioners that "the imports were a cause of material injury") and USX Corp. v. United States, 682 F. Supp. 69, 67 (Ct. Int'l Trade 1988)("any causation analysis must have at its core the issue of whether the imports at issue cause, in a non de minimis manner, the material injury to the industry").

Accordingly, Vice Chairman Watson has determined to adhere to the standard articulated by Congress, in the legislative history of the pertinent provisions, which states that "the Commission must satisfy itself that, in light of all the information presented, there is a sufficient causal link between the less-than-fair-value imports and the requisite injury." S. Rep. No. 249, at 75.

[77] Commissioners Crawford and Brunsdale note that the statute requires that the Commission determine whether a domestic industry is "materially injured by reason of" the allegedly LTFV and subsidized imports. They find that the clear meaning of the statute is to require a determination on whether the domestic industry is materially injured by reason of allegedly LTFV and subsidized imports, not by reason of allegedly LTFV and subsidized imports among other things. Many, if not most domestic industries, are subject to injury from more than one economic factor. Of these factors, there may be more than one that independently is causing material injury to the domestic industry. It is assumed in the legislative history that the "ITC will consider information which indicates that harm is caused by factors other than less-than-fair-value imports." S. Rep. No. 249 at 58, 75. However, the legislative history makes it clear that the Commission is not to weigh or prioritize the factors that are independently causing material injury. Id. at 57, 74; H.R. Rep. No. 317, 96th Cong., 1st Sess. 46-47 (1979). The Commission is not to determine if the allegedly LTFV and subsidized imports are "the principal, a substantial or a significant cause of material injury." S. Rep. No. 249 at 57, 74. Rather, it is to determine whether any injury "by reason of" the alleged LTFV and subsidized imports is material. That is, the Commission must determine if the subject imports are causing material injury to the domestic industry. "When determining the effect of imports on the domestic industry, the Commission must consider all relevant factors that can demonstrate if unfairly traded imports are materially injuring the domestic industry." S. Rep. No. 71, 100th Cong., 1st Sess. 116 (1987)(emphasis added).

The volume and value of imports of the subject merchandise were significant and *** in each segment of the investigatory period. The cumulative volume of imports *** tons in 1990 to *** tons in 1992, and *** between the interim periods from *** tons to *** tons.[78] Meanwhile, the domestic industry's production and shipments *** and total apparent U.S. consumption ***.[79] Imports of the subject merchandise *** share of total U.S. consumption during the period of investigation. The market share of the subject imports *** from *** percent in 1990 to *** percent in 1991 and to *** percent in 1992. Accordingly, we find the volume of the subject imports to be significant.

The subject imports also had an adverse effect on prices of the domestic like product. The Commission collected price data for a cross-section of grain-oriented steel grades. These price comparisons revealed that in the *** instances the imported product undersold the comparable domestic product.[80] [81] Notably, the subject imports from Italy for which the Commission was able to make price comparisons undersold the domestic product in *** of the period of investigation. The margins of *** percent. Comparisons between domestic products and imports from Japan in three efficiency grades indicated ***.[82] In the two product categories in which the ***, the margins of ***. Domestic prices for *** type of grain-oriented steel *** during the period of investigation and that *** was *** production costs.[83] Based on the price data collected in these preliminary investigations, we determine that the subject imports suppressed prices for the like product.[84]

Substitutability between the domestic like product and subject imports is a factor we considered in these preliminary investigations. The more substitutable the alleged LTFV and subsidized imports are with the domestic like product, the more heavily consumers may weigh price as a factor in their purchasing decisions. The record indicates that imports of the subject merchandise which are within the same efficiency categories as the domestic products are substitutable. Although the subject imports from Japan were concentrated in the high-permeability grades and imports from Italy were mainly in the low efficiency, conventional grades, it appears that those imports could be substituted for some of the various conventional and high-permeability grades manufactured by the domestic industry. The extent of such substitution will be further examined in any final investigations.

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[78] Report at II-23, Table 15.

[79] Report at II-24, Table 16 and Report at II-14, Table 1. Domestic shipments and production were *** in interim 1993 than in the interim period of 1992.

[80] Report at II-27, Tables 17-20.

[81] Commissioner Brunsdale and Commissioner Crawford do not rely on the underselling data in this case. Since the products are not identical, and sales terms vary, it may be misleading to compare the largest sale of each manufacturer for each period.

[82] Report at II-27 through II-28.

[83] Report at II-28 and II-17 through II-18. While domestic prices *** during the period of investigation, cost of goods sold as a percentage of net sales *** percent in 1990 to *** percent in 1992, and in the interim period of 1993 equalled *** percent compared to *** percent in interim 1992.

[84] Commissioners Brunsdale and Crawford note that the alleged dumping margins in this case range from 30.91 to 32.46 percent for subject imports from Japan, and 60.79 percent for subject imports from Italy. (Commerce had not indicated a subsidy margin for subject imports from Italy, although petitioners allege it is over 100 percent.) Given the information currently available, we gave the benefit of the doubt to petitioners and assume that subject imports and the domestic like product are reasonably good substitutes. Because there appears to be excess capacity in the domestic industry, it is likely that domestic producers would have increased their sales had imports been fairly traded. In the final investigations, we will seek more information about the relative substitutibility of fairly traded imports and about any specific capacity constraints for domestic producers of grain-oriented silicon electric steel. Until we have this information, it is difficult to judge the extent to which any adverse impact on the domestic producers was caused by a *** sales or by suppressed domestic prices.

In assessing the impact of imports on the domestic industry, it is significant that the quantity of grain-oriented steel demanded by domestic consumers is relatively unresponsive to changes in the price of grain-oriented steel. There are a limited number of applications of grain-oriented steel, and for these applications there are no close substitutes for grain-oriented steel. Therefore, the *** in lower priced subject imports does not lead to increased consumption of grain-oriented steel. Rather, an *** in allegedly dumped and subsidized imports comes at the expense of sales by domestic producers and fairly traded imports. This is particularly true for a product such as this which is graded according to a common industry standard.

CONCLUSION

We find that the relatively low prices of the imports have enabled the subject imports to *** and enabled the subject imports to ***, resulting in *** sales, production, capacity utilization, employment, and profitability for the domestic industry, and adversely affecting that industry. Therefore, we determine that the information of record in these preliminary investigations establishes a reasonable indication that the domestic industry producing grain-oriented steel is materially injured by reason of the subject imports from Japan and Italy.

PART II

INFORMATION OBTAINED IN THE INVESTIGATIONS

II-1

INTRODUCTION

On August 26, 1993, petitions were filed with the U.S. International Trade Commission (Commission) and the U.S. Department of Commerce (Commerce) by counsel on behalf of Allegheny Ludlum Corp. (Allegheny), Pittsburgh, PA; Armco, Inc. (Armco), Butler, PA; the Butler Armco Independent Union, Butler, PA; the United Steelworkers of America, Pittsburgh, PA; and the Zanesville Armco Independent Union, Zanesville, OH. The petitions allege that an industry in the United States is being materially injured and is threatened with further material injury by reason of allegedly subsidized imports from Italy and allegedly less than fair value (LTFV) imports from Italy and Japan[1] of grain-oriented silicon electrical steel.[2] Accordingly, effective August 26, 1993, the Commission instituted countervailing duty investigation No. 701-TA-355 (Preliminary) under section 703(a) of the Tariff Act of 1930 (the Act) and antidumping investigations Nos. 731-TA-659 and 660 (Preliminary) under section 733(a) of the Act to determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry is materially retarded, by reason of imports of such merchandise into the United States.

Notice of the institution of these investigations was posted in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and published in the *Federal Register* of September 2, 1993 (58 F.R. 46650). Commerce published its notice of initiation in the *Federal Register* of September 21, 1993 (58 F.R. 49017). Copies of the Commission's and Commerce's *Federal Register* notices are presented in appendix A.

The Commission held a public conference in Washington, DC, on September 16, 1993, at which time all interested parties were allowed to present information and data for consideration by the Commission. A list of the participants in the conference is presented in appendix B. The Commission voted on these investigations on October 6, 1993. The statute directs the Commission to make its preliminary determination within 45 days after receipt of the petition, or in these investigations by October 12, 1993.

PREVIOUS AND RELATED COMMISSION INVESTIGATIONS

In 1988, Allegheny filed a petition under section 337 of the Act. In the petition, Allegheny alleged that grain-oriented silicon electrical steel produced by Nippon Steel Corp. (Nippon) and imported into the United States was produced in violation of U.S. Patent No. 3,855,018 held by Allegheny. However, the Commission did not initiate a section 337 investigation in response to the complaint because it found that Allegheny did not satisfy the statute's definition of the "industry." That is, although Allegheny produced a product that it felt was competitive with that exported to the United States by Nippon, it was not producing a product pursuant to its own patent. Therefore, the Commission found that in the absence of significant investment in plant and equipment, significant

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[1] Armco, the Butler Armco Independent Union, and the Zanesville Armco Independent Union are not petitioners in the antidumping investigation concerning Japan. Armco, however, indicated that it supports the antidumping petition concerning Japan filed by Allegheny and the United Steelworkers of America. Conference transcript, p. 48.

[2] The products covered by Commerce's investigations are grain-oriented silicon electrical steel, which are flat-rolled alloy steel products containing by weight at least 0.6 percent of silicon, not more than 0.08 percent of carbon, not more than 1.0 percent of aluminum, and no other element in an amount that would give the steel the characteristics of another alloy steel, of a thickness of no more than 0.560 millimeters (mm), in coils of any width, or in straight lengths which are of a width measuring at least 10 times the thickness. The subject products are provided for in subheadings 7225.10.00, 7225.30.70, 7225.40.70, 7225.50.80, 7225.90.00, 7226.10.10, 7226.10.50, 7226.91.70, 7226.91.80, 7226.92.50, 7226.92.70, 7226.92.80, 7226.99.00, 7228.30.80, 7228.60.60, and 7229.90.10 of the Harmonized Tariff Schedule of the United States (HTS).

employment of labor and capital, and substantial investment in the exploitation of the patent at issue, Allegheny did not have standing under section 337 of the Act.[3]

THE PRODUCT

Description

Grain-oriented silicon electrical steel is a flat-rolled steel product sold in sheet or strip form and has a grain structure that permits it to conduct a magnetic field with a high degree of efficiency. It is used principally in the manufacture of large power and distribution transformers. The special characteristics of grain-oriented silicon electrical steel are its superior magnetic properties, chiefly its higher permeability[4] and lower core loss,[5] compared with non-grain-oriented silicon electrical steel.

Grain-oriented silicon electrical steel typically ranges in gauge or thickness up to 0.457mm[6] and is sold in various lengths, normally in coil form, in either sheet or strip width. The standard full-width size of grain-oriented silicon electrical steel sheet in the United States is 34 inches.[7] Grain-oriented silicon electrical steel is subjected to specialized rolling and annealing processes which yield grain structures (crystalline structures of the iron-silicon-carbon molecules) uniformly oriented in the rolling (or lengthwise) direction of the sheet.

Grain-oriented silicon electrical steel is identified using alpha-numeric grades developed by the American Iron and Steel Institute (AISI) and the American Society for Testing Materials (ASTM). The AISI grades ("M" series identifiers, for "magnetic") are older and generally less descriptive than the ASTM grades; however, the industry continues to use principally either AISI grades or company-specific identifiers.[8] For U.S. tariff purposes, the term "silicon electrical steel"[9] by definition consists of alloy steel containing by weight at least 0.6 percent but not more than 6 percent of silicon and not more than 0.08 percent of carbon. It may also contain by weight not more

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[3] Transcript of the Commission meeting, Docket No. 1479, Jan. 4, 1989, p. 5, and postconference brief of petitioners, attachment 1, p. 1.

[4] Permeability refers to the ease of magnetization of the grain-oriented silicon electrical steel.

[5] Most transformers include a core made of grain-oriented silicon electrical steel. There are two basic types of cores: stacked and wound. Stacked cores consist of steel laminations (generally rectangular in shape) stacked one on top of the other around the perimeter of the transformer. Electric wires are then fitted over the core structure to complete the core; the final shape of the core resembles a box without a top or a bottom. Wound cores are made by winding a continuous length of steel into a circular, or doughnut, form. The doughnut shape is pressed into a rectangular shape, heat treated (stress-relief annealed), then paired with coiled electric wires. Manufacturing efficiency determines the choice of a stacked or wound core. Production of the wound core is not as labor intensive as is the handling of the laminations in a stacked core, but the use of a wound core is limited to smaller transformers because of the physical drawbacks of handling large amounts of steel. Petition, p. 118, and conference transcript, pp. 51-53. "Core" loss is a measure of the amount of electrical energy that is lost as heat when magnetic flux flows through the steel. It is typically expressed as a numeric value, in units of watts per pound or watts per kilogram.

[6] Petition, p. 4. In its definition of the scope of these investigations, Commerce specified that grain-oriented silicon electrical steel can range up to 0.56mm in thickness.

[7] The bulk of the Italian producer's exports of grain-oriented silicon electrical steel to the United States is in widths greater than 34 inches, which the Italian producer noted was attractive to its customers because the greater width permits additional cuts in customers' slitting patterns. Conference transcript, pp. 152-153. The grain-oriented silicon electrical steel produced in Japan is in standard widths of either 36 inches or 1 meter. Postconference brief of Kawasaki Steel Corp. (Kawasaki), exhibit B, p. 23.

[8] Petition, pp. 4-5. The ASTM designations for grain-oriented silicon electrical steel are 27GO58, 30GO58, 35GO66, 27HO76, 30HO83, 35HO94, 27PO66, 30PO70, and 30PO76; the trade designations are M-2 through M-6 and M-OH through M-4H. The Association of Iron and Steel Engineers, *The Making, Shaping, and Treating of Steel*, Pittsburgh, PA, 1985.

[9] Consists of grain-oriented and non-grain-oriented silicon electrical steel.

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than one percent of aluminum but no other element in a proportion that would give the steel the characteristics of another alloy steel.

Grain-oriented silicon electrical steel is normally produced to maximum core loss values specified by the ASTM/AISI designations. The various grades of grain-oriented silicon electrical steel are differentiated by their performance, as determined by their magnetic properties, specifically their energy efficiency or core loss ratings.[10] The domestic industry produces a wide range of grain-oriented silicon electrical steel from the relatively thick conventional grade M-6, which has the highest core loss (i.e., the lowest energy efficiency), to the thin-gauge conventional grades such as M-2 and to the high-permeability grades having the lowest core losses (i.e., the highest energy efficiency).[11] Within each grade of grain-oriented silicon electrical steel, magnetic characteristics differ in that the same grade made by two producers will have different average core losses.[12]

The petitioners argue that different grades of grain-oriented silicon electrical steel compete directly with one another for use in a given transformer because of the process by which transformers are designed and materials are selected by manufacturers to yield the lowest "total ownership cost," or TOC, for each customer. The TOC is the total cost of buying and operating a transformer and reflects the initial purchase price plus the cost to operate the unit over its estimated 30-year lifetime.[13] The TOC is essentially a cost-benefit analysis that evaluates the steel's core loss, permeability, and price, among other factors, in the context of the utility company's energy loss specifications (known as loss evaluation) and cost constraints to determine the optimum grade of steel required to produce the lowest TOC transformer.[14] Petitioners state that the different grades of grain-oriented silicon electrical steel are essentially points along a continuum of varying core losses, all of which compete directly with one another at different pricing points.[15]

Japanese respondents, however, state that high-permeability, very low-core-loss grain-oriented silicon electrical steel used for high-efficiency transformer applications and low-permeability, conventional-core-loss grain-oriented silicon electrical steel used for low-efficiency or less demanding transformer, motor, and ballast applications are not substitutable and constitute two separate like products and two separate domestic industries.[16] They assert that the products are distinguished in part by their distinctive permeability and core loss levels, their different chemistries, and their different magnetostriction ("noise" generated when electrical energy travels through a transformer).[17]

Because all of the subject steel sold in the United States conforms to ASTM/AISI specifications, domestic and imported products with identical specifications are presumably interchangeable in terms of product characteristics and quality. However, the domestic industry distinguishes between product quality and product performance and states that quality refers to the

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[10] The characteristics differentiating the various grades of grain-oriented silicon electrical steel differ from those that differentiate other types of steel. For example, stainless steel is differentiated on the basis of its metallurgical and mechanical properties rather than on the basis of its performance. Conference transcript, p. 25.

[11] Petition, p. 140. Japanese respondents assert that the U.S. industry produces only one high-permeability low-core-loss product suitable for use only in stacked core transformers and that only the Japanese have developed a high-permeability product for applications in low-core-loss wound core transformers or in ultra-low-core-loss applications. Postconference brief of Kawasaki, pp. 19 and 23.

[12] Conference transcript, p. 57.

[13] Petition, pp. 140-142.

[14] Petition, pp. 140-142, and conference transcript, pp. 84-85. Some transformer customers are indifferent to the cost of operating a transformer. Their transformer requirements are referred to as non-evaluated. Postconference brief of Kawasaki, p. 16.

[15] Conference transcript, p. 33.

[16] Postconference brief of Kawasaki, p. 1. Respondents further noted that high-permeability and conventional grain-oriented silicon electrical steel are not interchangeable products because the transformer producers' strict specifications of core loss, size, weight, noise level, and transformer design preclude such changes. Conference transcript, pp. 106-107.

[17] Postconference brief of Kawasaki, pp. 4-7.

ability of a product to meet the specifications to which it is sold in terms of chemistry, thickness, coating, and flatness, whereas performance refers to magnetic properties of the steel, particularly its core loss.[18] Petitioners state that the domestic industry manufactures the full spectrum of imported products and competes directly with all the subject imports of grain-oriented silicon electrical steel for sales in the U.S. market.[19] Respondents for Japan, however, state that domestic high-permeability grain-oriented products have significantly higher core losses than the Japanese high-permeability products, which make the domestic products inappropriate for many applications.[20] Japanese respondents also stated that ultra-low-core-loss grain-oriented products are not produced in the United States, but are produced in Japan.[21]

Manufacturing Process[22]

The manufacturing process for grain-oriented silicon electrical steel begins with the melting process, during which scrap and selected ferroalloys are melted in either an electric furnace or a basic-oxygen furnace. The molten steel is poured or "tapped" from the furnace to a ladle. It then passes through a ladle metallurgy station where the steel's chemistry is refined by the addition of silicon and other ferroalloys that are important to the development of the desired orientation of the grains (crystallographic texture), thereby facilitating magnetization. For grain-oriented silicon electrical steel, the two most important ladle refining techniques used are argon-oxygen-decarburization and vacuum degassing, both of which mix the ladle additions and reduce contaminants prior to casting the steel into a form that can enter the hot-rolling process. Currently the industry uses two principal methods of casting: ingot teeming and continuous casting. Ingots are hot-rolled into slab (a semifinished product) on a primary breakdown mill, whereas continuous cast slabs are cast directly from molten steel into semifinished shapes in the desired cross-sectional dimensions. Both continuous cast slabs and slabs rolled from ingots require controlled cooling after casting to avoid fracture.[23] Slabs are then reheated for hot-rolling during which the slab is conveyed through one or more stands of rolls which progressively reduce it to a sheet of the desired thickness. Up to this point, the production process for grain-oriented silicon electrical steel is essentially the same as that for stainless steel in that the two different types of steel can be melted in the same furnace and hot-rolled on the same hot strip mill.[24] After hot-rolling, the steel sheet, in the form of a coil, is wheelabrated (a surface-smoothing operation similar to sandblasting), annealed, and pickled for cold-reduction. Up to this point in the manufacturing process, the production steps for grain-oriented and non-grain-oriented silicon electrical steel are essentially the same. Following the initial annealing process, the production steps for the two types of silicon electrical steel diverge for the most part.

After hot-rolling, the steel coil is cold-reduced twice to further reduce its thickness and to orient its grains, twice annealed on a continuous basis to recrystallize its structure, and decarburized and coated to prevent sticking during batch annealing and to reduce current flow between steel layers in the transformer core. Next, the steel is high-temperature batch annealed to promote grain growth

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[18] Conference transcript, p. 35.
[19] Conference transcript, p. 18.
[20] Conference transcript, p. 101.
[21] Conference transcript, pp. 140-141.
[22] The manufacturing processes described in this section are based on information from the Association of Iron and Steel Engineers, *The Making, Shaping, and Treating of Steel*; from the American Iron and Steel Institute, *Steel Products Manual: Electrical Steels (January 1983)*; and ***, unless otherwise noted. The production process for grain-oriented silicon electrical steel is similar for each of the producers, although not identical. Potential variations in production steps are noted.
[23] The addition of silicon to the raw material mix makes the steel more brittle.
[24] Both of the U.S. producers of grain-oriented silicon electrical steel make some stainless steel ***.

and the formation of a glass-like film insulation (or coating) that results from the reaction of an applied magnesium oxide coating with silicates at the steel's surface. The coiled sheet is then thermal flattened and may be laser scribed[25] to improve the steel's magnetic properties; a second coating may be applied to improve electrical resistance. The sheet is inspected for edge straightness, coating consistency, and surface flaws, and may then be slit to a narrower width, depending on customer requirements, and packaged for shipment.

Certain steps in the production process for conventional grain-oriented silicon electrical steel are different from those for high-permeability grain-oriented silicon electrical steel. For example, the different chemistries of these two types of steel are partly achieved at the vacuum degassing stage of production in which certain alloys are added to the molten steel to create high-permeability grain-oriented silicon electrical steel.[26] In addition, ***.[27] Production of permanent domain-refined[28] high-permeability grain-oriented silicon electrical steel also requires additional steps beyond the typical production process for conventional grain-oriented silicon electrical steel, including, for example, ***.[29]

The production processes used by domestic and foreign producers are essentially the same.[30] Any differences in manufacturing processes generally reflect differences in production equipment and processing technology.

Uses

Grain-oriented silicon electrical steel is used primarily in the production of the cores of large and medium-sized electrical energy power transformers and distribution transformers, the designs of which effectively utilize the directional magnetic properties of the grain-oriented silicon electrical steel. These properties permit grain-oriented silicon electrical steel to transform electric power from a high-voltage form generated by a power plant to levels appropriate for local distribution. Distribution transformers, which are smaller than power transformers, further reduce the electrical energy to levels suitable for commercial uses and for residential consumers. Some grain-oriented silicon electrical steel, principally grade M-6, is used by stampers to punch laminations for use in equipment having smaller transformers, such as appliances and aerospace, aeronautical, and electronic equipment.[31] Transformer manufacturers account for more than 95 percent of the grain-oriented silicon electrical steel market. Of this amount, approximately 80 percent of the shipments are to manufacturers of transformers used by utility companies. Shipments of grain-oriented silicon electrical steel to markets other than the transformer customers are primarily to electrical generator

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[25] Laser scribing is a process in which a laser etches tiny lines into the surface of the steel to reduce grain size. It is done primarily on certain high-permeability steel, although petitioners note that this process is also performed on conventional grain-oriented silicon electrical steel. Postconference brief of petitioners, p. 5. The Japanese producers also laser scribe their high-permeability steel, but they must reapply the steel's initial surface coating which is destroyed by the scribing process.

[26] Postconference brief of Kawasaki, p. 7.

[27] Japanese respondents state ***. Postconference brief of Kawasaki, p. 13.

[28] "Domain refined" is a term that describes the process of reducing the size of the individual domains, or grains, in grain-oriented silicon electrical steel. Methods for accomplishing this include laser scribing, plasma jet scribing, mechanical scribing, and electronic beam scribing. The domain-refining effects of laser scribing, however, are eliminated in any further stress-relief annealing (a controlled heating process) that the grain-oriented silicon electrical steel undergoes. Permanent domain-refined grain-oriented silicon electrical steel is that which has been domain refined in a manner that can withstand further stress-relief annealing without losing its domain-refined characteristics.

[29] Postconference brief of Kawasaki, p. 14.

[30] Conference transcript, pp. 54 and 168, and postconference brief of Kawasaki, exhibit B, p. 13.

[31] Conference transcript, pp. 60-61.

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manufacturers, which account for less than 5 percent of total grain-oriented silicon electrical steel shipments.[32]

According to the Japanese respondents, conventional grain-oriented silicon electrical steel can, in theory, perform the same function as high-permeability grain-oriented silicon electrical steel; however, they state that the commercial realities of the transformer industry dictate that high-permeability grain-oriented silicon electrical steel and conventional grain-oriented silicon electrical steel cannot be used to create the same product.[33] Consequently, the respondents assert that the high-permeability product primarily services the evaluated transformer market, of which the utility companies constitute the major portion, and that the conventional product primarily services the non-evaluated market, which consists of small electric product manufacturers, low voltage transformer makers, appliance producers, and similar customers.[34]

Substitute Products

There are very few practical substitutes for grain-oriented silicon electrical steel. The electromagnetic properties necessary to transform electric power efficiently from a form that is generated at a power plant to a form that can be used by a consumer are uniquely provided by grain-oriented silicon electrical steel. The magnetic properties of grain-oriented silicon electrical steel (chiefly its permeability and core loss) imparted by the precisely controlled chemistry, cold-rolling, and annealing to which it is subjected preclude its interchangeability with any other types of steel, including non-grain-oriented silicon electrical steel, carbon steel, and stainless steel.[35] The achievement of acceptable magnetic performance in transformer cores made from steel other than grain-oriented silicon electrical steel would require an enormous amount of material and would make the transformers prohibitively large and heavy.

Amorphous metal is a non-steel material that is used to make certain transformers, mainly those for which very high operating efficiency is demanded. Unlike grain-oriented silicon electrical steel, amorphous metal has a noncrystalline structure, which gives it a lower core loss than grain-oriented silicon electrical steel, but which also limits the number of lines of force that it can absorb during its lifetime. Amorphous metal is believed by petitioners to have application in very limited areas of the grain-oriented silicon electrical steel market and to account for 1 to 2 percent of the total transformer market.[36] Respondents contend that amorphous metal very actively substitutes for high-permeability grain-oriented silicon electrical steel in high-loss, evaluated transformer applications.[37] Respondents further state that the core loss of amorphous metals can be significantly lower than that of the lowest core loss grain-oriented silicon electrical steel (i.e., permanent domain-refined high-permeability material). Because amorphous metals can be used only for wound core transformers, they compete only with high-permeability grain-oriented silicon electrical steel for wound core transformer applications.[38]

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[32] Conference transcript, pp. 62-63.
[33] Postconference brief of Kawasaki, p. 8.
[34] Postconference brief of Kawasaki, p. 16.
[35] Petition, pp. 116 and 121, and conference transcript, p. 14.
[36] Conference transcript, pp. 69-70, and ***.
[37] Conference transcript, p. 116.
[38] Postconference brief of Kawasaki, exhibit B, p. 10. Staff believes that amorphous metal does compete with high-permeability grain-oriented silicon electrical steel, but that amorphous metal's relatively higher cost to the transformer producer and its relatively shorter useful life currently limit its use in other transformer applications.

U.S. Tariff Treatment

Imports of grain-oriented silicon electrical steel subject to these investigations are provided for principally in HTS statistical reporting numbers 7225.10.0030 (of a width of 600mm or more), 7226.10.1030 (of a width of 300mm but less than 600mm), 7226.10.5015 (of a width of less than 300mm and of a thickness not exceeding 0.25mm), and 7226.10.5065 (of a width of less than 300mm and of a thickness exceeding 0.25mm).[39] The column 1-general (most-favored-nation or MFN) rates of duty for grain-oriented silicon electrical steel (applicable to imports from both Italy and Japan) are 5.8 percent ad valorem for widths of 300mm or more and 7.0 percent ad valorem for widths of less than 300mm.

On April 1, 1993, petitioners filed a request with the interagency Committee for Statistical Annotation of Tariff Schedules (Committee) for separate HTS statistical reporting numbers for grain-oriented and non-grain-oriented silicon electrical steel. The request was approved by the Committee with certain modifications; specifically, categories were created for grain-oriented silicon electrical steel and for other silicon electrical steel, rather than for non-grain-oriented silicon electrical steel. Supplement 1 to the *Harmonized Tariff Schedule of the United States (1993)* contains the new statistical breakouts listed in the preceding paragraph.[40]

THE NATURE AND EXTENT OF ALLEGED SUBSIDIES

The petitioners allege that ILVA S.p.A. (ILVA), the only Italian producer of grain-oriented silicon electrical steel, receives subsidies from the Italian government within the meaning of the countervailing duty law. The petitioners named 26 subsidy programs alleged to be benefitting ILVA. Commerce has reviewed the petitioners' allegations and has initiated an investigation on the following programs:

1. Equity Infusions
   a. Equity infusions provided to predecessor companies of ILVA (Terni Societa per l'Industria e l'Elettricita S.p.A. and Terni Acciai Speciali (Terni)) in 1978, 1980 through 1982, and 1984 through 1987
   b. Equity infusions provided to ILVA from 1989 through 1991
2. Debt forgiveness in connection with the 1987-88 Restructuring Plan
3. Debt forgiveness in connection with the transfer of Terni's assets to ILVA
4. Government Loan Guarantees
5. Preferential Financing under Law 675/77
   a. Loans from the Ministry of Industry
   b. Istituto per la Ricostruzione Industriale (IRI) Bond Issue Loan
   c. Interest contributions
   d. Capital grants/grants to ILVA
   e. Personnel retraining grants
   f. Value-added tax (VAT) Reductions
6. Interest grants for "indirect debts" under law 750/81

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[39] Commerce's scope of the investigations indicates that the subject product is also provided for in the following HTS statistical reporting numbers: 7225.30.7000, 7225.40.7000, 7225.50.8000, 7225.90.000, 7226.91.7000, 7226.91.8000, 7226.92.5000, 7226.92.7050, 7226.92.8050, 7226.99.0000, 7228.30.8050, 7228.60.6000, and 7229.90.1000.

[40] Prior to the creation of the new statistical breakouts, grain-oriented silicon electrical steel was principally classified under HTS statistical reporting numbers 7225.10.0000, 7226.10.1000, 7226.10.5030, and 7226.10.5060.

7. Urban redevelopment packages under law 181
8. Social Security exemptions
9. Interest subsidies under law 617/81
10. Interest contributions under the Sabatini law
11. Finsider financing
12. Subsidized Istituto Mobiliare Italiano (IMI) export financing
13. National Research Plan for the Iron and Steel Industry grant
14. Early retirement
15. Exchange Risk Guarantee Program
16. Exemptions from local income taxes (ILOR) and profit taxes (IRPEG)
17. European Coal and Steel Community (ECSC) Article 54 loans
18. European Social Fund grants
19. ECSC redeployment aid (Article 56(2)(b))

The following programs alleged by the petitioners to be benefitting the Italian producer of grain-oriented silicon electrical steel were not included by Commerce in the initiation of the investigation because of the petitioners' lack of evidence, information, or specific allegations:

1. Terni's 1990 contribution of assets to ILVA
2. Law 464/72 financing
3. Regional government financing
4. IMI research loans
5. Subsidized short-term financing
   a. Short-term debt from IRI
   b. Short-term debt from Istituto Ligure Interessenze Industriali e Commerciali (ILLIC)
6. OECD Nuclear Energy Agency financing
7. Monetary revaluation under law 72/83

THE NATURE AND EXTENT OF ALLEGED SALES AT LTFV

The United States price (USP) of the subject imports from Italy, as calculated by the petitioners, is based on U.S. price quotes provided by a consultant. Deductions to the USP were made for ocean freight, marine insurance, U.S. duties, U.S. merchandise processing fees, and U.S. harbor maintenance fees. The petitioners based the foreign market value (FMV) of the subject Italian products on a constructed value (CV) because they claim that ILVA's home market prices of grain-oriented silicon electrical steel, obtained from consultants, are below ILVA's cost of production. Based on a comparison of CV and USP, the alleged dumping margin concerning grain-oriented silicon electrical steel from Italy is 60.79 percent.

The petitioners obtained from a consultant USP quotes for Japanese grain-oriented silicon electrical steel, f.o.b. Japanese port. The USP was calculated by making deductions for foreign inland freight, discounts, and rebates. The FMV for the Japanese subject product is based on delivered home market prices obtained by the petitioners from a consultant. Deductions were made for inland freight, rebates, promotions, advertising, warranties, guarantees, trade discounts, and credits. Based on comparisons of USP and FMV, the alleged dumping margins of Japanese grain-oriented silicon electrical steel range from 30.91 to 32.46 percent.

THE U.S. MARKET

The period for which information was requested in these investigations is from January 1990 to June 1993. Summary data collected in the investigations and presented in this report concerning grain-oriented silicon electrical steel are presented in appendix C.

U.S. Producers

Allegheny and Armco, *** of the U.S. production and shipments of grain-oriented silicon electrical steel during the period for which data were collected, are the only producers of this product in the United States. These two firms and the nature of their operations are discussed below.

Allegheny

Allegheny, headquartered in Pittsburgh, PA, is a major producer of a wide range of flat-rolled specialty materials, including stainless steel, grain-oriented silicon electrical steel, and other specialty alloys. The corporate total net sales in fiscal year 1992 were over $1 billion, compared with its U.S. grain-oriented silicon electrical steel net sales in 1992 of $***.

Allegheny, a petitioner in the antidumping investigations concerning Italy and Japan and the countervailing duty investigation concerning Italy, owns and operates grain-oriented silicon electrical steel production facilities in the United States at ***. It is at *** that the firm produces grain-oriented silicon electrical steel in conventional grades from M-2 to M-6. Allegheny does not produce high-permeability grain-oriented silicon electrical steel.[41] Other products, such as ***, are also produced at ***.[42] These other products share a portion of the machinery, equipment, and production workers with grain-oriented silicon electrical steel, primarily in the early stages of the production process. The portion of the process that gives grain-oriented silicon electrical steel its inherent properties is dedicated to this product. The firm indicated that, although its *** business shares the hot strip mill machinery, equipment, and production workers with grain-oriented silicon electrical steel, ***.

During the period for which data were collected, Allegheny reported export sales of grain-oriented silicon electrical steel to ***. No imports of grain-oriented silicon electrical steel were reported by Allegheny and the firm indicated that it does not maintain any joint ventures or agreements with the Japanese or Italian producers of grain-oriented silicon electrical steel.[43]

Armco

Armco, headquartered in Parsippany, NJ, is a major producer of stainless steel, electrical steel, carbon steel, steel products, and tubular goods. Armco also has joint-venture interests in companies that produce stainless steel, carbon steel flat-rolled sheets, and oil field machinery and equipment. In addition, Armco provides insurance services through businesses it intends to sell. The corporate total net sales in fiscal year 1992 were over $2 billion, compared with its U.S. grain-oriented silicon electrical steel net sales in 1992 of $***.

Armco owns and operates grain-oriented silicon electrical steel production facilities in the United States at ***. At ***, Armco produces all grades of conventional and high-permeability

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[41] Conference transcript, p. 54.
[42] Allegheny indicated that in its most recent fiscal year ***.
[43] Conference transcript, p. 49.

grain-oriented silicon electrical steel.[44] Other products, such as ***, are also produced at ***, all of which share a portion of the machinery, equipment, and production workers with grain-oriented silicon electrical steel, primarily in the early stages of production.

During the period for which data were collected, Armco reported export sales of grain-oriented silicon electrical steel to ***. No imports of grain-oriented silicon electrical steel were reported by Armco.

Armco is a petitioner in the antidumping and countervailing duty investigations concerning Italy. The firm explains that it did not join Allegheny as a petitioner in the case concerning Japan because it has certain technical relationships with a Japanese producer of grain-oriented silicon electrical steel that it wants to preserve. The firm indicated, however, that it was in support of the antidumping petition concerning Japan.[45] Armco's relationship with the Japanese concerns the production of its high-permeability grain-oriented silicon electrical steel under a 1990 technology licensing agreement with Nippon. Nippon has provided Armco with technical assistance and know-how concerning the production of this high-permeability product.[46]

Armco and Vicksmetals[47] formed a joint-venture company (Vicksmetals Armco Associates (VAA)) in August 1990 to perform steel slitting operations in the United States. VAA's sole function is to slit steel that is owned by another party, generally either by Armco or by Nippon, for a fee. Armco asserts that the VAA joint venture was established to provide additional slitting capacity for Armco that was closer in proximity to its customers. Armco also insists that no older slitting capacity at Armco's facility was decommissioned nor was its workforce reduced. ***.[48]

U.S. Importers

The Commission sent questionnaires requesting information concerning U.S. imports of grain-oriented silicon electrical steel to the two U.S. producers of the product and to the 16 firms identified in the petition as importers of the product from Italy and Japan. Importers' questionnaires were also sent to an additional 13 firms identified by the U.S. Customs Service as importers of products falling within the same HTS numbers provided in the petitions.

ILVA, the importer of record of all Italian grain-oriented silicon electrical steel entering the United States, provided complete information concerning its imports of the subject product. Information concerning imports of grain-oriented silicon electrical steel from Japan was provided by

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[44] Conference transcript, p. 54. Respondents assert that Armco produces only high-permeability low-core-loss grain-oriented silicon electrical steel for use in stacked core power transformers and that it does not produce the high-permeability ultra-low-core-loss product for use in wound core distribution transformers. In addition, respondents indicated that the high-permeability product that Armco produces cannot meet the performance standards of the Japanese product and is not produced in sufficient quantities to satisfy consumer requirements. Conference transcript, pp. 100-102, and postconference brief of Nippon, exhibit 1, pp. 3-4. The National Electrical Manufacturers Association (NEMA) indicates that its members believe that Armco could provide only 25 to 50 percent of the domestic requirements for the high-permeability product. Postconference brief of Kawasaki, p. 20. Armco stated ***. ***. Telephone conversation with Armco officials, Sept. 27, 1993.

[45] Conference transcript, p. 48.

[46] Conference transcript, pp. 93 and 100, and postconference brief of Kawasaki, p. 20. Armco's relationship with Nippon ***. ***. Field tour of Armco, Sept. 9, 1993, and telephone conversation with Armco officials, Sept. 27, 1993.

[47] Vicksmetals is wholly owned by Sumitomo Corp. of America (Sumitomo), a trading company that imports the subject product from Japan.

[48] Postconference brief of petitioners, pp. 14-15 and 23, and telephone conversation with *** of Armco, Sept. 27, 1993.

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six importers of the Japanese products.[49] These data are believed to account for all of the subject imports from Japan. Information concerning imports from non-subject countries was provided by four importers of grain-oriented silicon electrical steel from France, Sweden, and the United Kingdom. These data are believed to account for almost all grain-oriented silicon electrical steel imports from these three non-subject countries. Commerce's official import statistics for imports from other non-subject countries have been used in this report in the absence of primary data.[50]

Channels of Distribution

U.S. producers and importers from Japan generally sell directly to manufacturers of large power and distribution transformers.[51] ILVA sells the majority of its imports of the Italian product to stampers of laminations.[52] U.S. producers also sell to this channel of distribution. Stampers sell the laminations for use in small stacked core transformers used in appliances, electronic equipment, and aerospace and aeronautical applications.

Apparent U.S. Consumption

Data concerning apparent U.S. consumption of grain-oriented silicon electrical steel are calculated based on questionnaire responses containing data concerning U.S. shipments of U.S. producers and U.S. shipments of U.S. importers from France, Italy, Japan, Sweden, and the United Kingdom. Imports as provided by Commerce's official import statistics are presented in the absence of importers' questionnaire data concerning imports from non-subject countries other than France, Sweden, and the United Kingdom.[53] The calculated apparent U.S. consumption data are presented in table 1 and figure 1.

The quantity of apparent U.S. consumption of grain-oriented silicon electrical steel fell by 13.0 percent from 1990 to 1992 and by 2.4 percent in the first half of 1993. By value, the apparent U.S. consumption fell by 11.6 percent from 1990 to 1992 and by 5.3 percent in the first half of 1993. This decline in apparent U.S. consumption may be explained by a fall in housing starts, nonresidential building, power plant construction, electric motor and small transformer production, electricity usage, utility spending, and core loss improvements.[54]

CONSIDERATION OF ALLEGED MATERIAL INJURY

Data presented in this section of the report consist of data provided by Allegheny and Armco. Each firm's data is presented separately in appendix D. Data provided by Armco concerning its high-permeability and conventional grain-oriented silicon electrical steel are presented in appendix E.

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[49] The largest importers of the subject product from Japan are ***. These three firms account for approximately *** percent of the subject imports from Japan. The other three importers that account for the remaining *** percent are ***.

[50] The HTS tariff classification numbers under which grain-oriented silicon electrical steel falls include non-grain-oriented silicon electrical steel, a product not included in the scope of these investigations. Therefore, official import statistics, as presented for grain-oriented silicon electrical steel imports from non-subject countries other than France, Sweden, and the United Kingdom, may be overstated.

[51] Conference transcript, pp. 15 and 96.

[52] ILVA indicated in its questionnaire response that its 1992 shipments were as follows: ***.

[53] The data concerning imports from non-subject countries, other than France, Sweden, and the United Kingdom, may be overstated by the amount of non-grain-oriented silicon electrical steel included in Commerce's official statistics.

[54] Conference transcript, pp. 109-110, and ***.

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Table 1
Grain-oriented silicon electrical steel: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 1990-92, January-June 1992, and January-June 1993

Item	1990	1991	1992	January-June-- 1992	1993
	Quantity (short tons)				
Producers' U.S. shipments . . .	***	***	***	***	***
Importers' U.S. shipments:					
Italy	***	***	***	***	***
Japan	***	***	***	***	***
Subtotal	***	***	***	***	***
Other sources:					
Primary[1]	***	***	***	***	***
Secondary[2]	14,247	13,286	12,846	6,523	6,125
Subtotal	***	***	***	***	***
Total	***	***	***	***	***
Apparent consumption . . .	287,815	248,844	250,335	129,245	126,144
	Value (1,000 dollars)				
Producers' U.S. shipments . . .	***	***	***	***	***
Importers' U.S. shipments:					
Italy	***	***	***	***	***
Japan	***	***	***	***	***
Subtotal	***	***	***	***	***
Other sources:					
Primary[1]	***	***	***	***	***
Secondary[2]	12,513	12,608	12,903	6,471	5,186
Subtotal	***	***	***	***	***
Total	***	***	***	***	***
Apparent consumption . . .	432,505	381,959	382,321	198,706	188,164

[1] Data for primary sources are compiled from data submitted in questionnaire responses. These data consist of U.S. shipments of imports from France, Sweden, and the United Kingdom.

[2] Data for secondary sources are imports obtained from the official import statistics of the U.S. Department of Commerce.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission, except where noted.

Figure 1
Grain-oriented silicon electrical steel: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 1990-92

* * * * * * *

U.S. Capacity and Production

Data concerning U.S. capacity, production,[55] and capacity utilization of grain-oriented silicon electrical steel are presented in table 2. Capacity data reported by Allegheny are calculated based on operating *** hours per week, *** weeks per year. Allegheny's basis for determining its capacity for grain-oriented silicon electrical steel is the capacity of ***.[56] Armco reported capacity data based on operating *** hours per week, *** weeks per year. Armco's capacity constraint for producing grain-oriented silicon electrical steel is based on its equipment dedicated to the production of this product.[57] The U.S. producers' capacity to produce grain-oriented silicon electrical steel *** throughout the period for which information was requested.

Table 2
Grain-oriented silicon electrical steel: U.S. capacity, production, and capacity utilization, 1990-92, January-June 1992, and January-June 1993

* * * * * * *

Production of grain-oriented silicon electrical steel in the United States ***. Although Armco reported ***, Allegheny reported ***. Allegheny explains ***.

The calculated capacity utilization for U.S. production of grain-oriented silicon electrical steel ***.[58]

U.S. Producers' Shipments

Shipments of U.S.-produced grain-oriented silicon electrical steel are presented in table 3. The quantity of the U.S. producers' U.S. shipments ***. By value, the U.S. producers' U.S. shipments ***.

The quantity of exports ***. During the period for which data were collected, Allegheny exported ***.[59] ***.

Table 3
Grain-oriented silicon electrical steel: Shipments by U.S. producers, by types, 1990-92, January-June 1992, and January-June 1993

* * * * * * *

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[55] Production data reported include work-in-progress materials, as well as finished materials. Allegheny and Armco indicated that reporting the data in this manner is in keeping with the industry-reporting standard.

[56] Allegheny points out ***. Postconference brief of petitioners, p. 24.

[57] Armco indicates that its melt shop and hot-rolling mill are used in the production of other products in addition to grain-oriented silicon electrical steel. Postconference brief of petitioners, p. 24. Respondents argue that Armco's melt shop and hot-rolling mill are operating at full capacity with the production of grain-oriented silicon electrical steel and stainless steel products. Respondents further indicated ***. Postconference brief of Nippon, pp. 18-21 and exhibit 5. Armco indicated ***. ***. Telephone conversation with Armco officials, Sept. 27, 1993.

[58] Petitioners point out ***. Postconference brief of petitioners, p. 21.

[59] The petitioners indicated ***. Telephone conversation with Allegheny and Armco officials, Sept. 27, 1993.

U.S. Producers' Inventories

End-of-period inventories of grain-oriented silicon electrical steel held by U.S. producers are presented in table 4.[60] These inventories ***. ***. The ratios of inventories to total shipments and of inventories to production ***.

* * * * * * *

Table 4
Grain-oriented silicon electrical steel: End-of-period inventories of U.S. producers, 1990-92, January-June 1992, and January-June 1993

* * * * * * *

U.S. Employment, Wages, and Productivity

Allegheny indicated that its production and related workers that produce grain-oriented silicon electrical steel are represented by the United Steelworkers of America and Armco indicated that its workers are represented by the Butler Armco Independent Union and the Zanesville Armco Independent Union. All three unions that represent these workers in the United States are also petitioners in at least two of these investigations. The production and related workers that produce grain-oriented silicon electrical steel at Armco's and Allegheny's facilities are also employed in the production of other products. At Armco, these other products consist of ***. At Allegheny, these other products consist of ***.

Allegheny reported ***. Armco reported ***.

Data concerning employment and productivity are presented in table 5. The data presented indicate ***. ***.

* * * * * * *

Table 5
Average number of U.S. production and related workers producing grain-oriented silicon electrical steel, hours worked, wages and total compensation paid to such employees, and hourly wages, productivity, and unit labor costs, 1990-92, January-June 1992, and January-June 1993

* * * * * * *

Financial Experience of U.S. Producers

Allegheny and Armco, which together accounted for 100 percent of U.S. 1992 production of grain-oriented silicon electrical steel, supplied financial data. Both companies have fiscal years ending on or about December 31. Allegheny, a domestic producer of specialty steels--stainless steels, silicon electrical steels, and high-technology alloys--produces grain-oriented silicon electrical steel at ***. The company's overall corporate net sales have hovered around $1.05 billion since 1990, whereas net sales of grain-oriented silicon electrical steel have ***. ***.

Although Armco is primarily a producer of specialty steels, it also produces carbon steel and steel products. Armco produces grain-oriented silicon electrical steel at ***. Armco's overall

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[60] According to industry-reporting standards, inventory data include work-in-progress materials, as well as finished materials.

corporate net sales fell steadily from about $3.2 billion in 1988 to $1.6 billion in 1991 as the company sold off business components. Following a major acquisition in 1992, sales increased to $2.1 billion; about 15 percent of the total consisted of export sales. Armco had net profits from 1987 to 1989, but has had net losses totaling $856 million since then. ***.

Overall Establishment Operations

Armco was able to provide financial data for its establishments that produced grain-oriented silicon electrical steel, but Allegheny was not. Instead, Allegheny provided data for its overall corporation. The data provided by the two producers are shown in table 6. While net sales ***. ***, as cost of goods sold *** relative to net sales. Since selling, general, and administrative (SG&A) expenses and other expenses ***. ***.

In 1992, net sales ***. However, since cost of goods sold *** relative to ***, and since SG&A ***. ***, interim 1993 results were *** interim 1992 results. Not only were net sales ***, but cost of goods sold *** relative to net sales ***. ***.

Sales of grain-oriented silicon electrical steel accounted for about *** percent of Armco's establishment and Allegheny's overall sales, respectively.

Table 6
Income-and-loss experience of U.S. producers on the overall operations of their establishments wherein grain-oriented silicon electrical steel is produced, fiscal years 1990-92, January-June 1992, and January-June 1993

* * * * * * *

Operations on Grain-Oriented Silicon Electrical Steel

Income-and-loss data for operations on grain-oriented silicon electrical steel are shown in table 7. Net sales ***, principally due to ***. ***. *** in SG&A expenses ***. ***.

The situation *** in 1992. Net sales value ***. ***.

A comparison of interim 1993 and interim 1992 reveals *** results. Net sales value ***. ***.

Table 7
Income-and-loss experience of U.S. producers on their operations producing grain-oriented silicon electrical steel, fiscal years 1990-92, January-June 1992, and January-June 1993

* * * * * * *

Table 8 presents selected income-and-loss data for both producers. ***, Allegheny is experiencing ***. From 1990 to 1992, its net sales value ***. With respect to the interim periods, even though Allegheny's net sales value ***. *** in sales from 1990 to 1992 is largely attributable to ***. In 1990 and 1991 the company ***. In 1992, ***, and in the first half of 1993, ***. When sales *** in 1992, Allegheny's ***.[61] ***.

From 1990 to 1992, Armco's net sales ***. ***, its net sales value ***. ***. Armco's unit sales value *** from 1990 through the first half of 1993. ***, its unit cost of goods sold *** from 1990 to 1992 *** in the interim periods. According to Armco, *** is principally due to ***.

[61] In 1990 and 1991, ***. In 1992, ***. ***.

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Table 8
Income-and-loss experience of U.S. producers on their operations producing grain-oriented silicon electrical steel, by firms, fiscal years 1990-92, January-June 1992, and January-June 1993

* * * * * * *

***. In terms of quantity, Armco's export sales *** from *** percent of total sales in 1990 to *** percent in 1992.

Counsel for Nippon[62] claims ***. Staff reviewed this claim and examined possible effects these events may have had upon grain-oriented silicon electrical steel costs. Based on information gathered, ***.

Investment in Productive Facilities and Net Return on Assets

Data on investment in productive facilities and return on assets are shown in table 9. ***.

Table 9
Value of assets and return on assets of U.S. producers' operations producing grain-oriented silicon electrical steel, fiscal years 1990-92, January-June 1992, and January-June 1993

* * * * * * *

Capital Expenditures

The capital expenditures for both producers are shown in table 10. *** grain-oriented silicon electrical steel-related expenditures in 1990 and 1991, ***. From 1990 to 1992 the ratios of grain-oriented silicon electrical steel-related capital expenditures to total corporate capital expenditures were *** percent, respectively, for Armco, and *** percent, respectively, for Allegheny.

Table 10
Capital expenditures by U.S. producers of grain-oriented silicon electrical steel, by products, fiscal years 1990-92, January-June 1992, and January-June 1993

* * * * * * *

Research and Development Expenses

The research and development expenses for both producers are shown in table 11. Allegheny's annual grain-oriented silicon electrical steel-related R&D expenses ***, while Armco's ***. On a corporate-wide level, Allegheny's annual R&D expenses have been *** from 1990 to 1992 while Armco's have been about ***. From 1990 to 1992, the ratios of grain-oriented silicon electrical steel-related R&D expenses to total corporate R&D expenses were *** percent, respectively, for Allegheny, and *** percent, respectively, for Armco.

[62] Postconference brief of Nippon, pp. 28-30.

Table 11
Research and development expenses of U.S. producers of grain-oriented silicon electrical steel, by products, fiscal years 1990-92, January-June 1992, and January-June 1993

* * * * * * *

Capital and Investment

The Commission requested U.S. producers to describe any actual or potential negative effects of imports of grain-oriented silicon electrical steel from Italy and Japan on their growth, investment, ability to raise capital, or existing development and production efforts (including efforts to develop a derivative or more advanced version of the product). Their responses are shown in appendix F.

CONSIDERATION OF THE QUESTION OF THREAT OF MATERIAL INJURY

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

> In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the merchandise, the Commission shall consider, among other relevant economic factors[63]--
>
> (I) If a subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the subsidy is an export subsidy inconsistent with the Agreement),
>
> (II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,
>
> (III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,
>
> (IV) the probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise,
>
> (V) any substantial increase in inventories of the merchandise in the United States,
>
> (VI) the presence of underutilized capacity for producing the merchandise in the exporting country,
>
> (VII) any other demonstrable adverse trends that indicate the probability that the importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury,

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[63] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "Any determination by the Commission under this title that an industry in the United States is threatened with material injury shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."

(VIII) the potential for product-shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 701 or 731 or to final orders under section 706 or 736, are also used to produce the merchandise under investigation,

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

(X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.[64]

Available information on the nature of the alleged subsidies (item (I) above) is presented in the section of this report entitled "The Nature and Extent of Alleged Subsidies;" information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV) above) is presented in the section entitled "Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged Material Injury;" and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts (item (X)) is presented in the section entitled "Consideration of Alleged Material Injury." Available information on U.S. inventories of the subject products (item (V)); foreign producers' operations, including the potential for "product-shifting" (items (II), (VI), and (VIII) above); any other threat indicators, if applicable (item (VII) above); and any dumping in third-country markets, follows. Item (IX) is not applicable.

U.S. Importers' Inventories

Data concerning U.S. inventories held by importers of Italian and Japanese grain-oriented silicon electrical steel are presented in table 12.

The inventories of the Italian product ***. ILVA indicated that the inventories reported were ***. ***. ILVA notes that the inventory reported ***.[65]

The inventories of the Japanese product ***. ***.

The trend concerning total inventories of the subject product held in the United States ***, while U.S. inventories of grain-oriented silicon electrical steel from non-subject countries ***.

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

[65] Postconference brief of ILVA, p. 20.

Table 12
Grain-oriented silicon electrical steel: End-of-period inventories of U.S. importers, by sources, 1990-92, January-June 1992, and January-June 1993

* * * * * * *

Ability of Producers in Italy and Japan to Generate Exports and the Availability of Export Markets Other than the United States

Italy

ILVA, the only producer of grain-oriented silicon electrical steel in Italy, also produces ***. The firm's production of grain-oriented silicon electrical steel accounts for approximately *** percent of its total net sales. ILVA produces a full range of grain-oriented silicon electrical steel, including all grades of the conventional product and the high-permeability low-core-loss product. ILVA's high-permeability product is produced under a technology license with Nippon; however, the license does not permit sales of this product into the United States.[66] ILVA indicates that approximately 95 percent of its exports to the United States are of conventional grade M-6 grain-oriented silicon electrical steel and the remaining 5 percent are conventional grades M-4 and M-5 products.[67] ILVA supplied data concerning its Italian grain-oriented silicon electrical steel production, inventories, and shipments. These data are shown in table 13.

ILVA reported capacity data on the basis of operating *** hours per week, *** weeks per year. ILVA's annual capacity to produce grain-oriented silicon electrical steel *** during the period for which data were collected. The firm also indicated ***.

Production of the subject product in Italy ***. Projections reveal *** is expected from 1992 to 1994.

Inventories held in Italy ***. ***. ILVA indicated that it plans to *** its level of inventories from 1992 to 1994.

Exports of grain-oriented silicon electrical steel to the United States, which represented *** percent of ILVA's total shipments of the product, ***. ***. ILVA's projections indicate that exports to the United States are expected to *** from 1992 to 1994.

Table 13
Grain-oriented silicon electrical steel: Italian capacity, production, inventories, capacity utilization, and shipments, 1990-92, January-June 1992, January-June 1993, and projected 1993-94

* * * * * * *

Japan

Kawasaki and Nippon are the only Japanese producers of grain-oriented silicon electrical steel, a product which accounts for approximately *** percent of their corporate net sales. Nippon represents approximately *** percent of all Japanese grain-oriented silicon electrical steel production and *** percent of Japanese exports of this product to the United States, while Kawasaki accounts for the remaining percentages. Nippon and Kawasaki produce the conventional grades and the high-

[66] Conference transcript, p. 171.
[67] Conference transcript, pp. 152 and 172.

permeability grain-oriented silicon electrical steel.[68] Import data collected in these investigations indicate that, in 1992, *** percent of the U.S. shipments of Japanese imports were of the conventional product,[69] and *** percent were of the high-permeability product.[70] Both Japanese producers of grain-oriented silicon electrical steel supplied data concerning their production, inventories, and shipments. These data are shown in table 14.

The Japanese producers' capacity to produce grain-oriented silicon electrical steel ***. This *** in capacity is explained by ***. ***.

***, the total Japanese capacity to produce grain-oriented silicon electrical steel is projected to *** from 1992 to 1994. Nippon indicated that ***; however, Kawasaki indicated that ***.

Production of the subject product in Japan ***. *** in total Japanese production may be explained by ***. ***. Projections reveal that *** in production is expected from 1992 to 1994.

Inventories held in Japan ***. ***. Projections reveal that the Japanese producers expect *** in the inventory levels from 1992 to 1994.

Exports of grain-oriented silicon electrical steel to the United States, which represented *** percent of the Japanese producers' total shipments of the product, ***. Projections indicate that Japanese exports to the United States are expected to *** from 1992 to 1994. Export markets other than the United States include ***. Since 1990, the share of the Japanese producers' shipments to these other markets ***.

Table 14
Grain-oriented silicon electrical steel: Japanese capacity, production, inventories, capacity utilization, and shipments, 1990-92, January-June 1992, January-June 1993, and projected 1993-94

* * * * * * *

CONSIDERATION OF THE CAUSAL RELATIONSHIP BETWEEN IMPORTS OF THE SUBJECT MERCHANDISE AND THE ALLEGED MATERIAL INJURY

U.S. Imports

The import data received from six Japanese importers of the subject product and ILVA, the only importer of the subject product from Italy, are believed to account for all imports of the subject product from these two countries. Import data were also received from four importers of grain-oriented silicon electrical steel from France, Sweden, or the United Kingdom. These data received from questionnaire responses, coupled with Commerce's official import statistics for non-subject countries other than those for which data were supplied in response to the Commission's request, are believed to account for essentially all of the imports from non-subject countries.[71] These data are presented in table 15.

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[68] Petitioners contend that although the imported Japanese product is sold primarily at the high end of the spectrum and that the imported Italian product is sold primarily at the low end, there have recently been imports of conventional grade M-6 grain-oriented silicon electrical steel from Japan that compete directly with the Italian M-6 product. Conference transcript, p. 183, and postconference brief of petitioners, p. 18. Respondents argue ***. Postconference brief of Kawasaki, p. 32.

[69] ***.

[70] *** percent of the Japanese high-permeability product shipped in the United States in 1992 was for use in wound core transformers, while *** percent was for use in stacked core transformers.

[71] Imports from non-subject countries may be overstated by the amount of non-grain-oriented products included in Commerce's official statistics.

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Table 15
Grain-oriented silicon electrical steel: U.S. imports, by sources, 1990-92, January-June 1992, and January-June 1993

* * * * * * *

ILVA's U.S. imports consist of 95 percent conventional grade M-6 grain-oriented silicon electrical steel and 5 percent conventional grades M-4 and M-5. ILVA sells the M-6 product to five customers in the United States, all of which are stampers.[72]

The quantity of U.S. imports of grain-oriented silicon electrical steel from Italy increased by *** percent between 1990 and 1992 and by *** percent in the first half of 1993 over the comparable period in 1992. By value, U.S. imports of the subject product from Italy increased by *** percent between 1990 and 1992 and by *** percent in the partial-year periods. The increase in imports from Italy between 1990 and 1992 was explained by ILVA as a customer response to the introduction of a new coating for the product, a coating, ILVA alleges, that is not available from importers from other countries.[73] The increase from the first half of 1992 to the comparable period in 1993 was attributed by ILVA to the cessation of grain-oriented silicon electrical steel production at the DoFasco mill in Canada. ILVA asserts that it received requests from its customers for additional amounts of product that DoFasco had previously supplied but that ILVA did not obtain any new customers as a result of the Canadian firm's exit from the market.[74] In addition, ILVA indicates ***.

Data collected in these investigations indicate that U.S. shipments of imports from Japan in 1992 consisted of *** percent high-permeability product and *** percent conventional product.[75] The Japanese grain-oriented silicon electrical steel is sold in the United States primarily to large power and distribution transformer manufacturers.[76]

Imports of the subject product from Japan, by quantity, ***. ***. The value of U.S. imports from Japan ***. ***. In addition, the Japanese importers indicated that *** is scheduled for delivery during ***.

The quantity of U.S. imports of the subject product from Italy and Japan combined ***. By value, the trend of total subject imports ***. By quantity and value, data concerning imports of grain-oriented silicon electrical steel from non-subject countries revealed ***.

Average unit values reported by ILVA for imports from Italy were approximately *** the average unit values reported by importers of the subject product from Japan. The difference in the average unit value of imports from Italy and Japan is explained by the type of product produced and exported by the producers in these countries. The Italian product that is exported to the United States is generally a grade M-6 conventional permeability product that commands a much lower price than the higher permeability and lower core loss Japanese products. The average unit values of the Italian product *** from 1990 to 1991, *** from 1991 to 1992 and from January-June 1992 to January-June 1993. The unit values of the Japanese product *** in all periods for which data were collected.

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[72] Conference transcript, pp. 152-153 and 172.
[73] Conference transcript, p. 155.
[74] Conference transcript, p. 156.
[75] Of the conventional product, ***.
[76] Conference transcript, p. 96.

Voluntary Restraint Agreements

Electrical steel is included in the Voluntary Restraint Agreements (VRAs) that were in effect between 1984 and 1992. VRAs on electrical steel exports from Japan were in effect from October 1, 1984, through March 31, 1992. In June 1985, the United States and Japan reached an agreement limiting Japan's exports of steel, including electrical steel, to the United States. The agreement was enforced retroactively, covering Japan's exports beginning on October 1, 1984 and extending for 5 years through September 30, 1989. On October 1, 1989, the agreement was extended until March 31, 1992. According to petitioners, Japan did not fully utilize its export limit for electrical steel during the extended agreement.[77] Electrical steel from Italy was initially covered in the 1985 Complementary Arrangement, which supplemented the existing Steel Products Arrangement of 1982. As of January 1, 1986, the Italian restraints were converted to a VRA, which remained in effect until March 31, 1992.

U.S. Market Penetration by the Subject Imports

Market penetration data are calculated based on questionnaire responses containing data concerning U.S. shipments by U.S. producers and U.S. shipments by U.S. importers from France, Italy, Japan, Sweden, and the United Kingdom. Imports as provided by Commerce's official import statistics are presented in the absence of importers' questionnaire data concerning imports from non-subject countries other than France, Sweden, and the United Kingdom.[78] These data are presented in table 16 and figure 2.

From 1990 to 1992, the U.S. importers' share of apparent U.S. consumption of grain-oriented silicon electrical steel, by quantity, *** while the U.S. producers' share ***. During this period, the share held by imports from Italy increased ***, the share held by imports from Japan ***, and the share held by imports from non-subject countries ***.

In comparing the first six months of 1992 to the comparable period of 1993, the U.S. producers' share of apparent U.S. consumption of grain-oriented silicon electrical steel, by quantity, ***. In the same period, the share held by imports from Italy increased ***, the share held by imports from Japan ***, and the share held by imports from all other countries ***.

The share of apparent U.S. consumption held by the subject product from Italy and Japan combined ***.

Table 16
Grain-oriented silicon electrical steel: U.S. shipments of domestic and imported product as a share of apparent U.S. consumption, 1990-92, January-June 1992, and January-June 1993

* * * * * * *

Figure 2
Grain-oriented silicon electrical steel: Shares of the quantity and value of apparent U.S. consumption held by the United States, Italy, Japan, and other countries, 1990-92, January-June 1992, and January-June 1993

* * * * * * *

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[77] Postconference brief of petitioners, attachment 1, pp. 13-15.

[78] The data concerning imports from non-subject countries other than France, Sweden, and the United Kingdom may be overstated by the amount of non-grain-oriented silicon electrical steel included in Commerce's official statistics.

Prices

Marketing Practices

Most grain-oriented silicon electrical steel is sold directly to transformer manufacturers. These manufacturers, in turn, design transformers to meet the requirements of each utility to which they sell. The specifications of a particular transformer will depend, among other factors, on the utility's long-term energy supply cost and system capacity.[79] The cost of grain-oriented silicon electrical steel comprises approximately 30 percent of the total cost of the transformer.[80]

Grain-oriented silicon electrical steel is used in transformers because of its "ability to conduct a magnetic field in a specific direction with a high degree of efficiency."[81] Efficiency is defined by core loss,[82] a measurement of the amount of electrical energy lost in the core steel of the transformer. Core loss is the attribute that differentiates the grades of grain-oriented silicon electrical steel and is the main performance consideration for the purchaser.

The various grades of grain-oriented silicon electrical steel are often identified as either conventional grades (M-2 through M-6) or high- permeability grades. High-permeability products generally have lower core loss ratings than the conventional grades.[83] Allegheny produces all of the conventional grades from M-2 to M-6, and Armco produces the conventional grades as well as the high-permeability grades HO and H1.[84] During the period for which data were requested, imports from Italy consisted almost entirely of the M-6 grade,[85] whereas imports from Japan were mainly high-permeability products as well as ***.

As stated above, most sales of grain-oriented silicon electrical steel are made directly to transformer manufacturers. However, ILVA sells most of its imports of the Italian product to stampers of laminations, a market also served by the U.S. producers.[86] These stampers generally purchase only grade M-6 grain-oriented silicon electrical steel and produce various shaped laminations, such as E and I shapes. These laminations are then sold for use in small stacked core transformers used in appliances, electronic equipment, and aerospace and aeronautical applications.

Because of the need for transformer manufacturers to place bids with utilities, transformer manufacturers often solicit prices up to six months in advance of when the product is needed. Most sales by producers and importers are on a contract basis. Producers report that contracts are usually for ***; importers of the Japanese products report that their contracts are usually for ***; and ILVA reports shorter contracts of ***. Contracts usually state a fixed price and in some cases, quantity may be fixed. Only *** reported that their contracts contained meet-or-release clauses.

Responses to the questionnaires indicate that demand for grain-oriented silicon electrical steel has declined since 1990. Reasons cited include the decline in residential and non-residential construction, the decline in investment by utilities, increased energy conservation, and core loss improvements in grain-oriented silicon electrical steel.

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[79] Conference transcript, p. 23.
[80] Conference transcript, p. 102.
[81] Petition, p. 5.
[82] The maximum or average core loss is measured for a given induction level (the intensity of the magnetic field in the transformer).
[83] Conference transcript, p. 33.
[84] Conference transcript, p. 54.
[85] In addition, ILVA reported some imports of M-4 and M-5 grades.
[86] In 1992, ILVA's shipments were as follows: ***.

Transportation Costs

Reported U.S. inland transportation costs accounted for *** percent of the total delivered cost of U.S.-produced grain-oriented silicon electrical steel, *** percent of the cost of imports from Japan, and *** percent of the cost of imports from Italy. Both U.S. producers quoted prices on an f.o.b. basis, whereas 4 of the 6 importers from Japan and ILVA quoted prices on a delivered basis. U.S. producers and importers from Japan indicated that they serve the entire U.S. market; ILVA serves its customers located in ***. U.S. producers' lead times range from 2 to 3 weeks, whereas lead times from Italy and Japan range from 3 to 6 months.

Quality Considerations

Both U.S. producers reported in their questionnaire responses that the domestic and imported products are used interchangeably and that differences in quality were not a significant factor in their sales of the subject products. *** additionally reported that high-permeability laser-scribed material from Japan had lower core losses than *** M-3 product but that this would only be an advantage if the high-permeability material was priced too low.

ILVA reported that while its Italian M-6 product can technically be used interchangeably with domestic products, its product has a superior coating and is offered in wider size coils than the U.S. products. All of the importers from Japan agreed that their products were not interchangeable with the U.S.-produced products. These importers stated that the Japanese products had lower core losses, higher permeability, and better performance characteristics that facilitate the design of more compact transformers which use less steel and have decreased "noise" level. One importer stated that the quality of Armco's high-permeability products has not been acceptable to end users and that Armco offers only 0.23mm thick material while market demand is for the 0.20mm size provided by Japanese suppliers. In addition, it states that there are no imports from Japan of M-2 or M-4 and only limited imports of M-6 and that Kawasaki's M-3 has a lower core loss rating than domestic M-3.

Questionnaire Price Data

The Commission requested U.S. producers and importers to provide quarterly price data between January 1990 and June 1993 for the following four products:

Product 1: M-6, 0.35mm thickness, maximum core loss 0.66 (1.5T; 60 Hz), punching quality.

Product 2: M-3, 0.23mm thickness, maximum core loss 0.46-0.49 (1.5T; 60 Hz).

Product 3: Domain-refined grain-oriented silicon electrical steel for stacked core application with high permeability (1850μp at 10 Oe), maximum core loss 0.50 (1.7T; 60 Hz), 0.23mm thickness.

Product 4: Non-domain refined grain-oriented silicon electrical steel for wound core application with high permeability (1850μp at 10 Oe), maximum core loss 0.35-0.39 (1.5T; 60 Hz), 0.20mm thickness.

The price data were requested on a net U.S. f.o.b. and delivered basis for each responding firm's largest sale and its total quarterly sales to end users and stampers/service centers.[87] Weighted-average net U.S. f.o.b. prices, quantities sold, and margins of underselling/overselling are presented in tables 17 to 20 and figures 3 to 6.

Table 17
Weighted-average f.o.b. prices for sales to stampers/service centers of product 1 reported by U.S. producers and importers, and margins of underselling (overselling), by quarters, January 1990-June 1993

* * * * * * *

Table 18
Weighted-average f.o.b. prices for sales to end users of product 2 reported by U.S. producers and importers, and margins of underselling (overselling), by quarters, January 1990-June 1993 [1] [2]

* * * * * * *

[1] There were no imports of product 2 from Italy during the period for which data were requested.
[2] Petitioners allege that the Japanese M-3 product sold in the United States is really high-permeability product that is mislabeled (postconference brief of petitioners, p. 29). ***.

Table 19
Weighted-average f.o.b. prices for sales to end users of product 3 reported by U.S. producers and importers, and margins of underselling (overselling), by quarters, January 1990-June 1993[1]

* * * * * * *

[1] There were no imports of product 3 from Italy during the period for which data were requested.

Table 20
Weighted-average f.o.b. prices for sales to end users of product 4 reported by U.S. producers and importers, and margins of underselling (overselling), by quarters, January 1990-June 1993[1]

* * * * * * *

[1] There were no imports of product 4 from Italy during the period for which data were requested.

Figure 3
Weighted-average f.o.b. prices for sales to stampers/service centers of product 1 reported by U.S. producers and importers, by quarters, January 1990-June 1993

* * * * * * *

[87] Producers and importers reported sales of both slit sizes and full-width sizes. Therefore, slitting charges were deducted when applicable so that prices shown in the tables represent prices for full-width material.

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Figure 4
Weighted-average f.o.b. prices for sales to end users of product 2 reported by U.S. producers and importers, by quarters, January 1990-June 1993

* * * * * * *

Figure 5
Weighted-average f.o.b. prices for sales to end users of product 3 reported by U.S. producers and importers, by quarters, January 1990-June 1993

* * * * * * *

Figure 6
Weighted-average f.o.b. prices for sales to end users of product 4 reported by U.S. producers and importers, by quarters, January 1990-June 1993[1]

* * * * * * *

[1] Domestic and import prices for product 4 were not compared because U.S. producers do not produce a high-permeability product meeting the specifications of product 4.

Price Trends

United States

U.S. producers' sales prices of products 1 and 2 ***, by *** per pound, during the period for which data were collected. U.S. prices of product 3, a high-permeability product, ***. Prices of the U.S. producers' M-2 products which were reported for product 4 ***.

Italy

Product 1, M-6, is the only one of the four products imported from Italy for which pricing was requested. The vast majority of imports of grain-oriented silicon electrical steel from Italy are of M-6 grade. Prices of product 1 imported from Italy ***. ***.

Japan

Import prices of product 2, M-3, increased slightly during 1990-91, and then fell during 1992-93. Import prices of the high-permeability products 3 and 4 ***, respectively, between January-March 1990 and April-June 1993. *** of product 1 was reported during the period for which data were requested.

Price Comparisons

Prices of product 1, M-6, imported from Italy were *** than U.S. producer prices in each quarter for which data were reported. Margins ranged from *** to *** percent.

The prices of imports from Japan were *** than prices of the U.S.-produced products in *** possible comparisons for products 1 to 3.[88] Margins of *** ranged from *** to *** percent for product 2 and from *** to *** percent for product 3. Direct price comparisons for product 4 are not possible since the pricing reported by U.S. producers is for a conventional grade with a higher core loss rating than the high-permeability products imported from Japan.

Lost Sales and Lost Revenues

Allegheny and Armco alleged 8 lost sales and 2 instances of lost revenues involving imports from Italy and 3 lost sales and 7 instances of lost revenues involving imports from Japan. Fourteen purchasers were named in the allegations. The value and quantity of alleged lost sales and lost revenues for each country are shown in the following tabulation:

* * * * * * *

*** alleged losing a sale in *** of *** tons of *** grade product priced at $*** per pound due to Italian imports priced at $*** per pound. The purchaser named in the allegation was ***. Staff spoke with ***, who said that his firm had received a quote from ILVA for *** product but that *** had never purchased *** product or any other grain-oriented silicon electrical steel products imported from Italy.

*** alleged another lost sale due to imports from Italy in which it attempted to sell *** tons of *** product priced at $*** per pound. *** alleges that the purchaser, ***, bought Italian imports which were priced at $*** per pound. *** said that his company had received a lower quote of $*** per pound from ***. However, his company purchased product from ILVA because ILVA offers coils in widths of 39 inches while the U.S. producers offer smaller widths of 32 to 34 inches. *** said that because *** slits the coils into smaller widths, the wider coil from ILVA provides more flexibility than the smaller widths provided by U.S. producers.

*** also alleged losing revenues due to lower-priced imports from Italy. *** alleged that in *** it was forced to lower its prices for *** from $*** per pound to $*** per pound due to imports from Italy which were ***. The quantity involved was *** tons. Staff spoke with *** named in the allegation. *** said that the prices and tonnage sounded correct. He said that *** purchased *** product from ILVA because its product was *** than the domestic product. ***. Also, in 1992 ***. In addition, in 1992 *** than that of the domestic product. For all of these reasons, ILVA is *** purchases of ***.

Both Armco and Allegheny alleged lost sales due to Italian imports of *** product involving ***. Allegheny's allegations were ***. Allegheny's quoted price *** was $*** per pound while ILVA's quoted price was allegedly $*** per pound. Armco's allegation was for ***, involving *** tons priced at $*** per pound by Armco and at $*** per pound by ILVA. *** said that his company purchases only about *** tons per year of *** material, not *** tons as alleged by ***. He said that he purchases *** of *** product from *** but does not purchase at all from ***. *** said that other than the sales to the one customer for which there is ***, neither *** nor *** had quoted prices to ***. He said that ILVA has been *** and that *** prefers ILVA's product because of it wider coils and much smoother coating.

*** also alleged that in *** it lowered its price on the *** product from $*** per pound to $*** per pound because of competition from Italian imports priced at $*** per pound. Staff spoke with ***, the purchaser named in the allegation. *** said that he did not receive any bids from ILVA for this purchase and that the only other significant bid proposal was from ***. *** said that

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[88] In *** cases, Japanese-produced products were priced *** than the U.S.-produced products and in *** cases, the prices differed by less than 0.05 percent.

*** had received a *** shipment of *** tons of *** product from ILVA in order to test the material. He said that ILVA's material was acceptable and ILVA is now qualified as a potential supplier. However, because *** has a ***, *** would not consider purchasing from ILVA or any other supplier until ***.

The final allegations involving Italy were two lost sales reported by *** in which *** quoted $*** per pound for *** tons of *** product in *** and *** for *** tons of this product in ***. In both cases the customer, ***, allegedly purchased the Italian product priced at $*** per pound. Staff spoke with ***. *** did not comment on the specific allegations. ***.

*** stated that *** purchases most of its supply of *** product from ***. Concerning its dealings with ***. ***. *** states that the reasons for purchasing the Italian product are ***.

*** reported a lost revenue allegation involving ***. *** alleged that in *** it was forced to lower its price on *** tons of *** product from $*** per pound to $*** per pound because of Japanese *** priced at $*** per pound. *** said that the information provided by *** was correct. In addition to its purchases of ***, ***. *** said that *** has increased its purchases of high-permeability products while purchases of conventional grade products have decreased as utilities demand more energy efficient transformers. He further stated that conventional products cannot be substituted in high-loss applications in which high-permeability products are used.

In another lost revenue allegation, *** alleged that in *** it reduced its prices for *** tons of its *** product from $*** per pound to $*** per pound because of Japanese imports priced at $*** per pound. Staff spoke with *** named in the allegation. *** did not comment on the specific allegation or any pricing issues. However, he did discuss the issues of substitutability between U.S.-produced and Japanese high-permeability products and between high-permeability and conventional grade products. *** produces *** and does not produce ***. *** said that *** product and that produced by the Japanese were generally substitutable in the production of power transformers (which use stacked cores). However, he said that very large power transformers, ***, require wider width material which is available from Japanese producers but not from U.S. producers. In addition, *** said that *** product typically has higher core losses making it less efficient than *** products manufactured by Nippon and Kawasaki. However, *** purchases *** product in order to have multiple sources of supply and because *** prefers to buy American-made products when possible.

*** also allegedly lost a sale in *** of *** tons of *** priced at $*** per pound due to Japanese *** product priced at $*** per pound. *** was the purchaser named in the allegation. *** did not comment on the specific allegation but said that U.S.-produced *** product has core losses of 8 to 9 percent higher than that of the Japanese product and therefore *** could not generally use the U.S. product in its ***. In addition, *** said that while high-permeability product can be substituted for conventional-grade product, conventional grades could not be used in applications which require high-permeability products because of costly increases in energy losses and operating performance.

*** alleged that it lost revenues when it lowered its price on *** products from $*** per pound to $*** per pound in 1992 and from $*** per pound to $*** per pound in *** due to *** products imported from Japan priced at $*** per pound in ***. The volumes for *** were *** tons and *** tons, respectively. Staff spoke with *** cited in the allegation. *** did not address the specific allegations but said that the Japanese *** product was generally priced lower than the domestic *** product and that he had received verbal quotes from suppliers of the Japanese products in ***. *** said that *** buys almost all of its material from *** and only a small amount from ***. He said that the *** products from Japanese and domestic suppliers are very similar in terms of core loss.

*** also named *** in a lost revenue allegation. *** alleges that it lowered its prices on *** tons of *** product from $*** per pound to $*** per pound due to imports of *** product from Japan priced at $*** per pound. Staff talked with ***. *** said that the information provided by *** was correct. When asked why *** did not purchase the lower-priced imports, *** said that

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factors other than price were important, such as the difference in quoted core loss between products, freight costs, and a preference for domestic products.

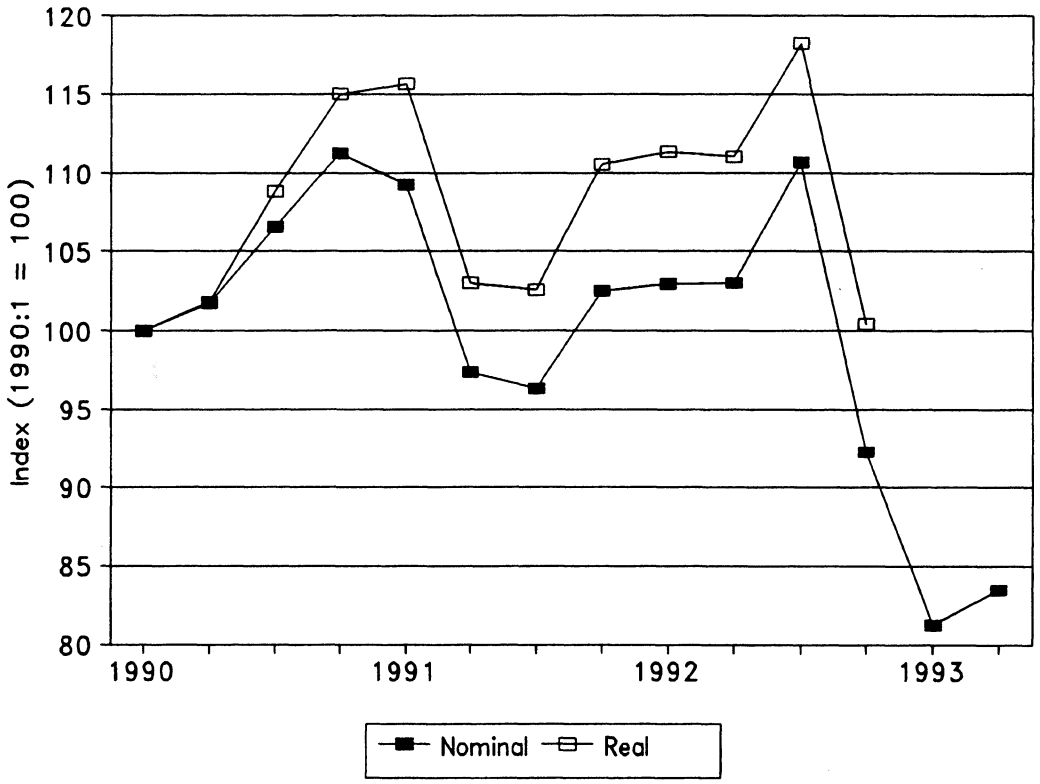
*** was named by *** in another lost revenue allegation. In ***, *** allegedly reduced its price for *** tons of *** product from $*** per pound to $*** per pound due to imports from Japan priced at $*** per pound. *** did purchase *** tons of *** from U.S. suppliers for $*** per pound as stated in the allegation. However, he said that *** purchased *** tons of *** from Japanese suppliers for $*** per pound, a price higher than that quoted in the allegation, for *** and then another *** tons from Japanese suppliers priced at $*** per ton for ***.

Exchange Rates

Quarterly data reported by the International Monetary Fund indicate that the Italian lira depreciated in relation to the U.S. dollar while the Japanese yen appreciated in relation to the U.S. dollar over the period from January-March 1990 through April-June 1993 (figures 7-8). The nominal value of the Italian lira fluctuated but depreciated overall by 17 percent while the nominal value of the Japanese yen appreciated by 34 percent. When adjusted for movements in producer price indexes in the United States and the specified countries, the real value of the Italian currency fluctuated during 1990-92,[89] while the Japanese currency appreciated by 23.5 percent during the period for which data were collected.

[89] Data on real exchange rates for the Italian lira were not available for 1993.

Figure 7
Exchange rates: Indexes of nominal and real exchange rates of the Italian lira, by quarters, January 1990-June 1993



Source: International Monetary Fund, International Financial Statistics, August 1993.

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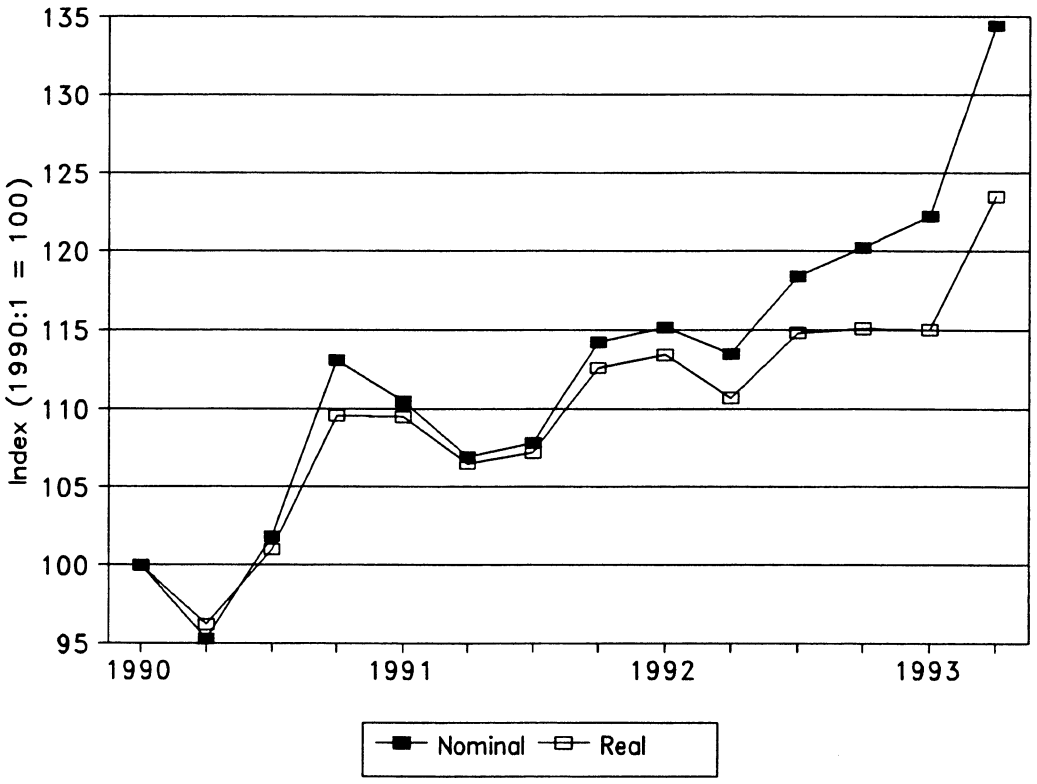
Figure 8
Exchange rates: Indexes of nominal and real exchange rates of the Japanese yen, January 1990-June 1993



Source: International Monetary Fund, International Financial Statistics, August 1993.

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APPENDIX A

FEDERAL REGISTER NOTICES

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INTERNATIONAL TRADE COMMISSION

[Investigation No. 701–TA–355 (Preliminary) and Investigations Nos. 731–TA–659 and 660 (Preliminary)]

Grain-Oriented Silicon Electrical Steel From Italy and Japan

AGENCY: United States International Trade Commission.

ACTION: Institution and scheduling of a preliminary countervailing duty investigation and preliminary antidumping investigations.

SUMMARY: The Commission hereby gives notice of the institution of preliminary countervailing duty investigation No. 701–TA–355 (Preliminary) under section 703(a) of the Tariff Act of 1930 (19 U.S.C. 1671b(a)) and preliminary antidumping investigations Nos. 731–TA–659 and 660 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of alleged subsidized imports from Italy or alleged less than fair value imports from Italy and Japan of grain-oriented silicon electrical steel, provided for in subheadings 7225.10.00, 7226.10.10, and 7226.10.50 of the Harmonized Tariff Schedule of the United States. The Commission must complete preliminary antidumping and countervailing duty investigations in 45 days, or in this case by October 12, 1993.

For further information concerning the conduct of these investigations and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and B (19 CFR part 207).

EFFECTIVE DATE: August 26, 1993.

FOR FURTHER INFORMATION CONTACT: Mary Messer (202–205–3193), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000.

SUPPLEMENTARY INFORMATION:

Background

These investigations are being instituted in response to a petition filed

on August 26, 1993, by counsel on behalf of Allegheny Ludlum Corp., Pittsburgh, PA, Armco, Inc., Butler, PA, the Butler Armco Independent Union, Butler, PA, the United Steelworkers of America, Pittsburgh, PA, and the Zanesville Armco Independent Union, Zanesville, OH.

Participation in the Investigations and Public Service List

Persons (other than petitioners) wishing to participate in the investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in §§ 201.11 and 207.10 of the Commission's rules, not later than seven (7) days after publication of this notice in the Federal Register. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to these investigations upon the expiration of the period for filing entries of appearance.

Limited Disclosure of Business Proprietary Information (BPI) Under an Administrative Protective Order (APO) and BPI Service List

Pursuant to § 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these preliminary investigations available to authorized applicants under the APO issued in the investigations, provided that the application is made not later than seven (7) days after the publication of this notice in the Federal Register. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Conference

The Commission's Director of Operations has scheduled a conference in connection with these investigations for 9:30 a.m. on September 16, 1993, at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Parties wishing to participate in the conference should contact Mary Messer (202–205–3193) not later than September 14, 1993 to arrange for their appearance. Parties in support of the imposition of countervailing and/or antidumping duties in these investigations and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the conference.

Written Submissions

As provided in §§ 201.8 and 207.15 of the Commission's rules, any person may submit to the Commission on or before September 21, 1993, a written brief containing information and arguments pertinent to the subject matter of the investigations. Parties may file written testimony in connection with their presentation at the conference no later than three (3) days before the conference. If briefs or written testimony contain BPI, they must conform with the requirements of §§ 201.6, 207.3, and 207.7 of the Commission's rules.

In accordance with §§ 201.16(c) and 207.3 of the rules, each document filed by a party to these investigations must be served on all other parties to the investigations (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: These investigations are being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to section 207.12 of the Commission's rules.

Issued: August 27, 1993.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 93–21352 Filed 9–1–93; 8:45 am]

BILLING CODE 7020–02–P

International Trade Administration

[A-475-811 and A-588-831]

Initiation of Antidumping Duty Investigations: Grain-Oriented Electrical Steel From Italy and Japan

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: September 21, 1993.

FOR FURTHER INFORMATION CONTACT: Edward Easton or Andrew McGilvray, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone (202) 482-1777 and 482-0108, respectively.

Initiations

The Petition

On August 26, 1993, we received a petition filed in proper form by Allegheny Ludlum Corporation, Armco, Inc., United Steelworkers of America, Butler Armco Independent Union, and Zanesville Armco Independent Union (petitioners) against Italy and by Allegheny Ludlum Corp. and United Steelworkers of America (petitioners) against Japan. In accordance with 19 CFR 353.12, petitioners allege that grain-oriented electrical steel from Italy and Japan is being, or is likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports are materially injuring, or threaten material injury to, a U.S. industry.

Petitioners state that they are the only U.S. producers of grain-oriented electrical steel, and that, therefore, they have standing to file the petition because they are interested parties as defined under section 771(9)(C) of the Act, and because the petition is being filed on behalf of the U.S. industry producing the product subject to these investigations. If any interested party, as described under paragraphs (C), (D), (E) or (F) of section 771(9) of the Act, wishes to register support for, or opposition to, the petitions, such party should file a written notification with the Assistant Secretary for Import Administration.

Scope of Investigations

The product covered by these investigations is certain grain-oriented silicon electrical steel, which is a flat-rolled alloy steel product containing by weight at least 0.6 percent of silicon, not more than 0.08 percent of carbon, not more than 1.0 percent of aluminum, and no other element in an amount that would give the steel the characteristics of another alloy steel, of a thickness of no more than 0.560 millimeters, in coils of any width, or in straight lengths which are of a width measuring at least 10 times the thickness, as currently classifiable in the Harmonized Tariff Schedule of the United States (HTS) under item numbers 7225.10.0030, 7225.30.7000, 7225.40.7000, 7225.50.8000, 7225.90.0000, 7226.10.1030, 7226.10.5015, 7226.10.5065, 7226.91.7000, 7226.91.8000, 7226.92.5000, 7226.92.7050, 7226.92.8050, 7226.99.0000, 7228.30.8050, 7228.60.6000, and 7229.90.1000. Although the HTS subheadings are provided for convenience and customs purposes, our written description of the scope of these proceedings are dispositive.

United States Price

Italy

Petitioners based United States Price (USP) on information obtained by a consultant. The consultant had furnished U.S. price quotes for subject merchandise delivered to the United States. Petitioners calculated USP by

making deductions for ocean freight, marine insurance, U.S. duties, U.S. merchandise processing fees, and U.S. harbor maintenance fees.

Japan

Petitioners based USP on information obtained by a consultant. The consultant had furnished U.S. price quotes for subject merchandise FOB Japanese port. Petitioners calculated USP by making deductions for foreign inland freight and discounts and rebates.

Foreign Market Value

Italy

Petitioners claim that home market prices cannot be used as a basis for estimating foreign market value (FMV) because these prices are below the cost of production of ILVA S.p.A., the company that allegedly exports all of the subject merchandise to the United States from Italy. Therefore, petitioners based FMV on constructed value, pursuant to Section 773(e)(1) of the Act. Petitioners obtained from consultants prices for the subject merchandise sold, or offered for sale, in Italy.

The quoted prices in Italy were ex-factory and net of applicable taxes. Petitioners then compared these prices to a cost-of-production based on U.S. manufacturers' experience, adjusted for known differences in costs between the United States and Italy. Based on this analysis, petitioners determined that the quoted home market prices were below the cost of production.

To calculate constructed value, petitioners adjusted the average cost of manufacture for known differences in costs between the United States and Italy, using the January 1993 monthly average exchange rate published in the IMF's International Financial Statistics. The statutory minimum percentages for selling, general and administrative expenses and for profit were relied upon in the calculation. Petitioners added an amount for export packing and then deducted home market credit expenses. Because an accurate measure of credit terms for U.S. sales was unavailable, petitioners did not add U.S. credit expenses to constructed value.

The margin of dumping of grain-oriented electrical steel from Italy alleged by petitioners is 60.79 percent.

Japan

Petitioners based FMV on delivered home market prices obtained by a consultant for subject merchandise offered by two Japanese producers. Deductions were made for inland freight, rebates and promotions, advertising, warranties and guarantees, trade discounts and credit. Circumstance of sale adjustments were calculated for advertising and warranties. Petitioners deducted home market credit and added U.S. credit. Petitioners added an amount for export packing but made no adjustment for taxes, as prices were quoted exclusive of the Japanese consumption tax. Net prices were converted to dollars by using the contemporaneous exchange rates from the Federal Reserve.

Based on comparison of USP and FMV, petitioners allege dumping margins of grain-oriented electrical steel from Japan ranging from 30.91 to 32.46 percent.

Initiation of Investigations

Pursuant to section 732(c) of the Act, the Department must determine, within 20 days after a petition is filed, whether a petition sets forth allegations necessary for the initiation of an antidumping duty investigation, and whether the petition contains information reasonably available to petitioners supporting the allegation.

We have examined the petitions on grain-oriented electrical steel from Italy and Japan and have found that it meets the requirements of section 732(b) of the Act. Therefore, we are initiating antidumping duty investigations to determine whether imports of grain-oriented electrical steel from Italy and Japan are being, or are likely to be, sold in the United States at less than fair value.

Petitioners' analysis provides reasonable grounds to believe or suspect the ILAV has made sales in the home market at prices below the cost of production. (See the September 14, 1993, Memorandum to the Director of the Office of Accounting, "Review of Cost Allegation for Grain-Oriented Electrical Steel from Italy from Italy-ILVA S.p.A.") Petitioners have compared ILVA-specific prices to the cost of production, which includes ILVA-specific data where available. Therefore, pursuant to section 773(b) of the Act, we are initiating an investigation to determine whether Italian home market sales (or third-country sales in the event that we determine that the home market is not viable) are made at prices below the cost of production.

ITC Notification

Section 732(d) of the Act requires us to notify the International Trade Commission (ITC) of this action and we have done so.

Preliminary Determination by the International Trade Commission

The ITC will determine by October 10, 1993, whether there is a reasonable indication that imports of grain-oriented electrical steel from Italy and Japan are materially injuring, or threaten material injury to, a U.S. industry. Pursuant to section 733(a) of the Act, negative ITC determinations will result in the investigations being terminated; otherwise, the investigations will proceed according to statutory and regulatory time limits.

This notice is published pursuant to section 732(c)(2) of the Act and 19 CFR 353.13(b).

Dated: September 15, 1993.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 93-23076 Filed 9-20-93; 8:45 am]

BILLING CODE 3510-DS-M

[C-475-812]

Initiation of Countervailing Duty Investigation: Grain-Oriented Electrical Steel From Italy

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: September 21, 1993.

FOR FURTHER INFORMATION CONTACT: Stephanie L. Hager, Annika O'Hara, or David Boyland, Office of Countervailing Investigations, U.S. Department of Commerce, room 3099, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone (202) 482-5055, (202) 482-4198, and (202) 482-0588.

INITIATION:

The Petition

On August 26, 1993, Allegheny Ludlum Corp., Armco, Inc., United Steelworkers of America, Butler Armco Independent Union, and Zanesville Armco Independent Union (hereinafter, "petitioners") filed with the Department of Commerce ("the Department") a countervailing duty petition on behalf of the United States industry producing grain-oriented electrical steel (hereinafter, "electrical steel"). In accordance with section 701 of the Tariff Act of 1930, as amended ("the Act"), the petitioners allege that manufacturers, producers, or exporters of the subject merchandise in Italy receive countervailable subsidies.

Injury Test

Because Italy is a "country under the Agreement" within the meaning of section 701(b) of the Act, Title VII of the

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Act applies to this investigation. Accordingly, the U.S. International Trade Commission ("ITC") must determine whether imports of the subject merchandise from Italy materially injure, or threaten material injury to, a U.S. industry.

Standing

Petitioners have stated that they have standing to file the petition because they are interested parties as defined in sections 771(9)(C) and 771(9)(D) of the Act and that they have filed the petition on behalf of the U.S. industry producing the like product. If any interested party, as described in sections 771(9) (C), (D), (E), or (F) wishes to register support for, or opposition to, this petition, such party should file written notification with the Assistant Secretary for Import Administration, room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230.

Scope of the Investigation

The products covered by this investigation are certain grain-oriented silicon electrical steel, which are flat-rolled alloy steel products containing by weight at least 0.6 percent of silicon, not more than 0.08 percent of carbon, not more than 1.0 percent of aluminum, and no other element in an amount that would give the steel the characteristics of another alloy steel, of a thickness of no more than 0.560 millimeters, in coils of any width, or in straight lengths which are of a width measuring at least 10 times the thickness, as currently classifiable in the HTS under item numbers 7225.10.0000, 7225.30.7000, 7225.40.7000, 7225.50.8000, 7225.90.0000, 7226.10.1010, 7226.10.5030, 7226.10.5060, 7226.91.7000, 7226.91.8000, 7226.92.5000, 7226.92.7050, 7226.92.8050, 7226.99.0000, 7228.30.8050, 7228.60.6000, and 7229.90.1000. Although the Harmonized Tariff Schedule of the United States ("HTS") subheadings are provided for convenience and customs purposes, our written descriptions of the scope of this proceeding is dispositive.

Allegation of Subsidies

Section 702(b) of the Act requires the Department to initiate a countervailing duty proceeding whenever an interested party files a petition, on behalf of an industry, that (1) alleges the elements necessary for an imposition of a duty under section 701(a), and (2) is accompanied by information reasonably available to the petitioner supporting the allegations.

Initiation of a Countervailing Duty Investigation

The Department has examined the petition on electrical steel from Italy and found that it complies with the requirements of section 702(b) of the Act. Therefore, in accordance with section 702 of the Act, we are initiating a countervailing duty investigation to determine whether manufacturers, producers, or exporters of electrical steel from Italy receive subsidies.

We are including in our investigation the following programs alleged in the petition to have provided subsidies to producers of the subject merchandise in Italy:

1. Equity Infusions
   (a) Equity infusions provided to Terni (a predecessor company to Ilva) in 1978, 1980 through 1982, and 1984 through 1987; and
   (b) Equity Infusions provided to Ilva from 1989 through 1991
2. Debt Forgiveness in Connection with the 1987–88 Restructuring Plan
3. Debt Forgiveness in Connection with the Transfer of Terni's assets to Ilva
4. Government Loan Guarantees
5. Preferential Financing under Law 675/77
   (a) Loans from the Ministry of Industry
   (b) IRI Bond Issue Loan
   (c) Interest Contributions
   (d) Capital Grants/Grants to Ilva
   (e) Personnel Retraining Grants
   (f) VAT Reductions
6. Interest Grants for "Indirect Debts" under Law 750/81
7. Urban Redevelopment Packages under Law 181
8. Social Security Exemptions
9. Interest Subsidies under Law 617/81
10. Interest Contributions under the Sabatini Law
11. Finsider Financing
12. Subsidized IMI Export Financing
13. National Research Plan for the Iron and Steel Industry Grant
14. Early Retirement
15. Exchange Risk Guarantee Program
16. Exemption from ILOR and IRPEG Taxes
17. ECSC Article 54 Loans
18. European Social Fund Grants
19. ECSC Redeployment Aid (Article 56(2)(b))

We are not including the following programs alleged to be benefitting producers of the subject merchandise in Italy.

1. Terni's 1990 Contribution of Assets to Ilva

After the 1988 transfer of some of its assets to Ilva (see section 3, above), Terni was left with 596.4 billion lire in assets, the same amount in liabilities, and no equity. These remaining assets were later transferred to Ilva in 1990.

Petitioners reason that either Terni revalued the assets prior to their transfer to Ilva, or Ilva received the assets at an inflated value. In either event, Terni benefitted from this asset transfer, according to petitioners. Petitioners assume that the assets were indeed written down and that the GOI covered the resulting loss incurred by Terni which did not have any capital left and, therefore, was unable to cover such write-down.

Petitioners have not shown that there is a benefit associated with the 1990 asset transfer of Terni's residual assets to Ilva. Petitioners have not provided any evidence in support of their allegation that Terni wrote down the assets and that the company was subsequently reimbursed by the GOI. We, therefore, are not including this allegation in our investigation.

2. Law 464/72 Financing

Petitioners state that Article 1 of Law 464/72 provides wage subsidies to workers laid off for specified reasons, including restructuring of industrial enterprises. Article 9 of that law provides "tax and credit measures" for enterprises engaged in conversion, reorganization, etc. when criteria with regards to the number of workers displaced are met. Under Law 464/72, a decree issued by the Ministers of Industry, Commerce and Artisanry, of the Treasury, of the State Shareholdings, and of Labor and Social Welfare specifies the measures to be extended to qualifying companies.

Petitioners maintain that, given the amount of discretion with which the Ministers listed above allocate the benefits under Law 464, it should be concluded that the benefits are directed to specific industries and that the benefits are, thus, countervailable. Petitioners also note the significant amount of financing under this program that Terni received from IMI, *i.e.*, the fluctuating loan balances from this program in 1978, as well as each of the years 1982 through 1988.

Petitioners have not provided information as to how the mere existence of ministerial discretion indicates that this program was used in favor of a particular enterprise or industry. Therefore, we are not including Law 464/72 financing in our investigation.

3. Regional Government Financing

Petitioners maintain that Terni received preferential financing from the regions of Friuli and Umbria, and from

regional lending institutions (Mediocredito Umbro, Cassa di Risparmio di Trieste, and Cassa di Risparmio di Lombardia). Petitioners maintain that these loans provided countervailable benefits due to their preferential nature and the uncreditworthiness of Terni.

Petitioners have not even alleged that the loans extended by the regional entities listed above were made pursuant to measures specific to the steel industry. We note that § 355.44b(9) of the Department's Proposed Regulations states that the Department will not investigate a loan from a government-owned bank absent allegations that the loan was provided at the direction of the government and was provided on terms inconsistent with commercial considerations. With regards to direct regional government loans, the petitioners have not alleged that this financing was a result of a program specifically benefitting the steel industry. Therefore, we are not including this financing in our investigation.

4. IMI Research Loans

According to petitioners, annual loan tranches for research and development associated with Terni's "Trest" and "Trest 2" projects provided countervailable benefits to Terni. Petitioners state that, while they cannot outline the terms of the financing provided, the program was countervailable because it (1) was provided at a subsidized rate, and (2) none of the research, to petitioners' knowledge, was made publicly available.

Petitioners have not provided information as to how this funding is specific to the steel industry. Without allegations of specificity, the fact that the research results were not disclosed to the public does not mean that the program is countervailable. Due to the lack of a specificity allegation, we are not including the IMI research loans in our investigation.

5. Subsidized Short-Term Financing

Petitioners state that Terni received short-term financing from a number of related entities: Finsider, IRI, Finsider subsidiary Istituto Ligure Interessenze Industriali e Commerciali (ILLIC), Terni's subsidiaries Terninoss and Industria Acciai Inox S.p.A. (I.A.I.). Petitioners note that the financing from IRI and ILLIC nominally matured within a year of the publication of the Annual Report in which the loans first appeared. However, according to petitioners, these were in fact long-term in nature.

(a) *Short-Term Debt from IRI*

Petitioners note that Terni had short-term debt of 15,987 and 50,893 million lire with IRI in 1987 and 1988 respectively. Petitioners claim that the balances for both years, especially the second, were relatively large (for short-term debt) and would have been difficult for Terni to repay in one year, given the company's financial circumstances. Also, since Terni was placed in liquidation by its parent in 1987, it is unlikely that IRI expected to be repaid in one year or less.

(b) *Short-Term Debt from ILLIC*

Petitioners state that short-term debt outstanding with ILLIC, a sister company, between each of the years 1978 through 1988 was in fact long-term financing. Petitioners note that, with the exception of financing through the Law 675/77 IRI bond issue, the average short-term debt balance with IRI was the largest single source of financing for Terni. Petitioners further maintain that there is no evidence to indicate that this debt was retired each year as per normal short-term debt financing. More than likely, according to petitioners, this debt was rolled-over each year. However, the retirement of the debt and its replacement each year would still not alter the fact that Terni was receiving long-term financing in the form of nominally short-term debt.

Although petitioners have argued that this short-term debt is in fact long-term debt, no evidence has been provided to support their claims. Because short-term loan benefits are allocated to the year in which they affect a company's cash flow, no benefits from short-term loans outstanding in 1978–1988 would continue to exist in our period of investigation (1992). Therefore, we are not including these loans in our investigation.

6. OECD Nuclear Energy Agency ("NEA") Financing

Terni's 1987 Annual Report indicates that NEA awarded Terni 126 billion lire for a multi-year program in innovation of energy-related materials. The NEA is an agency within the OECD whose main objective is to promote cooperation between governments of its participating countries in furthering the development of nuclear power as a safe, environmentally acceptable and economic energy source. Research and development projects are individually funded by participating member countries with the NEA acting as advisor and facilitator. Petitioners allege that NEA projects are generally one-time only and that they are funded by participating member countries.

According to petitioners, the project-by-project nature of NEA's one-time only ventures means that its programs can only target specific companies for very specific research and/or industrial construction projects. Furthermore, because recipient companies may be entitled to the exclusive use of the results of the research, depending on the negotiated agreement for the project, the grant Terni received is countervailable, according to petitioners.

Petitioners have not provided adequate information regarding their allegation that the one-time only, project-by-project nature of the financing rendered it specific to an enterprise or industry. The project-by-project nature of a program, alone, does not render it specific. Therefore, we are not including NEA financing in our investigation.

7. Monetary Revaluation under Law 72/83

Law 72/83 permitted companies to increase the book value of their assets by specified percentages depending on the year in which the assets were acquired. The Law provided that the values registered in the balance sheet following revaluation could not exceed the values actually attributable to the goods. Furthermore, the Law required the companies' Board of Directors and Board of Auditors to identify and justify in their reports the criteria used in any revaluation and to certify that the revaluation corresponded to the actual values attributable to the goods.

According to petitioners, Law 72/83 conferred countervailable benefits on Terni because (1) in light of Terni's poor financial performance throughout the period of investigation, the 1983 revaluation of Terni's assets under Law 72/83 bore little or no relation to the probable economic utility of these assets, and (2) the certifications by the independent auditors in a number of years contain statements that cast substantial doubt upon the accuracy and realism of the assets values recorded in Terni's books. Therefore, because Terni was a government-owned and heavily subsidized company, petitioners believe that it was not held to the letter of Law 72/83. According to petitioners, at a minimum, Terni violated the spirit of the law by revaluing assets that it had no reason to believe would ever be put to profitable use.

Petitioners have not provided sufficient evidence indicating that Terni was, in fact, exempted from the requirements of Law 72/83 for revaluing its assets. In addition, there is no mention in the translated portions of Terni's 1983 Annual Report that the

certifications required under Law 72/83 were not provided. Lacking such evidence, we find no basis for including this alleged subsidy in our investigation.

ITC Notification

Pursuant to section 702(d) of the Act, we have notified the ITC of this initiation.

Preliminary Determination by the ITC

The ITC will determine by October 11, 1993, whether there is a reasonable indication that an industry in the United States is being materially injured, or is threatened with material injury, by reason of imports from Italy of electrical steel. Any ITC determination which is negative will result in the investigation being terminated; otherwise, the investigation will proceed according to statutory and regulatory time limits.

This notice is published pursuant to 702(c)(2) of the Act and 19 CFR 355.13(b).

Dated: September 15, 1993.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 93-23077 Filed 9-20-93; 8:45 am]

BILLING CODE 3510-DS-P

APPENDIX B

LIST OF PARTICIPANTS IN THE CONFERENCE

B-1

CALENDAR OF THE PUBLIC CONFERENCE

Inv. No. 701-TA-355 (Preliminary)
Invs. Nos. 731-TA-659 and 660 (Preliminary)

GRAIN-ORIENTED SILICON ELECTRICAL STEEL
FROM ITALY AND JAPAN

Those listed below appeared at the United States International Trade Commission's conference held in connection with the subject investigations on September 16, 1993, in ALJ Courtroom A of the USITC Building, 500 E Street, SW, Washington, DC.

In support of the imposition of antidumping and countervailing duties

Collier, Shannon, Rill & Scott--Counsel
Washington, DC
on behalf of--

Allegheny Ludlum Corp., Armco, Inc., United Steelworkers of America, Butler Armco Independent Union, and Zanesville Armco Independent Union

Robert I. Psyck, Manager of Sales and Marketing for Electrical Steel, Armco Advanced Materials Co.

Anthony Von Holle, Principal Research Engineer, Research & Technology Group, Armco Inc.

F. Joseph Miller, Marketing Director, Silicon Steel, Allegheny Ludlum Corp.

Clarisse A. Morgan, Assistant Director, Georgetown Economic Services

David A. Hartquist)
Michael J. Coursey)--OF COUNSEL
Kathleen W. Cannon)

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In opposition to the imposition of antidumping and countervailing duties

Steptoe & Johnson--Counsel
Washington, DC
on behalf of--

Nippon Steel Corp.

Bruce P. Malashevich, President, Economic Consulting Services

Ashley Stirrup, Economist, Economic Consulting Services

Daniel J. Plaine, Edward J. Krauland)--OF COUNSEL

Howrey and Simon--Counsel
Washington, DC
on behalf of--

Kawasaki Steel Corp.

William Kerr, Economist, Capital Economics

Michael A. Hertzberg, Callie Georgeann Pappas)--OF COUNSEL

National Electrical Manufacturers Association (NEMA)

John Gauthier, NEMA Staff Executive, Transformer Products Group

Rogers and Wells--Counsel
Washington, DC
on behalf of--

ILVA, S.p.A. and ILVA USA, Inc.

Fabio Balboni, Sales Manager, ILVA USA, Inc.

Marco Papini, Export Sales Manager, ILVA, S.p.A.

Enrico Chevallard, General Director, ILVA, S.p.A.

William Silverman, Carrie A. Simon)--OF COUNSEL

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APPENDIX C

SUMMARY DATA

C-1

Table C-1
Grain-oriented silicon electrical steel: Summary data concerning the U.S. market, 1990-92, January-June 1992, and January-June 1993

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

Item	Reported data			Jan.-June--		Period changes			
	1990	1991	1992	1992	1993	1990-92	1990-91	1991-92	Jan-June 1992-93
U.S. consumption quantity:									
Amount	287,815	248,844	250,335	129,245	126,144	-13.0	-13.5	+0.6	-2.4
Producers' share[1]	***	***	***	***	***	***	***	***	***
Importers' share:[1]									
Italy	***	***	***	***	***	***	***	***	***
Japan	***	***	***	***	***	***	***	***	***
Subtotal	***	***	***	***	***	***	***	***	***
Other sources:									
Primary[2]	***	***	***	***	***	***	***	***	***
Secondary[3]	5.0	5.3	5.1	5.0	4.9	+0.2	+0.4	-0.2	-0.2
Subtotal	***	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount	432,505	381,959	382,321	198,706	188,164	-11.6	-11.7	+0.1	-5.3
Producers' share[1]	***	***	***	***	***	***	***	***	***
Importers' share:[1]									
Italy	***	***	***	***	***	***	***	***	***
Japan	***	***	***	***	***	***	***	***	***
Subtotal	***	***	***	***	***	***	***	***	***
Other sources:									
Primary[2]	***	***	***	***	***	***	***	***	***
Secondary[3]	2.9	3.3	3.4	3.3	2.8	+0.5	+0.4	+0.1	-0.5
Subtotal	***	***	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***	***	***
U.S. importers' imports from--									
Italy:									
U.S. shipments quantity	***	***	***	***	***	***	***	***	***
U.S. shipments value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory qty	***	***	***	***	***	***	***	***	***
Japan:									
U.S. shipments quantity	***	***	***	***	***	***	***	***	***
U.S. shipments value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory qty	***	***	***	***	***	***	***	***	***

See footnotes at end of table.

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Table C-1--Continued
Grain-oriented silicon electrical steel: Summary data concerning the U.S. market, 1990-92, January-June 1992, and January-June 1993

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

Item	Reported data			Jan.-June--		Period changes			Jan-June
	1990	1991	1992	1992	1993	1990-92	1990-91	1991-92	1992-93
U.S. importers' imports from--									
Subject sources:									
U.S. shipments quantity	***	***	***	***	***	***	***	***	***
U.S. shipments value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory qty	***	***	***	***	***	***	***	***	***
Primary, other sources:[2]									
U.S. shipments quantity	***	***	***	***	***	***	***	***	***
U.S. shipments value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory qty	***	***	***	***	***	***	***	***	***
Secondary, other sources:[3]									
U.S. imports quantity	14,247	13,286	12,846	6,523	6,125	-9.8	-6.7	-3.3	-6.1
U.S. imports value	12,513	12,608	12,903	6,471	5,186	+3.1	+0.8	+2.3	-19.9
Unit value	$878.35	$948.99	$1,004.40	$992.09	$846.68	+14.4	+8.0	+5.8	-14.7
Ending inventory qty	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
All other sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory qty	***	***	***	***	***	***	***	***	***
All sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
U.S. producers'--									
Average capacity quantity	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***
Capacity utilization[1]	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Exports/shipments[1]	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***

See footnotes at end of table.

Table C-1--Continued
Grain-oriented silicon electrical steel: Summary data concerning the U.S. market, 1990-92, January-June 1992, and January-June 1993

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

	Reported data					Period changes			
				Jan.-June--					Jan-June
Item	1990	1991	1992	1992	1993	1990-92	1990-91	1991-92	1992-93
U.S. producers'--									
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Inventory/shipments[1]	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***
Total comp. ($1,000)	***	***	***	***	***	***	***	***	***
Hourly total compensation	***	***	***	***	***	***	***	***	***
Productivity (short tons per 1,000 hours)	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***
Net sales--									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
COGS/sales[1]	***	***	***	***	***	***	***	***	***
Op.income (loss)/sales[1]	***	***	***	***	***	***	***	***	***

[1] 'Reported data' are in percent and 'period changes' are in percentage points.
[2] Data for other primary sources are compiled from data submitted in questionnaire responses. These data consist of U.S. shipments of imports from France, Sweden, and the United Kingdom.
[3] Data for other secondary sources are imports obtained from the official import statistics of the U.S. Department of Commerce.
[4] Not available.

Note.--Period changes are derived from the unrounded data. Period changes involving negative period data are positive if the amount of the negativity decreases and negative if the amount of the negativity increases. Because of rounding, figures may not add to the totals shown. Unit values and other ratios are calculated using data of firms supplying both numerator and denominator information. Part-year inventory ratios are annualized.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission, except where noted.

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Figure C-1
Salient data for grain-oriented silicon electrical steel

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APPENDIX D

SUMMARY DATA, BY U.S. PRODUCER

D-1

Table D-1
Grain-oriented silicon electrical steel: Summary data, by U.S. producer, 1990-92, January-June 1992, and January-June 1993

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APPENDIX E

DATA CONCERNING ARMCO'S CONVENTIONAL AND HIGH-PERMEABILITY GRAIN-ORIENTED SILICON ELECTRICAL STEEL[1]

[1] In the information contained herein, Armco refers to high-permeability grain-oriented silicon electrical steel as "HIGH-PERM GOES STEEL" and conventional grain-oriented silicon electrical steel as "GOES STEEL."

E-1

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APPENDIX F

COMMENTS RECEIVED FROM U.S. PRODUCERS ON THE IMPACT OF IMPORTS OF GRAIN-ORIENTED SILICON ELECTRICAL STEEL FROM ITALY AND JAPAN ON THEIR GROWTH, INVESTMENT, ABILITY TO RAISE CAPITAL, OR EXISTING DEVELOPMENT AND PRODUCTION EFFORTS, INCLUDING EFFORTS TO DEVELOP A DERIVATIVE OR MORE ADVANCED VERSION OF THE PRODUCT

F-1

The Commission requested U.S. producers to describe any actual or anticipated negative effects of grain-oriented silicon electrical steel from Italy or Japan on their growth, investment, ability to raise capital, or existing development and production efforts, including efforts to develop a derivative or more advanced version of the product. Their comments are as follows:

1. Since January 1, 1990, has your firm experienced any actual negative effects on its growth, investment, ability to raise capital, or existing development and production efforts, including efforts to develop a derivative or more advanced version of the product, as a result of imports of grain-oriented silicon electrical steel from Italy or Japan?

Allegheny--

* * * * * * *

Armco--

* * * * * * *

2. Does your firm anticipate any negative impact of imports of grain-oriented silicon electrical steel from Italy or Japan?

Allegheny--

* * * * * * *

Armco--

* * * * * * *

3. Has the scale of capital investments undertaken been influenced by the presence of imports of grain-oriented silicon electrical steel from Italy or Japan?

Allegheny--

* * * * * * *

Armco--

* * * * * * *