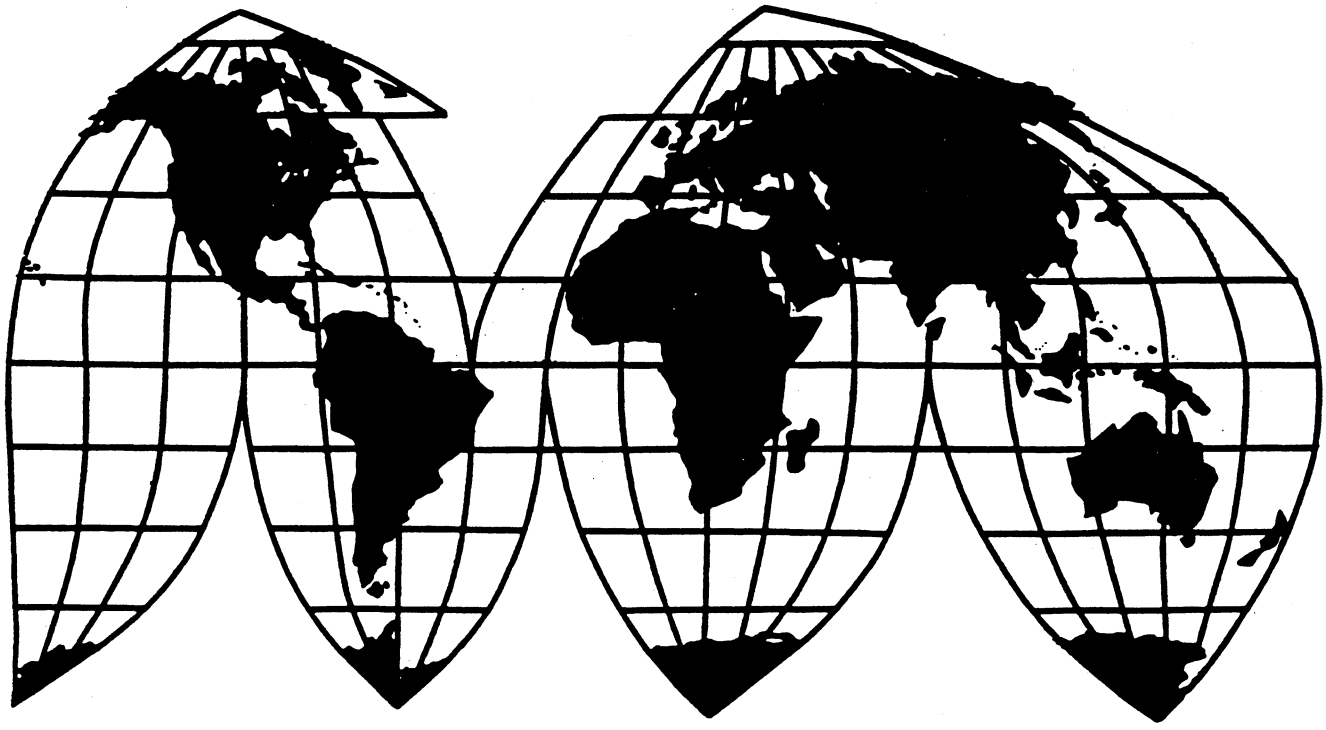
Ferrovanadium and Nitrided Vanadium from Russia

Investigation No. 731-TA-702 (Final)

Publication 2904 **June 1995**

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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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

DETERMINATION AND VIEWS OF THE COMMISSION

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-702 (Final)

FERROVANADIUM AND NITRIDED VANADIUM FROM RUSSIA

Determination

On the basis of the record[1] developed in the subject investigation, the Commission determines, pursuant to section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)) (the Act), that an industry in the United States is materially injured by reason of imports from Russia of ferrovanadium and nitrided vanadium, provided for in subheadings 2850.00.2000, 7202.92.0000, 7202.99.5040, 8112.40.3000, and 8112.40.6000 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce to be sold in the United States at less than fair value (LTFV).

Background

The Commission instituted this investigation effective December 30, 1995, following a preliminary determination by the Department of Commerce that imports of ferrovanadium and nitrided vanadium from Russia were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. § 1673b(b)).[2] Notice of the institution of the Commission's investigation and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of January 19, 1995 (60 FR 3873). The hearing was held in Washington, DC, on May 23, 1995, and all persons who requested the opportunity were permitted to appear in person or by counsel.

[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] The petition in this investigation was filed prior to the effective date of the Uruguay Round Agreements Act ("URAA"). This investigation, thus, remains subject to the substantive and procedural rules of the pre-existing law. See P.L. 103-465, approved Dec. 8, 1994, 108 Stat. 4809, at § 291.

VIEWS OF THE COMMISSION

Based on the record in this final investigation, we find that an industry in the United States is materially injured by reason of imports of ferrovanadium and nitrided vanadium from Russia that are sold in the United States at less than fair value ("LTFV").[1] [2]

I. DEFINITION OF LIKE PRODUCT AND DOMESTIC INDUSTRY

A. Like Product

To determine whether an industry in the United States is materially injured or threatened with material injury by reason of the subject imports, the Commission must first define the "like product" and the domestic "industry."[3] Section 771(4)(A) of the Tariff Act of 1930 ("the Act"), as amended, 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. . . ."[4] In turn, the statute 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. . . ."[5] Our decision regarding the appropriate like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[6] No single factor is dispositive, and the Commission may

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[1] The petition in this investigation was filed prior to the effective date of the Uruguay Round Agreements Act ("URAA"). This investigation, thus, remains subject to the substantive and procedural rules of the pre-existing law. See P.L. 103-465, approved Dec. 8, 1994, 108 Stat. 4809, at § 291.

Whether the establishment of an industry in the United States is materially retarded is not an issue in this investigation.

[2] Commissioner Crawford finds that the domestic industry producing ferrovanadium and nitrided vanadium is neither materially injured nor threatened with material injury by reason of the LTFV imports from Russia. See her separate and dissenting views.

[3] 19 U.S.C. § 1677(4)(A).

[4] 19 U.S.C. § 1677(4)(A).

[5] 19 U.S.C. § 1677(10).

[6] See, e.g., Nippon Steel Corp. v. United States, Slip Op. 95-57 at 11 (Ct. Int'l Trade, Apr. 3, 1995); Torrington Co. v. United States, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). In analyzing like product issues, the Commission generally considers a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes and production employees; and, where appropriate, (6) price. See Calabrian Corp. v. United States, 794 F. Supp. 377, 382 n.4 (Ct. Int'l Trade 1992); Torrington, 747 F. Supp. at 749; e.g., S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

consider other factors relevant to a particular investigation. The Commission looks for clear dividing lines among possible like products and disregards minor variations.[7]

The imported articles subject to this investigation are ferrovanadium and nitrided vanadium, regardless of grade, chemistry, form or size.[8] Ferrovanadium is a steel additive containing by weight between 40 percent and 80 percent vanadium and at least 4 percent iron.[9] Nitrided vanadium is also a steel additive and generally contains by weight less than 80 percent vanadium and at least 5 percent (typically between 7 and 12 percent) nitrogen.[10] Ferrovanadium and nitrided vanadium are used as alloying agents in the production of certain specific types of alloy steel. The vanadium contained in the products improves the hardness and ductility of the alloy steel, as well as aiding grain refining and case hardening.[11]

In the preliminary determination, we found ferrovanadium and nitrided vanadium to be a single like product, based on use of common raw materials, similar, though not identical, production processes, overlapping end uses, related prices, and identical channels of distribution.[12] While the end uses for ferrovanadium and nitrided vanadium vary to some extent, we found that the shared characteristic of a high percentage of vanadium content was a more compelling factor supporting a single like product determination.[13]

The record in this final investigation confirms these conclusions.[14] The record continues

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[7] Torrington, 747 F. Supp. at 748-49.

[8] Notice of Final Determination of Sales at LTFV: Ferrovanadium and Nitrided Vanadium from the Russian Federation, 60 Fed. Reg. 27957 (May 26, 1995), reprinted in, Confidential Report (CR) Appendix B, Public Report (PR) Appendix B. Commerce stated that ferrovanadium includes "alloys containing ferrovanadium as the predominant element by weight (i.e., more weight than any other element, except iron in some instances) and at least 4 percent by weight of iron." Commerce stated that nitrided vanadium includes "compounds containing vanadium as the predominant element, by weight, and at least 5 percent, by weight of nitrogen." Id.

Excluded from Commerce's scope are "vanadium additives other than ferrovanadium and nitrided vanadium, such as vanadium-aluminum master alloys, vanadium chemicals, vanadium waste and scrap, vanadium-bearing raw materials, such as slag, boiler residues, fly ash, and vanadium oxides." Id.

Commerce's scope determination specifically refers only to ferrovanadium and nitrided vanadium. We note that the only merchandise other than ferrovanadium imported from Russia that falls within the scope determination is nitrided ferrovanadium. It contains a minimum of 42 percent vanadium, 10 percent nitrogen, and approximately 40 percent iron. CR at I-5, n.1 to Table A-3 at A-11, PR at II-5, n.1 to Table A-3 at A-9.

[9] See CR at I-4-I-5, PR at II-4-II-5; Petition at 6.

[10] CR at I-4-I-5, PR at II-4-II-5; Petition at 6-7.

[11] CR at I-6, PR at II-6.

[12] Ferrovanadium and Nitrided Vanadium from Russia, Inv. No. 731-TA-702 (Preliminary), USITC Pub. 2796 at I-7 (July 1994).

[13] CR at I-7, PR at II-6.

[14] Petitioner, Shieldalloy Metallurgical Corporation, contends that the Commission should define one like product in this final investigation that includes both ferrovanadium and nitrided vanadium. See (continued...)

to support our view that the shared physical characteristic of vanadium content is more important than the differences in other contained elements.[15] This shared physical characteristic is essential for the production of alloy steels, which is the common end use of both ferrovanadium and nitrided vanadium.[16]

The record also shows that ferrovanadium and nitrided vanadium are interchangeable (and are generally viewed as interchangeable) to at least some degree.[17] Limitations on interchangeability are based on whether purchasers can use, on the one hand, the iron content found in ferrovanadium or, on the other hand, the nitrogen content found in nitrided vanadium.[18]

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[14] (...continued)
Petitioner's Prehearing Brief at 6-13; Petitioner's Posthearing Brief at 2. Respondent Odermet contends that the Commission should define two like products, ferrovanadium and nitrided vanadium, based on differences in physical characteristics and uses, limitations on interchangeability, and differences in production facilities. See Odermet's Prehearing Brief at 9-11; Odermet's Posthearing Brief at 3-4.

Respondent argues further that because there is currently no production of nitrided vanadium in the United States, there is no domestic industry and, accordingly, the Commission cannot find material injury, or threat thereof, to a nitrided vanadium domestic industry if no industry exists. We disagree with this analysis because nitrided vanadium was produced domestically during the period of investigation. Moreover, the Commission has in past investigations dismissed the argument Odermet makes because, in the absence of a product "like" the subject imported article, the Commission must find a product that is "most similar in characteristics and uses with, the article subject to an investigation." 19 U.S.C. § 1677(10); see, e.g., Nepheline Syenite from Canada, Inv. No. 731-TA-525 (Final), USITC pub. 2502 at 7-9 (Apr. 1992); Extruded Rubber Thread from Malaysia, Inv. No. 731-TA-527 (Final), USITC Pub. 2559 at 9-12, 33-34, 48 (Sept. 1992). If we did not find a domestic product "like" imported nitrided vanadium, we would, nevertheless, find a domestically produced product to be "most similar in characteristics and uses" to it and use the same analysis as contained herein with the same result.

[15] CR at I-7-I-8, PR at II-6. This characteristic distinguishes these products from other products used in steel production. CR at I-8, I-50, PR at II-7, II-31; EC-S-065 at 7-8 (June 20, 1995).

[16] CR at I-5-I-12, PR at II-5-II-9.

[17] We note that one of the subject articles imported during the period of investigation, nitrided ferrovanadium, contains vanadium and both iron and nitrogen. We find that the presence of this intermediate product containing both iron and nitrogen increases the difficulty in drawing a clear dividing line between ferrovanadium and nitrided vanadium. In this regard, we note that in Aramide Maatschappij V.O.F. v. United States, Slip Op. 95-113 at 7-8 (Ct. Int'l Trade June 19, 1995), the Court of International Trade affirmed a determination in which the Commission found that limited interchangeability both within and among various product forms supported a finding that no clear dividing lines existed among the various forms of the product.

[18] CR at I-9, I-63, PR at II-7-II-8, II-39. Only one domestic producer indicated that ferrovanadium and nitrided vanadium are not interchangeable. Odermet's Prehearing Brief at 10-11 (quoting a producer's questionnaire response). Several purchaser-steel makers reported that they use ferrovanadium interchangeably with nitrided vanadium. Some purchaser-steel makers indicated that it was possible to substitute ferrovanadium for nitrided vanadium, although they indicated that the reverse was not possible.
(continued...)

Although nitrided vanadium was produced in facilities different from ferrovanadium when it was produced domestically, the production processes for nitrided vanadium are similar to those for ferrovanadium.[19] Ferrovanadium and nitrided vanadium are sold through the same channels of distribution,[20] and both are priced according to their vanadium content.[21] Accordingly, we again find one like product that includes both ferrovanadium and nitrided vanadium.[22]

B. Domestic Industry

Based on the definition of the like product in this investigation, the domestic industry consists of the domestic producers of ferrovanadium and nitrided vanadium. The Commission includes all domestic production, including toll-production, within the domestic industry.[23] In deciding whether a firm qualifies as a domestic producer, we examine the overall nature of a firm's production-related activities in the United States.[24]

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[18] (...continued)
CR at I-9-I-11, PR at II-7-II-8; see also Tr. at 21-21 (listing the products for which ferrovanadium and nitrided vanadium can be used interchangeably).

[19] CR at I-13-I-15, PR at II-9-II-11.

[20] CR at I-12, PR at II-9.

[21] CR at I-16, PR at II-11.

[22] Odermet relies on Silicon Carbide from the People's Republic of China, Inv. No. 731-TA-651 (Preliminary), USITC Pub. 2668 at 11 (Aug. 1993), in which the Commission found that silicon carbide briquettes were a separate like product from silicon carbide grains because the former was mixed with other materials and sold as "briquettes" while the latter was sold in "bags." Odermet's Prehearing Brief at 9; Odermet's Posthearing Brief at 3. Silicon Carbide concerned factors pertinent to a semifinished/finished like product analysis. As we stated in the preliminary determination, such an analysis is inapplicable here because nitrided vanadium is not a downstream product made from ferrovanadium. USITC Pub. 2796 at I-7 & n.26.

[23] See United States Steel Group v. United States, 873 F. Supp. 673, 683 (Ct. Int'l Trade 1994), aff'g, Certain Flat-Rolled Carbon Steel Products from Argentina, Australia, Austria, Belgium, Brazil, Canada, Finland, France, Germany, Italy, Japan, Korea, Mexico, the Netherlands, New Zealand, Poland, Romania, Spain, Sweden, and the United Kingdom, Inv. Nos. 701-TA-319-332, 334, 336-342, 344, and 347-353 and 731-TA-573-579, 581-592, 594-597, 599-609, and 612-619 (Final), USITC Pub. 2664 at 17 (Aug. 1993) ("Certain Flat-Rolled Steel"); Aramid Fiber Formed of Poly Para-Phenylene Terephthalamide from the Netherlands, Inv. No. 731-TA-652 (Final), USITC Pub. 2783 at I-8-I-9 (June 1994).

As discussed, infra, notes 33-34 and accompanying text, we do not consider as part of the domestic industry two tollees that performed no production-related activities during the period of investigation.

[24] The Commission has examined six specific factors in this regard: (1) the extent and source of a firm's capital investment; (2) the technical expertise involved in U.S. production activity; (3) the value added to the product in the United States; (4) employment levels; (5) the quantities and types of parts sourced in the United States; and (6) any other costs and activities in the United States leading to (continued...)

Three domestic firms produced ferrovanadium over the period of investigation (1992 to 1994): the petitioner (Shieldalloy), Strategic Minerals Corporation (Stratcor) through its subsidiary U.S. Vanadium Corporation, and Bear Metallurgical Corp. (Bear). Stratcor is the only firm to have produced nitrided vanadium during the period of investigation. It ceased production of nitrided vanadium in July 1992 in favor of importing from a related South African firm, and ceased production of ferrovanadium in January 1994 in favor of a tolling arrangement with Bear. It also imported subject merchandise from Russia during the period of investigation.

Bear is a toll producer that makes ferrovanadium from intermediate products such as vanadium pentoxide.[25] In addition to its arrangement with Stratcor, Bear also toll produces ferrovanadium for ***.[26] Stratcor, *** supply Bear with intermediate products for reduction, crushing, and packaging into ferrovanadium.[27]

We find that Bear is a domestic producer because the activities in which it engages involve significant production operations and production costs and a level of technical expertise that adds substantial value to the end product it produces.[28] We also find that *** and Stratcor are engaged in sufficient production-related activities to qualify as domestic producers. ***

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[24] (...continued)
production of the like product, including where production decisions are made. Aramid Fiber Formed of Poly Para-Phenylene Terephthalamide from the Netherlands, Inv. No. 731-TA-652 (Final), USITC Pub. 2783 at I-9 n.34 (June 1994); Fresh Garlic from the People's Republic of China, Inv. No. 731-TA-683 (Final), USITC Pub. 2805 at I-15 & n.68 (Nov. 1994). The Commission has emphasized that no single factor -- including value added -- is determinative and that value added information becomes more meaningful when other indicia of production activity are taken into account. See, e.g., Compact Ductile Iron Waterworks Fittings and Parts Thereof from the People's Republic of China, Inv. No. 731-TA-621 (Final), USITC Pub. 2671 at 23 (Aug. 1993); Color Television Receivers from the Republic of Korea and Taiwan, Inv. Nos. 731-TA-134-135 (Final), USITC Pub. 1514 at 7-8 (May 1984). It also has stated that it will consider any other factors it deems relevant in light of the specific facts of any investigation. Erasable Programmable Read Only Memories from Japan, Inv. No. 731-TA-288 (Final), USITC Pub. 1927 (Dec. 1986).

[25] CR at I-19, I-30-I-31, PR at II-13, II-21-II-22.

[26] CR at I-19, PR at II-13.

[27] These tollees, rather than Bear, retain title to the products. CR at I-19 n.34, PR at II-13 n.34.
In 1993, Bear's toll production was divided among the tollees in the following estimated amounts: approximately *** percent to Stratcor, approximately *** percent to ***, approximately *** percent to *** and approximately *** percent to ***. CR at I-19 n.33, PR at II-13 n.33. In 1994, these percentages were estimated as follows: approximately *** percent to Stratcor, approximately *** percent to ***, approximately *** percent to ***, and approximately *** percent to ***.

[28] Table 10, CR at I-41, PR at II-26; CR at I-13-I-15, I-30, I-37, I-40, PR at II-9-II-11, II-21, II-24, II-25. Bear accounted for a significant percentage of domestic production during the period and its level of employment, production assets, investments, and R&D expenses for production of ferrovanadium are significant. Table 2, CR at I-23, PR at II-16; CR at I-20, PR at II-14 (production levels); Tables 9 & 10, CR at I-40-I-41, PR at II-25-II-26 (employment, production assets, and investments).

produces the intermediate product,[29] ***.[30] Stratcor was a fully integrated manufacturer, until 1994, and currently produces a significant percentage of the intermediate product that it provides to Bear, while purchasing the remainder.[31] Through 1994, Stratcor also maintained the capability to convert the intermediate products into ferrovanadium.[32]

However, because the activities of both *** are not sufficiently production-related, we do not consider them to be domestic producers.[33] The activities they perform with respect to ferrovanadium production, i.e., procurement of intermediate products for Bear to transform, involve only the purchase of an input, not production.[34] [35]

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[29] *** environmental group processes spent catalysts for other chemical companies and oil refineries, and part of the processing is the recovery of vanadium along with other substances. CR at I-19 n.35, I-30-I-31, PR at II-13 n.35, II-21-II-22. However, it has no facilities for the conversion of these substances into ferrovanadium. CR at I-31, PR at II-22.

[30] CR at I-19 n.31, PR at II-13 n.31.

[31] CR at I-19, PR at II-13.

[32] Table 2, CR at I-22-I-23, PR at II-15-II-16. Stratcor indicated that it would begin to produce ferrovanadium internally again if ***. Producer Questionnaire Response of Stratcor at 9 (***). It would take Stratcor *** to begin producing nitrided vanadium once again, because ***. Id.

[33] *** is an international metals merchant that imports the intermediate product from ***. It shipped only *** worth of ferrovanadium in 1994. CR at I-19, PR at II-13. *** did not provide any financial data; therefore, its inclusion or exclusion will not affect the data that we examine. *** is a minerals and metals trading company that purchases intermediate products for Bear to toll produce into ferrovanadium. CR at I-19, I-29, PR at II-13, II-21. It purchases vanadium-bearing material with the expectation of having Bear convert the material into ferrovanadium and selling it for a profit. CR at I-19, I-29, PR at II-13, II-21. ***. CR at I-31, PR at II-22; Producer's Questionnaire of *** at 6.

[34] See, e.g., Sweaters Wholly or in Chief Weight of Manmade Fibers from Hong Kong, the Republic of Korea, and Taiwan, Inv. Nos. 731-TA-448-450 (Final), USITC Pub. 2312 at 24-26 (Sept. 1990) (including manufacturers and contractors in industry, but not "jobbers" whose only activity involved often designing the sweaters and sometimes investing in the machinery of the contractors, but which did not rise to "engag[ing] in any actual product manufacturing"), remanded on other Grounds, Chung Ling Co., Ltd. v. United States, 805 F. Supp. 45 (Ct. Int'l Trade 1992).

We have used some of the information provided by all tollees (including Stratcor, ***, and ***) to analyze Bear's financial condition. Because Bear provided the Commission with only limited financial data, we have used the financial data that these tollees supplied to analyze the financial condition of the portion of Bear's ferrovanadium production operations that are tied to toll production for those firms. See Producers' Questionnaire Response of Bear; see also CR at I-29-I-31, PR at II-21-II-22.

With regard to ***, we have relied on data in the final report rather than the tables included in INV-S-088 (June 21, 1995), which exclude *** expenses associated with acquiring the intermediate products, because we believe that inclusion of those costs presents a more accurate picture of the domestic industry's condition. We note, however, that reliance on the information contained in INV-S-088 would have strengthened the case for an affirmative determination because those data show even weaker financial performance by domestic producers.

C. Related Parties

The related parties provision, 19 U.S.C. § 1677(4)(B), allows the Commission to exclude certain domestic producers from the domestic industry. The Commission must first determine whether the domestic producer meets the definition of a related party.[36] If a producer is a related party, the Commission may exclude that producer from the domestic industry if "appropriate circumstances" exist.[37] Exclusion of a related party is within the Commission's

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[35] (...continued)

[35] Commissioner Rohr agrees with his colleagues that because Bear could not provide the Commission with full financial data, it is necessary to use a portion of *** financial data to obtain an accurate picture of the financial condition of this industry. However, because we concluded that ***, itself, is not a domestic producer, it is proper to include only that portion of *** data which reflect Bear's operations as a domestic producer and not *** expenses associated with acquiring the intermediate products. The tables in Staff Memorandum INV-S-088 (June 21, 1995) include only the relatively small portion of *** operations which reflect Bear's domestic production activities, therefore the data in this memorandum represent the true operations of the domestic industry as the Commission has defined that industry for purposes of this investigation.

Since Commissioner Rohr relied on the data in INV-S-088 in making his determination, the data are slightly different than those discussed in the Condition of the Industry section below; however, the differences are only minimal and do not affect the overall trends of the industry indicators. The exact figures are confidential so he cannot discuss them publicly. COGS and SG&A expenses as a percentage of net sales are either the same as, or slightly higher than, those in Table 7 of the report, while gross profits, SG&A expenses, and operating income as a percentage of net sales are lower. Net sales, COGS, gross profit, SG&A expenses, and operating income on a value per-pound basis are slightly lower than in Table 7 of the Report. Prices and quantities of domestic products 1 and 2 in certain quarters vary slightly from those in tables 15 and 16 of the report.

[36] A domestic producer is a related party if it is either related to the exporters or importers of LTFV merchandise, or is itself an importer of the subject merchandise. 19 U.S.C. § 1677(4)(B).

[37] 19 U.S.C. § 1677(4)(B). The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include:

(1) the percentage of domestic production attributable to the importing producer;
(2) the reason the U.S. producer has decided to import the product subject to investigation, i.e., whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market, and
(3) the position of the related producer vis-a-vis the rest of the industry, i.e., whether inclusion or exclusion of the related party will skew the data for the rest of the industry.

See, e.g., Torrington Co. v. United States, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), aff'd without opinion, 991 F.2d 809 (Fed. Cir. 1993). The Commission has also considered whether a company's books are kept separately from its "relations" and whether the primary interests of the related producer lie in domestic production or in importation. See, e.g., Certain Carbon Steel Butt-Weld Pipe Fittings from France, India, Israel, Malaysia, the Republic of Korea, Thailand, the United Kingdom, and Venezuela, Inv. Nos. 701-TA-360 and 361, 731-TA-688-695 (Final), USITC Pub. 2870 at I-18 (April 1995).

discretion based upon the facts presented in each investigation.[38]

In this investigation, petitioner and Stratcor imported the subject products from Russia during 1993 and 1994[39] and, therefore, both are related parties. In the preliminary determination, the Commission did not find appropriate circumstances existed to exclude either petitioner or Stratcor because each firm's imports were relatively small in relation to its production and neither firm's operations were shielded from the effects of the subject imports.[40]

No party in this final investigation has advocated that the Commission exclude Shieldalloy as a related party. Nor is there new evidence in this final investigation that would warrant excluding Shieldalloy.[41] Accordingly, we again find that appropriate circumstances do not exist in this final investigation to exclude Shieldalloy as a related party, for the same reasons stated in the preliminary determination.

Respondent Odermet argues that appropriate circumstances exist to exclude Stratcor because Stratcor is ***, accounting for about *** percent of total subject imports in 1993 and *** percent in 1994.[42] We note, however, that Stratcor's sales of domestically-produced ferrovanadium are much larger than its sales of subject imports.[43] Further, Stratcor accounted for *** percent of domestic production in 1993,[44] and, in 1994, was a significant user of Bear's

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[38] Torrington, 790 F. Supp. at 1168; Empire Plow Co. v. United States, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

[39] CR at I-21, PR at II-14.

[40] USITC Pub. 2796 at I-9. The Commission added that "[i]n any final investigation, we intend to examine more closely the relationship between Stratcor's domestic operations and subject imports and the extent to which this relationship may affect our analysis of whether to exclude Stratcor from the domestic industry." Id. at I-9 n.43.

[41] Instead, the current record is substantially similar to the one developed in the preliminary investigation. Shieldalloy maintains *** percent of domestic production. CR at I-20, PR at II-14. Its share of subject imports, reasons for importing, and ratio of imports to domestic production do not show appropriate circumstances to support exclusion, nor do its level of production, shipments, employment, and financial experience compared to other producers. Tables 2, 3, 5, 8, CR at I-23, I-25, I-27-I-28, I-35-I-36, PR at II-16, II-17, II-19-II-20, II-24.

[42] Odermet's Prehearing Brief at 13, 14, 15.

[43] Table 8, CR at I-35-I-36, PR at II-24; CR at I-21, PR at II-14. In 1994, Stratcor sold *** pounds of domestic ferrovanadium produced under its toll production arrangement with Bear, while it imported only roughly *** pounds of the subject merchandise. Thus, its sales of domestic product are almost *** the volume of its subject imports. See Table 8, CR at I-35, PR at II-24 (Stratcor's quantity of domestic ferrovanadium sales in 1994); compare CR at I-21, PR at II-14 (Stratcor has *** percent of subject imports) with Table 1 and CR at I-17, PR at II-12 (total subject imports); Producer Questionnaire Response of U.S. Vanadium Corp. at 10. Using the same sources of information reveals that in 1993, Stratcor sold *** pounds of domestically produced ferrovanadium, while it imported only *** pounds of subject ferrovanadium.

[44] Table 2, CR at I-23, PR at II-16. Stratcor's wholly owned subsidiary, U.S. Vanadium Corporation, performed the production. See Petitioner's Prehearing Brief at 27 n.85.

tolling operations.[45] Stratcor also continues to produce the intermediate product that Bear converts into ferrovanadium under this tolling arrangement.[46]

Moreover, the data concerning Stratcor's shipments and financial performance with respect to its sales of domestically-produced ferrovanadium do not appear to have been affected by its importation of the subject merchandise.[47] Finally, Stratcor's stated reasons for importing ferrovanadium from Russia do not support its exclusion from the domestic industry.[48] Accordingly, as in the preliminary determination, we do not find appropriate circumstances exist to exclude Stratcor as a related party.

II. CONDITION OF THE DOMESTIC INDUSTRY

In assessing whether the domestic industry is materially injured or threatened with material injury by reason of LTFV imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[49] 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 dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[50]

We note certain conditions of competition pertinent to our analysis of the domestic ferrovanadium and nitrided vanadium industry. Demand for ferrovanadium and nitrided vanadium is derived from industrial demand for the products that incorporate ferrovanadium and nitrided vanadium, such as alloy steel products.[51] Through 1991, the economic recession in the United States steel industry caused a decline in demand for ferrovanadium and nitrided vanadium, which may have contributed to declining prices in 1992.[52] The subject merchandise from Russia was first sold in the U.S. market in late 1992.[53]

We also note that a general shift within the domestic industry toward toll production arrangements during the period examined enabled the industry to achieve certain cost of

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[45] CR at I-19 n.33, PR at II-13 n.33. Stratcor accounted for *** percent of Bear's production under its toll production arrangement.

[46] CR at I-19, PR at II-13.

[47] Table 8, CR at I-35-I-36, PR at II-24.

[48] Stratcor responded that it imported the subject merchandise because the imports ***. Producer's Questionnaire of U.S. Vanadium Corp. at 15.

[49] 19 U.S.C. § 1677(7)(C)(iii).

[50] 19 U.S.C. § 1677(7)(C)(iii). No party addressed the issue of a business cycle, and there is no evidence of a business cycle distinctive to the domestic industry.

[51] CR at I-50, PR at II-31.

[52] EC-S-065 at 7 (June 20, 1995); CR at I-20, I-50, PR at II-14, II-31.

[53] Tr. at 73-74; Odermet's Preliminary Investigation Postconference Brief at 28-29; Preliminary Investigation Conf. Tr. at 70-72.

production efficiencies.[54] We further have taken into account that the domestic cost of raw materials used in the production of ferrovanadium and nitrided vanadium fell throughout the period of investigation.[55]

Apparent U.S. consumption of ferrovanadium and nitrided vanadium increased during each year of the period of investigation, with the largest increase occurring from 1992 to 1993.[56] The increase in U.S. consumption was largely due to increasing demand for the alloy steel products produced with ferrovanadium and nitrided vanadium.[57] The domestic industry's U.S. shipments of ferrovanadium and nitrided vanadium moved in the opposite direction of overall U.S. consumption, declining in each year of the period of investigation. The greatest decrease occurred from 1992 to 1993, which corresponds to the period of greatest expansion in U.S. consumption.[58] The value of domestic producers' U.S. shipments also decreased from 1992 to 1994, outpacing the decline in volume during the same period.[59] As a consequence of expanding consumption and declining U.S. shipments, the domestic industry's share of the U.S. market for ferrovanadium and nitrided vanadium declined substantially from 1992 to 1994.[60]

The domestic industry's capacity to produce ferrovanadium and nitrided vanadium remained constant during the period of investigation.[61] Production volume and capacity

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[54] As noted above, in January 1994, Stratcor ceased internal production of ferrovanadium in favor of a toll arrangement with Bear, and *** also entered into a toll arrangement with Bear. CR at I-19, PR at II-13.

[55] CR at I-37, PR at II-24.

[56] Apparent U.S. consumption increased by 24.5 percent from 1992 to 1993 and by an additional 3.2 percent from 1993 to 1994, for an overall increase during the period of 28.4 percent. Tables 1 and A-1, CR at I-17 and A-3, PR at II-12 and A-3.

The value of apparent U.S. consumption followed an opposite pattern, with the largest decrease occurring from 1992 to 1993. Tables 1 and A-1, CR at I-17 and A-3, PR at II-12 and A-3. The value of apparent U.S. consumption decreased by 9.4 percent from 1992 to 1993, and by 7.2 percent from 1993 to 1994, for an overall decrease in value of 15.9 percent during the period of investigation.

[57] CR at I-50, PR at II-31.

[58] Tables 1, 3 and A-1, CR at I-17, I-25 and A-4, PR at II-12, II-17 and A-4; Figure 1, CR at I-18, PR at II-12. The domestic industry's U.S. shipments by quantity *** from 1992 to 1993 and by *** from 1993 to 1994, for an overall *** during the period of investigation.

[59] Tables 1 and A-1, CR at I-17 and A-4, PR at II-12 and A-4. The value of the domestic producers' U.S. shipments decreased by 26.2 percent from 1992 to 1993 and by *** from 1993 to 1994, for an overall decrease in value of *** during the period of investigation. The unit value of domestic industry shipments decreased by 23.9 percent from 1992 to 1993, and by *** from 1993 to 1994, for an overall decrease of *** from 1992 to 1994.

[60] Tables 14 and A-1, CR at I-48 and A-3, PR at II-30 and A-3. The domestic industry's share of total apparent consumption by quantity was *** in 1992, *** in 1993 and *** in 1994, for an overall decline of 18.8 percentage points; the domestic industry's share of the U.S. market by value was *** in 1992, *** in 1993 and *** in 1994, for an overall decline of 16.1 percentage points.

[61] Tables 2 and A-1, CR at I-23 and A-4, PR at II-16 and A-4. Ferrovanadium and nitrided vanadium production capacity remained at roughly 19.4 million pounds from 1992 to 1994.

utilization increased slightly during the period of investigation, with all of the increases occurring in toll production operations; production by integrated producers declined.[62] The domestic industry's year-end inventories declined irregularly from 1992 to 1994.[63] As a percentage of shipments and production, inventories fluctuated but declined over the period of investigation.[64]

The number of production workers, hours worked, wages paid, total compensation, hourly wages, and unit labor costs associated with ferrovanadium and nitrided vanadium production declined during the period of investigation.[65] Productivity, however, increased consistently during the period.[66]

The decline in domestic shipments was reflected in reduced sales revenues from 1992 to 1994.[67] Unit sales values also declined over this period.[68] The domestic industry's costs of goods sold (COGS) and selling, general and administrative expenses (SG&A), as well as unit COGS and unit SG&A expenses, decreased over the period.[69] COGS declined both because raw

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[62] Tables 2 and A-1, CR at I-23 and A-4, PR at II-16 and A-4. Production volumes increased by 0.6 percent from 1992 to 1993 and by *** from 1993 to 1994, for an overall *** during the period of investigation. Capacity utilization increased from 37.1 percent in 1992 to 37.3 percent in 1993 to *** in 1994.

Although production increased, the domestic industry's U.S. shipments declined and inventories declined irregularly; thus, the increased production was directed to export markets. Tables 3 and A-1, CR at I-25 and A-4, PR at II-17 and A-4.

[63] Tables 4 and A-1, CR at I-27 and A-4, PR at II-18 and A-4. Domestic industry year-end inventories increased by 21.4 percent from 1992 to 1993 and *** from 1993 to 1994, for an overall *** during the period of investigation.

[64] Tables 4 and A-1, CR at I-27 and A-4, PR at II-18 and A-4. Domestic inventories as a percentage of U.S. shipments increased from 8.2 percent in 1992 to 10.3 percent in 1993, then ***. As a share of U.S. production, inventories increased from 7.8 percent in 1992 to 9.5 percent in 1993, then ***.

[65] The number of production workers decreased from 169 in 1992 to 150 in 1993 and *** in 1994. Hours worked decreased from 344,000 hours in 1992 to 299,000 hours in 1993 and to *** hours in 1994. Wages paid ***. Total compensation ***. Hourly wages paid ***. Hourly total compensation ***. Unit labor costs ***. Tables 5 and A-1, CR at I-27-I-28 and A-4, PR at II-19-II-20 and A-4.

[66] Tables 5 and A-1, CR at I-27-I-28 and A-4, PR at II-19-II-20 and A-4. Productivity increased from 20.9 pounds per hour in 1992 to 24.2 pounds per hour in 1993 and to *** in 1994.

[67] The domestic industry's net sales by quantity decreased by 3.0 percent from 1992 to 1993 but increased by 14.2 percent from 1993 to 1994, for an overall increase of 10.8 percent for the period of investigation. Tables 7 and A-1, CR at I-33 and A-4, PR at II-23 and A-4. Net sales by value decreased 25.8 percent from 1992 to 1993 but increased by 9.6 percent in 1994, for an overall decrease for the period of 18.6 percent. Tables 7 and A-1, CR at I-33 and A-4, PR at II-23 and A-4.

[68] Tables 7 and A-1, CR at I-33 and A-4, PR at II-23 and A-4. Unit sales value decreased 23.5 percent from 1992 to 1993 and 4.1 percent from 1993 to 1994, for an overall decrease over the period of 26.6 percent.

[69] COGS decreased 20.7 percent from 1992 to 1993 and 6.3 percent from 1993 to 1994. SG&A expenses decreased 7.5 percent from 1992 to 1993 and 12.9 percent from 1993 to 1994. Unit COGS

(continued...)

material costs declined and because there was a sharp decline in "other factory costs." The latter decrease was coincident with, and attributable to, the decline in integrated production in favor of tolling arrangements.[70]

From 1992 to 1993, net sales revenue declined more rapidly than production costs, leading to an increase in operating losses. From 1993 to 1994, production costs continued to decline, but net sales revenues increased modestly. The decline in unit costs and the small increases in sales resulted in a positive, but small, operating profit.[71]

Finally, capital expenditures by the domestic ferrovanadium and nitrided vanadium industry decreased consistently and substantially from 1992 to 1994.[72] [73]

III. MATERIAL INJURY BY REASON OF LTFV IMPORTS

In final antidumping duty investigations, the Commission determines whether an industry in the United States is materially injured by reason of the imports subject to investigation that Commerce has determined to be sold at LTFV.[74] In making this determination, the Commission must consider the volume of imports, their effect on prices for the like product, and their impact

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[69] (...continued)
decreased 18.2 percent from 1992 to 1993 and 18.0 percent from 1993 to 1994, for an overall decrease of 33.0 percent. Unit SG&A expenses decreased 4.6 percent from 1992 to 1993 and 23.7 percent from 1993 to 1994. Tables 7 and A-1, CR at I-33 and A-4-A-5, PR at II-23 and A-4-A-5.

[70] CR at I-37, PR at II-24.

[71] Tables 7 and A-1, CR at I-33 and A-4, PR at II-23 and A-4. The domestic industry experienced gross profits of $217,000 in 1992 but had gross losses of $2.0 million in 1993, and experienced gross profits of $3.2 million in 1994. Gross profits for the domestic ferrovanadium and nitrided vanadium industry as a share of net sales declined from 0.5 percent in 1992 to a loss of 6.3 percent in 1993 and rose in 1994 to 9.2 percent.

The domestic industry experienced operating losses of $3.7 million in 1992 and $5.6 million in 1993, but had operating income of $26,000 in 1994. Operating losses as a share of net sales were 8.7 percent in 1992 and 17.7 percent in 1993, but the industry's operating profitability improved to 0.1 percent of net sales in 1994.

[72] Tables 10 and A-1, CR at I-41 and A-5, PR at II-26 and A-5. Capital expenditures ***, for an overall *** from 1992 to 1994.

Although the industry reported annual research and development (R&D) expenses related to its overall establishment operations, it reported no R&D expenses related to ferrovanadium and nitrided vanadium.

[73] Based on the foregoing, Commissioner Rohr and Commissioner Newquist conclude that the domestic ferrovanadium and nitrided vanadium industry is experiencing material injury.

[74] 19 U.S.C. § 1673d(b). The statute defines "material injury" as "harm which is not inconsequential, immaterial or unimportant." 19 U.S.C. § 1677(7)(A).

on domestic producers of the like product, but only in the context of U.S. production operations.[75] Although the Commission may consider alternative causes of injury to the domestic industry other than the LTFV imports, it is not to weigh causes.[76] [77] [78]

For the reasons discussed below, we find that the domestic industry producing ferrovanadium and nitrided vanadium is materially injured by reason of LTFV imports from Russia.

A. Volume of Imports

The volume and market share of subject imports increased substantially throughout the period of investigation.[79] The rate of increase in the volume of subject imports significantly outpaced the rate of increase in overall domestic consumption of ferrovanadium and nitrided vanadium.[80] Thus, subject imports captured a substantially increasing share of the expanding U.S. market by quantity and by value over the period of investigation. Much of the increase came at the expense of the domestic industry.[81]

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[75] 19 U.S.C. § 1677(7)(B)(i). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each *** factor . . . and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[76] See, e.g., Citrosuco Paulista, S.A. v. United States, 704 F. Supp. 1075, 1101 (Ct. Int'l Trade 1988). Alternative causes may include the following:

> [T]he volume and prices of imports sold at fair value, contraction in demand or changes in patterns of consumption, trade, restrictive practices of and competition between the foreign and domestic producers, developments in technology, and the export performance and productivity of the domestic industry.

S. Rep. No. 249, 96th Cong., 1st Sess. 74 (1979). Similar language is contained in the House Report. H.R. Rep. No. 317, 96th Cong., 1st Sess. 46-47 (1979).

[77] For Chairman Watson's interpretation of the statutory requirement regarding causation, see Certain Calcium Aluminate Cement Clinker from France, Inv. No. 731-TA-645 (Final), USITC Pub. 2772 at I-14 n.68 (May 1994).

[78] Commissioner Rohr and Commissioner Newquist 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 (CIT 1989); Citrosuco Paulista, 704 F. Supp. at 1101.

[79] Subject imports of ferrovanadium and nitrided vanadium by quantity were *** pounds in 1992, *** pounds in 1993, and *** pounds in 1994. Subject imports increased similarly by value, rising from *** in 1992 to *** in 1993 and to *** in 1994. Tables 13 and A-1, CR at I-46 and A-3, PR at II-29 and A-3.

[80] Apparent U.S. consumption by quantity ***. Table A-1, CR at A-3, PR at A-3. In contrast, subject imports by quantity ***.

[81] The market share held by subject imports by quantity was: 0.2 percent in 1992; 13.4 percent in 1993; and 21.1 percent in 1994. Market share by value for subject imports was: 0.2 percent in 1992; (continued...)

Based on the foregoing, we conclude that the volume and market share of subject imports, as well as the increases in those volumes and market share, are significant.

B. Price Effects of Imports

Evidence on the record indicates that subject imports and the domestic like product generally are interchangeable and serve as good substitutes.[82] Producers, importers, and purchasers generally considered the domestic product and the subject imports to be comparable with regard to most factors, such as product quality and availability.[83] Price, therefore, is an important factor in the purchasing decisions for this commodity.[84] All of the responding purchasers cited price as a major factor in deciding from whom to purchase ferrovanadium and nitrided vanadium.[85]

The pricing information in the record demonstrates that subject imports have suppressed and depressed prices in the domestic market to a significant degree. Prices of the domestic product began to decline slightly prior to the influx of subject imports from Russia. Notwithstanding a large increase in apparent consumption after 1992, however, the rate at which prices of both the domestic product and the subject imports declined accelerated from 1992 to January-March 1994, at the same time that subject imports entered the market in increasing volumes. Prices leveled off and began to increase after the first quarter of 1994,[86] coincident

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[81] (...continued)
10.1 percent in 1993; and 16.1 percent in 1994. Table A-1, CR at A-3, PR at A-3. The U.S. market share held by the domestic industry, by quantity, was: *** in 1992; *** in 1993; and *** in 1994. The domestic industry's market share by value was: *** in 1992; *** in 1993; and *** in 1994. Non-subject imports by quantity accounted for *** of the market in 1992, 1993 and 1994 respectively. Table A-1, CR at A-3, PR at A-3.

[82] CR at I-52-I-53, PR at II-32-II-33; EC-S-065 at 14-16, 27 (June 20, 1995). Steel producers have the technical capability to use domestic or subject imported products despite any differences in vanadium content (grade) that the respective products may have. CR at I-9, PR at II-7.

[83] CR at I-52-I-53, I-62-I-65, PR at II-32-II-33, II-38-II-39; EC-S-065 at 14-16 (June 20, 1995).

[84] Accord CR at I-59-I-60, I-62-I-65, PR at II-36-II-37, II-38-II-39; EC-S-065 at 14 & n.16, 15 & n.18.

[85] EC-S-065 at 14 (June 20, 1995). In addition, 10 out of the 30 purchasers responding to the Commission's questionnaire ranked price as the most important factor in their ferrovanadium and nitrided vanadium purchasing decisions, with another 10 respondents ranking quality as the most important factor. Id.; see also CR at I-59-I-60, I-62-I-65, PR at II-36-II-37, II-38-II-39.

[86] Weighted-average prices for import subject product 1 *** from October-December 1992 to January-March 1994, then increased thereafter. The prices of imported subject products 2 and 3, which began to enter the U.S. market in October-December 1993 and July-September 1993, respectively, rose through 1994. Tables 15-17 and Figures 8-10, CR at I-55-I-57, PR at II-35.

Weighted-average prices for the domestic products 1 and 2 were ***, respectively, in the first quarter of 1994 than in the first quarter of 1992, then increased thereafter. Tables 15-17 and Figures 8-10, (continued...)

with the filing of the petition in this investigation. Significantly, the domestic industry's largest price declines occurred in 1993,[87] which is when the largest increases in the volume of subject imports occurred. The concurrence of volume increases with the price declines supports the conclusion that the domestic industry was forced to reduce prices as a defensive measure to retain market share.[88]

The evidence showing subject imports underselling the domestic product provides further support for our finding of adverse price effects.[89] Although underselling occurred in a limited number of quarters in which price comparisons were made, a larger quantity of subject imports undersold the domestic product than oversold it.[90] Thus, examined on a volume basis, underselling by subject imports was more pervasive than overselling by subject imports. In addition, the product grade in which most of the underselling by subject imports occurred accounts for the bulk of both subject import and domestic industry sales.[91] We therefore find the underselling to be significant.

Moreover, the evidence of record shows that price played an important role in purchasers' decisions to switch from domestic to subject import supply. Several purchasers stated that the primary advantage of the Russian product was its lower price, while the primary disadvantage of the domestic product was its higher price.[92] Other information in the record, including information developed in interviews with purchasers confirming allegations of lost sales and lost revenues, further substantiates the significance of price in purchasing decisions.[93]

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[86] (...continued)
CR at I-55-I-57, PR at II-35. The domestic industry sold product 3 only in 1992, and prices fluctuated during that period, but were lower at the end of the year than at the beginning of the year. Table 17 and Figure 10, CR at I-57, PR at II-35.

[87] Tables 15-17 and Figures 8-10, CR at I-55-I-57, PR at II-35.

[88] Although costs declined over the period of investigation, these cost decreases do not fully explain the domestic industry's price decreases. Prices for the domestic industry increased only after subject import prices rose, and price declines over the period do not directly track cost declines. Compare Tables 15-17 and Figures 8-10, CR at I-55-I-57, PR at II-35 with Tables 7 and A-1, CR at I-33 and A-4-A-5, PR at II-23 and A-4-A-5. Moreover, declining costs primarily reflect the domestic industry's efforts to compete with the subject imports by shifting toward lower-cost toll production. We discuss these issues in more detail, infra, in our section on the impact of the subject imports on the domestic industry.

[89] Table 18, CR at I-58, PR at II-36. Subject imports of product 1 undersold the domestic product in five out of nine quarters for which price comparisons could be made. Subject imports of product 2 oversold the domestic product in all five quarters for which price comparisons could be made. Id. The margins of underselling ranged between 1 percent and 10.0 percent. Id.

[90] Tables 15-17 and Figures 8-10, CR at I-55-I-57, PR at II-35.

[91] Id. ***.

[92] CR at I-53, PR at II-33; EC-S-065 at 15 (June 20, 1995).

[93] CR at I-60-I-65, PR at II-36-II-37. Conversations with purchasers named in lost sales allegations confirm that purchasers consistently bought subject imports because they were priced lower than the
(continued...)

Although unit values do not reflect differences in product mix, we note that unit values for subject imports were consistently lower than the unit values for the domestic product over the period of investigation.[94]

Although prices for the domestic industry rose slightly in 1994, underselling by substantial volumes of subject imports continued through much of the year.[95] Moreover, domestic producers were not able to increase their prices in 1994 to levels corresponding to earlier periods, and the 1994 price increases allowed U.S. producers to achieve only minimal profitability. Based on these factors, we also find that subject imports suppressed domestic prices to a significant degree. In sum, given the importance of price to purchasers, the overall decline in prices for the domestic product and subject imports, and the evidence of underselling by subject imports, we conclude that the prices of the subject imports have had a significant depressing or suppressing effect on the prices of domestic ferrovanadium and nitrided vanadium.

C. Impact of Imports on the Domestic Industry

Finally, we consider the impact of subject imports on the domestic industry producing ferrovanadium and nitrided vanadium. In this case, we find that the large and increasing volume and market share of the subject imports have had an adverse impact on the domestic industry. As discussed earlier, subject imports captured an increasing and substantial share of the U.S. market at the expense of the domestic industry. Moreover, declining domestic and import prices and underselling by subject imports over the period of investigation indicate that the subject imports have depressed or suppressed domestic prices to a significant degree.

This impact of the subject imports on the domestic industry is demonstrated by the

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[93] (...continued)
domestic like product. CR at I-62-I-65, PR at II-37-II-40. Indeed, one purchaser indicated that "the U.S. market was inundated by imports of Russian ferrovanadium" and that "several times during 1993, suppliers of Russian ferrovanadium drove the U.S. market price down to a level so low that one of [its] U.S. suppliers was forced to quote a price below its cost of production." CR at I-62, PR at II-38; see also CR at I-64, PR at II-39 (price of the subject imports had to be 25 percent higher before purchaser would have bought U.S.-produced ferrovanadium); CR at I-65, PR at II-39-II-40 (subject imports were 25 to 30 cents per pound lower than prices for domestic material).

We also note that a comparison of Stratcor's published prices for domestically-produced ferrovanadium and subject imported ferrovanadium in April 1994 shows that the subject imports were priced below the domestic product for at least part of the period of investigation. See Petitioner's Prehearing Brief Exhibit 2.

[94] Tables 3, 13 and A-1, CR at I-25, I-46 and A-3-A-4, PR at II-17, II-29 and A-3-A-4. Although there was a mix of products, the differences among the products are relatively minor and are outweighed by the similarity of vanadium content as the shared essential physical characteristic in all products examined. See CR at I-9, I-52-I-53, I-62-I-63, PR at II-7, II-32-II-33, II-38-II-39; EC-S-065 at 14-16, 27 (June 20, 1995).

[95] Tables 15-17 and Figures 8-10, CR at I-55-I-57, PR at II-35; see also Table A-1, CR at A-3-A-4, PR at A-3-A-4 (unit value comparison).

declines in many of the key domestic industry indicators, including shipments, employment, sales revenue,[96] and market share.[97] We note that despite increased U.S. demand for ferrovanadium and nitrided vanadium, the domestic industry's U.S. shipments declined from 1992 to 1994.[98] Although domestic producers' sales quantities (including exports) increased from 1992 to 1994, their sales values and unit sales values declined noticeably.

The domestic industry experienced operating losses in 1992 and 1993. Although it was able to achieve a modest operating income in 1994 in the face of significant volumes of low-priced subject imports, this improvement in operating performance was mainly due to the industry's ability to take advantage of declining unit costs (both COGS and SG&A),[99] which in turn resulted largely from the shift to tolling operations. Despite this improvement in cost structure, the domestic industry still experienced significant declines in average unit values and market share in 1994, while the volume and market share of subject imports increased. Thus, the subject imports prevented the domestic industry from taking full advantage of the expanding U.S. market and declining costs, and had an injurious impact.

CONCLUSION

For the foregoing reasons, we determine that the domestic ferrovanadium and nitrided vanadium industry is materially injured by reason of LTFV imports from Russia.[100]

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[96] Although U.S. producers' overall sales quantities increased from 1992 to 1994, most of this increase is attributable to increases in U.S. producers' export shipments, not domestic shipments. Tables 3 and A-1, CR at I-25 and A-4, PR at II-17 and A-4. U.S. producers' sales of ferrovanadium and nitrided vanadium increased from 7.3 million pounds in 1992 to 8.1 million pounds in 1994, while exports increased from *** in 1992 to *** in 1994. Tables 3, 8 and A-1, CR at I-25, I-35, A-3-A-4, PR at II-17, II-24, A-3-A-4. Exports also provided an outlet for the domestic industry's increase in production over the period of investigation. Tables 2 and 3, CR at I-23 and I-25, PR at II-16 and II-17.

[97] Data referred to in this paragraph are summarized in Table A-1, CR at A-3-A-5, PR at A-3-A-5.

[98] Apparent U.S. consumption by quantity increased by 28.4 percent from 1992 to 1994. Table A-1, CR at A-3, PR at A-3. In contrast, the domestic industry's U.S. shipments by quantity decreased by *** from 1992 to 1994. Id.

[99] U.S. producers' unit COGS declined from $5.83 per unit in 1992 to $3.91 per unit in 1994, while unit SG&A costs declined from $0.54 to $0.39. Table A-1, CR at A-5, PR at A-5.

[100] Vice Chairman Nuzum also finds the record supports an affirmative determination of threat of material injury. See her additional views.

ADDITIONAL VIEWS OF VICE CHAIRMAN JANET A. NUZUM
Ferrovanadium and Nitrided Vanadium from Russia
Inv. No. 731-TA-702 (Final)

I concur with my colleagues in the majority that the domestic industry is materially injured by reason of less than fair value ("LTFV") imports of ferrovanadium and nitrided vanadium from Russia. I also find, however, that the record equally supports an affirmative determination that the domestic industry is threatened with material injury by reason of LTFV imports of ferrovanadium and nitrided vanadium from Russia. These additional views set forth my analysis regarding threat of material injury.

In determining whether a domestic industry is threatened with material injury, the Commission must base its determination on "the basis of evidence that the threat of material injury is real and that actual injury is imminent."[1] The determination may not be made "on the basis of mere conjecture or supposition."[2] The Commission considers as many of the ten statutory factors as are relevant to the facts of the particular investigations before it, as well as any other relevant economic factors.[3]

The Russian ferrovanadium and nitrided vanadium industry has substantial production capacity that far exceeds that of the U.S. ferrovanadium industry. I observed a close relationship between * * * * * in Russian production and home market shipments of ferrovanadium and nitrided vanadium, and capacity utilization, and increases in imports of the subject merchandise into the United States.[4] The sharpest period * * * * * in Russian consumption of Russian ferrovanadium and capacity utilization occurred during 1992-93, which coincided with the sharpest increase in U.S. market penetration by the Russian product. Russian consumption continued to * * * * * in 1994, although at a slower rate. The same is true for Russian capacity utilization. Likewise, U.S. market penetration by the subject imports also increased in 1994, although somewhat more slowly than during 1992-93.[5]

The Russian producers forecast that their production and home market shipments will * * * * * and that exports to the United States will * * * * * . Even assuming these projections are correct, however, there will still be * * * * * .[6] In any event, the projections are

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[1] 19 U.S.C. §1677(7)(F)(ii).

[2] Id.

[3] 19 U.S.C. §1677(7)(F)(i)(I) - (X). Factor I, regarding the nature of subsidies, and Factor IX, regarding agricultural products, are not relevant to the facts of this investigation.

[4] Compare Table 12, CR at I-45, PR at II-28 and Table 13, CR at I-46, PR at II-29.

[5] Compare Table 12, CR at I-45, PR at II-28 and Table 14, CR at I-48, PR at II-30.

[6] Table 12, CR at I-45, PR at II-28. The Russian producers also forecast that their exports to the United States will * * * * * in 1995. I do not give this projection much weight for two reasons. First, one of the Russian producers stated * * * * * See Foreign Producer Q.R. of Tulachermet, p. 4, Question 3. Second, the Russian producers' reported exports to the United States in 1993 and 1994 do not account for all subject imports that entered the United States during the same period. Compare Table 12, CR at I-45, PR at II-28 and Table 13, CR at I-46, PR at II-28.

unsubstantiated by objective evidence. The presence of substantial * * * * * and the apparent connection between * * * * * capacity utilization and * * * * * exports to the United States indicate that subject imports will continue to increase to injurious levels.

Importers' inventories of the Russian product also increased rapidly since 1992 and remained high, far outpacing inventories of non-subject imports in both absolute terms and as a ratio of imports.[7]

As discussed in the majority's views, there is substantial evidence that subject imports had depressing and suppressing effects on domestic prices. I find no evidence that suggests such adverse price effects will subside as subject import volumes continue to increase.

Finally, I note that certain indicators of domestic industry performance, including unit cost of goods sold and operating income, showed positive improvement from 1993-94, even as subject imports continued to increase in volume.[8] This improvement, however, was largely the result of a shift in production from an integrated basis to a tolling basis as Stratcor ceased its own production of ferrovanadium in favor of a tolling arrangement with Bear.[9] The record indicates that * * * * * .[10] Consequently, the domestic industry's ability to shift more production to a tolling basis and further reduce its production costs is limited. Thus, the modest improvement in the industry's financial performance in 1994 would very likely be reversed in the face of additional increases in subject imports at depressing and suppressing prices.

For the foregoing reasons, I find substantial evidence that the domestic industry is threatened with material injury by reason of LTFV imports from Russia.[11]

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[7] Table 11, CR at I-43, PR at II-28.

[8] Table 7, CR at I-33, PR at II-23.

[9] CR at I-34, PR at II-22.

[10] Table 2, CR at I-23, PR at II-16.

[11] As noted earlier, I also determine that the domestic industry is materially injured by reason of subject imports. Therefore, I do not need to make a "but for" decision pursuant to section 735(b)(4)(B) of the statute. 19 U.S.C. §1673(b)(4)(B).

VIEWS OF COMMISSIONER CAROL T. CRAWFORD

On the basis of information obtained in this final investigation, I determine that an industry in the United States is not materially injured or threatened with material injury by reason of imports of ferrovanadium and nitrided vanadium from Russia found by the Department of Commerce to be sold at less-than-fair-value ("LTFV"). I concur in the conclusions of my colleagues in the finding of the like product and domestic industry, and in the discussion of the condition of the domestic industry. These dissenting views provide an explanation of my determination of no reasonable indication of material injury or threat of material injury by reason of LTFV imports of ferrovanadium and nitrided vanadium from Russia.

I. ANALYTICAL FRAMEWORK

In determining whether a domestic industry is materially injured by reason of the LTFV imports, the statute directs the Commission to consider:

> (I) the volume of imports of the merchandise which is the subject of the investigation,
> (II) the effect of imports of that merchandise on prices in the United States for like products, and
> (III) the impact of imports of such merchandise on domestic producers of like products, but only in the context of production operations within the United States....[1]

In making its determination, the Commission may consider "such other economic factors as are relevant to the determination."[2] In addition, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry ... within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[3]

The statute directs that we determine whether there is "material injury by reason of the dumped imports." Thus we are called upon to evaluate the effect of dumped imports on the domestic industry and determine if they are causing material injury. There may be, and often are, other "factors" that are causing injury. These factors may even be causing greater injury than the dumping. However, the statute does not require us to weigh or prioritize the factors that are independently causing material injury. Rather, the Commission is to determine whether any injury "by reason of" the dumped imports is material. That is, the Commission must determine if the subject imports are causing material injury to the domestic industry. "When determining the effects of imports on the domestic industry, the Commission must consider all relevant factors

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[1] 19 U.S.C. § 1677(7)(B)(I).

[2] 19 U.S.C.§ 1677(7)(B)(ii).

[3] 19 U.S.C. § 1677(7)(C)(iii).

that can demonstrate if unfairly traded imports are materially injuring the domestic industry."[4] It is important, therefore, to assess the effects of the dumped imports in a way that distinguishes those effects from the effects of other factors unrelated to the dumping. To do this, I compare the current condition of the industry to the industry conditions that would have existed without the dumping, that is, had subject imports all been fairly priced. I then determine whether the change in conditions constitutes material injury. The Court of International Trade has held that the "statutory language fits very well" with my mode of analysis.[5]

In my analysis of material injury, I evaluate the effects of the dumping on domestic prices, domestic sales, and domestic revenues. To evaluate the effects of the dumping on domestic prices, I compare domestic prices that existed when the imports were dumped with what domestic prices would have been if the imports had been priced fairly. Similarly, to evaluate the effects of dumping on the quantity of domestic sales,[6] I compare the level of domestic sales that existed when imports were dumped with what domestic sales would have been if the imports had been priced fairly. The combined price and quantity effects translate into an overall domestic revenue impact. Understanding the impact on the domestic industry's prices, sales and overall revenues is critical to determining the state of the industry, because the impact on other industry indicators (e.g., employment, wages, etc.) is derived from the impact on the domestic industry's prices, sales, and revenues.

I then determine whether the price, sales and revenue effects of the dumping, either separately or together, demonstrate that the domestic industry would have been materially better off if the imports had been priced fairly. If so, the domestic industry is materially injured by reason of the dumped imports.

For the reasons discussed below, I determine that the domestic industry producing ferrovanadium and nitrided vanadium is not materially injured by reason of LTFV imports of ferrovanadium and nitrided vanadium from Russia.

II. CONDITIONS OF COMPETITION

To understand how an industry is affected by unfair imports, we must examine the conditions of competition in the domestic market. The conditions of competition constitute the commercial environment in which the domestic industry competes with unfair imports, and thus form the foundation for a realistic assessment of the effects of the dumping. This environment includes demand conditions, substitutability among and between products from different sources, and supply conditions in the market.

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[4] S.Rep. No. 71, 100th Cong., 1st Sess. 116 (1987)(emphasis added).

[5] U.S. Steel Group v. United States, 873 F.Supp. 673, 695 (Ct. Int'l Trade 1994), appeal docketed, No. 95-1245 (Fed. Cir. March 22, 1995).

[6] In examining the quantity sold, I take into account sales from both existing inventory and new production.

A. Demand Conditions

An analysis of demand conditions tells us what options are available to purchasers, and how they are likely to respond to changes in market conditions, for example an increase in the general level of prices in the market. Purchasers generally seek to avoid price increases, but their ability to do so varies with conditions in the market. The willingness of purchasers to pay a higher price will depend on the importance of the product to them (e.g., how large a cost factor) and whether they have options that allow them to avoid the price increase, for example by switching to alternative products. An analysis of these demand-side factors tells us whether demand for the product is elastic or inelastic, that is, whether purchasers will reduce the quantity of their purchases if the price of the product increases. For the reasons discussed below, I find that the elasticity of demand for ferrovanadium and nitrided vanadium is relatively low.

Cost Factor. The first factor that measures the willingness of purchasers to pay higher prices is the importance of the product to purchasers. If the product is an input, its importance will depend on the significance of the product's cost relative to the total cost of the downstream products in which it is used. When the price of an input is a small portion of the total product cost, changes in the price of the input are less likely to alter demand for the downstream product and, by extension, the demand for the input.

Purchasers reported that ferrovanadium and nitrided vanadium account for 0.1 percent to 0.3 percent of the total cost of the final steel products in which they are used.[7] Thus primary ferrovanadium and nitrided vanadium account for a very small percentage of the cost of the final products in which they are used.

Alternative Products. A second important factor in determining whether purchasers would be willing to pay higher prices is the availability of viable alternative products. Often purchasers can avoid a price increase by switching to alternative products. If such an option exists, it can impose discipline on producer efforts to increase prices.

In this investigation the record demonstrates that there are only very limited alternatives to ferrovanadium and nitrided vanadium. Domestic producers and importers reported that ferrocolumbium is a viable substitute for ferrovanadium and nitrided vanadium, but only if the price of the subject products exceeds the price of ferrocolumbium. Half the responding purchasers reported substitutes for ferrovanadium and nitrided vanadium. Most purchasers cited ferrocolumbium as the primary substitute. A majority of those purchasers reporting, however, indicated they prefer the density and melting point of the subject products over ferrocolumbium. Also, steel alloyed with the subject products is easier to convert to shapes.[8] Thus, very few products represent commercially viable alternatives to ferrovanadium and nitrided vanadium. Purchasers seeking to avoid a price increase would have only a very limited ability to switch to alternative products. In fact, only four of the 30 responding purchasers reported that they

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[7] EC-S-065 at 8.

[8] EC-S-065 at 7 - 8.

increased their purchases of alternate products because of a relative increase in the price of ferrovanadium and nitrided vanadium.[9]

Taking into consideration both the small cost factor in downstream products and purchasers' limited options to use alternative products, I find that the elasticity of demand for ferrovanadium and nitrided vanadium is low. That is, purchasers will not reduce significantly the amount of ferrovanadium and nitrided vanadium they buy in response to a general increase in the price of ferrovanadium and nitrided vanadium.

B. Substitutability

Simply put, substitutability measures the similarity or dissimilarity of products from the purchaser's perspective. Substitutability depends upon 1) the extent of product differentiation, measured by product attributes such as physical characteristics, suitability for intended use, purity, rate of defects, convenience or difficulty of usage in production process, quality, etc.; 2) differences in other non-price considerations such as reliability of delivery, technical support, and lead times; and 3) differences in terms and conditions of sale. Products are close substitutes and have high substitutability if product attributes, other non-price considerations and terms and conditions of sale are similar.

While price is nearly always important in purchasing decisions, non-price factors that differentiate products determine the value that purchasers receive for the price they pay. If products are close substitutes, their value to purchasers is similar, and thus purchasers will respond more readily to relative price changes. On the other hand, if products are not close substitutes, relative price changes are less important and are therefore less likely to induce purchasers to switch from one source to another.

Because demand for ferrovanadium and nitrided vanadium is relatively inelastic, overall purchases will not decline significantly if ferrovanadium and nitrided vanadium prices increase. However, purchasers will seek other sources of ferrovanadium and nitrided vanadium to avoid a price increase. In other words, while overall demand for ferrovanadium and nitrided vanadium will remain relatively constant, the demand for ferrovanadium and nitrided vanadium from different sources will decrease or increase depending on their relative prices and the substitutability of ferrovanadium and nitrided vanadium from different sources. If ferrovanadium and nitrided vanadium from different sources are substitutable, purchasers are more likely to shift sources when the price from one source (e.g., subject imports) increases. The magnitude of this shift in demand is determined by the degree of substitutability among the sources.

Purchasers in this investigation have three primary sources of ferrovanadium and nitrided vanadium: domestically produced ferrovanadium and nitrided vanadium, subject imports, and nonsubject imports. Subject imports from Russia may be further divided into several alternative sources based on the magnitude of the margins assigned by Commerce to certain individually

[9] EC-S-065 at 8.

named trading companies.[10] Purchasers are more or less likely to switch from any one of these sources to another as relative price levels change depending on the similarity, or substitutability, between and among them.

Most purchasers reported that there are no significant differences in quality or other non-price factors between the domestic product and subject imports. Several purchasers that did observe differences indicated that the domestic product was better than the Russian product in terms of supply reliability, product availability, technical support, and delivery time. Domestic producers reported average delivery lead times of one to three days, whereas the average delivery lead times for importers ranges from one to two weeks. *** reported that its minimum order size requirements are lower than those of its competitors. Two importers stated that Russian product was higher in quality than the domestic product because it was cleaner in regard to trace elements. Based on this information, I find that on balance subject imports and domestic ferrovanadium and nitrided vanadium are moderately good substitutes.

It also appears that imports of ferrovanadium and nitrided vanadium from nonsubject countries are relatively good substitutes for the domestic product and imports from Russia. The record shows that ferrovanadium and nitrided vanadium from nonsubject countries are used in the same applications as the domestic product and subject imports. Also, nearly all purchasers reported that the quality of the subject merchandise from nonsubject countries is comparable to that of domestic and Russian ferrovanadium and nitrided vanadium.[11]

Subject imports from Russia exported to the U.S. by the trading companies with relatively low individual margins and those exported by Trading companies that received the high Russia-wide margin are very close, if not perfect, substitutes for each other. There are only two ferrovanadium and nitrided vanadium producers in Russia, and subject product produced by both is imported into the U.S. market.[12] There is no evidence on the record to suggest any significant product differentiation, non-price differences or differences in terms and conditions of sale between Russian imports exported by the various trading companies. Consequently, I conclude that Russian imports from all sources are very close, if not perfect, substitutes for each other.

C. Supply Conditions

Supply conditions in the market are a third condition of competition. Supply conditions determine how producers would respond to an increase in demand for their product, and also affect whether producers are able to institute price increases and make them stick. Supply conditions include producers' capacity utilization, their ability to increase their capacity readily, the availability of inventories and products for export markets, production alternatives and the

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[10] The margins in this investigation are: Galt Alloys, Inc. (3.75); Gesellschaft fur Elektrometallurgie m.b.H.and its related companies, Shieldalloy Metallurgical Corporation, and Metallurg, Inc., (11.72); Odermet (10.10); and the Russia-wide Rate (108.00).

[11] EC-S-065 at 17.

[12] CR at I-42 to I-44, PR at II-27.

level of competition in the market.

The level of competition in the domestic market has a critical effect on producer responses to demand increases. A competitive market is one with a number of suppliers, able to produce sufficient amounts of a product to meet purchaser demand. Capacity utilization rates are also key. Unused capacity can exercise discipline on prices, if there is a competitive market, as no individual producer could make a price increase stick.

Capacity Utilization and Inventories. In 1994, average-of-period capacity utilization for the domestic industry was *** percent. Available production capacity far exceeded the total quantity of subject imports in 1994. The domestic industry also had sizeable inventories available at the end of 1994. Significant export sales in 1994 also could be diverted to the U.S. market.[13] Thus the domestic industry had available capacity, inventories and export sales that would allow it to fill the demand supplied by subject imports.

Level of Competition. The domestic ferrovanadium and nitrided vanadium market is highly competitive. There are two domestic producers of ferrovanadium with industry-wide unused capacity. However, as noted in the discussion of the domestic industry in the majority opinion, one of these producers is a toll producer that makes ferrovanadium for four domestic companies. These four companies and petitioner compete for sales in the domestic market.[14] In addition, nonsubject imports have a significant presence in the U.S. market, accounting for *** percent of consumption in 1994.[15]

Finally, as I discuss further below, a significant quantity of Russian imports would still have entered the U.S. market if subject imports had been fairly priced. Importers who had purchased from exporters receiving the high Russia-wide margin could have avoided significantly higher prices and still have purchased the identical or substantially the same product merely by switching their purchases to exporters who received the relatively low individual margins. The record thus indicates that there is significant competition in the domestic market, and there would have been significant competition in the domestic market among domestic producers, nonsubject imports, and continued imports from Russian if subject imports had been fairly priced.

III. NO MATERIAL INJURY BY REASON OF LTFV IMPORTS OF FERROVANADIUM AND NITRIDED FROM RUSSIA

The statute requires us to consider the volume of LTFV imports, their effect on domestic prices, and their impact on the domestic industry. I consider each requirement in turn.

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[13] CR at A-3 to A-5, Table A-1; PR at A-3 to A-5.

[14] CR at I-19; PR at II-13.

[15] CR at A-3 to A-5, Table A-1; PR at A-3 to A-5.

A. Volume of Subject Imports

Subject imports of ferrovanadium and nitrided vanadium increased from *** pounds in 1992, to *** million pounds in 1993, and to *** million pounds in 1994. The value of subject imports of pure ferrovanadium and nitrided vanadium was *** in 1992, *** million in 1993, and *** million in 1994.[16] By quantity, subject imports of pure ferrovanadium and nitrided vanadium held a market share of 0.2 percent in 1992, 13.4 percent in 1993, and 21.1 percent in 1994. Their market share by value was 0.2 percent in 1992, 10.1 percent in 1993 and 16.1 percent in 1994.[17] While it is clear that the larger the volume of subject imports, the larger the effect they will have on the domestic industry, whether the volume is significant cannot be determined in a vacuum, but must be evaluated in the context of its price and volume effects. In light of the anticipated price and volume effects as discussed below, I find that the volume of subject imports is not significant.

B. Effect of Subject Imports on Domestic Prices

To determine the effect of subject imports on domestic prices I examine whether the domestic industry could have increased its prices if the subject imports had not been dumped. As discussed, both demand and supply conditions in the ferrovanadium and nitrided vanadium market are relevant. Examining demand conditions helps us understand whether purchasers would have been willing to pay higher prices for the domestic product, or buy more or less of it, if subject imports had been sold at fairly traded prices. Examining supply conditions helps us understand whether available capacity and competition in the market would have imposed discipline and prevented price increases for the domestic product, even if subject imports had not been unfairly priced.

In most cases, if the subject imports had not been dumped, their prices in the U.S. market would have increased. Thus, if subject imports had been fairly priced, they would have become more expensive relative to domestic ferrovanadium and nitrided vanadium and nonsubject imports. If the ferrovanadium and nitrided vanadium are substitutable, purchasers would have shifted towards the relatively less expensive products.

In this investigation the magnitude of the changes in relative price levels if subject imports had been fairly priced would have been dramatically different depending on the margin received by the individual exporter. In 1994, exporters receiving margins ranging between 3.75 percent and 11.72 percent accounted for *** percent of subject imports. The remaining *** percent of subject imports were accounted for by companies receiving a margin of 108 percent.

If subject imports had been fairly priced, it is highly likely that a substantial portion, if not all, of the demand for subject imports purchased from exporters receiving the 108 percent margin would have shifted to exporters receiving the relatively low margins. As discussed above, Russian imports purchased from the various exporters are produced by only two producers and

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[16] CR at A-3, Table A-1; PR at A-3.

[17] CR at A-3, Table A-1; PR at A-3.

are very close, if not perfect, substitutes for each other. Purchasers could have avoided significantly higher prices and still have purchased the identical or substantially the same product merely by switching their purchases to exporters who received the relatively low individual margins. Consequently, if subject imports had been fairly priced, their prices effectively would have increased between 3.75 percent and 11.72 percent. In these circumstances, a substantial portion of the subject imports would still have entered the U.S. market. Some of those purchasers that were unwilling to pay a higher price for the subject imports would have switched to the relatively less expensive domestic product, while others would have switched to the relatively less expensive nonsubject imports. The shift in demand from subject imports would be split between the domestic product and nonsubject imports. Accordingly, the overall increase in demand for domestic ferrovanadium and nitrided vanadium would have been small.

Notwithstanding the low elasticity of demand for ferrovanadium and nitrided vanadium, any attempt by the domestic industry to increase its prices would have been unsuccessful. There is significant competition among ferrovanadium and nitrided vanadium suppliers in the U.S. market. The five domestic suppliers compete among themselves as well as with nonsubject imports. The substantial amount of subject imports that would have continued to enter the U.S. market at fairly traded prices would have provided significant additional price discipline. And there is substantial excess production capacity. In these circumstances, any effort by a domestic supplier to raise its prices would have been beaten back by competitors. Therefore, significant effects on domestic prices cannot be attributed to the unfair pricing of subject imports. Consequently, I find that subject imports are not having significant effects on prices for domestic ferrovanadium and nitrided vanadium.

C. Impact of Subject Imports on the Domestic Industry

To assess the impact of subject imports on the domestic industry, I consider output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, research and development and other relevant factors.[18] These factors together either encompass or reflect the volume and price effects of the dumped imports, and so I gauge the impact of the dumping through those effects.

The domestic industry would not have been able to increase its prices significantly if subject imports had been sold at fairly traded prices. Therefore, any impact of dumped imports on the domestic industry would have been on the domestic industry's output and sales.

As I have discussed above, had subject imports not been dumped, the increase in demand for domestic ferrovanadium and nitrided vanadium would have been small. Domestic suppliers could easily have increased their production and sales to satisfy the increased demand. However, the domestic industry's output and sales, and therefore its revenues, would not have increased significantly. Accordingly, I find that, had subject imports not been dumped, the impact on the domestic industry's output and sales would not have been significant.

Had subject imports not been dumped, the domestic industry would not have been able

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[18] 19 U.S.C. § 1677(7)(C)(iii).

to increase its prices, output or sales, and therefore its revenues, significantly. Consequently the domestic industry would not have been materially better off if the subject imports had been fairly traded. Therefore, I find that the domestic industry producing ferrovanadium and nitrided vanadium is not materially injured by reason of LTFV imports of ferrovanadium and nitrided vanadium from Russia.

IV. NO THREAT OF MATERIAL INJURY BY REASON OF LTFV IMPORTS OF FERROVANADIUM AND NITRIDED VANADIUM FROM RUSSIA

I have considered the enumerated statutory factors that the Commission is required to consider in its determination.[19] A determination that an industry "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."[20]

I am mindful of the statute's requirement that my determination must be based on evidence, not conjecture or supposition. Accordingly, I have distinguished between mere assertions, which constitute conjecture or supposition, and the positive evidence[21] that I am required by law to evaluate in making my determination.

I do not find that the information regarding production capacity and capacity utilization shows that a significant increase in subject imports into the U.S. is likely. There has not been an increase in Russian production capacity. Production capacity, ***.[22] Capacity utilization declined from *** percent in 1992 to *** percent in 1994, but is projected to increase in 1995 primarily as a result of a projected increase in home market sales.[23] Petitioner claims that the U.S. is an increasingly important market for Russian producers. Although the volume of Russian imports increased from 1992 to 1994, the record indicates that only *** percent of Russian production is sold in the U.S.[24] The majority of Russian production is sold for home market consumption, which, as noted above, is projected to increase in 1995.[25] Evidence of record also indicates that inflation in Russia, together with the denomination of raw materials in Russia in dollars, have raised the price of raw materials in Russia and the relative price of subject imports in international markets.[26] For these reasons, I find that the information relevant to production capacity and unused or underutilized capacity in Russia does not represent positive evidence that any threat of material injury is real or that actual injury is imminent.

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19 19 U.S.C. § 1677(7)(F)(I).

20 19 U.S.C.§ 1677(7)(F)(ii).

21 See American Spring Wire Corporation v. United States, 590 F.Supp. 1273 (1984).

22 CR at I-45, Table 12; PR at II-28.

23 CR at I-45, Table 12; PR at II-28.

24 Derived from Table 12; CR at I-45, PR at II-28; and Table A-1, CR at A-3, PR at A-3.

25 CR at I-45, Table 12; PR at II-28.

26 Odermet's prehearing brief at 45-47.

The market share of subject imports increased rapidly from 1992 to 1994.[27] I find that a "rapid increase" in market penetration from 1992 to 1994, without positive information that subject imports will increase significantly in 1995, does not constitute persuasive evidence that any threat of material injury is real or that actual injury is imminent. As I noted above, even though capacity is available in Russia, it is not likely that imports will increase significantly in the immediate future. Therefore, I find that any rapid increase in market penetration that occurred during the period of investigation does not indicate a likelihood that market penetration will increase to an injurious level in the immediate future.

In my determination of no material injury by reason of LTFV imports of ferrovanadium and nitrided vanadium, I demonstrated that subject imports have had no significant effect on domestic prices. I find nothing in the record to indicate that market conditions will change in the immediate future. Therefore, I conclude that subject imports are not likely to have significant price effects in the future.

The quantity of U.S. inventories of Russian imports increased significantly from 1992 to 1993, and declined somewhat from 1993 to 1994. U.S. inventories, however, declined significantly as a percentage of imports imported into the U.S.[28] Inventories of the subject imports in Russia are minuscule.[29] Based on the foregoing, I find that inventories of subject imports do not constitute a threat of material injury to the domestic industry.

There is no evidence of any potential for product shifting within the meaning of 19 U.S.C. § 1677(F)(I)(VIII). I also find no actual or potential negative effects on existing development and production efforts of the domestic industry. In addition, I find no "other demonstrable adverse trends" to indicate that the domestic industry is threatened with material injury by reason of subject imports.

For the reasons stated above, I determine that the domestic industry producing ferrovanadium and nitrided vanadium is not threatened with material by reason of LTFV imports of ferrovanadium and nitrided vanadium from Russia.

V. CONCLUSION

On the basis of the foregoing analysis, I determine that the domestic industry producing ferrovanadium and nitrided vanadium is not materially injured or threatened with material injury by reason of LTFV imports of ferrovanadium and nitrided vanadium from Russia.

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[27] CR at A-3, Table A-1; PR at A-3.

[28] CR at I-43, Table 11; PR at II-28.

[29] CR at I-45, Table 12; PR at II-28.

PART II

INFORMATION OBTAINED IN THE INVESTIGATION

INTRODUCTION

This investigation results from a petition filed by Shieldalloy Metallurgical Corporation (Shieldalloy), New York, NY, on May 31, 1994, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value (LTFV) imports of ferrovanadium and nitrided vanadium[1] from Russia.[2] Information relating to the background of the investigation is provided below.[3]

Date	*Action*
May 31, 1994	Petition filed with Commerce and the Commission; institution of Commission's preliminary investigation
June 27, 1994	Commerce's notice of initiation
July 15, 1994	Commission's preliminary determination
December 30, 1994 .	Receipt of Commerce's preliminary determination;[4] institution of Commission's final investigation (60 FR 3873, January 19, 1995)
May 19, 1995	Commerce's final determination (60 FR 27957, May 26, 1995)[5]
May 23, 1995	Commission's hearing[6]
June 22, 1995	Date of the Commission's vote
June 30, 1995	Commission's determination due to Commerce

[1] A detailed definition of the products subject to this investigation is provided in the section of this report entitled "The Products."

[2] Summaries of the data collected in the investigation are presented in tables A-1 to A-3 in app. A.

[3] *Federal Register* notices cited in the tabulation are presented in app. B.

[4] On Feb. 27, 1995 (60 FR 10563), Commerce amended its preliminary LTFV margins to be as follows (in percent): All exporters located in Russia including SC Vanadium-Tulachermet (94.92), Galt Alloys, Inc. (40.46), Gesellschaft fur Elektrometallurgie m.b.H./Shieldalloy Metallurgical Corporation/Metallurg, Inc. (49.18), Marc Rich Co., AG/Glencore International AG (108.00), Odermet, Ltd. (60.09), Wogan Resources, Ltd. (108.00), and all others not located in Russia (82.29).

[5] Commerce calculated final LTFV margins to be as follows (in percent): Galt Alloys, Inc. (3.75), Gesellschaft fur Elektrometallurgie m.b.H. and its related companies Shieldalloy Metallurgical Corporation and Metallurg, Inc. (11.72), Odermet (10.10), and Russia-wide rate (108.00). The companies receiving separate margins represented *** percent of U.S. imports from Russia in 1993 and *** percent in 1994.

[6] A list of witnesses appearing at the hearing is presented in app. C.

THE PRODUCTS[7]

The imported products subject to this investigation are ferrovanadium and nitrided vanadium, regardless of grade, chemistry, form, or size, unless expressly excluded from the Commerce scope. Ferrovanadium includes alloys containing ferrovanadium as the predominant element by weight (i.e., greater weight than any other element, except iron in some instances) and at least 4 percent by weight of iron. Nitrided vanadium includes compounds containing vanadium as the predominant element, by weight, and at least 5 percent, by weight, of nitrogen. Expressly excluded from the Commerce scope of investigation are vanadium additives other than ferrovanadium and nitrided vanadium (such as vanadium-aluminum master alloys), vanadium chemicals, vanadium waste and scrap, vanadium-bearing raw materials (e.g., slag, boiler residues, and fly ash), and vanadium oxides.[8]

In the preliminary investigation, the Commission determined that ferrovanadium and nitrided vanadium comprise a single like product. Petitioner argues that ferrovanadium and nitrided vanadium, regardless of grade, chemistry, form, shape, or size, constitute one like product. The respondents, chiefly Odermet, argue that there is a clear dividing line between ferrovanadium and nitrided vanadium.

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[7] This section presents information on both imported and domestically produced ferrovanadium and nitrided vanadium, as well as information related to the Commission's "like product" determination. The Commission's decision regarding the appropriate domestic products that are "like" the subject imported products is based on a number of factors including (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions; (5) common manufacturing facilities and production employees; and, where appropriate, (6) price.

[8] Commerce's notice of initiation indicated that U.S. imports of ferrovanadium (a ferroalloy) were described as being specifically provided for in subheading 7202.92.00 of the Harmonized Tariff Schedule of the United States (HTS). The column 1-general (most-favored-nation) duty rate for this item, applicable to imports from Russia, is 4.2 percent *ad valorem*. The notice indicated that U.S. imports of nitrided vanadium, which is considered a metallic compound rather than a metal alloy, are classified in HTS subheading 2850.00.20 with a 1995 column 1-general duty rate of 15 percent *ad valorem* (see also, Customs classification letter, NY 803793 of Dec. 9, 1994 to Jennifer de Laurentiis, Harris & Ellsworth). Under the proclamation implementing the U.S. schedule of concessions in the GATT 1994, this duty will be reduced in 10 equal stages to a final rate of 5.5 percent *ad valorem*. Imports from Russia of nitrided vanadium are eligible for duty-free entry under the Generalized System of Preferences (effective Oct. 16, 1993, when Russia was designated under the program as an eligible beneficiary). However, Commerce's notice of its final determination indicates that the subject imports are listed as being classifiable under subheadings 2850.00.20, 7202.92.00, 7202.99.5040, 8112.40.3000, and 8112.40.6000 of the HTS (60 FR 27957, May 26, 1995). Reporting number 7202.99.5040 is a residual statistical category of ferroalloys not having the essential character of a named material; subheading 7202.99.50 has a general duty of 5 percent *ad valorem*. Subheadings 8112.40.30 and 8112.40.60 are respective classifications for vanadium metal waste and scrap, which enter free of duty, and for vanadium metal other than waste and scrap, and articles thereof, dutiable at a 1995 general rate of 2.8 percent *ad valorem* (reaching 2 percent in 1999). Imports into the United States classifiable under the two dutiable subheadings are not eligible for GSP treatment.

Physical Characteristics and Uses

Ferrovanadium is an alloy of iron and vanadium used primarily by steel producers and iron casters, as discussed below. It is added to steel for the alloying effects of the contained vanadium; the iron merely acts as a convenient carrier. Ferrovanadium is produced in grades according to its vanadium content, which can vary from about 40 to 80 percent by weight. In practice, however, relatively few grades are actually produced. The most common ferrovanadium grades contain approximately 42, 52, and 80 percent vanadium and at least 4 percent iron, by weight.

One of the U.S. producers, Strategic Minerals Corporation (Stratcor), manufactured a nitrided vanadium that contains approximately 80 percent vanadium and at least 5 percent (typically between 7 and 12 percent) nitrogen, by weight; this product is a chemical compound of vanadium, carbon, and nitrogen (a vanadium carbonitride).[9] Because it contains no iron, it is not a ferroalloy. One of the two Russian producers, Chusovoy Metallurgical Works, produces a grade of nitrided ferrovanadium, i.e., ferrovanadium to which nitrogen has been added. This nitrided ferrovanadium contains a minimum of 42 percent vanadium, 10 percent nitrogen, and approximately 40 percent iron (i.e., it is a ferroalloy);[10] nitrided ferrovanadium imported by *** into the United States was upgraded at *** through a blending/conversion process to approximately 52 percent vanadium and 8 percent nitrogen.[11] Nitrided vanadium and nitrided ferrovanadium share the same uses as ferrovanadium as an alloying agent for metals, chiefly steel.

Ferrovanadium grades typically specify certain maximum levels of impurities (which are considered limits and may be specified within the designations published by the American Society for Testing and Materials (ASTM));[12] ferrovanadium grades may also contain elements that are considered enhancements. However, whether an element (e.g., silicon, nitrogen, and aluminum) is considered an impurity or enhancement largely depends upon the end user's furnace and rolling practice and product mix. Most ferrovanadium is sold in lumps with an upper size range of approximately 2 inches. Ferrovanadium and nitrided vanadium may be used either in the steel melting furnace or at an intermediate station, called the ladle metallurgy station (or ladle), prior to pouring the molten steel into its first solid form. Because of differences in solubility (based on size and temperature), large lumps tend to be used in steel melting, and high-percentage ferrovanadium tends to be used in melt shops using relatively higher temperatures; small lumps are commonly used for alloying purposes in the ladle, and lower-percentage ferrovanadium is used in melt shops employing lower temperatures. Nitrided vanadium is sold in the form of briquettes measuring approximately 1 inch by 1 inch.

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[9] See petition, exhibit 1A, for a comparison of these various grades by chemical analysis.

[10] Chusovoy provided specifications for the nitrided ferrovanadium it produces in Commerce's investigation, Sept. 8, 1994, response to section A, p. 3. In Commerce's investigation, the other Russian producer (Tulachermet) indicated that it does not produce or sell nitrided vanadium.

[11] Staff conversation with *** on June 12, 1995.

[12] ASTM Designation A 102-87, Standard Specification for Ferrovanadium, does not cover ferrovanadium with a vanadium content less than 55 percent, or approximately *** percent of U.S. consumption of ferrovanadium, according to petitioner. Compare, petition, p. 8 and exhibit 1B.

The principal use of ferrovanadium is as an alloying agent in the production of steel (approximately 93 to 95 percent of vanadium consumption in the United States was accounted for by use in the steel industry in 1993 and 1994).[13] When added to molten steel, the contained vanadium improves the finished product's hardness, ductility, and toughness. Vanadium also aids in grain refining and case hardening. Vanadium additions to tool steels enable such alloy steels to maintain their hardness at elevated temperatures generated during high-speed machining (these are called tungsten-vanadium or chromium-vanadium tool steels). Vanadium is added to high-strength low-alloy (HSLA) steels[14] used in high-strength long-distance oil and gas pipelines, railway lines, reinforcing steels used in building construction, and automobiles.[15] Ferrovanadium is also used in the production of cast iron to counteract graphitization and act as a chill stabilizer.

The quantity of added vanadium often accounts for less than 1 percent of the steel, by weight. Fifteen of 16 purchasers responding to the Commission questionnaire reported that ferrovanadium accounted for 0.22 to 5 percent of the cost of the molten steel they produced; the majority of these purchasers reported a narrower range, between 1 and 2 percent.

Nitrogen is contained in all steels in varying amounts, and may be carried over from steelmaking raw materials (such as coke), simply absorbed by contact with air, or added as gaseous nitrogen or as a constituent part of nitrogen-bearing alloying additions (nitrided grades of ferromanganese, ferrochrome, metallic manganese, and vanadium, for example). Nitrogen is generally an undesirable impurity in steel, giving rise to embrittlement and strain aging effects (which are deleterious to cold formability). The addition of nitrogen fixing elements (called nonaging elements), including aluminum and vanadium, may ameliorate the effects of strain aging, but control of the process is essential. Nitrogen combined with aluminum and vanadium promotes fine grain size in steel; nitrogen alone or in combination with vanadium also strengthens low carbon steels inexpensively, raising yield strength levels, and is used in HSLA steels, precipitation hardened alloys of carbon steels, and nitrogenized stainless steels.

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[13] Telephone conversation with Henry Hilliard, U.S. Bureau of Mines, on May 2, 1995, by USITC staff. Most of the remaining consumption was also accounted for by alloying uses in metals--in aluminum for the production of aluminum-vanadium master alloys (in the production of aluminum-titanium alloys for the aerospace industry), and in catalysts used in petroleum cracking.

[14] This is a class of structural steels which exhibit elevated yield points and which acquire their strength either after hot-rolling or normal cooling. Weight savings can be achieved through the substitution of HSLA steels for traditional structural steel grades. Some HSLA steels display a dual-phase structure, which provides good cold-forming and welding characteristics.

[15] Steels containing various combinations of other alloying elements can be substituted for steels containing vanadium. Among various metals that are to some degree interchangeable with vanadium as alloying elements in steel are columbium, manganese, molybdenum, titanium, and tungsten. Also, there is substitution within the class of ferrovanadium: several steelmaker-purchasers reported that because 42-percent ferrovanadium is more soluble in liquid steel, the consumption of this type of ferrovanadium is rising, displacing to some extent the consumption of 80-percent ferrovanadium.

Interchangeability

Reportedly, steelmakers do not utilize other vanadiferous-bearing materials such as vanadium-aluminum master alloy (consumed by producers of titanium and superalloys) or vanadium-silicon-iron alloy (not produced or used in the United States). Steelmakers seldom use vanadium pentoxide (which is used by the chemical, ceramics, and glass industries) because of the need for and higher cost of additional deoxidation. Substitution of vanadium by other ferroalloys is limited because vanadium has specific technical advantages and other alloying agents do not possess the versatility of ferrovanadium; vanadium may be replaced by niobium (columbium), but commercial considerations of cost outweigh any advantage that such substitution may provide.[16] The only potential substitutes for vanadium in the strengthening of steel are columbium, titanium, and molybdenum. According to members of the ferrovanadium industry and others, total alloy purchasing costs would be lower for these elements than for vanadium because less of these elements is needed to achieve the same result; however, total production costs would be higher because of the additional processing required, and additions of ferrocolumbium require changes in operational practices in steel melting and rolling. Users report that these elements would not be substituted unless the availability of vanadium were severely restricted.

In general, quantities of ferrovanadium and nitrided vanadium are bought and sold on the basis of pounds of contained vanadium.[17] For most users' systems, the other contained elements, which vary according to production process and raw materials used, are not as important as the contained vanadium and/or nitrogen. Therefore, ferrovanadium from various sources theoretically is interchangeable.[18] One exception is posed by the higher residual elements (chiefly sulfur and phosphorus) contained in the 42-percent ferrovanadium; certain purchasers reported they prefer the 80-percent ferrovanadium or the 52-percent ferrovanadium imported from Russia. Another exception is nitrided vanadium, with which, depending on the specific steelmaking process and the specific grade of steel desired, an equivalent strength of steel can be achieved with less vanadium if nitrogen is simultaneously present in the alloy.

Steel producers have the technical capability to use any grade of ferrovanadium interchangeably. The decision to use a specific grade (42- or 80-percent ferrovanadium, for example) depends upon the steelmaker's melting and rolling practices and the intended finished product. In general, steelmakers that pour their steel at lower temperatures tend to use the 42-percent material, whereas some steel grades that specify low residual chemistry or higher vanadium content may require the use of the higher grade (52- or 80-percent) ferrovanadium.

Nitrided vanadium is used by steel industry consumers to add nitrogen and vanadium to steel simultaneously; this is beneficial only in certain applications (e.g., some grades of steel and certain

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[16] According to one questionnaire response, ***. Another purchaser reported that his cost of ferrocolumbium was about *** per pound of contained columbium versus about *** per pound of contained vanadium, i.e., approximately 60 percent higher for the ferrocolumbium product on a pound-for-pound basis.

[17] Despite the general indifference to what grade is used, the user must know what grade it is so that proportions of steelmaking ingredients can be adjusted accordingly.

[18] For a small percentage of users, mainly those in the tool-steel industry, high residual levels of aluminum, chromium, silicon, or nickel can have a detrimental effect on production and may be a limiting factor in their purchases.

processing conditions to increase recovery rates). Although these drawbacks may be overcome, the interchangeability of nitrided vanadium or nitrided ferrovanadium with ferrovanadium may be limited. While several purchaser-steelmakers reported that they use ferrovanadium interchangeably with nitrided vanadium, others reported in the Commission questionnaire that nitrided vanadium cannot be substituted for ferrovanadium, although they thought the reverse is possible (however, more ferrovanadium would be required to replace a given quantity of nitrided vanadium). These same purchaser-steelmakers indicated they tend to use each in different product lines.

According to a spokesman for ***,[19] the converted Russian nitrided ferrovanadium was delivered to two domestic purchasers, *** and ***, with mixed results. *** and *** responded that ferrovanadium and nitrided vanadium are not substitutable; on the other hand, *** indicated that the products are substitutable, stating in one instance, ***.

More generally, purchaser responses to the question regarding substitutability of ferrovanadium and nitrided vanadium ranged from statements that the company does not use nitrided vanadium or that it purchases only ferrovanadium (5 responses out of 30), to full or qualified substitution (10 responses out of 30),[20] or to a flat "no" substitution between the two grades (14 responses out of 30).[21] One U.S. producer, ***, responded to the substitutability question by answering that nitrided vanadium ***. Another U.S. producer, ***. The third producer, ***. This producer stated ***.

Few significant differences appear to exist between domestically produced ferrovanadium and ferrovanadium imported from Russia, and most purchasers responding to the Commission questionnaire reported that the quality of the ferrovanadium and nitrided vanadium imported from Russia is comparable to the domestic product. Nearly all purchasers also reported that the quality of imported Russian ferrovanadium and nitrided vanadium is comparable to that of the product imported from nonsubject countries, which, in turn, was thought to be comparable in quality to the domestic product. However, some purchasers noted that certain grades or sizes are available only from U.S. producers.

Ferrovanadium is initially produced in molded brick form, then is crushed into standard-sized particles of 2 inches or less in diameter. Nitrided vanadium is also crushed to desired size. The products are then packaged for shipment in one of several types of containers, including bags and cans (usually 10 to 25 pounds of contained vanadium), drums (500 pounds gross), and "supersacks" (up to 4,000 pounds gross). Importers indicated that ferrovanadium imported from Russia requires resizing and repackaging to render it commercially suitable for the U.S. market. These operations, entailing emptying the imported ferrovanadium from its 350-kilo drums, assaying, crushing to standard sizes, blending (if necessary), check-assaying, and repacking into cans or bags, cost approximately *** to *** per pound vanadium, or about 3 to 8 percent of the final cost,[22] to conform to customary packaging and sizes in

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[19] Staff telephone conversation with Mr. *** on June 12, 1995.

[20] These qualified "yes" responses indicated: (1) that ferrovanadium may be substituted for nitrided vanadium, but not the reverse; (2) substitution is possible only in certain steel grades (i.e., nitrogen addition is tolerable) and where the added cost of nitrided vanadium is compensated for by the increased recovery of vanadium.

[21] One of the "no" responses indicated that nitrided vanadium is a substitute for columbium.

[22] One purchaser-importer reported that the costs of resizing and repacking Russian ferrovanadium accounted for approximately *** of the final product cost.

the U.S. market. As noted earlier, U.S. imports of Russian nitrided ferrovanadium are converted to increase the ratio of vanadium to nitrogen, resized, and repackaged.

Channels of Distribution

During the period 1992 through 1994, nearly 33 million pounds of ferrovanadium and nitrided vanadium, valued at approximately $145 million (of which about 11 percent was nitrided vanadium), were consumed in the United States. The domestic steel industry accounted for 93 to 95 percent of this consumption. Most of the ferrovanadium and nitrided vanadium produced in and imported into the United States is sold through a bidding process on a delivered basis directly to these users.

Customer and Producer Perceptions

According to questionnaires received by the Commission, there are a few differences between the domestic and foreign ferrovanadium;[23] most purchasers indicated they do not know the origin of the material they purchase, but believe that if it is 52-percent contained vanadium, it is of Russian origin. Also, a sizable number of purchasers reported that they do not purchase nitrided vanadium, but could. Most purchasers reported that their decision is based on quality of the product, timeliness of delivery, and price, with purchases made on a delivered basis. Most also reported that the Russian product is similar to the U.S.-produced product in nearly every respect (e.g., price, credit, delivery terms, product quality, product consistency, packaging, and technical support).

Common Manufacturing Facilities and Production Employees

Vanadium occurs naturally in mineral ores--mostly iron (titaniferous magnitite), uranium, and phosphorus--and in crude oil, but its quantities, although plentiful, are so diluted in these substances that it is economically unfeasible to extract it directly. It is the residue from the production or consumption of other products from these substances that forms the raw material for vanadium production: slag from iron, uranium, and phosphorus production; spent catalysts from crude oil refining; and (increasingly) fly ash and boiler scab from oil-burning power plants. To render the vanadium contained in these raw materials into a consumable form, such as ferrovanadium and nitrided vanadium, the raw material is generally first converted into an intermediate product, typically vanadium pentoxide, and is then reduced to ferrovanadium in a process using aluminum, carbon, and/or silicon as the chief reducing material. (In some cases, such as the petitioner's, no intermediate product is produced--the raw material is reduced directly.)

Ferrovanadium is produced commercially by the pyrochemical reduction of vanadium oxide or vanadium pentoxide anhydride, vanadium-bearing slag, or other vanadium-bearing materials (boiler

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[23] Several purchasers and importers distinguished the Russian ferrovanadium from the domestic product by indicating it is "cleaner" (i.e., contains less aluminum, nickel, and chrome); the primary *** indicated that the main factor limiting its acceptance is the ***.

residues, fly ash, and spent refinery catalysts, for example) with aluminum, carbon, or ferrosilicon.[24] The processes that are more commonly used are aluminothermic and/or silicothermic, described below. In the final product, the concentration of vanadium in ferrovanadium is controlled by the amount of iron scrap added during the production process.

One such process for preparing ferrovanadium entails, first, the conversion of vanadium-bearing slag (resulting from the production of pig iron from magnetite ore) into vanadium pentoxide and, second, the conversion of the oxide to ferrovanadium. In the second step a mixture of vanadium pentoxide, aluminum, iron scrap, and a flux (calcium oxide or calcium fluoride) is charged into an electric furnace and a reaction between the aluminum and vanadium pentoxide is initiated. Furnace heating is required only to raise the charge temperature sufficiently to kindle the reaction because the reaction (stemming from the aluminum mixture) is highly exothermic. Temperature and reaction control are accomplished by adjusting the particle size of the reagents, or the rate of charge feeding, or by changing the charge (i.e., the quantity or quality of the reagents, flux, or quantity vanadium oxide). Following reduction, the electric furnace is reignited to stir the ferrovanadium, which is then decanted from the furnace vessel and poured into molds.[25] Following cooling in the molds and separation from slag, the ferrovanadium is crushed, sized, and packaged. According to the petitioner, most Russian ferrovanadium is produced using this two-step process, as is the ferrovanadium produced by petitioner's related company in Germany, Gesellschaft fur Elektrometallurgie m.b.H. (GfE). Nitrided ferrovanadium is produced in Russia by Chusovoy by subjecting the molten ferrovanadium to a nitrogen-rich atmosphere. The nitrided ferrovanadium (containing 35 to 45 percent vanadium and 8 to 10 percent nitrogen) is then poured into molds and crushed, screened, and packaged. A different decanting vessel and mold (used to hold molten ferrovanadium during the nitrogen-fixing process) are likely to be used to produce the nitrided ferrovanadium in order to avoid the possibility of nitrogen contamination.

In a variation on this process, the aluminothermic reduction is carried out entirely without furnace heating: the mixture of vanadium pentoxide, aluminum, iron scrap, and flux is charged into a magnesite-lined vessel and the reactants are ignited electrically.[26] This production method is currently employed by Bear, Butler, PA, and was previously used by Shieldalloy at its Newfield, NJ, facility (production ceased in November 1992) and Stratcor through its subsidiary (U.S. Vanadium Corporation, Niagara Falls, NY, where production ceased in December 1993).[27] The process requires a short amount of time, although cooling of the ferrovanadium slab may require several hours. Following cooling, the slab is removed from its vessel, the layer of ferrovanadium metal is separated from the layer of slag, and the ferrovanadium is conveyed to a separate part of the facility for crushing, sizing, and packaging. Either of these methods may be used to produce 42- to 80-percent ferrovanadium grades.

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[24] For a generalized flowchart for the processing of vandiferous raw materials (uranium-vanadium ore, spent catalysts, fuel oil, and titaniferous magnetite, for example) see, Henry E. Hilliard, *Vanadium Annual Report 1992*, U.S. Department of the Interior, Bureau of Mines, Sept. 1993, fig. 1, p. 20.

[25] C.K. Gupta and N. Krishnamurthy, *Extractive Metallurgy of Vanadium*, New York: Elsevier, 1992, pp. 442-443.

[26] Telephone conversation with *** on June 23, 1994. See also, Gupta and Krishnamurthy, p. 445.

[27] Hilliard, *Vanadium Annual Report 1990*, p. 6. Petition, p. 15.

A modified reduction process using silicon and/or aluminum, developed by Shieldalloy, starts with vanadium-bearing iron slag alone or in combination with other vanadiferous materials (petroleum residues and fly ash) as the vanadium source instead of vanadium pentoxide. These vanadium-bearing materials are melted first in one submerged electric arc furnace to raise the material's vanadium content and extract certain elements. This alloy is further refined in another electric arc furnace to produce ferrovanadium containing about 42 to 48 percent vanadium.[28] Molten ferrovanadium that results from this process is poured into molds, crushed to size, and packaged.

Nitrided vanadium is produced in a manner similar to that used to produce ferrovanadium from vanadium pentoxide, described earlier. Following conversion from pentoxide, vanadium oxide powder is agglomerated into briquettes which conform to the industry size standard. The briquettes are then reduced with aluminum and/or carbon in a furnace to create briquettes containing a high percentage of vanadium by weight. They are then subjected to a nitrogen atmosphere where they absorb nitrogen, creating a vanadium-nitrogen compound containing approximately 80 percent vanadium and 7 to 12 percent nitrogen.[29] Stratcor, a former U.S. producer of ferrovanadium and the only firm to have produced nitrided vanadium in the United States during recent years, produced these products simultaneously from different raw materials on dissimilar lines of equipment.

Price

In the preliminary investigation all parties appeared to agree that prices for ferrovanadium and nitrided vanadium are related; nitrided vanadium is more expensive due to higher production costs, but for customers who use nitrided vanadium the higher cost is offset by the lower amount of vanadium required to achieve the same result. Otherwise, prices charged for ferrovanadium and nitrided vanadium are based almost exclusively on the contained vanadium content. For further information concerning prices, see the section of this report entitled "Prices."

APPARENT U.S. CONSUMPTION

Data on apparent U.S. consumption of ferrovanadium and nitrided vanadium, based on U.S. producers' U.S. shipments and imports of nitrided vanadium as reported in the Commission's questionnaires, and official U.S. import statistics for ferrovanadium, are presented in table 1 and figure 1. Apparent U.S. consumption rose 28 percent by quantity but fell 16 percent by value from 1992 to 1994. As indicated previously, the domestic steel industry accounted for the vast bulk of this consumption. About 10 percent of U.S. consumption in 1994 was nitrided vanadium.

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[28] Hilliard, *Vanadium Annual Report 1992*, p. 7. See also, Petition, p. 14 and Exhibit 1A.

[29] Petition, p. 16.

Table 1
Ferrovanadium and nitrided vanadium: U.S. shipments of domestic product, U.S. imports, by sources, and apparent U.S. consumption, 1992-94

Item	1992	1993	1994
	Quantity (*1,000 pounds*)		
Producers' U.S. shipments	6,868	6,657	***
U.S. imports from--			
Russia	***	***	***
Other sources	***	***	***
Total	***	***	***
Apparent consumption	***	***	***
	Value (*1,000 dollars*)		
Producers' U.S. shipments[1]	40,054	29,548	***
U.S. imports from--			
Russia	***	***	***
Other sources	***	***	***
Total	***	***	***
Apparent consumption	***	***	***

[1] The value of Bear's U.S. shipments is based on the average of the unit values reported by the companies for whom Bear tolls.

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

Source: U.S. shipments and nitrided vanadium imports are compiled from data submitted in response to questionnaires of the U.S. International Trade Commission, and imports of ferrovanadium are compiled from official statistics of the U.S. Department of Commerce.

Figure 1
Ferrovanadium and nitrided vanadium, U.S. shipments of domestic product, U.S. imports, by sources, and apparent U.S. consumption, 1992-94

* * * * * * *

U.S. PRODUCERS AND IMPORTERS

In addition to Shieldalloy, two other firms--Stratcor and Bear--produced ferrovanadium or nitrided vanadium in the United States during the period for which data were collected. All three firms are multinational corporations, at least through affiliation, and all produce alloys and compounds other than ferrovanadium. Shieldalloy is the principal U.S. subsidiary of Metallurg, Inc., and the sister company of GfE, a wholly owned German subsidiary of Metallurg, which exports ferrovanadium to the United States. U.S. Vanadium Corporation, a subsidiary of Stratcor, produced relatively large quantities of ferrovanadium until January 1994, when it shut down its ferrovanadium operations in favor of a toll agreement with Bear and importing from the largest producer in Russia, SC Vanadium Tulachermet (Tula). Tula and Stratcor have entered into an agreement whereby Stratcor acts as a major U.S. distributor for Tula's ferrovanadium.[30] Stratcor is the only U.S. firm to have produced nitrided vanadium. The firm ceased producing nitrided vanadium in July 1992 in favor of importing from its subsidiary in South Africa. Bear, which began operations in January 1991, has also produced substantial quantities of ferrovanadium, but only as a toll producer for other firms that provide it with an intermediate product such as vanadium pentoxide for this purpose. Firms that have supplied Bear with intermediate products for reduction, crushing, and packaging into ferrovanadium are ***,[31] ***,[32] and *** [33] [34] *** [35] ***.

As mentioned previously, most of the Russian product has had to be further crushed and packaged before shipment to users, operations that account for 3 to 8 percent of the total cost. Bear and at least two other firms that specialize in warehousing and distribution, Aero Terminals and S.H. Bell, have provided this service. Additional information on Shieldalloy, Stratcor, and Bear is presented as follows:[36]

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[30] Testimony of Cheryl Ellsworth at the Commission's hearing, hearing transcript, p. 38.

[31] ***.

[32] *** is an international metals merchant.

[33] In 1993, the shares of Bear's production accounted for by ***. In 1994, the shares of Bear's production accounted for by ***.

[34] *** all maintain title over the intermediate products they provide Bear and the ferrovanadium Bear tolls.

[35] *** recycles spent catalysts produced by oil refineries to recover various metals.

[36] In 1993, the shares of U.S. production accounted for by the 3 firms were as follows: Shieldalloy, *** percent; Stratcor, *** percent; and Bear, *** percent.

Firm	Plant location(s)	Produced raw materials	Produced intermediate product	Share (*percent*) of domestic production, 1994
Shieldalloy.....	Cambridge, OH	No	No[1]	***
	Newfield, NJ[2]	Yes		
Stratcor[3].....	Niagara Falls, NY[4]	No	Yes	***
Bear[5].....	Butler, PA	No	No	***

[1] Shieldalloy's Cambridge facility reduces raw material into ferrovanadium without producing the standard intermediate products, such as vanadium pentoxide.

[2] Ceased ferrovanadium operations in November 1992. In the interests of economic efficiency, the company concentrated its resources on its Cambridge facility with no loss in production capability.

[3] ***.

[4] Ceased nitrided vanadium operations in July 1992 and ferrovanadium operations in December 1993.

[5] ***.

Source: Compiled from data submitted in response to questionnaires and other requests of the U.S. International Trade Commission.

Citing global recession, increased competition from Russian exporters, U.S. defense cutbacks, and uncertainty about the costs of environmental compliance, Shieldalloy (as well as its parent, Metallurg, Inc.) filed for Chapter 11 bankruptcy protection in early September 1993. The announced intention was not to liquidate its assets but to temporarily shield itself from creditors while it reorganized and bided time for better market conditions. (To retain its counsel for this petition, Shieldalloy required special authorization from the Bankruptcy Court). Its status under Chapter 11 remains in effect.

Approximately a dozen firms, including Stratcor and the petitioner, have imported ferrovanadium and/or nitrided vanadium from Russia in recent periods. Stratcor ***. Shieldalloy imported Russian ferrovanadium in the second half of 1993 and the first 4 months of 1994. These imports ***. The petitioner accounted for about *** percent of U.S. imports from Russia in 1993 and *** percent in 1994. As a share of its combined U.S. production and imports from Russia, its imports from Russia were *** percent in 1993 and *** percent in 1994. Only one firm, ***, is known to have imported nitrided vanadium from Russia and only in small quantities.[37] Most of the importers are independent metals trading companies. All the producers and importers produce and/or deal in other, mostly metal alloy, products, and all claim to serve the entire U.S. market, although most deliveries are made within 500 miles of the point of shipment.

[37] As a share of ***.

CONSIDERATION OF THE QUESTION OF MATERIAL INJURY TO AN INDUSTRY IN THE UNITED STATES

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)(1994)). Information on the volume and pricing of imports of the subject merchandise is presented in the section of this report entitled "Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged Material Injury." Information on the other factors specified is presented in this section and (except as noted) is based on the questionnaire responses of three U.S. firms that accounted for 100 percent of U.S. production of ferrovanadium and nitrided vanadium during 1992-94.

U.S. Production, Capacity, and Capacity Utilization

Data concerning the U.S. producers' capacity, production, and capacity utilization are presented in table 2 and figure 2. U.S. capacity to produce ferrovanadium and nitrided vanadium combined remained unchanged from 1992 to 1994. During the same period, U.S. production rose by *** percent; as a consequence, U.S. capacity utilization increased slightly, from 37 percent in 1992 to *** percent in 1994.

U.S. Producers' Shipments

Shipments by U.S. producers are presented in table 3 and figure 3. The quantity of U.S. shipments by U.S. producers fell by *** percent from 1992 to 1994. The value of U.S. shipments fell by *** percent from 1992 to 1994 as the unit value of shipments fell from $5.83 per pound in 1992 to *** per pound in 1994.

U.S. Producers' Inventories

U.S. producers' end-of-period inventories are presented in table 4. Inventories increased from 1992 to 1993, then decreased in 1994, representing inventory-to-total shipments ratios of 8 percent, 10 percent, and *** percent, respectively.

Table 2
Ferrovanadium and nitrided vanadium: U.S. capacity, production, and capacity utilization, by firms, 1992-94

Item	1992	1993	1994
	Average-of-period capacity (*1,000 pounds*)		
Bear	***	***	***
Shieldalloy	***	***	***
Stratcor	***	***	***
Total	19,392	19,392	19,392
	Production (*1,000 pounds*)		
Bear	***	***	***
Shieldalloy	***	***	***
Stratcor	***	***	***
Total	7,200	7,240	***
	Capacity utilization (*percent*)		
Bear	***	***	***
Shieldalloy	***	***	***
Stratcor	***	***	***
Average	37.1	37.3	***

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

Figure 2
Ferrovanadium and nitrided vanadium: U.S. average-of-period capacity, production, and capacity utilization, 1992-94

* * * * * * *

Table 3
Ferrovanadium and nitrided vanadium: Shipments by U.S. producers, by types, 1992-94

Item	1992	1993	1994
	Quantity (*1,000 pounds*)		
Company transfers	***	***	***
Domestic shipments	***	***	***
Subtotal	6,868	6,657	***
Exports[1]	***	***	***
Total	***	***	***
	Value (*1,000 dollars*)		
Company transfers	***	***	***
Domestic shipments	***	***	***
Subtotal	40,054	29,548	***
Exports[1]	***	***	***
Total	***	***	***
	Unit value (*per pound*)		
Company transfers	$***	$***	$***
Domestic shipments	***	***	***
Average	5.83	4.44	***
Exports[1]	***	***	***
Average	***	***	***

[1] Includes exports made by ***.

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

Figure 3
Ferrovanadium and nitrided vanadium, Shipments by U.S. producers, by types, 1992-94

* * * * * * *

Table 4
Ferrovanadium and nitrided vanadium: End-of-period inventories of U.S. producers, 1992-94

Item	1992	1993	1994
Inventories (*1,000 pounds*)	565	686	***
Ratio of inventories to (*in percent*)--			
Production	7.8	9.5	***
U.S. shipments	8.2	10.3	***
Total shipments	***	***	***

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

Employment, Wages, and Productivity

Employment and productivity data are presented in table 5. The average number of production and related workers employed in ferrovanadium and nitrided vanadium operations fell sharply, by *** percent, from 1992 to 1994. U.S. producers reported several major actions that were at least partially responsible for this decline. As mentioned previously, Stratcor ceased producing nitrided vanadium in 1992 in favor of importing this product from an affiliate in South Africa and ceased producing ferrovanadium at the end of 1993 in favor of importing and toll conversion. Both decisions were made in an effort to reduce costs in an increasingly competitive environment. Shieldalloy, too, shut down part of its operations. Deciding it could operate its Cambridge, OH, plant more efficiently and still meet demand, it closed its Newfield, NJ, plant in November 1992. In addition, ***. Because of the additional work brought to Bear by Stratcor, Bear's workforce increased, but, overall, the U.S. workforce producing ferrovanadium and nitrided vanadium (and hours worked by them) declined.

Table 5
Average number of total employees and production and related workers in U.S. establishments wherein ferrovanadium and nitrided vanadium are produced, hours worked,[1] wages and total compensation paid to such employees, and hourly wages, productivity, and unit production costs,[2] by products, 1992-94

Item	1992	1993	1994
	Number of employees		
All products	***	***	***
	Number of production and related workers (PRWs)		
Ferrovanadium and nitrided vanadium	169	150	***
All products	***	***	***
	Hours worked by PRWs (*1,000 hours*)		
Ferrovanadium and nitrided vanadium	344	299	***
All products	***	***	***
	Wages paid to PRWs (*1,000 dollars*)		
Ferrovanadium and nitrided vanadium	***	4,395	***
All products	***	***	***
	Total compensation paid to PRWs (*1,000 dollars*)		
Ferrovanadium and nitrided vanadium	***	5,825	***
All products	***	***	***
	Hourly wages paid to PRWs		
Ferrovanadium and nitrided vanadium	$***	$14.70	$***
All products	***	***	***

Table continued on next page.

Table 5--Continued
Average number of total employees and production and related workers in U.S. establishments wherein ferrovanadium and nitrided vanadium are produced, hours worked,[1] wages and total compensation paid to such employees, and hourly wages, productivity, and unit production costs,[2] by products, 1992-94

Item	1992	1993	1994
	Hourly total compensation paid to PRWs		
Ferrovanadium and nitrided vanadium	$***	$19.48	$***
All products	***	***	***
	Productivity (*pounds per hour*)		
Ferrovanadium and nitrided vanadium	20.9	24.2	***
	Unit labor costs (*per pound*)		
Ferrovanadium and nitrided vanadium	$***	$0.80	$***

[1] Includes hours worked plus hours of paid leave time.
[2] On the basis of total compensation paid.

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

Financial Experience of U.S. Producers

Shieldalloy, Stratcor, ***, and Bear supplied financial data on their ferrovanadium and nitrided vanadium operations.[38] A summary of all U.S. companies engaged in the production of ferrovanadium and nitrided vanadium, their respective net sales of the products in 1994, and the nature of their production efforts is shown in the following tabulation:

[38] ***, Stratcor, and Shieldalloy have fiscal years ending Dec. 31, while ***'s ends May 31. On Nov. 30, 1994, Bear changed its fiscal yearend from Dec. 31 to Nov. 30.

Company	1994 net sales ($1,000s)	Raw materials source	Convert raw materials to finished product Yes	No	Sell finished product to outside parties Yes	No
Shieldalloy	***	***	***		***	
Stratcor	***	***	***		***	
Bear	***	***	***		***	
***	***	***	***		***	
***	***	***	***		***	
Total	$34,867[1] [2]					

[1] Does not include sales by ***.

[2] Does not include Bear's sales because doing so would result in double counting. Sales of the product Bear toll converted are credited to either *** or ***.

Shieldalloy purchases its raw materials and converts them into ferrovanadium using its own facilities. Three other companies--Stratcor, ***, and ***--used a toll converter (Bear) to process the raw materials into finished product. *** produced all of its raw materials internally; *** purchased all of its; and Stratcor produced some and purchased some. Finally, whereas Shieldalloy's, Stratcor's, ***'s, and ***'s sales are sales of the finished product to end users, Bear's are not.

Bear's net sales are the fees it collected for performing certain processes on the raw materials provided by others. In 1994, for example, Bear's ferrovanadium net sales of *** were based on converting about *** pounds of raw materials into ferrovanadium. About *** percent of the sales were to Stratcor, about ***. Since Bear's revenues (and its associated costs) relate only to the actual processes performed, they are *** than the corresponding figures for the other producers. For instance, in 1994 Bear's average unit sales value and unit cost of goods sold were *** and *** per pound, respectively; the corresponding figures for the other producers were *** and ***, respectively.

Because of the tolling operations, we cannot simply add the profit-and-loss data of all five companies shown above. To do so would result in double-counting revenues (Bear's sales to Stratcor, *** and then Stratcor's, ***'s sales of that product to end users). Instead, staff has consolidated Stratcor's, ***'s and Bear's data to capture the revenues from the sale of the product to the end user and Stratcor's, ***'s, and Bear's profitability.

Shieldalloy, a subsidiary of Metallurg, Inc., is a producer of metals and other ferroalloys. It currently produces ferrovanadium at its facility in Cambridge, OH; its ferrovanadium producing facility in Newfield, NJ, was closed in November 1992. On September 2, 1993, Shieldalloy and Metallurg filed separate voluntary petitions for relief under Chapter 11 of the Bankruptcy Code. Since then Shieldalloy has operated as a going concern while its plan of reorganization is adjudicated.

Stratcor, a producer of ferrovanadium, nitrided vanadium, and other alloys, has production facilities in Hot Springs, AR, and Niagara Falls, NY. The company stopped domestic production of nitrided vanadium in mid-1992 and began importing the product from its facility in South Africa. On

January 1, 1994, it stopped producing ferrovanadium at its own facilities and began toll converting at Bear.

***.

Shieldalloy's data were verified by Commission staff. There were no changes as a result of the verification.

Overall Establishment Operations

The data on the overall establishment operations of Shieldalloy and Stratcor (*** were unable to provide data) are shown in table 6. ***. The aggregate results are heavily influenced by ***. Large "other" expenses in 1993 were ***. From 1992 to 1994, sales of ferrovanadium and nitrided vanadium decreased from *** to *** percent of Stratcor's overall establishment sales and from *** to *** percent of Shieldalloy's overall establishment sales.

Table 6
Income-and-loss experience of U.S. producers on the overall operations of their establishments wherein ferrovanadium and nitrided vanadium are produced, fiscal years 1992-94

Item	1992	1993	1994
*	*	*	*
*	*	*	*
*	*	*	*

Operations on Ferrovanadium and Nitrided Vanadium

Income-and-loss data for operations on ferrovanadium and nitrided vanadium are shown in table 7. Results were all down in 1993 compared with those in 1992--net sales decreased by one-quarter, there were losses at the gross profit level, and the operating loss increased by one-half. The large decrease in net sales was almost all the result of the large decrease in unit sales value, as all four producers reported decreases ranging from *** to *** percent. Although unit cost of goods sold decreased from $5.83 to $4.76 per pound, the $1.07 decrease was more than offset by the $1.37 decrease in unit sales value. As a result, the small gross profit became a loss and existing losses deepened at all other levels.

The financial results improved considerably in 1994. Net sales value increased almost 10 percent as a large increase in sales quantities more than compensated for the further decline in unit sales value. Even more notable was the swing in operating income from a large loss to a small profit. The producers were able to improve their profitability because of large decreases in unit cost of goods sold (from $4.76 per pound to $3.91 per pound) and unit selling, general, and administrative (SG&A) expenses (from $0.51 to $0.39).

Table 8 presents selected income-and-loss data on a firm-by-firm basis for each of the producers. Shieldalloy's net sales and profit levels ***.

Stratcor's net sales value ***.

Table 7
Income-and-loss experience of U.S. producers on their operations producing ferrovanadium and nitrided vanadium, fiscal years 1992-94[1]

Item	1992	1993	1994
	Quantity (*1,000 pounds*)		
Trade sales	7,319	7,099	8,108
	Value (*1,000 dollars*)		
Net sales	42,858	31,818	34,867
Cost of goods sold	42,641	33,812	31,665
Gross profit or (loss)	217	(1,994)	3,202
SG&A expenses	3,940	3,646	3,176
Operating income or (loss)	(3,723)	(5,640)	26
Interest expense	***	***	***
Other expense items	***	***	***
Other income items	***	***	***
Net (loss) before income taxes	(4,011)	(13,607)	(495)
Depreciation and amortization	***	***	***
Cash flow[2]	***	***	***
	Ratio to net sales (*percent*)		
Cost of goods sold	99.5	106.3	90.8
Gross profit or (loss)	0.5	(6.3)	9.2
SG&A expenses	9.2	11.5	9.1
Operating income or (loss)	(8.7)	(17.7)	0.1
	Value (*per pound*)		
Net sales	$5.86	$4.48	$4.30
Cost of goods sold	5.83	4.76	3.91
Gross profit or (loss)	0.03	(0.28)	0.39
SG&A expenses	0.54	0.51	0.39
Operating income or (loss)	(0.51)	(0.79)	(3)
	Number of firms reporting		
Operating losses	1	2	1
Net losses	1	2	1
Data	4	4	4

[1] Shieldalloy, Stratcor, and *** have fiscal years ending Dec. 31; ***'s ends May 31.
[2] Cash flow is defined as net income or loss plus depreciation and amortization.
[3] Positive figure, but less than significant digits displayed.

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

Table 8
Income-and-loss experience of U.S. producers on their operations producing ferrovanadium and nitrided vanadium, by firms, fiscal years 1992-94

Item	1992	1993	1994

* * * * * * *

Like Shieldalloy and Stratcor, ***.

The tabulation below provides detail on the U.S. producers' three components of cost of goods sold:

Item	1992	1993	1994
	Value (*per pound*)		
Raw materials	$***	$***	$***
Direct labor	***	***	***
Other factory costs	***	***	***
Total	5.83	4.76	3.91
	As a percent of the total		
Direct materials	***	***	***
Direct labor	***	***	***
Other factory costs	***	***	***
Total	100.0	100.0	100.0

The total cost decreased every period and was down by about one-third from 1992 to 1994. The main reasons for the decrease were reduced raw material costs for all producers and ***.

The relationships (on a unit basis) between cost of goods sold and its major components and between sales values and cost of goods sold are displayed in figure 4. The approximate $1 per pound decrease in raw materials from 1992 to 1994 is now evident, as is the similar decrease in labor/other costs. Although unit sales values decreased by $1.56 from 1992 to 1994 while unit cost of goods sold decreased by $1.92, the decreases did not occur equally. For instance, unit cost of goods sold decreased by $1.07 from 1992 to 1993 while unit sales value was decreasing $1.38. Therefore, the 1992 gross profit of $0.03 per pound (unit sales less unit costs) became a $0.28 loss. In 1994 the situation was reversed as unit cost of goods sold decreased by $0.85 while unit sales value was decreasing $0.18. Therefore, the $0.28 per pound loss at the gross profit level became a $0.39 profit.

Figure 4
U.S. producers' sales values and costs per pound, fiscal years 1992-94

* * * * * * *

Figure 5 presents the unit costs of some of Shieldalloy's raw materials from 1991 to 1994. ***.

Figure 5
Shieldalloy's ferrovanadium raw materials costs, by quarters, 1991-94

* * * * * * *

Investment in Productive Facilities and Return on Assets

Data on Shieldalloy's, Stratcor's, and Bear's investment in productive facilities are shown in table 9. ***. We are not presenting return on assets since *** and *** were unable to supply asset data.

Table 9
Value of U.S. producers' ferrovanadium and nitrided vanadium producing assets, fiscal years 1992-94

(1,000 dollars)

Item	1992	1993	1994
Fixed assets:			
Original cost:			
Shieldalloy	***	***	***
Stratcor	***	***	***
Bear	***	***	***
Total	***	10,748	10,926
Book value:			
Shieldalloy	***	***	***
Stratcor	***	***	***
Bear	***	***	***
Total	***	***	***
Total assets:			
Shieldalloy	***	***	***
Stratcor	***	***	***
Bear	***	***	***
Total	***	***	***

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

Capital Expenditures

The capital expenditures for U.S. producers are shown in table 10. Only Shieldalloy and Bear reported expenditures relating to ferrovanadium and nitrided vanadium. ***.

Table 10
Capital expenditures by U.S. producers of ferrovanadium and nitrided vanadium, by products, fiscal years 1992-94

(1,000 dollars)

Item	1992	1993	1994
All products:			
Shieldalloy	***	***	***
Stratcor	***	***	***
Bear	***	***	***
Total	***	1,789	916
Ferrovanadium and nitrided vanadium:			
Shieldalloy	***	***	***
Bear	***	***	***
Total	***	***	***

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

Research and Development Expenses

Although the producers reported annual research and development (R&D) expenses related to all establishment products of *** to ***, they reported no R&D expenses relating to ferrovanadium and nitrided vanadium.

Capital and Investment

The Commission requested U.S. producers to describe any actual or potential negative effects of imports of ferrovanadium and nitrided vanadium from Russia 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). The responses are in appendix D.

CONSIDERATION OF THE QUESTION OF THREAT OF MATERIAL INJURY TO AN INDUSTRY IN THE UNITED STATES

The Commission analyzes a number of factors in making threat determinations (see 19 U.S.C. § 1677(7)(i)1994). Information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise is presented in the section of this report entitled "Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged Material Injury." Information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in the section entitled "Consideration of the Question of Material Injury to an Industry in the United States." Available information on U.S. inventories of the subject products; foreign producers' operations, including the potential for "product-shifting;" and any other threat indicators, if applicable, follows.

U.S. Importers' Inventories

Importers' inventory data are presented in table 11. Importers reported inventories of Russian-made ferrovanadium and nitrided vanadium totaling 892,000 pounds on December 31, 1993, and 769,000 pounds on December 31, 1994.

U.S. Importers' Current Orders

In its questionnaire the Commission asked importing firms to report future contracts or orders for importing ferrovanadium and nitrided vanadium after December 1994. All but one importer indicated that there were no future contracts or orders for subject imports in 1995. ***.

Ability of Foreign Producers to Generate Exports and the Availability of Export Markets other than the United States

The Commission requested information concerning the Russian producers of ferrovanadium and nitrided vanadium from the U.S. Embassy in Moscow. The U.S. Embassy was informed by the Russian Ministry of Foreign Economic Relations that the only producers and exporters of ferrovanadium and nitrided vanadium in Russia are Chusovoy Metallurgical Works (Chusovoy) and Tula.[39] Staff obtained certain information through counsel from Chusovoy and Tula; these data are presented in table 12. The combined capacity of Chusovoy and Tula for producing ferrovanadium and nitrided vanadium was *** pounds in 1994. Their combined capacity utilization was *** percent. Home market shipments accounted for *** percent of total shipments in 1992, *** percent in 1993, and *** percent in 1994. Exports to the United States rose from *** pounds in 1992 to *** pounds in 1994, which equaled *** percent of total shipments in 1992 and *** percent in 1994.

[39] Tula tolls for respondent Odermet.

Table 11
Ferrovanadium and nitrided vanadium: End-of-period inventories of U.S. importers, by sources, 1992-94

Item	1992	1993	1994
	Quantity (*1,000 pounds*)		
Russia	***	892	769
Other sources	217	288	194
Total	***	1,180	963
	Ratio to imports (*percent*)		
Russia	***	***	***
Other sources	***	***	***
Average	***	***	***
	Ratio to U.S. shipments of imports (*percent*)		
Russia	***	***	***
Other sources	***	***	***
Average	***	***	***
	Ratio to total shipments of imports (*percent*)		
Russia	***	***	***
Other sources	***	***	***
Average	***	***	***

Note.-- Ratios are calculated using data where both comparable numerator and denominator information were supplied.

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

Table 12
Ferrovanadium and nitrided vanadium: Russian capacity, production, inventories, capacity utilization, and shipments, 1992-94 and projected 1995

Item	1992	1993	1994	Projected 1995

* * * * * * *

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

U.S. Imports

Table 13 and figure 6 present U.S. import data compiled from information submitted in response to questionnaires of the Commission and official statistics of Commerce.[40] U.S. imports of ferrovanadium and nitrided vanadium have increased at a considerable rate since 1992. Much of this increase was due to imports from Russia,[41] which rose from less than 1 percent of total imports in 1992 (in terms of quantity) to 46.8 percent in 1994. While imports increased, unit values dropped by one-quarter.

Table 13
Ferrovanadium and nitrided vanadium: U.S. imports, by sources, 1992-94

* * * * * * *

Figure 6
Ferrovanadium and nitrided vanadium, U.S. imports, by sources, 1992-94

* * * * * * *

Market Penetration by the Subject Imports

U.S. producers' and importers' market shares based on their shipments of nitrided vanadium and Commerce's official statistics for imports of ferrovanadium are presented in table 14 and figure 7. The U.S. producers' market share (based on quantity) fell from *** percent in 1992 to *** percent in 1994. The import penetration of imports of ferrovanadium and nitrided vanadium from Russia increased from 0.2 percent in 1992 to 13.4 percent in 1993 and reached 21.1 percent in 1994.

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[40] Import data for nitrided vanadium are based on questionnaire responses by U.S. importers. Import data for ferrovanadium are based on official Commerce statistics.

[41] Counsel for petitioner testified that imports of ferrovanadium from Russia were introduced into the United States in the last quarter of 1992. Hearing transcript, p. 32.

Table 14
Ferrovanadium and nitrided vanadium: Apparent U.S. consumption and market penetration, 1992-94

Item	1992	1993	1994
	Quantity (*1,000 pounds*)		
Apparent consumption	***	***	***
	Value (*1,000 dollars*)		
Apparent consumption	***	***	***
	Share of the quantity of U.S. consumption (*percent*)		
Producers' U.S. shipments	***	***	***
U.S. imports from--			
Russia	.2	13.4	21.1
Other sources	***	***	***
Total	***	***	***
	Share of the value of U.S. consumption (*percent*)		
Producers' U.S. shipments	***	***	***
U.S. imports from--			
Russia	.2	10.1	16.1
Other sources	***	***	***
Total	***	***	***

Note.--Because of rounding, figures may not add to the totals shown; shares are computed from the unrounded figures.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission and from official statistics of the U.S. Department of Commerce.

Figure 7
Ferrovanadium and nitrided vanadium: Share of the quantity of U.S. consumption, by sources, 1992-94

* * * * * * *

Prices

Marketing Considerations

Demand for ferrovanadium and nitrided vanadium depends on industrial demand for the products that require ferrovanadium and nitrided vanadium alloy steels in their construction. Ferrovanadium and nitrided vanadium alloy steels are used in the production of a wide range of products including arctic-grade natural gas transmission line pipe, bridges, the framework for high-rise buildings, ship plates, steel pilings in docks and along riverbanks, forged automobile components, high-strength steel rails, turbines and steel drums in steam generating plants, machine tools and dies, transmission towers and poles, heavy-duty trucks, construction equipment, and armor plate used in the production of military tanks, naval vessels, and other defense applications.[42] Demand for ferrovanadium and nitrided vanadium increased during 1992-94, largely due to increasing demand for the downstream U.S. steel products.

U.S. producers and importers reported that ferrocolumbium is a viable substitute for ferrovanadium and nitrided vanadium, but only if the price of the subject product exceeds that for ferrocolumbium. Most customers prefer the density and melting point of ferrovanadium and nitrided vanadium to those of ferrocolumbium. Furthermore, steel alloyed with vanadium is generally easier to convert to shapes than steel alloyed with columbium. During 1994, prices for ferrocolumbium ranged from $6.30 to $6.58 per pound contained columbium, whereas prices for ferrovanadium and nitrided vanadium ranged from $3.36 to $6.09 per pound contained vanadium.[43]

One-half of the responding purchasers also reported substitutes for ferrovanadium. Most of these purchasers cited columbium as the primary substitute for some steel alloy grades; however, one purchaser reported that columbium can only be substituted on a 2-to-1 ratio, so it would not be economical unless the price for ferrovanadium is double the price for columbium. Other substitutes cited by purchasers include molybdenum, titanium, chrome, manganese, and tungsten. Only 4 of the 30 responding purchasers reported that they increased their purchases of the alternate products because of a relative increase in the price of ferrovanadium and nitrided vanadium.

Pricing Practices

Most U.S.-produced and imported Russian ferrovanadium and nitrided vanadium is sold on a bid basis. Sales of or prices for the subject product are typically negotiated either monthly or quarterly. Prices are generally negotiated on an individual sale basis and are not based on set list prices. Prices depend on a variety of factors, including the quantity, quality, and size of the ferrovanadium and nitrided vanadium being purchased, packaging and delivery costs, costs of production, availability of the product to the supplier, and current market conditions. Prices for both U.S.-produced and imported Russian ferrovanadium and nitrided vanadium are generally quoted on a delivered basis, and typical payment terms are net 30 days.

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[42] Conference transcript, p. 16. Purchasers reported that ferrovanadium and nitrided vanadium account for a small percentage of the total cost of the final product, ranging between 0.1 and 7.0 percent.

[43] *** reported that customers made many substitutions of ferrocolumbium for ferrovanadium and nitrided vanadium when U.S. producers raised the prices for the subject products to $20 per pound contained vanadium levels in 1988.

Bear, ***, produces ferrovanadium on a toll basis and accounted for *** percent of domestic production in 1994. Shieldalloy, ***, accounted for *** percent of domestic production in 1994. The third U.S. producer, Stratcor, produced ferrovanadium and nitrided vanadium through 1993 and mid-1992, respectively, then began toll production with Bear and importing/reselling Russian-produced ferrovanadium and South African nitrided vanadium. Eleven importers accounted for nearly all U.S. imports of Russian ferrovanadium and nitrided vanadium in 1994.[44] Most of these importers sell imported Russian ferrovanadium and nitrided vanadium primarily to alloy steel producers, whereas others sell their subject product to ***.

U.S. producers and importers market ferrovanadium and nitrided vanadium nationwide, but sales are concentrated in the northeast, southeast, and midwest regions. Most sales of the product are shipped by truck to customers located 100 miles or further from the U.S. production facilities or the U.S. port of entry. Most U.S. producers and importers and nearly all of the responding purchasers reported that transportation costs are not an important factor in their customers' purchasing decision.[45]

Most purchasers reported qualification requirements that had to be met by new suppliers before they would buy ferrovanadium or nitrided vanadium. These requirements varied significantly in difficulty and in the qualification time between the various purchasers. Some reported that the product had merely to meet their specifications, whereas others required trial samples and more thorough chemical analyses to prove the reliability and consistency of the product. Purchasers reported that the time required to qualify a new supplier ranged from 1 week to 6 months. Only 3 of the 28 responding purchasers reported having failed any suppliers during their qualification attempts.

Comparisons Between Sales of U.S. and Russian Ferrovanadium and Nitrided Vanadium

Sales of ferrovanadium and nitrided vanadium are differentiated by such factors as delivery lead times and reliability, minimum quantity order size, and quality. U.S. producers reported average delivery lead times of 1 to 3 days, whereas importers' average delivery lead times are significantly longer, typically ranging from 1 to 2 weeks. *** reported that its minimum order size requirements are lower than those of its competitors. Two importers, *** and ***, reported that Russian imports are a less reliable source of supply, but a third importer, ***, reported no difference between Russian and domestic supply reliability. One other importer, ***, reported that the Russian ferrovanadium had been, at times, more readily available in the market than the U.S. product, thereby also having shorter lead times for delivery.

Shieldalloy and Bear reported that quality differences between U.S.-produced and imported Russian ferrovanadium and nitrided vanadium are not significant. Stratcor, a firm that used to produce the subject product in the United States, but which now imports and resells Russian ferrovanadium and South African nitrided vanadium, reported that quality was not an important factor with ferrovanadium but it was important for nitrided vanadium. Stratcor reported that ***.

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[44] Shieldalloy imported Russian ferrovanadium during 1993-94. Shieldalloy's imports of Russian ferrovanadium accounted for about *** percent of U.S. imports of Russian ferrovanadium during 1993.

[45] U.S. producers reported that transportation costs accounted for between 1 and 2 percent of the delivered price, whereas U.S. importers reported that transportation costs accounted for between 1 and 5 percent of the delivered price.

Importers reported mixed opinions on whether quality differences are significant and constitute an advantage or a disadvantage to their firms. *** maintained that its imported Russian ferrovanadium and nitrided vanadium have lower levels of nickel and chrome than the U.S.-produced product and, therefore, can be used in tool steel applications that cannot use the U.S. product. *** also argued that the Russian product is much cleaner than the U.S. product in regard to trace elements such as chrome, silicon, and manganese. Conversely, *** reported that its imported Russian ferrovanadium in some cases has higher levels of impurities than the U.S.-produced subject product.

Nearly 75 percent of the responding purchasers (22 of 30) reported that there were no significant differences between U.S. and Russian ferrovanadium and nitrided vanadium.[46] Purchasers that cited differences mainly specified the different vanadium levels of the U.S. and Russian products. The U.S. product has a vanadium content of either 42 to 44 percent or 80 percent, whereas the Russian product has a vanadium content of 52 percent.

Most purchasers also reported that there were no significant differences in quality or other factors between U.S. and Russian ferrovanadium. Of those purchasers that did observe differences between the U.S. and Russian products, most reported that the U.S. product was better than the Russian product in terms of supply reliability, product availability, technical support, and delivery time. Purchasers reported that the primary advantages of the U.S. product were its local proximity, availability, and better technical support from the supplier, whereas the primary disadvantage was its higher price. Conversely, the primary advantage of the Russian product was its lower price, whereas the primary disadvantage was its current lack of availability.

Comparisons between U.S. and Russian Ferrovanadium and Nitrided Vanadium and Non-Subject Products[47]

Nearly all of the responding purchasers reported that the quality of imported ferrovanadium and nitrided vanadium from nonsubject countries was comparable to that of domestic and Russian ferrovanadium and nitrided vanadium. It was also used in the same end-use applications as domestic and Russian ferrovanadium and nitrided vanadium. Although most of the responding purchasers reported that the price of the imported product from nonsubject countries was similar to the price of the U.S. and Russian products, some stated that the U.S. product was priced higher than the non-subject product and that the Russian product was priced lower than the nonsubject product.

[46] Nearly 60 percent of those purchasers that buy Russian ferrovanadium (10 of 17) also reported no significant differences between U.S. and Russian product.

[47] Canada and South Africa accounted for most of the non-subject imports of ferrovanadium and nitrided vanadium, respectively, during 1994.

Questionnaire Price Data

The Commission requested U.S. producers and importers of Russian ferrovanadium and nitrided vanadium to provide net delivered prices and total quantities and values of three representative subject products. For each product listed below, the Commission requested price data for the largest sale to unrelated U.S. end users for each quarter during 1992-94. The price and quantity information is based on units of contained vanadium.

Product 1: **Grade 40-60 percent ferrovanadium, 2" by down**
Product 2: **Grade 78-82 percent ferrovanadium, 2" by down**
Product 3: **Nitrided vanadium, 2" by down**

Two U.S. producers, two suppliers that sold ferrovanadium toll-produced by Bear, and eight importers provided pricing data, although not necessarily for all products or quarters during January 1992-December 1994. The responding suppliers of domestic product accounted for *** percent of the reported U.S. shipments of U.S.-produced ferrovanadium and nitrided vanadium in 1994.[48] The responding importers accounted for over 80 percent of U.S. shipments of imported Russian subject product in 1994.[49]

Price trends

Delivered prices for sales of U.S.-produced products 1 to 3 generally declined during 1992-93 and then increased during 1994 (tables 15 to 17, figures 8 to 10).[50] Prices for product 1 (the most popular of the U.S.-produced subject products) declined by *** percent between January-March 1992 and January-March 1994, then increased by *** percent through October-December 1994. Product 2 prices also declined during January-March 1992 and January-March 1994, falling by *** percent. Product 2 prices then increased by *** percent during the rest of the period. Overall, product 2 prices were *** percent lower at the end of the period than they were at the beginning.

---

[48] The third U.S. producer, Bear, did not provide pricing information since it produced ferrovanadium on a toll basis. The Commission received pricing data from two firms, *** and ***, that sold the tolled Bear product during the period of investigation. These two firms accounted for *** percent of U.S. shipments of U.S.-produced ferrovanadium and nitrided vanadium in 1994.

[49] Twenty-five purchasers accounting for 42.7 percent of U.S. producers' shipments and 79.2 percent of importers' U.S. shipments of the subject product in 1994 also reported pricing data. Purchase prices and prices reported by U.S. producers of domestic products 1 and 2 tracked each other closely during 1992-94. Purchase prices and sales prices reported by importers of Russian products 1 and 2 showed similar trends; however, purchase prices for these products were somewhat lower than the corresponding sales prices in the last half of 1993 and 1994.

[50] Some U.S. producers, importers, and purchasers reported that the price for ferrovanadium increased significantly during the first quarter of 1995. ***. One importer reported prices up to $14.00 per pound for Russian ferrovanadium.

Table 15
Ferrovanadium: Weighted-average net delivered prices and total quantities of U.S.-produced and imported Russian product 1 sold to end users, by quarters, Jan. 1992-Dec. 1994

* * * * * * *

Figure 8
Ferrovanadium: Weighted-average net delivered prices of U.S.-produced and imported Russian product 1 sold to end users, by quarters, Jan. 1992-Dec. 1994

* * * * * * *

Table 16
Ferrovanadium: Weighted-average net delivered prices and total quantities of U.S.-produced and imported Russian product 2 sold to end users, by quarters, Jan. 1992-Dec. 1994

* * * * * * *

Figure 9
Ferrovanadium: Weighted-average net delivered prices of U.S.-produced and imported Russian product 2 sold to end users, by quarters, Jan. 1992-Dec. 1994

* * * * * * *

Table 17
Nitrided vanadium: Weighted-average net delivered prices and total quantities of U.S.-produced and imported Russian product 3 sold to end users, by quarters, Jan. 1992-Dec. 1994

* * * * * * *

Figure 10
Nitrided vanadium: Weighted-average net delivered prices of U.S.-produced and imported Russian product 3 sold to end users, by quarters, Jan. 1992-Dec. 1994

* * * * * * *

Prices for imported Russian product 1 showed similar trends as prices for the U.S. product 1. Prices declined by *** percent between October-December 1992 and January-March 1994, then increased by *** percent through the third quarter of 1994. Prices increased sharply by *** percent during the fourth quarter of 1994. Prices for imported Russian product 2, which were reported beginning in the last quarter of 1993, increased through 1994. Product 3 prices fell by *** percent from the last two quarters of 1993 to the first quarter of 1994, then increased by *** percent during the rest of 1994.

Price comparisons

There were 14 instances in which comparisons were possible between U.S.-produced and Russian ferrovanadium (table 18).[51] Imported Russian product 1 was priced below U.S. product 1 in five of the quarters, by margins ranging between 1 and 10 percent. It was priced above U.S. product 1 in four quarters, by margins ranging between 3 and 42 percent. Imported Russian product 2 was priced above U.S. product 2 in all five quarters, by margins of 2 to 17 percent.

Table 18
Ferrovanadium and nitrided vanadium: Margins of underselling/(overselling) for sales of products 1 and 2 to end users, by quarters, Jan. 1992-Dec. 1994

* * * * * * *

Purchaser Responses

The Commission sent questionnaires to 48 firms believed to be purchasers of ferrovanadium and nitrided vanadium. Responses were received from 30 firms representing over 53 percent and 81 percent of domestic shipments of ferrovanadium and nitrided vanadium during 1994 by U.S. producers and importers of Russian product, respectively. The responding firms included 28 end users and 2 distributors/suppliers of ferrovanadium and nitrided vanadium. Twenty-three purchasers reported buying only ferrovanadium, 6 purchasers reported buying both ferrovanadium and nitrided vanadium, and 1 purchaser reported buying only nitrided vanadium. Information obtained from these purchasers is summarized below.

More than one-half of the purchasers reported that they typically make irregular purchases of ferrovanadium and nitrided vanadium and that this purchasing pattern had not changed over the previous 3 years. Most purchasers also reported that they seldom changed suppliers; those that did reported making the switch for price and availability reasons. Although 20 of the 30 responding purchasers knew the country of origin of the ferrovanadium and nitrided vanadium, only 12 purchasers were aware of the foreign manufacturer. The purchasers were split on whether their customers were aware of, or interested in, the country of origin for the ferrovanadium and nitrided vanadium.

Purchasers were requested to rank, in order of importance, the three major factors considered in deciding from whom to purchase ferrovanadium and nitrided vanadium. All of the responding purchasers cited price as a major factor, while more than one-half also cited product quality and current availability. One-fourth of the purchasers also cited traditional suppliers. Of the six factors cited as the most important, the price and quality of the product were each cited by 10 purchasers; traditional suppliers was cited by 5 purchasers; current product availability was cited by 3 purchasers; and the efficiency of the product and the existence of prearranged contracts were each cited by 1 purchaser.

Although price is considered an important factor in purchasers' ferrovanadium and nitrided vanadium buying decisions, purchasers reported overwhelmingly (90 percent of the responding purchasers) that the lowest price will not necessarily get the sale. Rather, other factors are also important

[51] During 1992-94, U.S.-produced and imported Russian product 3 (nitrided vanadium) were not sold in the same quarter.

along with price. These include primarily product quality, current availability, and relationships with traditional suppliers.

Seventeen purchasers reported buying ferrovanadium from importers from Russia.[52] These purchasers were asked why they purchased the imported product in lieu of purchasing U.S.-produced ferrovanadium. A majority of these purchasers rated price, product quality, and speed of delivery as very important factors in their buying decision. A majority of purchasers also reported that they considered other factors at least somewhat important in their decision to buy the imported product. These include having several sources of supply and the packaging of the product.[53]

Exchange Rates

The exchange rates for Russia are not available.[54]

Lost Sales and Lost Revenues

The Commission received 22 allegations of lost sales and 8 allegations of lost revenues by *** (tables 19 and 20). These allegations involved 18 purchasers of ferrovanadium. The lost sales allegations involved *** pounds of contained vanadium, totaling $***, and the lost revenue allegations involved *** pounds of contained vanadium, totaling $***. The Commission contacted 12 firms representing 12 of the lost sale allegations involving *** pounds contained vanadium and totalling $*** and 5 of the lost revenue allegations involving *** pounds contained vanadium and totalling $***.[55]

Table 19
Lost sales allegations concerning imports of ferrovanadium from Russia

* * * * * * *

Table 20
Lost revenue allegations concerning imports of ferrovanadium from Russia

* * * * * * *

[52] Two purchasers also reported buying nitrided vanadium from Russia.

[53] The two responding purchasers of Russian nitrided vanadium reported that price, quality, speed of delivery, and having several sources of supply were very important factors.

[54] The International Monetary Fund does not report exchange rates for Russia.

[55] An additional three firms that represent the majority of the remaining allegations did not return their purchaser questionnaires.

*** could neither confirm nor deny the *** specific lost sales allegations and the *** specific lost revenue allegation. ***, a representative of ***, reported during the preliminary investigation that ***.[56] For each purchase, *** typically requests quotes from five sources and chooses one or two sources from this group. *** stated that as long as the ferrovanadium meets *** specifications, any quality differences are immaterial, and the purchasing decision is mainly based on price. *** typically buys 42- to 48-percent ferrovanadium and has never used nitrided vanadium.

*** could neither confirm nor deny the specific lost sales and lost revenue allegations. ***, a representative of ***, reported that *** typically buys *** pounds of contained vanadium per year. *** reported during the preliminary investigation that ***.[57] *** maintained that during the latter part of 1993 and the beginning of 1994 the U.S. market was inundated by imports of Russian ferrovanadium. *** claimed that, several times during 1993, suppliers of Russian ferrovanadium drove the U.S. market price down to a level so low that one of ***'s U.S. suppliers was forced to quote a price below its cost of production.

*** typically solicits quotes from approximately 10 approved suppliers in order to get the best price and quality. *** stated that, in general, there are no discernible differences between the quality of U.S.-produced ferrovanadium and that of the imported Russian subject product. *** typically uses 42- to 48-percent ferrovanadium; *** has used 80-percent but its recovery of vanadium from the higher-grade ferrovanadium was not as consistent. The 80-percent grade ferrovanadium must be heated to a higher temperature before the contained vanadium goes into solution. For this and other reasons, *** instructed *** to purchase the lower grade--the higher-grade ferrovanadium is not really an option anymore. *** bought nitrided vanadium from *** during the last 2 years. Because of metallurgical specifications, it is not really interchangeable with ferrovanadium.

*** confirmed the lost sales allegation. ***, purchasing agent for ***, reported during the preliminary investigation that *** buys approximately *** pounds of contained vanadium a year. All of the ferrovanadium *** purchased in the first quarter of 1994 was of Russian origin. *** does not care if the ferrovanadium is 42- to 48-percent grade, 80-percent grade, or of a different size--all that matters are the contained units of vanadium. It reported that there are no significant quality differences between U.S.-produced and imported Russian ferrovanadium. *** typically solicits quotes from a variety of sources and its purchasing decisions are generally based on price and delivery requirements--price is usually the main consideration. *** has never used nitrided vanadium but stated that it probably could if necessary.

*** reported in its purchaser questionnaire that it did buy Russian ferrovanadium during *** at lower prices than U.S.-produced ferrovanadium. *** reported that it considers the Russian and U.S. products to be similar and therefore has purchased the ferrovanadium with the lowest price. During 1994, *** purchased nearly *** percent (*** pounds) of its ferrovanadium requirements from Russian sources.[58]

*** could neither confirm nor deny the specific lost sales allegation. ***, a representative of ***, reported that *** typically buys *** pounds of contained vanadium a year. *** reported during the preliminary investigation that ***.[59] *** maintained that quality differences between U.S.-produced and

---

[56] ***.

[57] ***.

[58] *** percent was purchased from Canadian sources.

[59] ***.

imported Russian ferrovanadium are negligible. *** can use either 42- to 48-percent grade or 80-percent grade as long as the ferrovanadium is high purity (the aluminum content cannot exceed a specified level). When purchasing ferrovanadium, *** typically receives quotes from several approved suppliers, and pricing is a very important factor in the purchasing decision. *** has never used nitrided vanadium.

In its purchaser questionnaire, *** confirmed purchasing the Russian material at the alleged prices. It reported that the Russian product with its 50-percent contained vanadium was advantageous to *** because it has a lower melting point than the U.S.-produced 80-percent ferrovanadium. *** uses U.S.-produced 80-percent ferrovanadium at ***. *** reported that there was no domestic comparison to the Russian product because there is no 50-percent U.S.-produced ferrovanadium. Overall, *** reported that it purchased approximately *** percent (*** pounds) of its 1994 purchases of ferrovanadium from Russia.

*** reported in its purchaser questionnaire that it does not know the country of origin of the ferrovanadium that it purchases. However, *** did confirm purchasing the alleged quantity at approximately the alleged price from a company other than ***. It reported that *** purchases from the supplier who gives the best price and delivery.

*** reported in its purchaser questionnaire that it bought the Russian product at the alleged quantities and price during the third quarter of 1994. It reported that *** purchased the Russian ferrovanadium primarily because of the lower price and availability of the Russian product. Moreover, *** stated that the price of the imported product had to be 25 percent higher before it would have purchased U.S.-produced ferrovanadium. *** purchased nearly *** percent (*** pounds) of its ferrovanadium requirements from Russia during 1994.

*** reported in its purchaser questionnaire that it does not know the country of origin of the ferrovanadium that it purchases. However, *** did confirm purchasing the alleged quantity at approximately the alleged price from a company other than ***. *** purchases approximately *** pounds of ferrovanadium per year.

*** reported in its purchaser questionnaire that it does not know the country of origin of the ferrovanadium that it purchases. *** purchases ferrovanadium on the basis of traditional suppliers, price, and current availability.

*** could neither confirm nor deny the specific lost revenue allegation. *** reported during the preliminary investigation that it does not always know the country of origin of the ferrovanadium that it purchases. During 1993, *** bought approximately *** percent of its ferrovanadium from *** and the remaining *** percent from ***. Importers have approached *** with quotes for the Russian product, but *** is not really interested in foreign product because of its loyalty to domestic producers. Also, *** reported that Russian product that was offered to *** was 80-percent ferrovanadium and he did not have any interest in that product. *** only uses 40-percent ferrovanadium because 80-percent ferrovanadium does not mix into solution as well. *** has not used and is not familiar with nitrided vanadium.

*** could neither confirm nor deny the *** specific lost revenue allegations. ***, purchasing manager of ***, reported during the preliminary investigation that *** buys approximately *** pounds of contained vanadium a year. Prior to ***, *** bought all of its ferrovanadium from ***. On *** received quotes from three suppliers and chose ***, a supplier of imported Russian ferrovanadium, largely based on price.[60] At the time, offered prices for imported Russian ferrovanadium were 25 to 30 cents per pound lower than prices for domestic material. Since then, *** has switched back to

[60] ***.

domestic product because *** is now pricing its product more aggressively. *** maintained that there are no discernible differences between the quality of U.S.-produced and imported Russian ferrovanadium. *** typically uses 42- to 48-percent ferrovanadium because that is what their specifications call for. *** has tried nitrided vanadium, but he stated it did not work very well.

APPENDIX A

SUMMARY TABLES

Table A-1
Ferrovanadium and nitrided vanadium: Summary data concerning the U.S. market, 1992-94

(Quantity=*1,000 pounds*; value=*1,000 dollars*; unit values and unit labor costs are *per pound*; period changes=*percent, except where noted*)

Item	Reported data			Period changes		
	1992	1993	1994	1992-94	1992-93	1993-94
U.S. consumption quantity:						
Amount	***	***	***	+28.4	+24.5	+3.2
Producers' share[1]	***	***	***	-18.8	-16.4	-2.5
Importers' share:[1]						
Russia	0.2	13.4	21.1	+20.8	+13.1	+7.7
Other sources	***	***	***	-2.0	+3.2	-5.2
Total	***	***	***	+18.8	+16.4	+2.5
U.S. consumption value:						
Amount	***	***	***	-15.9	-9.4	-7.2
Producers' share[1]	***	***	***	-16.1	-14.0	-2.0
Importers' share:[1]						
Russia	0.2	10.1	16.1	+15.9	+9.9	+6.0
Other sources	***	***	***	+0.2	+4.2	-4.0
Total	***	***	***	+16.1	+14.0	+2.0
U.S. imports[2] from--						
Russia:						
Imports quantity	***	***	***	(3)	(3)	+62.4
Imports value	***	***	***	(3)	(3)	+48.3
Unit value	***	***	***	-25.1	-18.0	-8.7
Ending inventory quantity	***	892	769	(3)	(3)	-13.8
Other sources:						
Imports quantity	***	***	***	+18.7	+40.0	-15.2
Imports value	***	***	***	-15.3	+6.2	-20.2
Unit value	***	***	***	-28.6	-24.1	-5.9
Ending inventory quantity	217	288	194	-10.6	+32.7	-32.6
All sources:						
Imports quantity	***	***	***	+121.1	+102.4	+9.2
Imports value	***	***	***	+39.8	+43.0	-2.2
Unit value	***	***	***	-36.8	-29.4	-10.5

Table continued on next page.

Table A-1--Continued
Ferrovanadium and nitrided vanadium: Summary data concerning the U.S. market, 1992-94

(Quantity=*1,000 pounds*; value=*1,000 dollars*; unit values and unit labor costs are *per pound*; period changes=*percent, except where noted*)

Item	Reported data			Period changes		
	1992	1993	1994	1992-94	1992-93	1993-94
U.S. producers'--						
Average capacity quantity	19,392	19,392	19,392	0	0	0
Production quantity	7,200	7,240	***	***	+0.6	***
Capacity utilization[1]	37.1	37.3	***	***	+0.2	***
U.S. shipments:						
Quantity	6,868	6,657	***	***	-3.1	***
Value	40,054	29,548	***	***	-26.2	***
Unit value	$5.83	$4.44	***	***	-23.9	***
Export shipments:						
Quantity	***	***	***	+111.0	-5.5	+123.4
Exports/shipments[1]	***	***	***	+6.9	-0.2	+7.1
Value	***	***	***	+41.4	-36.5	+122.6
Unit value	***	***	***	-33.0	-32.7	-0.4
Ending inventory quantity	565	686	***	***	+21.4	***
Inventory/shipments[1]	***	***	***	***	***	***
Production workers	169	150	***	***	-11.2	***
Hours worked (*1,000s*)	344	299	***	***	-13.1	***
Wages paid (*$1,000*)	***	4,395	***	-35.3	***	***
Total compensation (*$1,000*)	***	5,825	***	-35.4	***	***
Hourly total compensation	***	$19.48	***	-1.6	***	***
Productivity (*pounds/hour*)	20.9	24.2	***	***	+15.7	***
Unit labor costs	***	$0.80	***	-37.5	***	***
Net sales--						
Quantity	7,319	7,099	8,108	+10.8	-3.0	+14.2
Value	42,858	31,818	34,867	-18.6	-25.8	+9.6
Unit sales value	$5.86	$4.48	$4.30	-26.6	-23.5	-4.1
Cost of goods sold (COGS)	42,641	33,812	31,665	-25.7	-20.7	-6.3
Gross profit (loss)	217	(1,994)	3,202	(3)	(4)	+260.6
SG&A expenses	3,940	3,646	3,176	-19.4	-7.5	-12.9
Operating income or (loss)	(3,723)	(5,640)	26	+100.7	-51.5	+100.5

Table continued on next page.

Table A-1--Continued
Ferrovanadium and nitrided vanadium: Summary data concerning the U.S. market, 1992-94

(Quantity=*1,000 pounds*; value=*1,000 dollars*; unit values and unit labor costs are *per pound*; period changes=*percent, except where noted*)

Item	Reported data			Period changes		
	1992	1993	1994	1992-94	1992-93	1993-94
U.S. producers'--						
Capital expenditures	***	***	***	***	***	***
Unit COGS	$5.83	$4.76	$3.91	-33.0	-18.2	-18.0
Unit SG&A expenses	$0.54	$0.51	$0.39	-27.2	-4.6	-23.7
Unit operating income or (loss)	($0.51)	($0.79)	(5)	+100.6	-56.2	+100.4
COGS/sales[1]	99.5	106.3	90.8	-8.7	+6.8	-15.5
Operating income or (loss)/sales[1]	(8.7)	(17.7)	0.1	+8.8	-9.0	+17.8

[1] "Reported data" are in percent and "period changes" are in percentage points.

[2] Imports listed below for nitrided vanadium are from Commission questionnaires. Other imports are from official Department of Commerce statistics.

[3] An increase of 1,000 percent or more.

[4] A decrease of 1,000 percent or more.

[5] Positive figure, but less than significant digits displayed.

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 from the unrounded figures, using data of firms supplying both numerator and denominator information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission and from official statistics of the U.S. Department of Commerce.

Table A-2
Ferrovanadium: Summary data concerning the U.S. market, 1992-94

(Quantity=*1,000 pounds*; value=*1,000 dollars*; unit values and unit labor costs are *per pound*; period changes=*percent, except where noted*)

Item	Reported data			Period changes		
	1992	1993	1994	1992-94	1992-93	1993-94
U.S. consumption quantity:						
Amount	***	***	***	***	***	***
Producers' share[1]	***	***	***	***	***	***
Importers' share:[1]						
Russia	***	***	***	***	***	***
Other sources	***	***	***	***	***	***
Total	***	***	***	***	***	***
U.S. consumption value:						
Amount	***	***	***	***	***	***
Producers' share[1]	***	***	***	***	***	***
Importers' share:[1]						
Russia	***	***	***	***	***	***
Other sources	***	***	***	***	***	***
Total	***	***	***	***	***	***
U.S. imports[2] from--						
Russia:						
Imports quantity	23	1,517	2,469	(3)	(3)	+62.8
Imports value	89	4,729	7,000	(3)	(3)	+48.0
Unit value	$3.80	$3.12	$2.83	-25.3	-17.9	-9.0
Ending inventory quantity	***	***	***	***	***	***
Other sources:						
Imports quantity	1,479	2,072	1,753	+18.5	+40.1	-15.4
Imports value	8,000	8,142	6,458	-19.3	+1.8	-20.7
Unit value	$5.41	$3.93	$3.68	-31.9	-27.3	-6.3
Ending inventory quantity	***	***	***	***	***	***
All sources:						
Imports quantity	1,502	3,589	4,222	+181.1	+138.9	+17.6
Imports value	8,088	12,871	13,458	+66.4	+59.1	+4.6
Unit value	$5.38	$3.59	$3.19	-40.8	-33.4	-11.1

Table continued on next page.

Table A-2--Continued
Ferrovanadium: Summary data concerning the U.S. market, 1992-94

(Quantity=*1,000 pounds*; value=*1,000 dollars*; unit values and unit labor costs are *per pound*; period changes=*percent, except where noted*)

Item	Reported data			Period changes		
	1992	1993	1994	1992-94	1992-93	1993-94
U.S. producers'--						
Average capacity quantity	***	***	***	0	0	0
Production quantity	***	7,240	***	***	***	***
Capacity utilization[1]	***	***	***	***	***	***
U.S. shipments:						
Quantity	***	6,657	***	***	***	***
Value	***	29,548	***	***	***	***
Unit value	***	$4.44	***	***	***	***
Export shipments:						
Quantity	***	***	***	***	***	***
Exports/shipments[1]	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	686	***	***	***	***
Inventory/shipments[1]	***	***	***	***	***	***
Production workers	***	150	***	***	***	***
Hours worked (*1,000s*)	***	299	***	***	***	***
Wages paid (*$1,000*)	***	4,395	***	***	***	***
Total compensation (*$1,000*)	***	5,825	***	***	***	***
Hourly total compensation	***	$19.48	***	***	***	***
Productivity (*pounds/hour*)	***	24.2	***	***	***	***
Unit labor costs	***	$0.80	***	***	***	***
Net sales--						
Quantity	***	7,099	8,108	***	***	+14.2
Value	***	31,818	34,867	***	***	+9.6
Unit sales value	***	$4.48	$4.30	***	***	-4.1
Cost of goods sold (COGS)	***	33,812	31,665	***	***	-6.3
Gross profit (loss)	***	(1,994)	3,202	***	***	+260.6
SG&A expenses	***	3,646	3,176	***	***	-12.9
Operating income or (loss)	***	(5,640)	26	***	***	+100.5

Table continued on next page.

Table A-2--Continued
Ferrovanadium: Summary data concerning the U.S. market, 1992-94

(Quantity=*1,000 pounds*; value=*1,000 dollars*; unit values and unit labor costs are *per pound*; period changes=*percent, except where noted*)

Item	Reported data			Period changes		
	1992	1993	1994	1992-94	1992-93	1993-94
U.S. producers'--						
Capital expenditures	***	***	***	***	***	***
Unit COGS	***	$4.76	$3.91	***	***	-18.0
Unit SG&A expenses	***	$0.51	$0.39	***	***	-23.7
Unit operating income or (loss)	***	($0.79)	(4)	***	***	+100.4
COGS/sales[1]	***	106.3	90.8	***	***	-15.5
Operating income or (loss)/sales[1]	***	(17.7)	0.1	***	***	+17.8

[1] "Reported data" are in percent and "period changes" are in percentage points.
[2] Imports listed below are from official Department of Commerce statistics.
[3] An increase of 1,000 percent or more.
[4] Positive figure, but less than significant digits displayed.

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 from the unrounded figures, using data of firms supplying both numerator and denominator information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission and from official statistics of the U.S. Department of Commerce.

Table A-3
Nitrided vanadium: Summary data concerning the U.S. market, 1992-94

* * * * * * *

APPENDIX B

FEDERAL REGISTER NOTICES

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731–TA–702 (Final)]

Ferrovanadium and Nitrided Vanadium From Russia

AGENCY: United States International Trade Commission.

ACTION: Institution and scheduling of a final antidumping investigation.

SUMMARY: The Commission hereby gives notice of the institution of final antidumping investigation No. 731–TA–702 (Final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) (the Act) to determine whether 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 imports from Russia of ferrovanadium and nitrided vanadium, provided for in subheadings 7202.92.0000, 7202.99.5040, 8112.40.3000 and 8112.40.6000 of the Harmonized Tariff Schedule of the United States.

For further information concerning the conduct of this investigation, hearing procedures, 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 C (19 CFR part 207).

EFFECTIVE DATE: December 30, 1994.

FOR FURTHER INFORMATION CONTACT: Elizabeth Haines (202–205–3200), 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. Information can also be obtained by calling the Office of Investigations' remote bulletin board system for personal computers at 202–205–1895 (N,8,1).

SUPPLEMENTARY INFORMATION:

Background.—This investigation is being instituted as a result of an affirmative preliminary determination by the Department of Commerce that imports of ferrovanadium and nitrided vanadium from Russia are being sold in the United States at less than fair value within the meaning of section 733 of the Act (19 U.S.C. 1673b). The investigation was requested in a petition filed on May 31, 1994, by counsel on behalf of Shieldalloy Metallurgical Corp., New York, NY.

Participation in the investigation and public service list.—Persons wishing to participate in the investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, not later than twenty-one (21) 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 this investigation 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 section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in this final investigation available to authorized applicants under the APO issued in the investigation, provided that the application is made not later than twenty-one (21) 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.

Staff report.—The prehearing staff report in this investigation will be placed in the nonpublic record on May 10, 1995, and a public version will be issued thereafter, pursuant to section 207.21 of the Commission's rules.

Hearing.—The Commission will hold a hearing in connection with this investigation beginning at 9:30 a.m. on May 23, 1995, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before May 12, 1995. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on May 17, 1995, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(f), and 207.23(b) of the Commission's rules. Parties are strongly encouraged to submit as early in the investigation as possible any requests to present a portion of their hearing testimony *in camera*.

Written submissions.—Each party is encouraged to submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.22 of the Commission's rules; the deadline for filing is May 17, 1995. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.23(b) of the Commission's rules, and posthearing briefs, which must conform with the provisions of section 207.24 of the Commission's rules. The deadline for filing posthearing briefs is May 31, 1995; witness testimony must be filed no later than three (3) days before the hearing. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before May 31, 1995. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules.

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the investigation must be served on all other parties to the

investigation (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: This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to section 207.20 of the Commission's rules.

Issued: January 12, 1995.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 95–1333 Filed 1–18–95; 8:45 am]

BILLING CODE 7020–02–P

International Trade Administration

[A-821-807]

Notice of Final Determination of Sales at Less Than Fair Value: Ferrovanadium and Nitrided Vanadium From the Russian Federation

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

EFFECTIVE DATE: May 26,1995.

FOR FURTHER INFORMATION CONTACT: David J. Goldberger or Louis Apple, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, N.W., Washington, D.C., 20230; telephone: (202) 482–4136 or (202) 482–1769, respectively.

Applicable Statute and Regulations

Unless otherwise indicated, all citations to the statute and to the Department of Commerce (the Department) regulations are in reference to the provisions as they existed on December 31, 1994.

Final Determination: We determine that imports of ferrovanadium and nitrided vanadium from the Russian Federation (Russia) are being, or are likely to be, sold in the United States at less-than-fair-value (LTFV), as provided in section 735 of the Tariff Act of 1930, as amended (the Act). The estimated margins are shown in the "Continuation of Suspension of Liquidation" section of this notice.

Case History

Since the Department announced its preliminary determination on December 27, 1994, (60 FR 438, January 4, 1995) the following events have occurred:

In response to our request, on February 27, 1995, we received additional surrogate valuation data from Odermet Limited (Odermet), Galt Alloys, Inc. (Galt), SC Vanadium-Tulachermet (Tulachermet), and Chusavoy Metallurgical Works (Chusavoy).

On February 17, 1995, we amended our preliminary determination to correct a significant ministerial error (60 FR 10563, February 27, 1995).

From January through March , 1995, we conducted verifications at Galt, Tulachermet, Chusavoy, Odermet, Shieldalloy Metallurgical Corporation (Shieldalloy), and Gesellschaft fur Elektrometallurgie m.b.H. (GfE).[1] Verification reports were issued in February, March, and April, 1995.

On April 17, 1995, the petitioner, Shieldalloy, and respondents Odermet, Chusavoy, Galt, and Tulachermet filed case briefs. Rebuttal briefs were submitted by these parties on April 24, 1995. A public hearing was held on April 26, 1995.

Scope of Investigation

The products covered by this investigation are ferrovanadium and nitrided vanadium, regardless of grade, chemistry, form or size, unless expressly excluded from the scope of this investigation. Ferrovanadium includes alloys containing ferrovanadium as the predominant element by weight (*i.e.*, more weight than any other element, except iron in some instances) and at least 4 percent by weight of iron. Nitrided vanadium includes compounds containing vanadium as the predominant element, by weight, and at least 5 percent, by weight, of nitrogen. Excluded from the scope of this investigation are the vanadium additives other than ferrovanadium and nitrided vanadium, such as vanadium-aluminum master alloys, vanadium chemicals, vanadium waste and scrap, vanadium-bearing raw materials, such as slag, boiler residues, fly ash, and vanadium oxides.

The products subject to this investigation are currently classifiable under subheadings 2850.00.20, 7202.92.00, 7202.99.5040, 8112.40.3000, and 8112.40.6000 of the Harmonized Tariff Schedule of the United States (HTSUS). Although the HTSUS subheadings are provided for convenience and customs purposes, our written description of the scope is dispositive.

Period of Investigation

The period of investigation (POI) is December 1, 1993, through May 31, 1994.

Non-Market Economy Country Status

Russia has been treated as a non-market economy (NME) for the purpose of determining foreign market value (FMV) in all past antidumping investigations (see, e.g., Final Determinations of Sales at Less Than Fair Value: Pure Magnesium and Alloy Magnesium from Russia, 60 FR 16432 (March 30, 1995)) (Magnesium from Russia). No information has been provided in this proceeding that would lead us to consider changing this designation. Therefore, in accordance with section 771(18)(c) of the Act, we continue to treat Russia as a NME for purposes of this investigation.

Best Information Available (BIA)

In this investigation, three companies failed to respond to the Department's questionnaire, and we were unable to verify the sales response of a fourth company, Tulachermet (discussed below under Comment 1). Consistent with the Department's two-tiered methodology for assigning BIA, we have based the BIA margin on the highest margin in the petition (see, Final Determination of Sales at Less Than Fair Value: Antifriction Bearings (other than Tapered Roller Bearings) and Parts Thereof from the Federal Republic of Germany, 54 FR 1892, 19033 (1989)) and (*Allied Signal* v. *United States*, 996 F.2d 1185 (Fed. Cir. 1993) (June 22, 1993)).

Fair Value Comparisons

In cases involving imports from NMEs, we calculate a single antidumping duty margin for companies that do not demonstrate that they are entitled to separate rates. The Russia-wide margin in this case, which applies to all exporters other than Galt, GfE, and Odermet, is the BIA rate. Galt, GfE, and Odermet have received separate rates.

To determine whether sales to the United States of ferrovanadium and nitrided vanadium by Galt, GfE, and Odermet, were made at less than fair value, we compared the United States price (USP) to FMV, as specified in the "United States Price" and "Foreign Market Value" sections of this notice.

United States Price (USP)

Pursuant to section 772 of the Act, USP was calculated on the basis of purchase price for Odermet, and exporter's sales price (ESP) for Galt and GfE, as described in the preliminary determination notice. Pursuant to findings at verification, we made the following adjustments to our margin calculations:

- For GfE, we deducted handling and repacking expenses incurred in Germany on certain sales. We revised the inland freight to customer expense incurred on certain sales to reflect verification findings. Finally, we revised the general and administrative expenses allocated to further manufacturing expenses to include environmental cleanup expenses omitted by GfE's U.S.

[1] Shieldalloy is the petitioner in this investigation and is related to GfE as both are wholly-owned subsidiaries of Metallurg, Inc.

affiliate, Shieldalloy, as derived from verification information.

- For Odermet, we revised ocean freight, brokerage, and containerization per-unit expenses on a contained vanadium weight basis, rather than gross weight basis (*see* Comment 12). We also revised inland insurance and marine insurance expenses, which Odermet had allocated on the basis of weight, to a value basis, reflecting the manner in which these expenses were incurred. Finally, we recalculated foreign inland freight using surrogate values, based on our verification finding that the actual freight services were provided by NME subcontractors (*see* Comment 10).

Foreign Market Value

In accordance with section 773(c) of the Act, we based FMV for ferrovanadium and nitrided vanadium on the factors of production reported by the two factories in Russia,(*i.e.*, Chusovoy and Tulachermet), which produced the subject merchandise for export to the United States. We calculated FMV based on factors of production as cited in the preliminary determination, making the following adjustments:

- We applied this methodology to Odermet's sales as well as to Galt's and GfE's sales as we have rejected Odermet's intermediate reseller claim (*see* Comment 5).
- We recalculated inland freight distances between each factory and various input suppliers, based on verified distances.
- We made minor revisions to many of Chusovoy's material and energy consumption factors, based on corrected verified data.
- We applied Chusovoy's public version reported vanadium pentoxide and ferrovanadium production labor factors for the corresponding labor inputs for Tulachermet, as discussed below in Comment 9. In addition, Odermet sold the subject merchandise produced by Tulachermet. Even though significant portions of Tulachermet's responses failed verification, Tulachermet's factors of production, with exception of labor, fully verified. Therefore, we continued to use Tulachermet's factors to calculate FMV for sales by Odermet.

To calculate FMV, the verified factor amounts for each company were multiplied by the appropriate surrogate values for the different inputs. In accordance with section 773(c)(4) of the Act, the Department must, to the extent possible, determine FMV by valuing the factors of production in one or more market economy countries that: (1) Are at a level of economic development comparable to that of the NME economy country, and (2) are significant producers of comparable merchandise. As discussed in the preliminary determination, the Department has determined that South Africa is the country that best meets the statutory criteria for purposes of this investigation. Accordingly, we have based FMV on the appropriate factors of production as valued in South Africa, except for those factors for which we were unable to obtain a suitable value from South Africa. In these instances, as discussed below, and in our preliminary determination, we used values from publicly-available, published information pertaining to Poland, Thailand, and Turkey, or values pertaining to Brazil and Germany as included in the petition. The selection of surrogate countries and certain surrogate values is discussed further below at Comment 6. We have obtained and relied upon published, publicly-available information, wherever possible, to value the factors of production. Following the surrogate value selection methodology outlined in our preliminary determination, we have used the same surrogate values used in the preliminary, with the following exceptions:

- For vanadium slag, we adjusted the surrogate value to account for differences between the grade of the surrogate and Russian materials, as discussed below in Comment 7.
- For additional raw materials identified subsequent to our preliminary determination, we used published price quotes for the South African material (fluorspar), or, in the absence of any available value from South Africa, unit values derived from Thai import statistics (fly ash, aluminum alloy, and cold-rolled steel sheet) or Thai export statistics (paint, thinner).
- For natural gas, we used the Polish natural gas rate published by the International Energy Agency.

As noted above, we relied on surrogate values from Thailand and Poland, countries identified as potential surrogates for Russia in the July 29, 1994, Memorandum from the Office of Policy to Gary Taverman, when no appropriate South African value was available for a particular factor. When no value was available from any potential surrogate country, we used values from Brazil and Germany, as described in our preliminary determination. The selection of the surrogate values for this determination is discussed further in the Valuation Memorandum dated May 19, 1995.

Currency Conversion

We made currency conversions based on the official exchange rates in effect on the dates of the U.S. sales as certified by the Federal Reserve Bank or, when unavailable, at the rates published by the International Monetary Fund in International Financial Statistics.

Verification

As provided in section 776(b) of the Act, we verified or attempted to verify all information submitted by respondents for use in our final determination. We used standard verification procedures, including examination of relevant accounting records and original source documents provided by respondents.

Interested Party Comments

Comment 1: Rejection of Tulachermet Sales Response

GfE and Shieldalloy argue that the Department should reject Tulachermet's sales response and apply BIA for the final determination because Tulachermet failed verification. The major reasons for the alleged verification failure cited by GfE and Shieldalloy are: (a) The Department's discovery at verification of an unreported sale accounting for a significant portion of the merchandise sold during the POI; (b) Tulachermet's refusal to allow the Department timely access to essential information at verification; (c) Tulachermet's inability to support or substantiate the questionnaire responses; and (d) inaccurate and omitted data. According to GfE and Shieldalloy, these verification failures establish the inaccuracy and unreliability of Tulachermet's response. Thus, BIA should be used for Tulachermet's margin.

Tulachermet claims that the sale in question was omitted inadvertently from the response and was not an attempt to impede the investigation. On the contrary, Tulachermet claims that reporting the sale would have been in its interest as the selling price was substantially higher than the prices of the reported sales. Tulachermet states that the initial refusal to allow the Department to view certain information at verification, which was subsequently permitted, was due to the staff involved with verification not having been given explicit authorization from the chief company official. Tulachermet states that, until recently, all factory output information was considered a state secret, with severe penalties for disclosure to outsiders. Nevertheless, Tulachermet asserts that the Department

subsequently was able to review the information in question and confirm that there were no other discrepancies in Tulachermet's sales response. Accordingly, Tulachermet contends that BIA is unjustified under these circumstances.

Odermet adds that there is no basis to reject Tulachermet's factors of production response since there were no problems with that portion of the response except for labor factors and distances to input suppliers.

DOC Position

During verification, Tulachermet withheld access to a customer contract and correspondence file. Under 19 CFR 353.36(c)(1994), all parties are on notice that "[a]s part of the verification, employees of the Department will request access to all files, records, and personnel of the producers, resellers, importers, or unrelated purchasers which the [Department] considers relevant to factual information submitted." The verification outline presented to Tulachermet prior to verification specifically advised Tulachermet that complete sales records, contracts, and customer correspondence files would be reviewed at verification and should be made available for inspection at verification. While the verifiers were eventually granted access to the file in question, the delay in providing access compromised this critical component of verification. More importantly, the Department had no way to determine whether the file, when finally seen, was complete. As a result, the Department was unable to conclude that no further discrepancies exist. Section 776(b) of the Act provides that if the Department "is unable to verify the accuracy of the information submitted, it shall use the best information available to it as the basis for its action * * *." Section 776(c) of the Act further states that the Department shall use BIA "whenever a party or any other person refuses or is unable to produce information requested in a timely manner and in the form required, or otherwise significantly impedes an investigation."

While we recognize the attempt of Tulachermet to be responsive, the Department cannot consider a response to be verified when the respondent significantly impedes the investigation in the manner described above. The verifiers' discovery of a substantial quantity of unreported POI sales further undermined the integrity of Tulachermet's sales response. Under such circumstances, we were unable to verify Tulachermet's responses. Accordingly, we must reject its sales response and rely on BIA. Further, because Tulachermet's actions at verification significantly impeded the Department's investigation, as to Tulachermet, we have treated the company as an uncooperative respondent warranting the application of adverse BIA.

Comment 2: Sales Responses from Other Russian Companies

GfE and Shieldalloy claim that Chusovoy and a Russian trading company should have submitted sales responses because, pursuant to information GfE provided for the record, they knew at the time of invoice preparation, if not at the time of sale, that the ultimate destination of the merchandise sold was the United States. GfE and Shieldalloy cite an internal GfE memorandum as evidence that, at the time of sale, Chusovoy knew the ultimate destination of its nitrided vanadium shipment. Since Chusovoy and the trading company each failed to provide a sales questionnaire response for these sales transactions, GfE and Shieldalloy argue that these entities should be assigned a margin based on BIA.

Chusovoy states that knowledge of the ultimate destination at the time of sale is the determinant factor and that, at the time of the sale, Chusovoy did not know this information. Chusovoy asserts that none of the sales documentation between GfE and Chusovoy, including the nitrided vanadium agreement, give any indication as to the ultimate destination of the merchandise. According to Chusovoy, GfE's internal memorandum is a self-serving document, not signed by Chusovoy, which, moreover, indicates the merchandise could be sold to another market as well as the United States.

DOC Position

We agree with Chusovoy. Our verification confirmed that neither Chusovoy nor the Russian trading company had knowledge *at the time of sale* as to the ultimate destination of its merchandise. It is knowledge at the time of the sale, and not the date of shipment, that is relevant in determining the proper respondent for such sales (*see, Magnesium from Russia*). In this situation, GfE was the first party in the distribution channel to know the ultimate destination of the merchandise and is, therefore, the proper exporter respondent for these sales.

Comment 3: Rejection of GfE/Shieldalloy response

Chusovoy, Galt, and Tulachermet argue that the Department should reject GfE/Shieldalloy's sales response because sales reporting of Russian-sourced merchandise was based on quantity estimates drawn from inventory turnover records, rather than actual sales data. These respondents claim that this averaging approach methodology is counter to the Department's specific questionnaire instructions and creates the potential for minimizing margins from large quantity product sales at lower prices. Accordingly, these respondents contend that the Department should assign GfE/Shieldalloy a margin based on BIA.

GfE and Shieldalloy contend that their reporting methodology is reasonable and sound, given the manner in which the sales were conducted. These sales were not reported using averaged prices, according to GfE and Shieldalloy, but rather at the per-unit price of each sale. GfE and Shieldalloy add that the verification showed the methodology was consistent with the information presented throughout the proceeding.

DOC Position

We have used GfE's and Shieldalloy's questionnaire response in our final determination. Their methodology did not affect the prices reported but rather the quantity of subject merchandise reported. We verified that the sales reporting was complete and that the inventory turnover methodology provided a reasonable basis for determining the quantity of subject merchandise sold during the POI. Further, we found no indication of any sale-specific distortions deriving from the application of this methodology.

Comment 4: Proper Respondent for Galt Sales

GfE and Shieldalloy claim that the exporter for Galt's sales was Hascor BV, or the "Galt/Hascor" joint venture, not Galt, since according to GfE and Shieldalloy, the former was the first exporter with knowledge that the merchandise was destined for the United States. Since neither entity filed a questionnaire response, GfE and Shieldalloy contend that a BIA rate should be assigned to these entities, and that Galt should receive the "all others" rate. Alternatively, GfE and Shieldalloy claim that the Galt response should be rejected because of the number of revisions submitted seven days prior to verification and response errors identified at verification.

Galt responds that the record, including the verification results, demonstrates that Galt is the exporter in this investigation and is entitled to its own rate. Galt points to a variety of shipment documents, as examined at verification, which specifically identify it as the exporter of the merchandise. Further, Galt adds that, at verification, the Department was able to determine that Galt was the first party in the distribution chain to have knowledge of the destination of the merchandise and, in fact, was the party that determined that the merchandise was to be sent to the United States.

DOC Position

We agree with Galt. Our verification confirmed that Galt is the proper exporter-respondent for its sales because it determines that the merchandise is destined for sale in the United States. The Galt/Hascor joint venture was responsible for garnering the merchandise from Russia and shipping it to a bonded warehouse in the Netherlands. At that point Galt obtained the merchandise, sold it and shipped it to the United States. Revisions to its response were timely and verification discrepancies were relatively minor, affecting only its movement expenses.

Comment 5: Odermet's Intermediate Country Reseller Claim

Odermet claims that, in accordance with Section 773(f) of the Act, its U.S. sales should be compared to its sales to Germany for the following reasons: (1) Odermet was a reseller of the subject merchandise; (2) the Russian manufacturer, Tulachermet, did not know at the time of the sale to Odermet the country to which Odermet intended to export the merchandise; (3) the merchandise was exported by Odermet to a country other than the United States; (4) the merchandise entered the commerce of an intermediate country (Germany) but was not substantially transformed there; and (5) the merchandise was subsequently exported to the United States. Odermet states that verification corroborated its claim, demonstrating that it met all of the above statutory criteria to support its claim. In particular, Odermet states that it demonstrated that the merchandise entered the commerce of Germany and was not warehoused in bond, and that the merchandise could then be resold to customers in Germany and elsewhere, including the United States.

GfE and Shieldalloy contend that Odermet's intermediate reseller claim should be rejected because Odermet failed to establish at verification that the merchandise entered the commerce of Germany. GfE and Shieldalloy's contention rests on its assertion that Odermet failed to demonstrate that the warehouses used to store the merchandise were non-bonded and that, in nearly every case, merchandise ultimately shipped to the United States was stored in one warehouse in one city, while merchandise ultimately sold to German customers was stored in a different warehouse in a different city. Even if the warehouses were not bonded, GfE and Shieldalloy claim that, as established in Final Determination of Sales At Less Than Fair Value: Sulfur Dyes, Including Sulfur Vat Dyes, from the People's Republic of China, (58 FR 7537, February 8, 1993) (Sulfur Dyes), storage in a non-bonded warehouse in a third country alone does not demonstrate, in and of itself, that the merchandise enters the commerce of that country. The channel of distribution in this case, they continue, does not support a finding that the merchandise entered the commerce of Germany.

DOC Position

For the Department to accept Odermet's claim, Odermet must demonstrate that it satisfies each of the five statutory criteria under Section 773(f) of the Act, cited above. The Department agrees with Odermet that it has met four of these five criteria. However, we do not agree that Odermet has satisfied the criterion that the merchandise enter the commerce of the intermediate country. Verification revealed that Odermet maintains two distinct distribution channels: (a) Transportation of merchandise from Tulachermet to a warehouse in Duisburg, Germany, for prospective sale to German customers in that region; and (b) transportation of merchandise from Tulachermet to a warehouse in Bremerhaven, Germany, for prospective sale and ocean shipment from the port of Bremerhaven to customers in the United States and other countries outside of Germany. In each case, the sales agreement with the customer was made prior to shipment of the merchandise into Germany. Moreover, the shipment quantity and delivery dates correspond with the specifications in the sales agreements. While for each distribution channel we noted one exception to the pattern, in that one shipment to Duisburg was destined for delivery to overseas customers, and one shipment to Bremerhaven was destined to a German customer, all other shipments followed the above stated pattern. Furthermore, although the Bremerhaven warehouse may not have been a bonded warehouse (we have no evidence that it was or was not), we found no customs duties or German value-added taxes (VAT) were assessed on U.S. sales through the Bremerhaven warehouse—expenses that would support a finding that such merchandise entered Germany for commercial consumption—while duties and VAT were imposed on sales withdrawn from a bonded warehouse in Duisburg.

The sum of these facts indicates two very different and distinct patterns of distribution, with merchandise shipped to Bremerhaven normally not entering the commerce of Germany, as this merchandise is not intended to be made available to German customers. Under similar circumstances in Sulfur Dyes, where sales intended for U.S. export followed a different sales and distribution pattern from sales intended for domestic consumption in Hong Kong, we found the pattern for U.S. sales to be "most accurately characterized as transshipment." In this investigation, we reach the same conclusion for Odermet's sales. These transshipments do not enter the commerce of Germany and, accordingly, do not merit consideration under Section 773(f) of the Act.

Comment 6: Surrogate Country Selection

Odermet contends that South Africa is not appropriate for use as the surrogate country for Russia in this investigation because current economic data offered by Odermet indicates that South Africa is not economically comparable to Russia in terms of gross domestic product (GDP). Odermet argues that the Department should first attempt to value the factors of production from the "first tier" of comparable economies identified in the Department's surrogate country selection memorandum dated July 29, 1994,—Algeria, Poland, Thailand, Tunisia, and Turkey. Specifically, Odermet proposes the use of a surrogate value for natural gas from Poland. For values that could not be obtained from the above-mentioned countries, such as vanadium slag, Odermet suggests that then the Department would turn to allegedly noncomparable economies such as South Africa, following the methodology applied in Final Determination of Sales at Less Than Fair Value: Cased Pencils from the PRC (59 FR 55625, November 8, 1994) (Pencils).

Chusovoy, Galt, and Tulachermet agree with Odermet that South Africa is not economically comparable to Russia, but acknowledge that vanadium slag has to be valued in South Africa because of the lack of alternatives. However, they contend that values from the first tier

countries should be used for the other factors. Specifically, they propose the use of a Polish labor rate and an Algerian value for natural gas.

GfE and Shieldalloy support the selection of South Africa as the appropriate surrogate country. This selection, they state, is consistent with the statutory requirement of Section 773(c)(4) of the Act that the surrogate country be economically comparable and a significant producer of comparable merchandise. They note that the Department, in its December 22, 1994, Office of Policy Memorandum, has recognized that South Africa is the only producer of comparable merchandise whose level of economic development is reasonably close to that of Russia. GfE and Shieldalloy further assert that none of the first tier countries should be considered as acceptable surrogates for Russia in valuing factors for this investigation because these countries produce neither the subject merchandise nor comparable merchandise. For those instances where values from these countries were used in the preliminary determination or may be considered for the final determination, GfE and Shieldalloy contend that the Brazilian data from the petition should be used. Brazil has been accepted as an appropriate surrogate country for purposes of the initiation of this investigation, and has also been used as the surrogate country in the Magnesium from Russia investigation. The methodology employed in Pencils, they say, is not appropriate here because in Pencils the other countries used as surrogates were producers of comparable merchandise, while in this case the other countries do not produce comparable merchandise.

DOC Position

Section 773 (c)(4) of the Act requires that, to the extent possible, the factors be valued in one or more market economy countries that are: (a) At a comparable level of economic development, and (b) significant producers of comparable merchandise. In this investigation, none of the countries initially identified as potential surrogate countries because of comparable levels of economic development produces comparable merchandise. Of those countries that produce comparable merchandise, only South Africa, which produces the subject merchandise, is the most comparable in terms of economic development, as stated in the December 22, 1994, Memorandum. We acknowledge that economic growth trends in South Africa and Russia are dissimilar, but these differences notwithstanding, the Department's selection of South Africa satifies both statutory criteria set forth above.

As for the specific factors cited by the parties, the respondents' claims that Russian wage levels are among the lowest in the world, are not relevant because information regarding specific NME prices or wage rates cannot be relied upon. Thus, the argument based on a comparison of purported Russian wage rates with South African wage rates is inappropriate.

We disagree with GfE and Shieldalloy's proposal to use Brazilian values from the petition where there are no South African values available because Brazil is not a producer of comparable merchandise—there is no information on the record that Brazil has been a significant producer of ferrovanadium or comparable merchandise since 1986.

Comment 7: Valuation of Vanadium Slag

Respondents contend that the Department should adjust the vanadium slag value, based on a price quote submitted in the petition for South African Highveld slag containing 24% vanadium pentoxide, to reflect the lower purity of the Russian slag in addition to the lower vanadium pentoxide content of 12 to 20%. Simply adjusting the value for vanadium pentoxide content ("straight-line proportionality" method) is not sufficient, respondents claim, because the additional impurities contained in the Russian slag add to the cost of extracting vanadium pentoxide from the raw material. They argue that this renders the Russian slag less valuable than the prime grade South African Highveld slag, even after adjusting for the different concentration levels of vanadium pentoxide. Chusovoy, Galt, and Tulachermet propose an adjustment to the Highveld slag value based on the price differential for processed vanadium pentoxide of Highveld 98% merchandise to 90% merchandise, according to price information published in the Metal Bulletin. These respondents claim that basing the price differential on this data is appropriate given the strong market linkage between vanadium pentoxide, the intermediate product, and ferrovanadium, the final product. Moreover, they contend it is appropriate to base the adjustment on the difference between Highveld vanadium pentoxide and other vanadium pentoxide prices because the surrogate value for slag is based on the Highveld slag value.

Odermet adds that the Metal Bulletin price-based adjustment methodology is the only reasonably sound basis for valuing vanadium slag, given that there is no source of publicly available published information for vanadium slag prices and that, as vanadium slag is the major input for processed vanadium pentoxide, the pricing of vanadium pentoxide is relevant to valuing vanadium slag. Finally, Odermet states that this case differs from the Final Determination of Sales at Less Than Fair Value: Refined Antimony Trioxide from the PRC (57 FR 6801, February 28, 1992) (Antimony) situation, where the Department used the straight-line proportionality method because it had no prices for different concentrate levels. Here, Odermet contends, the Department does have the information to make the appropriate adjustment.

GfE and Shieldalloy state that the adjustments, proposed by respondents, are not supported economically. GfE and Shieldalloy argue that respondents have failed to demonstrate the relationship between selected European transaction prices for processed vanadium pentoxide and any value differential between the South African and Russian raw materials. They cite a similar situation in Antimony where the Department made no adjustment to the raw material value because, without actual prices, the data was inconclusive as to the adjustment to be made. In addition, GfE and Shieldalloy contend that the respondents' price adjustment methodology is flawed because it utilizes price comparisons between an ultra-refined product manufactured from Highveld slag that is not likely to be used in ferrovanadium production, to the lowest prices published. After discounting those comparisons, GfE and Shieldalloy assert that the price differentials between processed grades are significantly less than those claimed by respondents.

DOC Position

Based on the submitted information, verification findings, and the Department's own research, we agree with the respondents that the South African vanadium slag value should be adjusted to reflect the lower purity of Russian vanadium slag. Our analysis and research suggest a strong relationship between vanadium pentoxide prices and vanadium slag value, particularly as vanadium slag is the principal raw material for vanadium pentoxide production and there are few, if any, other markets for vanadium slag. We have confirmed, through a South African publication, South Africa's Mineral Industry 1993/94, that the Highveld prices cited by Chusovoy, Galt, Odermet, and Tulachermet reflect

the typical Highveld product, while the prices for the other 98% products reflect Chinese origin, and the 90% products are of Russian slag. Based on this information, we have adjusted the vanadium slag surrogate value according to the Metal Bulletin vanadium pentoxide price differentials. Our methodology for adjusting both Tulachermet's and Chusovoy's slag values is detailed in the Valuation Memorandum.

Comment 8: Adjustment to Factory Overhead Percentage

Chusovoy, Galt, and Tulachermet claim that the surrogate value for factory overhead, which was derived from GfE's experience at its German facility and submitted in the petition, should be adjusted for the known differences between the GfE production plant and the Russian plants. These respondents contend that the Department verified that the Russian plants are fully depreciated and lack special environmental equipment. The respondents claim further that depreciation, including depreciation for environmental control equipment, accounts for the majority of the GfE factory overhead percentage. Accordingly, the respondents argue that the Department should reduce the factory overhead percentages by at least half to reflect the absence of any depreciation element in the Russian producers' factory overhead.

GfE and Shieldalloy state that factory overhead was properly calculated using the petition information derived from GfE experience, and this value remains the best available information. They assert that GfE's depreciation experience is likely to be the same as the Russian companies. Moreover, as there is no evidence of any known differences between the GfE's experience and the Russian producers', the respondents' claim for a factory overhead adjustment is unsubstantiated and the suggested adjustment methodology is arbitrary.

DOC Position

The Department has been unable to locate other, publicly available, data for the factory overhead surrogate value. (The Department's attempts to find factory overhead data is described in the *Valuation Memorandum.*) Thus, the only available data is the percentages stated in the petition. The respondents' assertions provide an insufficient basis for us to make any adjustments to these percentages.

Comment 9: BIA Labor Factors

GfE, Shieldalloy, and Odermet assert that the Department should use the labor factors reported by Chusovoy as BIA for the unreported Tulachermet labor factors. GfE and Shieldalloy state that Chusovoy's factors should be used because they are the highest available labor factors and, given Tulachermet's refusal to provide this information, the most adverse data should be applied. Odermet favors the use of Chusovoy labor factors because it believes these factors reflect more accurately the Russian approach to production of the subject merchandise.

DOC Position

Tulachermet failed to submit its production labor factors. Accordingly, it is appropriate to make adverse assumptions about its labor factors in assigning BIA. Thus, consistent with Department practice, we have applied the data from the public version of Chusovoy's response, because these factors are higher than that reported in the petition.

Comment 10: Freight Valuation for Odermet Exports

Odermet argues that its freight expenses from the Russian factory to German warehouses were paid in a market-economy currency to a market-economy freight forwarder and, thus, should be accepted as reported, even though the freight forwarder contracted with NME trucking companies to perform the actual service. Odermet claims that the subcontracting arrangement is irrelevant; all that is required for establishing the market price for the freight service is the convertible currency transaction to the market economy freight forwarder. To do otherwise and value the freight service using a surrogate value would lead, according to Odermet, to such "absurd" situations as finding surrogate values for PRC-origin inputs when calculating the cost of production for a Japanese producer.

DOC Position

We disagree with Odermet. In NME proceedings, our consistent methodology has been to determine whether a good or service obtained through a market economy transaction is, in fact, sourced from a market economy rather than merely purchased in it. For example, in Final Determination of Sales at Less Than Fair Value: Coumarin from the People's Republic of China (59 FR 66895, December 28, 1994), we did not value Chinese port charges according to the U.S. dollar price quote obtained from a market economy freight forwarder because of our assumption that such services were actually provided by Chinese sources. Instead, we valued port charges according to the information obtained from the surrogate country. Since such goods and services are produced in a NME, we cannot rely on the market economy payment transaction as the basis for valuing these charges because the costs upon which these expenses are based are not themselves market-based. Although Odermet arranges the freight transportation through its market economy freight forwarder, the forwarder's costs for contracting to NME trucking companies cannot be relied on and, thus, the price charged to Odermet cannot be relied upon.

Comment 11: Input Freight for Tulachermet's Vanadium Slag Factor

GfE and Shieldalloy allege that the Department erred in not including surrogate freight charges for the expense of transporting vanadium slag from the source to Tulachermet. Although the surrogate value is based on an FOB South African port price, which includes inland freight expenses, GfE and Shieldalloy claim that an additional amount for the freight expense should be added to Tulachermet's FMV calculation because the distance between Tulachermet's supplier and Tulachermet is four to five times greater than the distance from the South African supplier to the South African port.

Odermet states there is no support for GfE and Shieldalloy's contention regarding the source of the raw material and distance to it from the port.

DOC Position

When relying on a surrogate value that is freight-inclusive, the Department's consistent practice has been to accept that value as the surrogate value for the good as delivered to the NME consumer, without any attempt to adjust for alleged differences in freight costs (see, *e.g.*, Final Determination of Sales at Less Than Fair Value: Saccharin from the People's Republic of China, 59 FR 588818 (November 15, 1994). In most cases, we do not have sufficient information regarding the freight expense included in the surrogate value in order to make the adjustment. Moreover, a value inclusive of freight represents the level of the surrogate value we intend to reflect—the surrogate price of the good available to the producer at its factory gate. We add an additional value for freight from the supplier to the producer only when such freight is not included in the surrogate value. Since the surrogate value for vanadium slag is freight-inclusive, we have made no

adjustment to the vanadium slag value for purported differences in freight expenses.

Comment 12: Odermet's Export Shipment Expenses

Odermet claims it correctly reported its per-unit freight expenses based on gross weight, rather than contained vanadium weight, because this methodology reflects the manner in which it is billed for freight services.

GfE and Shieldalloy contend that, as USP is reported in terms of contained vanadium weight, the freight expenses should be reported on the same basis and thus must be corrected.

DOC Position

We agree with GfE and Shieldalloy and have adjusted these expenses accordingly. Price adjustments are always made on the same basis upon which price is reported. Although Odermet is correct that expenses should be reported on the same basis on which they are incurred, since Odermet reported its sales prices on a contained vanadium weight basis, the proper basis for allocating movement expenses on a per-unit basis is contained vanadium weight. To allocate these expenses on a gross weight basis would understate the expense to Odermet, not overstate it as Odermet claims.

Comment 13: Inflation Adjustments and Exchange Rate Conversions for Surrogate Values

GfE and Shieldalloy contend that the Department erred by not properly inflating pre-POI surrogate values to the POI for raw materials where the value was based on 1993 data. These parties contend that the pre-POI surrogate values must be converted to U.S. dollar values using contemporaneous exchange rates in order to accurately reflect costs and market conditions during the time these costs were incurred. Thus, according to GfE and Shieldalloy, to value these factors properly, the Department should first convert the value to U.S. dollars using the average exchange rate for 1993, and then inflate the value to the POI using the ratio between the average price index for 1993 and the average price index for the POI.

Chusovoy, Galt, and Tulachermet contend that the exchange rate methodology used in preliminary determination was proper, and that GfE and Shieldalloy's methodology is internally inconsistent. If contemporaneous exchange rates must be used, they say, then contemporaneous prices must also be used. However, Chusovoy, Galt, and Tulachermet add that there is no reason to inflate these 1993 prices because the period during which the subject merchandise was produced includes months in 1993, and there is no basis to conclude that average prices for 1993 went up or down relative to average prices during the POI.

DOC Position

The Department's consistent practice has been to first inflate non-contemporaneous surrogate values to the POI, to reflect the economic trends in the surrogate country, and then convert the POI-value to U.S. dollars according to the POI exchange rate (see, *e.g., Pencils*). Converting to U.S. dollars first and then inflating the U.S. dollar-denominated prices risks pulling into the valuation equation variables that have no bearing on factor prices in the surrogate country. Moreover, our practice is not to inflate values when the time period of the value—in this case 1993—overlaps with any part of the POI—in this case December 1993. GfE and Shieldalloy offer no compelling arguments to change our practice; thus we have made no changes to our inflation rate and exchange rate adjustment methodologies.

Continuation of Suspension of Liquidation

In accordance with section 733(d)(1) of the Act, we directed the Customs Service to suspend liquidation of all entries of ferrovanadium and nitrided vanadium from the Russian Federation entered, or withdrawn from warehouse, for consumption on or after January 4, 1995, which is the date of publication of our notice of preliminary determination in the **Federal Register**. We shall instruct the Customs Service to require a cash deposit or posting of a bond equal to the estimated amount by which the FMV exceeds the USP as shown below, as of the effective date of this notice. The suspension of liquidation instructions will remain in effect until further notice.

The weighted-average margins are as follows:

Manufacturer/producer/exporter	Weighted-average margin
Galt Alloys, Inc.	3.75
Gesellschaft far Elektrometallurgie m.b.H. (and its related companies Shieldalloy Metallurgical Corporation, and Metallurg, Inc.)	11.72
Odermet	10.10
Russia-wide Rate	108.00

ITC Notification

In accordance with section 735(d) of the Act, we have notified the ITC of our determination. As our final determination is affirmative, the ITC will determine whether these imports are causing material injury, or threat of material injury, to the industry in the United States, within 45 days. If the ITC determines that material injury, or threat of material injury, does not exist, the proceeding will be terminated and all securities posted will be refunded or cancelled. If the ITC determines that such injury does exist, the Department will issue an antidumping duty order directing Customs officials to assess antidumping duties on all imports of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after the effective date of the suspension of liquidation.

Dated: May 19, 1995.

Susan G. Esserman,

Assistant Secretary for Import Administration.

[FR Doc. 95–13011 Filed 5–25–95; 8:45 am]

BILLING CODE 3510–DP–P

APPENDIX C

LIST OF PARTICIPANTS IN THE HEARING

CALENDAR OF HEARINGS

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

Subject: FERROVANADIUM AND NITRIDED VANADIUM FROM RUSSIA

Inv. No.: 731-TA-702 (F)

Date and Time: May 23, 1995 - 9:30 a.m.

Sessions were held in connection with the investigation in the Main hearing room 101, 500 E Street, S.W., Washington, D.C.

OPENING REMARKS

Petitioner (Cheryl Ellsworth) Harris & Ellsworth

Respondent (John B. Gantt) Ober, Kaler, Grimes & Shriver

In Support of Imposition of Antidumping Duties:

Harris & Ellsworth
Washington, D.C.
on behalf of

Shieldalloy Metallurgical Corporation

H. Nils Schooley, President, Shieldalloy Metallurgical Corporation

R. James Carter, Vice President, Sales and Product Management, Alloys and Metals Division, Shieldalloy Metallurgical Corporation

Cheryl Ellsworth
Jennifer de Laurentiis } --OF COUNSEL

-**MORE**-

In Opposition to the Imposition of Antidumping Duties:

Ober, Kaler, Grimes & Shriver
Washington, D.C.
on behalf of

Odermet Ltd.

Mel Waskow, President, Metal Elements, Ltd.

John B. Gantt--OF COUNSEL

APPENDIX D

COMMENTS RECEIVED FROM U.S. PRODUCERS ON THE IMPACT OF IMPORTS OF FERROVANADIUM AND NITRIDED VANADIUM FROM RUSSIA ON THEIR GROWTH, INVESTMENT, ABILITY TO RAISE CAPITAL, AND DEVELOPMENT AND PRODUCTION EFFORTS

The Commission requested U.S. producers to describe any actual or anticipated negative effects of imports of ferrovanadium and nitrided vanadium from Russia 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. Stratcor and ***. Shieldalloy's, ***'s, and Bear's responses are as follows:

1. Since January 1, 1992, 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 ferrovanadium and nitrided vanadium from Russia?

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2. Does your firm anticipate any negative impact of imports of ferrovanadium and nitrided vanadium from Russia?

* * * * * * *

3. Has the scale of capital investments undertaken been influenced by the presence of imports of ferrovanadium and nitrided vanadium from Russia?

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