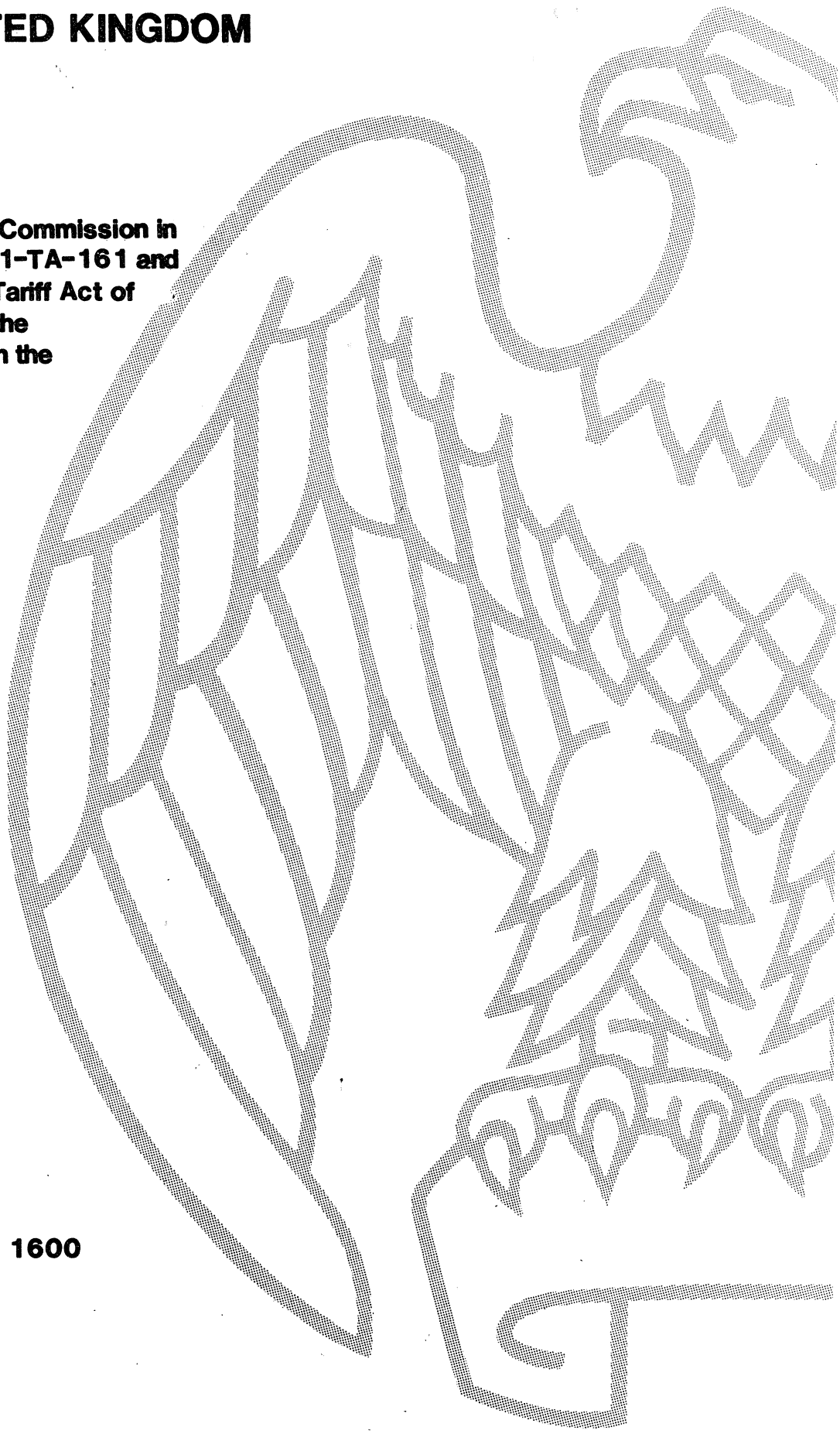
TITANIUM SPONGE FROM JAPAN AND THE UNITED KINGDOM

Determinations of the Commission in Investigations Nos. 731-TA-161 and 162 (Final) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigations



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Note.--Information that would reveal the confidential operations of individual concerns may not be published and, therefore, has been deleted from this report.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

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, DC

Investigation Nos. 731-TA-161 and 162 (Final)

TITANIUM SPONGE FROM JAPAN AND THE UNITED KINGDOM

Determinations

On the basis of the record 1/ developed in investigation No. 731-TA-161 (Final), the Commission determines, 2/ pursuant to section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)), that an industry in the United States is threatened with material injury by reason of imports from Japan of titanium sponge, 3/ which the Department of Commerce has found are being, or are likely to be, sold in the United States at less than fair value (LTFV). Pursuant to section 736 of the Tariff Act of 1930 (19 U.S.C. § 1673e(b) (1980)), the Commission further determines that the threat of material injury would not have led to a finding of material injury but for the suspension of liquidation under section 1673b(d)(1).

On the basis of the record 1/ developed in investigation No. 731-TA-162 (Final), the Commission determines, pursuant to section 735(b) of the Tariff Act of 1930, that an industry in the United States is not materially injured or threatened with material injury, nor is the establishment of an industry in the United States materially retarded, by reason of imports from the United Kingdom of titanium sponge 3/ which the Department of Commerce has found are being, or are likely to be, sold in the United States at LTFV.

Background

The Commission instituted these final antidumping investigations, effective May 11, 1984, following preliminary determinations by the Department

1/ The "record" is defined in section 207.2(i) of the Commission's Rules of Practice and Procedure (19 C.F.R. § 207.2(i)).

2/ Chairwoman Stern and Vice Chairman Liebeler dissenting.

3/ Titanium sponge is provided for in items 629.14 and 833.00 of the Tariff Schedules of the United States.

of Commerce that imports of titanium sponge from Japan and the United Kingdom are being, or are likely to be, sold in the United States at LTFV (49 F.R. 20042). Notice of the institution of the Commission's investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of May 31, 1984 (49 F.R. 22724). Following a 60-day extension of its final determinations by the Department of Commerce, the Commission revised its hearing date (Federal Register of July 18, 1984, 49 F.R. 29167). The hearing was held in Washington, DC, on September 26, 1984, and all persons who requested the opportunity were permitted to appear in person or to be represented by counsel. Commerce published its affirmative final LTFV determinations in the Federal Register on October 1, 1984 (49 F.R. 38384). The Commission's determinations in these investigations were made in an open "Government in the Sunshine" meeting, held on October 29, 1984.

VIEWS OF COMMISSIONER ECKES, COMMISSIONER LODWICK, AND COMMISSIONER ROHR

On the basis of the record in these investigations, we determine that an industry in the United States is threatened with material injury by reason of imports of titanium sponge from Japan. We determine that an industry in the United States is not materially injured or threatened with material injury by reason of imports of titanium sponge from the United Kingdom.

Domestic industry

Section 771(4)(A) of the Tariff Act of 1930 defines the term "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." 1/ Section 771(10) 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 . . . ." 2/

The subject of these investigations is titanium sponge, a porous, brittle form of titanium, a highly ductile metal which has a high strength-to-weight ratio. Titanium has low thermal and electrical conductivity and is one of the most corrosion-resistant structural metals. Sponge is an intermediate product used to produce titanium ingot, which in turn is used to make slab, billet, bar, plate, sheet, and other titanium mill products. Because of its desirable properties, it is used in both aerospace and non-aerospace applications. 3/

In the preliminary investigations we determined that domestically produced titanium sponge is like the imported product and, consequently, we

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1/ 19 U.S.C. § 1677(4)(A).
2/ 19 U.S.C. § 1677(10).
3/ Report of the Commission (Report) at A-2.

concluded that the domestic industry consists of the U.S. producers of titanium sponge. 4/ None of the parties to these investigations has objected to that determination and we again conclude that the domestic industry consists of the U.S. producers of titanium sponge. Five U.S. companies produced titanium sponge during the period covered by the investigations: RMI Co. (the petitioner), Oregon Metallurgical Corp. (Oremet), Titanium Metals Corp. of America (Timet), International Titanium, Inc. (ITI), and Teledyne Wah Chang Albany (Teledyne). 5/ 6/

Condition of the domestic industry

The bulk of U.S. production of titanium sponge is consumed captively to produce ingots, which are either sold or further worked into semifinished and finished products. 7/ Only a small percentage of titanium sponge is sold commercially to independent melters. 8/ An important element in the current condition of the titanium sponge industry is government procurement for the National Defense Stockpile. 9/ In fact, the General Services Administration

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4/ Titanium Sponge from Japan and the United Kingdom, Investigations Nos. 731-TA-161 and 162 (Preliminary), USITC Pub. 1477 (1984).

5/ Teledyne Wah Chang Albany is not to be confused with Teledyne Allvac, a nonintegrated producer of titanium bar products which imports titanium sponge for use in its operations. Teledyne Allvac appeared at the conference in opposition to the petition. See Transcript of the preliminary hearing (Tr.) at 145-47 and Conference Exhibit 8.

6/ One other company, Western Zirconium Co., had the capacity to produce titanium sponge, but did not produce any significant amounts during the period covered by the investigations. Report at A-8.

7/ As noted above, titanium sponge is an intermediate product used by titanium mill product producers, melters of titanium sponge into ingot, and product converters. RMI, Timet, Teledyne, Western Zirconium, and Oremet are vertically integrated; ITI is not. (Teledyne and Western Zirconium are not currently producing titanium sponge). Id. at A-8, A-10.

8/ Commercial sales annually accounted for less than 8 percent of total U.S. production in the period covered by these investigations. Id. at A-14-15.

9/ Titanium sponge stockpiled by GSA is not intended for domestic consumption except in a national emergency. See 50 U.S.C. § 98f.

(GSA) procurement of 9 million pounds of titanium sponge for delivery in 1984 represents approximately 15 percent of apparent consumption. 10/

Titanium sponge is a structural metal that is subject to sharp swings in supply and demand. The recent acute shortage of supply and increased demand which began in December 1978 and continued through 1980 was due to the increase in commercial aerospace activity. 11/ The aerospace industry, which accounts for between 60 and 80 percent of U.S. consumption, and the steel alloy industry, which accounts for 20 percent of U.S. consumption, have both encountered poor conditions since 1980. 12/ In spite of the downturn in these industries, demand for titanium sponge continued to increase in 1981 before declining sharply in 1982 and 1983. 13/ The downturns in the consuming industries adversely affected the performance of the domestic titanium sponge industry.

The domestic demand for titanium sponge in the United States dropped substantially from 68 million pounds in 1981 to 34.3 million pounds in 1982 and then dropped further to 31.4 million pounds in 1983. During January-June 1984, apparent consumption was 30.9 million pounds compared with 15.6 million pounds during the corresponding period of 1983. 14/

Most of the key indicators of the condition of the domestic titanium sponge industry reflect similar sharp declines in 1982, which continued during 1983 but began to level off or increase during January-June 1984. Production dropped from a 1981 peak of 55.7 million pounds to 33.1 million pounds in 1982, and then to 28.4 million pounds in 1983. During January-June 1984,

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10/ The GSA acts as purchasing agent for the Federal Emergency Management Agency when procurements are made for the Stockpile.
11/ Report at A-12.
12/ Id. at A-12-14.
13/ Id.
14/ Id. at A-11.

production increased to 22.4 million pounds compared with 12.2 million pounds in the corresponding period of 1983. 15/

Total U.S. capacity has remained relatively stable during this period with a low of 60.3 million pounds in 1981 and a high of 64.9 million pounds in 1982. Current U.S. capacity is 62.4 million pounds. Capacity utilization, however, has fluctuated greatly during this period. In 1981, capacity utilization was 92.4 percent. It dropped sharply to 51 percent in 1982 and then to 45.1 percent in 1983. During January-June 1984 capacity utilization increased to 71.7 percent compared with 38.9 percent in the corresponding period of 1983. 16/

Employment of production and related workers producing titanium sponge, as well as wages and total compensation paid to such workers, declined steadily from 1981 through 1983. They all increased substantially, however, in the first half of 1984. 17/

Because of the small size of the commercial market domestic shipments of titanium sponge represent only a small fraction of U.S. production. Nevertheless, domestic shipments followed a pattern similar to the one previously noted. Domestic shipments dropped by 60 percent between 1981 and 1982, but then tripled in 1983, and again tripled in January-June 1984 compared with the corresponding period of 1983. 18/

The average unit value of domestic shipments of titanium sponge, while following the general pattern of decline in 1982 and 1983, has not leveled off

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15/ Id. at A-14.
16/ Id.
17/ Id. at A-16-19.
18/ Id. at A-15. Domestic shipments increased in 1983 because RMI was successful in securing a large contract from Martin-Marietta during that year. Therefore there is a deviation from the general pattern of decline in 1982 and 1983 for the other indicators.

or increased in the first half of 1984. Instead, the unit value for January-June 1984 dropped even further compared with that for the comparable period of 1983. 19/

Price trends for both titanium sponge and mill products have also declined sharply during the period of these investigations, but have yet to recover significantly. Available data for price quotes and winning bids for titanium sponge contracts indicate that quoted prices from domestic producers fell by almost 50 percent from 1981 to 1983. 20/ Data for January-June 1984 shows only a minimal increase in price compared to the same period of 1983. Prices for mill products have dropped approximately 33 percent from the second quarter of 1982 through the second quarter of 1984. 21/ There is virtually no indication of price increases for mill products in January-June 1984.

Finally, although it was difficult to evaluate the financial experience of the U.S. titanium sponge industry as a group, the available data indicate that the industry experienced a sharp decline in profitability between 1981 and 1983. The industry's profitability has improved for the first half of 1984. 22/

In sum, the available data depict a domestic industry that has endured serious difficulties but has improved recently.

19/ Id.
20/ Id. at A-41.
21/ Id. at A-45.
22/ Id. at A-19-27. Timet, one of the largest domestic producers of titanium sponge, was unable to provide profit and loss data for sponge production because of accounting practices, but did provide profit and loss data for their entire titanium operations. RMI, the other large domestic producer, provided profit and loss data for sponge but insisted that many general and administrative costs were not allocated to sponge production and that the transfer price of sponge was merely a paper transaction, not reflecting actual value. Nonetheless, their profit and loss data can be compared to their peak year of 1981 on a relative basis in order to evaluate the current profitability of their sponge production.

Threat of material injury due to LTFV imports from Japan

In concluding that LTFV imports constitute a threat of material injury to a domestic industry, we determine that the threat is real and imminent, and not based on a mere possibility that injury might occur at some remote date. 23/ In examining the question of threat of material injury to the domestic titanium sponge industry, we evaluated the rate of increase of LTFV sales to the U.S. market, the rate of increase in U.S. market penetration of LTFV imports, the capacity of foreign producers to generate exports, the unit value of imports, and the availability of other export markets, among other factors. 24/

We note generally that the titanium sponge industry is a highly volatile industry that has yet to fully mature. It has been plagued by a recurring pattern of sharp supply and demand shifts and has had to rely on demand projections (for both military and commercial markets) which have tended to be unreliable because of changes in a complex mosaic of factors, including the speculative nature of aerospace and defense demand. 25/ Therefore, while the industry has recovered somewhat in January-June 1984, that recovery is tenuous at this point in time.

There are four producers of titanium sponge in Japan. Their combined exports to the U.S. market declined from a peak of 11.4 million pounds in 1981 to 2.6 million pounds in 1982 and 2.0 million pounds in 1983. Imports from Japan increased dramatically to 7.6 million pounds in January-June 1984 compared with 1.3 million pounds in the corresponding period for 1983. 26/

23/ S. Rep. No. 249, 96th Cong., 1st Sess. 88 (1979).
24/ H.R. Rep. No. 317, 96th Cong., 1st Sess. 47-48 (1979).
25/ Report at A-13-14.
26/ Id. at A-36. Imports were unusually high in 1981 because domestic demand reached an all-time high and exceeded domestic production.

Market penetration of imports from Japan followed a similar pattern declining from 16.7 percent of apparent U.S. consumption in 1981 to 7.5 percent in 1982 and 6.2 percent in 1983. Market penetration jumped to 24.4 percent for January-June 1984 compared with 8 percent for the corresponding period of 1983. 27/

Total capacity and capacity utilization figures indicate that Japanese producers have the ability to further increase their market share in the United States, their largest export market since 1982, through LTFV sales. 28/ Moreover, an increasing percentage of Japanese exports of titanium sponge are being dumped in the U.S. market. Japanese capacity has increased while capacity utilization has dropped. From 1981 through January-June 1984, capacity in Japan increased from 62 million pounds per year to 81.2 million pounds per year. Production, however, declined from 55 million pounds in 1981 to 37.1 million pounds in 1982, then to 23.3 million pounds in 1983. Production increased somewhat to 14.7 million pounds in January-June 1984 compared with 12.2 million pounds for the corresponding period of 1983. 29/ Capacity utilization showed a similar decline from 88.7 percent in 1981 to 51.5 percent in 1982 and 29.3 percent in 1983 before increasing slightly to 36.2 percent during January-June 1984. 30/ Furthermore, the average unit value of titanium sponge imports from Japan dropped sharply from $7.12 per pound in 1981 to $6.53 in 1982 and $3.46 in 1983. For January-June 1984, the unit value continued to drop, to $2.87 per pound. 31/

27/ Id. at A-37.
28/ In 1983, idle Japanese capacity exceeded total U.S. consumption, including all GSA purchases.
29/ Report at A-31.
30/ Id.
31/ Id. at A-36.

Recently, GSA procurements for the National Defense Stockpile have assumed increasing importance to the domestic industry. 32/ In October 1983, GSA purchased 4,500 tons of titanium sponge for the Stockpile. This was GSA's first major unencumbered purchase of titanium sponge for the stockpile in more than 20 years. 33/ The bidding was open to both U.S. and foreign entities. Bids were solicited on three types of titanium sponge. 34/ GSA sought to purchase 9 million pounds of titanium sponge in nine lots of 1 million pounds each. GSA apparently had no preference for any one type of titanium sponge since it asked for bids up to the maximum 9 million pounds for each type. Although titanium sponge purchased for the National Defense Stockpile may

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32/ In its final LTFV determination, the Department of Commerce (Commerce) decided to exclude from suspension of liquidation and bonding or deposit requirements those entries of titanium sponge imported from Japan and the U.K. in fulfillment of sales made to the GSA during the period of Commerce's investigations. Commerce reached this decision based upon past practice, which it felt the importers had reason to rely on when the GSA contract was made. However, Commerce stated that this decision is not "immutable," and noted its intention to conduct a 6-month review of antidumping and countervailing duties under TSUS item 832.00 and 833.00. 49 Fed. Reg. 38690-91 (Oct. 1, 1984).

The respondents have argued that the decision of Commerce not to assess or collect duties on imported titanium sponge for the National Stockpile precludes the Commission from making its determination based in any way on GSA imports. We conclude, however, that the GSA sale should be considered within the scope of the investigation. The scope of the investigation is determined by Commerce's findings of LTFV sales, not its determination of whether or not dumping duties are to be collected. Since Commerce specifically found the GSA sale to be at LTFV, we should include those sales in our investigation.

33/ An "unencumbered" bid means a solicitation which contains no "buy back" provisions as did the one in 1972. In short, the 1972 GSA solicitation provided that should the government determine that there was an excess of titanium sponge in the stockpile, the two contractors, Timet and RMI, would be required to buy the sponge back. Billiton Posthearing Brief, Answer to Question 4.

34/ GSA categorizes titanium sponge as type A, B, or C, depending upon the process used in its manufacture. Titanium sponge produced by magnesium reduction/vacuum distillation is classified as type A. That produced by magnesium reduction/inert gas sweep or by magnesium reduction/acid leaching is classified as type B. Titanium sponge produced by sodium reduction/acid leaching is type C. Report at A-4.

enter the United States duty free, GSA imputed a duty of 17 percent ad valorem to each foreign bid for purposes of comparisons with domestic bids. 35/

GSA's Federal Property Resources Service awarded four contracts to three firms as a result of bids received on September 2, 1983. 36/ Philipp Brothers, Inc. (Phibro) received two contracts for delivery of titanium sponge produced in Japan. One contract calls for delivery of 2,500 short tons of type A titanium sponge for $3.20 per pound, or $3.69 per pound duty included; the other is for 500 short tons of type C titanium sponge also valued at $3.20 per pound, or $3.69 per pound duty included. 37/ Billiton Metals, Inc. (Billiton) was awarded a contract to deliver 500 short tons of type C titanium sponge produced in the United Kingdom. The Billiton contract is valued at $2.92 per pound, or $3.37 per pound duty included. 38/ The only domestic producer to be awarded a contract was Timet. Timet received a contract for 1,000 short tons of type B titanium sponge valued at $3.57 per pound. 39/ The GSA contracts provide that all titanium sponge must be delivered by October 28, 1984. 40/

The loss of two-thirds of the GSA contract to LTFV imports from Japan clearly demonstrates the imminent threat of material injury to the domestic industry. The domestic industry lost the opportunity to increase revenue and achieve volume-related efficiencies that would have occurred but for LTFV imports. In addition, the Japanese bid indicated not only their ability to supply large quantities of sponge to the domestic market, but also underscored

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35/ Id. at A-46-47.
36/ Id.
37/ Id.; Appendix E at B-28-29.
38/ Id.
39/ Id.
40/ Id.

their aggressive approach to the domestic market by bidding below market prices in order to secure a large contract. The recent GSA purchases together with indications that future solicitations are likely suggest that the U.S. government procurement market may grow in importance to the U.S. titanium sponge industry. The excessive idle capacity of Japanese producers in conjunction with their willingness to supply LTFV imports for the GSA contract in the past suggest that future contracts are likely to be secured by Japanese producers to the detriment of the domestic industry. 41/

In addition to the previous factors, we further note that the largest single commercial contract in the last few years is threatened by LTFV imports from Japan. That contract contains a meet competition clause that has already caused the domestic supplier to lose revenue, because of a lower price quote from a Japanese competitor, and could result in further loss of revenue or loss of the entire contract because of future lower price quotes from Japanese competitors. 42/ The lower price quote was unsolicited and, although later withdrawn, indicates a willingness on the part of Japanese producers to take an aggressive role in order to increase market share in the domestic market.

Finally, LTFV imports pose a threat to the ability of ITI, the only domestic nonintegrated producer of titanium sponge, to compete effectively in

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41/ We note that the Continuing Resolution, signed by the President on October 12, 1984, provides a Buy America provision for the $185 million appropriated for fiscal year 1985 procurements for the National Stockpile. That provision, however, has no application to other funds already available or later made available that could be used for foreign procurement. Moreover, it is questionable whether titanium sponge meets the condition stated in the Buy America provision that the item be "mined and refined" in the United States in sufficient quantities since the basic raw material in sponge, rutile, is generally imported from Australia. Even if the Buy America provision were applied to procurements in 1985, it has no application to subsequent procurements in 1986 or thereafter.

42/ Report at A-49-50.

the U.S. market. Despite some initial start-up problems, ITI stands ready to supply the sponge needs of the nonintegrated mill product manufacturers. 43/ The accessibility of LTFV imports not only poses a threat of lost sales and revenue to ITI, as well as the other domestic sponge producers, it also creates a disincentive for future investment in extremely capital intensive sponge production facilities.

We therefore determine that the domestic titanium sponge industry is threatened with material injury by reason of LTFV imports from Japan. Pursuant to section 736 of the Tariff Act of 1930, 44/ we further determine that the threat of material injury would not have led to a finding of material injury but for the suspension of liquidation under section 1673b(d)(1). All indications are that imports from Japan continued to increase notwithstanding the suspension of liquidation in May, 1984. Therefore antidumping duties should not be imposed retroactively but should be assessed as of the date of the publication of notice of this affirmative determination.

No material injury or threat of material injury due to LTFV imports from The United Kingdom

In the United Kingdom (U.K.) there is currently only one producer of titanium sponge. That producer has had no significant commercial sales to the United States during the period of these investigations, other than the 500 ton lot to the GSA in 1983. 45/ This single shipment, standing alone, is an insufficient basis for a finding of present material injury, in the absence of

43/ Id. at A-9. This negates the argument of the nonintegrated mill product manufacturers that there is no reliable alternative source of supply of titanium sponge, other than the Japanese.
44/ 19 U.S.C. § 1673e(b) (1980).
45/ Report at A-33.

any other indication of an intent to enter and compete in the domestic market. We therefore determine that imports from the U.K. did not cause material injury to the domestic industry.

We also determine, applying the same threat factors discussed previously to LTFV imports from the U.K., that such imports do not pose a threat of material injury to the domestic industry. First, there is no rate of increase of LTFV sales to the U.S. market since there has been only one significant sale to that market during the period of these investigations. The U.K. producer has not otherwise been a factor in the U.S. market. 46/ Therefore, there can be no meaningful evaluation of market penetration or unit value of imports. Moreover, actual capacity has declined substantially due to start up difficulties of the U.K. producer. 47/ Together with this limited actual capacity, recent capacity utilization figures exceeding 70 percent suggest that very little, if any, U.K.-produced titanium sponge will find its way into the U.S. market. 48/ Finally, it must be noted that the British producer is the only domestic source of titanium sponge in the European Community (EC), where it is sold duty-free, and was established primarily to ensure that two of its shareholders, Rolls Royce and IMI, would have adequate supplies of titanium sponge for their operations. 49/ Further, demand in the EC is likely to increase in the near future because of the increased production of the Airbus in Europe. These facts suggest that, to the extent that U.K. sponge is not consumed entirely by Rolls Royce and IMI, it will be shipped to other

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46/ Id. at A-36-37.
47/ Id. at A-33-34.
48/ Id.
49/ Id. at A-33.

members of the EC to eliminate their dependency on titanium imports from the United States and Japan.

In sum, it is unlikely that there will be future significant imports of LTFV titanium sponge from the United Kingdom. We therefore conclude that the domestic industry is not threatened with material injury by reason of LTFV imports from the United Kingdom. 50/

50/ Petitioner has urged the Commission to cumulate LTFV imports from the U.K. with those from Japan. We have concluded, however, that cumulation is not warranted in this case. Cumulation of imports does not follow as a matter of law from the fact that the product under investigation is being imported from several different countries. The Commission's decision whether to cumulate is discretionary and depends upon an evaluation of several factors.

In this case, we note that, other than a single 500 ton lot for the GSA, there have been no significant imports of U.K. sponge to the United States. Imports from the U.K. are not a factor in the commercial market, are not distributed through the same channels as Japanese imports, which are distributed through Phibro, one of the worlds largest metals dealers, and there is no evidence of coordinated action between Japanese and British producers. Furthermore, it is not likely that the British producer would bid on any future GSA contracts.

VIEWS OF CHAIRWOMAN STERN

These views explain my determination that domestic titanium sponge (sponge) producers are not materially injured or threatened with material injury by reason of LTFV imports of sponge from Japan. I have joined with my colleagues in determining that the domestic industry is not materially injured or threatened with material injury by reason of LTFV imports of sponge from the United Kingdom. 1/

This case presents a rather unusual set of circumstances. It concerns domestic production of titanium sponge, the lion's share of which is consumed internally by integrated domestic producers of titanium end products (or "mill products"). 2/ Only a very small portion of domestically-produced titanium sponge is sold in the open market. It is this small part of the domestic titanium product market about which this case is principally concerned. Yet, because this investigation involves a thin slice of what is a very dynamic market, it is necessary to first understand a few key characteristics of the overall market.

Price of Sponge

First, because such a small amount of sponge is sold on the open market, the price of sponge sold commercially is primarily, if not overwhelmingly,

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1/ I concur with the majority opinion regarding the United Kingdom case. In addition, my analysis of the condition of the domestic industry contained in these views also applies to the United Kingdom case.

2/ Of the total titantium sponge produced domestically, only a very small amount was sold commercially in 1981 and 1982. Even in data for 1983, which reflects the entrance of ITI, a nonintegrated domestic producer of sponge, the figure is still small. See Report at A-15. (Exact figures are confidential.)

derived from the demand for titanium end products. 3/ Demand for end products, in turn, is tied to the strong swings in demand for military and aerospace applications. When demand for end products is high, producers can command a price for sponge several times greater than cost. 4/

Second, the price swings for commercial sales of titanium sponge have been further aggravated by the structure of the titanium industry, which is divided into two distinct groups of end product producers, the integrated and nonintegrated producers. Integrated producers manufacture sponge, convert it to ingot, and then make various end products out of the ingot. Nonintegrated producers do not make their own sponge. Rather, they produce ingot from a mix of purchased sponge and scrap. 5/ As aptly described by the President of the petitioning domestic integrated producer, the integrated and nonintegrated producers represent different competitive strategies of generally equal risk. 6/ Their relative competitive advantages or disadvantages vis-a-vis one another depend upon whether the market is strong or weak. In a strong market, increased demand for end products prompts an integrated producer to consume its sponge internally in order to make a substantially higher-value end

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3/ The unit cost of the raw materials that are used to produce titanium sponge have remained relatively stable, but fixed operating costs as a percent of unit costs of production vary substantially in relation to volume. The term "end product" as used in these views refers to both ingot and mill products.

4/ [Confidential]

5/ Although integrated producers also use scrap, generally they utilize a 3:1 sponge-to-scrap ratio, and nonintegrateds utilize the opposite, a 1:3 ratio. See, e.g., Transcript of Final Hearing (Tr.) at 18 and 170.

6/ President, Reactive Metals, Inc. ("RMI"), Tr. at 17-18.

product. For nonintegrated producers, the result can be shortage situations or a marked increase in the price for sponge. 7/ Similarly, when demand for titanium end products goes up, the price of titanium scrap goes up. Thus, during periods of high demand, the nonintegrated producer is at a substantial cost disadvantage in producing end products compared to the integrated producers. 8/

Conversely, during periods of weak demand for titanium end products, both the price of scrap and sponge falls. 9/ This reduces the nonintegrated producers' costs, and puts them in a significantly better competitive position with respect to the price of their end products than the integrated producers. 10/ The present case is supported by all domestic sponge producers, all but one of which are integrated producers, 11/ and is vigorously opposed by nonintegrated producers of mill products.

An additional factor affecting the cost of producing sponge, and thus its price, is the fact that the cost of producing it fluctuates significantly depending upon the volume produced. 12/ Thus, during periods when capacity

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7/ For example, in 1981, a year of record high domestic demand for titanium mill products, nonintegrated producers paid prices for sponge substantially higher than the integrateds' cost of producing sponge. Compare Report at A-27 (unit costs) with prices, Tables 24-26.

8/ See Tr. at 18 (Comments of President, RMI).

9/ For example, prices for sponge fell from a range of $7.51-$9 per pound in 1981 to $4.35-$5.50 per pound in 1982. Tables 24-26. Similarly, the price of scrap fell by one-third between 1981 and 1983. See n. 27 infra.

10/ Compare, for example, billet prices of integrated and nonintegrated producers for 1983 in Report, table D-1 and petitioner's prehearing brief . See also Tr. at 18 (Comments of President, RMI).

11/ The nonintegrated sponge producer exception is ITI, a new nonintegrated producer of sponge only, with a very small share of the market. See Table 3.

12/ The greater the volume, the lower the per-unit operating costs. See, e.g., Report, A-27 (unit costs), and October 25, 1984, posthearing submission of ICF; and confidential prehearing brief of RMI, Table E.

utilization is high, the unit cost of producing sponge drops sharply compared to the costs incurred at low or mid-range capacity utilization rates. 13/

Time Period Under Investigation

The 1981-84 time period which is the focus of the Commission's analysis has been characterized by three distinct phases. In 1981, record demand for end products resulted in a "boom" 14/ year of record shipments, prices, and profits. 15/ On total company operations, the operating profit margins of sponge producers were above 30 percent. In fact, demand for sponge exceeded the total capacity of the domestic sponge producers by several million pounds. 16/ Integrated producers placed many nonintegrated producers on allocation or were unable to supply them at all. Sponge imported from Japan at high prices filled the gap. Due to the shortage problems incurred during this period and in apparent anticipation of increased demand in the near term, nonintegrated producers purchased as much sponge as was available. However, in 1982, consumption of sponge fell to half of the 1982 figure, due to a drop in end product demand, coupled with an unexpectedly large inventory overhang. Integrated producers' sponge capacity utilization rates fell by about half,

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13/ Thus, in analyzing the injury issue, over-reliance on examining price trends divorced from volume, and the effect of that volume on capacity utilization rates can be misleading. For example, when capacity utilization is less than optimal, a producer can offer a price below the current cost of production, yet still realize a profit--sometimes a significant profit--because the volume associated with the sale will result in lower costs at the time the order is manufactured, i.e., the price is calculated based upon anticipated costs of production. See, e.g., October 25, 1984, submission of ICF. Therefore, in this industry, one cannot assume that declining price trends necessarily translate into poor profitability.

14/ The "boom" period actually encompassed three years, 1979 to 1981, with 1981 representing the peak.

15/ Tr. at 19.

16/ Report, Tables 5 and 7.

causing unit costs to increase significantly. 17/ Prices for both end products and sponge fell substantially. This cost/price squeeze resulted in plummeting profitability for both sponge and overall operations. Even so, total establishment operating profit margins for some integrated producers remained in the double digits.

In 1983, domestic consumption of both mill products and sponge continued to decline, but at a substantially smaller rate than in 1982. For integrated producers, profitability fell to a loss or near loss position for both sponge and mill products. Integrated producers lost sales or lowered price as a result of competition with nonintegrated producers for sales of end products. Nonintegrated producers enjoyed the major cost advantage of very low scrap prices, 18/ because of the generally higher scrap to sponge ratio they utilize. 19/

In 1984, demand for titanium mill products increased suddenly and substantially. The president of one major integrated producer estimates that demand for titanium mill products will total between 38 million and 40 million pounds in 1984, and will be between 45 million and 50 million pounds--i.e., almost back to the near-record 1981 levels--in 1985. 20/ By mid-1984, RMI was

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17/ Report, Table 7 and A-27.

18/ Scrap prices fell between 1981 and 1983 to approximately one-third of the 1981 price. See, e.g., ICF September 24, 1984, Submission, Appendix A-2.

19/ The integrated producers argue that the prices of LTFV sponge from Japan materially contributed to the nonintegrated producers' cost advantage during this period. I do not find this argument persuasive. See discussion infra.

20/ See, Joseph Byrne, president, Timet quoted in "Titanium: A Break in Clouds", American Metal Market v. 92, No. 185 (September 21, 1984) at 1, and Report, Table 6 (Mill Products). Note that there is not a 1:1 correspondence between demand for mill products and demand for sponge. Generally, 5 percent more sponge is needed to make one pound of mill product. Also, the use of scrap must be taken into account. A Department of Defense estimate of future demand for sponge, which takes into account the scrap factor, indicates much higher demand for pounds of sponge than this source estimates for pounds of mill products.

reportedly operating at full capacity. During third quarter 1984, both RMI and Timet were at or near full capacity. 21/ In the second half of 1984, these two companies also announced price increases for mill products for the last two quarters of 1984, and the first quarter of 1985. 22/ Available profitability data on sponge producers' sponge and total operations for the third quarter of 1984 are mixed, but indicate a general strengthening of profitability. 23/ The announced price increases coupled with the very high current total capacity utilization rate for sponge production clearly indicate that sponge industry profitability for both sponge operations and mill products will continue to increase.

No Material Injury or Threat By Reason of LTFV Imports from Japan

During the 1982-1983 downturn in the mill product sales, certain integrated producers--primarily RMI--became interested in increasing sales of sponge in the commercial market. Thus, they began to compete with those selling imported sponge for sales to nonintegrated producers. In addition, the General Services Administration (GSA), in an attempt to purchase sponge at weak-market prices, solicited blind bids for nine one-million pound lots of sponge for the national defense stockpile. RMI, two other integrated producers, and ITI, the nonintegrated sponge producer, bid on the GSA purchase.

The domestic producers' share of the commercial market steadily grew from less than thirty percent in 1981 -- a year in which imports were needed to make up for shortfalls in domestic production -- to more than sixty percent in

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21/ Id. The exact figures are confidential.

22/ Price increases for sponge are not publicly reported. However, the record indicates a general firming of sponge prices in 1984. See n. 28 infra.

23/ Report, Tables 13, 14, 16, 17, as supplemented by October 26, 1984, confidential submissions to record by C. Wilson (Inv.). See also n. 29 infra.

1983. 24/ During this period, prices of commercially sold sponge steadily declined, in tandem with price declines for mill products. 25/

Domestic sponge producers argue that they were materially injured by LTFV imports of sponge from Japan during the 1982-84 period because profitability declined due in part to sales of sponge lost to the imports on the basis of price. In addition, petitioners offer a "downstream injury" argument, i.e., they argue that the purchase of LTFV imports from Japan gave the nonintegrated producers a competitive cost advantage that has resulted in lost sales or price depression of mill products.

Although the "downstream injury" analysis is one which the Commission has found to be relevant in some cases, 26/ it does not conform to the facts of this case. It was clearly the low price of scrap and the relatively greater amounts of scrap used which provided nonintegrated producers their cost advantage. Any cost advantage derived from sponge is simply irrelevant in light of the nonintegrateds' overwhelming cost advantage during downturns in the cycle related to their utilization of scrap. 27/ Therefore, if we are

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24/ Extrapolated from data on shipments plus imports minus exports. Report, tables 5 and 8.

25/ See, e.g., ICF September 24, 1984, submission, Ex. 19; Report, Tables 24-26 and Appendix D.

26/ See, e.g., Anhydrous Sodium Metasilicate from France, 731-TA-25 (1980) USITC Pub. No. 118, aff'd, Rhone Poulenc, S.A. v. United States, ___ C.I.T. ___, 6 ITRD 1001, 1008-9.

27/ Not only are scrap prices always lower than sponge prices, regardless of whether the market is weak or strong, but typically nonintegrated producers use three times as much scrap as sponge in manufacturing a pound of end product. See, e.g., ICF September 24, 1984, submission, App. A-2 (scrap prices) and Report, Tables 24-26. Thus even though the price of sponge (as well as scrap and end products) has declined, and even assuming, arguendo, that the LTFV imports aggravated the decline in sponge prices, any cost savings related to sponge is irrelevent in relation to the overwhelming cost

(Footnote continued)

to find material injury or threat, it must be in the context of commercial sales of sponge, not in terms of alleged effects of the imports under investigation on the price of the integrated producers' end products or on the effect of end product sales on the financial performance of the integrated producers.

Condition of Sponge Producers

I generally concur with the majority's description of the condition of the sponge producers' operations, except for that regarding profitability, and their failure to acknowledge the most recent industry capacity utilization rate of 82 percent.

While it is true that domestic sponge producers experienced a price/cost squeeze on the profits earned through sales of sponge in 1982 and 1983, in 1984, as mill production increased, sponge capacity utilization shot up to 82 percent, unit costs declined substantially, and sponge prices increased. 28/ Profitability on sponge sales increased substantially. 29/

(Footnote continued)
advantages related to scrap, and to not having the fixed costs of the sponge production facilities. Petitioner's argument here would have the tail wagging the dog. RMI's presentation of sponge costs as a percentage of its own costs is obviously that of an integrated producer that uses substantially more sponge per pound of end product and is thus misleading.

28/ See Table 26 and Table 24, including note 5. Also, RMI was able to negotiate a price increase in a large contract in September, 1983, Report at A-49-50.

29/ [Confidential]. Also, the overall establishment figures for all sponge producers, though of limited value since they reflect mostly sales of end products, also show a general strengthening. See Report Tables 12-17, as supplemented by October 26, 1984 summary (Office of Investigation).

Another point that deserves emphasis is that the industry is cyclical. The financial performance of the sponge producers on their commercial sales of sponge 30/ has varied dramatically during the three year period. 31/

Imports from Japan

In 1981, imports from Japan accounted for most U.S. commercial sponge sales. However, they largely filled a shortfall in supply occasioned by record demand in that year. In 1982 and 1983, imports from Japan declined at a rate greater than the drop in domestic consumption. 32/ With respect to the commercial market for sponge, the market share for imports from Japan actually declined from over 70 percent in 1981 to less than 40 percent in 1983, and the market share of domestic producers increased during this period. 33/

30/ Unfortunately, only two domestic producers provided profitability data on their commerical sales of sponge. Others provided such data only for total operations, the vast majority of which reflect sales of mill products not the subject of this investigation. Of the two that did provide the data, one was a small, new entrant whose data was not representative and did not cover the entire period. The other's profitability data on sponge combined commercial sales with intracompany transfers. The data on commercial sales that I cite was extrapolated from Table 12. In addition, another domestic producer supplied cost data for sponge operations. For the remaining domestic producers, I examined data on overall operations. However, since these data reflect mostly end products, not sponge production, they are obviously of very limited value, if not misleading. This is the best information available to me at this time. Since separate data (except for employment) is available for all other categories, since the separate profitability data which is in the record is reliable, and since data on total operations masks the small contribution of sponge production, I do not find it appropriate to utilize section 771(4)(D). I do not know whether additional reliable separate data on commercial sponge sales could have been provided based upon reasonable cost-allocations, but it clearly would have been helpful.

31/ [Confidential]

32/ See Report, Tables 5 and 21.

33/ See n. 24 supra.

The exception to this trend was for the January-June 1984 period, when the market share for imports from Japan increased significantly, to close to 70 percent, and domestic market share declined. 34/ However, this increase is attributable to the GSA stockpile purchase, which presents troublesome causation issues. 35/

The General Services Administration (GSA) Stockpile Purchase

In September 1983, GSA solicited bids for 9 million pounds of sponge. Producers were asked to bid on nine lots of 1 million pounds each. Producers adopted various bidding strategies. The importer of Japanese sponge bid the same price for all nine lots. Timet bid on all nine lots using an "escalator" approach, bidding lower than average prices on some and higher than average prices on others. RMI bid on only four lots, offering the same price for all four lots. GSA awarded the bids on the basis of the nine lowest prices offered regardless of lot. 36/ The parties did not seem to be aware that GSA would make the awards in this manner. The importer of Japanese sponge won six lots of 1 million pounds each, Timet won two lots, and Billiton, part owner of the U.K. producer, won one lot. Other domestic producers bid on the purchase, but they would not have won in any event, since they were outbid by other domestic producers. 37/ Absent awards to the imports, RMI would have won four lots and Timet would have won three more lots than it did. 38/

34/ See n. 24 supra.

35/ If imports for the GSA stockpile are not included as part of commercial consumption, the market share of these imports is only one percentage point greater than for the comparable January-June period in 1983. Id.

36/ See Report, Appendix E and Memorandum, Office of Economics (October 25, 1984).

37/ Id.

38/ Id.

The circumstances surrounding GSA's awarding of the bids is complicated, if not mystifying. The respondents have persuasively demonstrated that the importers bid an average price that was in line with current market prices, particularly with the price which the trade press reported that RMI had offered Martin Marietta regarding a very large volume contract concluded in May of that year. 39/ Further, respondents have persuasively illustrated that Timet lost the lots that it did because of its "escalator" bidding strategy, coupled with GSA's not factoring into the price the volume discount which Timet offered.

Third, respondents argue that RMI lost the lots it bid on because of its pricing strategy. 40/

In the preliminary investigation, I joined a unanimous Commission in an affirmative threat finding. In this final investigation, there are, of course, two major changes: (1) there is a fully developed record on both the circumstances as they existed at the time of the preliminary finding and subsequent developments; and (2) the standard for an affirmative determination is much stronger than the mere showing of "a reasonable indication." In the preliminary investigation, I found that the loss of this potential nine million pound GSA purchase constituted a reasonable indication of threat of

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39/ See ICF submission of September 24, 1984, at 23-28, and Philipp Bros. et. al posthearing brief at 2.

40/ Respondents argue that [confidential].

material injury. In this final investigation, respondents have cast substantial doubt as to whether this loss was by reason of LTFV imports, or GSA, or the individual companies' pricing and bidding strategies.

Furthermore, the irony of RMI's loss of the GSA purchase is that, regardless of the cause, subsequent events have substantially diminished its significance. Had RMI won the four lots, this would have put them at full capacity utilization. Having lost the GSA business, RMI was able to pick up new orders at a time when the market and prices were firming. 41/ Thus, even RMI acknowledges that the subsequent new orders eclipsed more than half the potential volume lost in the GSA bid. 42/ In addition, the value of these substitute orders or substitute internal production was quite respectable. 43/

Another major argument raised by petitioner is that competition posed by imports from Japan forced it to lower its prices to Martin Marietta, a major account. The importers argue that it was they who lost this account to RMI as a result of RMI's aggressive pricing and concessionary terms. 44/ The chronology of events and charges by both sides is again complex. RMI won the contract in May 1983, and effectively negotiated a significant price increase for 1984 shipments in September, 1983, at a time when the importer of Japanese

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41/ [Confidential]
42/ RMI prehearing brief at 23-24.
43/ See, e.g., Report, Table 24, n. 5 and n. 29 supra.
44/ See Philipp Bros. et al. posthearing brief at 5.

sponge was soliciting orders in the U.S. market. The importer withdrew its offer to Martin Marietta upon the filing of this case in late November 1983. Nevertheless, in January, 1984, Martin Marietta successfully negotiated a small decrease in the price increase for January-June 1984 to, as it explained at the time, "reflect current market conditions." 45/

Another domestic producer, ITI, offered examples of lost sales or price depression related to imports from Japan. However, ITI only began operations in late 1982, and has experienced start-up problems, has higher than average costs that during a weak market made its product noncompetitive with most domestic producers as well, and has not yet obtained certification from all military and aerospace end users. 46/ In addition, it accounts for only a very small amount of domestic production.

No Threat of Material Injury by Reason of Imports from Japan

Domestic demand for titanium sponge currently is very high and growing. Domestic consumption of sponge in 1984 might well reach 62 million pounds, 47/ which is equal to current total domestic capacity. A recently revised

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45/ See Report at A-49 and [Confidential].

46/ See Report, A-50-51. Also, ITI bid on only one lot of the GSA bid (ITI admitted that it was all that ITI felt it could provide) and offered a price that was not competitive even with other domestic producers. See Report, App. E and ITI posthearing brief at 4.

47/ Based upon annualizing figure for January-June 1984. Although approximately [*] million pounds of the interim figure is attributable to sponge related to the GSA stockpile purchase, [*] is expected to be reflected in consumption figures for the second half of 1984. In addition, since certain large domestic producers have been running at full or near full capacity during the entire second half of 1984, annual consumption might well be more than a doubling of the interim figure.

Department of Defense estimate of sponge demand, when supplemented by the amount of the 1983 stockpile purchase, indicates that demand will reach 59 million pounds, or very near total domestic capacity in 1984. 48/ In addition, it also projects a steady climb in domestic demand for sponge from 53 million pounds in 1985 to 63 million pounds in 1989. 49/ Any further GSA purchases will be in addition to these amounts.

The majority affirmative determination of threat presumably is based on the possibility that future imports from Japan could result in lost sales or price depression, particularly because future GSA purchases will apparently be open to imports. However, the facts of this case indicate that such a scenario is most unlikely and may well fly in the face of basic economic reality.

The current total industry capacity utilization rate is 82 percent; the two largest producers that account for most of domestic production already are at or approaching 100 percent. 50/ These integrated producers will be interested in using their sponge internally rather than selling it in the commercial market. The one nonintegrated sponge producer is experiencing start-up problems and clearly cannot satisfy more than a small amount of the nonintegrateds' demand for sponge. Thus, the most likely scenario resembles

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48/ Calculated based on July 19, 1984 Defense Economic Impact Modeling System Strategic Materials Requirements Model Forecast for Titanium Sponge (Short tons) (converted to pounds) plus GSA purchase.

49/ These forecasts take into account the "scrap factor," i.e., the fact that capacity to produce end products can be effectively expanded through usage of scrap.

50/ See October 26, 1984 Office of Investigations Submission.

what occurred in 1981 when imports from Japan were necessary to meet the domestic shortfall. 51/

Furthermore, it is clear that in a strong market, prices for sponge will rise, and rise sharply, as they did during the last peak of the cycle, for both domestic and imported sponge. 52/ Moreover, as capacity utilization increases, costs are falling substantially. Thus, the profit margins on sales of sponge are currently good, and will only improve.

Finally, I have considered the increasing volumes of imports from Japan in the interim 1984 period, increases in Japanese capacity, and the excess capacity of Japanese sponge producers. 53/ However, the demand and capacity utilization data for the domestic sponge industry persuade me that any future increases in imports from Japan will largely supplement, rather than displace, domestic production and that, in any case, prices and profitability related to commercial sales will be quite good.

51/ Petitioner has emphasized that because of the additional sponge capacity of Japanese producers installed since 1981, the 1981 situation is unlikely to recur. However, the important point is not the ability of the Japanese companies to supply sponge, but the desire of U.S. producers in a strong market to sell it. Since U.S. capacity to produce titanium end products has not increased significantly, it appears that domestic sponge producers representing the vast bulk of domestic production will continue to favor internal consumption. See Report, Table 6.

52/ See, e.g., Report, Tables 24-26. Since there is greater world supply of sponge now than in 1981, the price increases may not be as extreme. However, there are already indications that prices are firming. And based upon prices for January-June 1984, the record indicates that profitability, is generally good on commercial sponge sales at current prices.

53/ The Japanese clearly have capacity substantially in excess of what can be converted into end products by Japanese producers and low capacity utilization rates for 1983 and interim 1984. However, demand for end products has increased in the E.C., as well as the United States. Also, the sponge capacity of at least the United Kingdom has fallen since 1981. Moreover, the more fundamental point is that, as historical data on 1981 indicate, during periods of strong demand for end products, domestic producers accounting for the overwhelming amount of sponge production will prefer to consume sponge internally.

During periods of high demand for mill products, the integrated producers have demonstrated little interest in selling sponge commercially when they can use it internally to produce higher value end products. 54/ Future imports of sponge from Japan may compete with ITI, the one small nonintegrated domestic sponge producer. Even this, however, is unlikely; it is more probable that during periods of high demand, ITI will supply Wyman-Gordon, a nonintegrated producer which is part owner of ITI. In addition, ITI's sponge has yet to obtain certification for various defense and aerospace end uses. Thus, due largely to what are and will continue to be robust market conditions within the United States, I have concluded that there is no real and imminent threat of material injury.

54/ It is relevant to note in this regard that only small amounts of titanium mill products are currently imported from Japan. Apparently most imported mill products from Japan have not been certified by major U.S. defense contractors. See Tr. at 116-17.

TITANIUM SPONGE

SEPARATE VIEWS OF VICE CHAIRMAN LIEBELER

I concur with the Commission majority in finding no material injury by reason of imports in this case. I also find that there is no threat of material injury to the domestic industry by reason of LTFV imports from Japan. In order to conclude that LTFV imports constitute a threat to the domestic industry, the threat must be both real and imminent and not a mere possibility.

The domestic industry is not currently injured. Capacity utilization in the third quarter of 1984 has risen to almost 100% from 45.1% in 1983. This leads me to conclude that the sales prices of the domestic industry are far above their average cost of production. Firms in this industry, as in all industries, have an upward sloping supply curve, i.e., the higher the price the more they produce. Therefore, if capacity utilization is 100%, prices must be relatively high. It is doubtful that the firms in the industry would be using their capital stock so intensively and not earning a healthy return.

The majority is apparently basing its affirmative determination of threat on the sharp rise in imports from Japan over the last six months. Imports from Japan were 16.7% of apparent U.S. consumption in 1981, 7.5% in 1982, 6.2% in 1983, and 24.4% from January to June of 1984. This increase in imports is not surprising in light of the fact that the domestic industry has been operating at full capacity in the last six months.

The U.S. aerospace industry and GSA are large players in the supply and demand equation. When their purchases increase, prices rise and more players want to enter the game on the supply side. This explains the increased Japanese participation in the U.S. market. Rather than the Japanese being a likely cause of future decline in the domestic titanium sponge industry, it is the health of that industry that has attracted the Japanese into the market. Therefore, we can anticipate that if the market softens and price falls, the most likely scenario is that the Japanese will return from whence they came as they did in 1982 and 1983. Such a turn of events is not likely, however, in the near term. Production of the B-1 bomber is scheduled to increase this year, and this combined with a continuing U.S. military buildup, will result in an increase in the demand for titanium.

Japanese capacity has increased over the last several years from 62 million pounds in 1981 to 81.2 million pounds at present. This gradual increase in capacity correctly anticipated an increase in world demand for titanium over the last two years. It was neither sharp nor inappropriate and does not support the assertion that the domestic industry is on the verge of an imminent decline. I see no likelihood of injury to the domestic industry in the foreseeable future.

INFORMATION OBTAINED IN THE INVESTIGATIONS

Introduction

On November 28, 1983, petitions were filed with the United States International Trade Commission and the U.S. Department of Commerce by counsel on behalf of RMI Co., Niles, OH, alleging that imports of titanium sponge from Japan and the United Kingdom are being, or are likely to be, sold in the United States at less than fair value (LTFV) and that an industry in the United States is materially injured or threatened with material injury by reason of imports of such merchandise. Accordingly, the Commission instituted preliminary investigations (Nos. 731-TA-161 and 162 (Preliminary)) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)) to determine whether there was a reasonable indication that an industry in the United States was materially injured or threatened with material injury, or whether the establishment of an industry in the United States was materially retarded, by reason of the subject imports.

As a result of its preliminary investigations, the Commission, on January 12, 1984, notified the Department of Commerce that there was a reasonable indication that an industry in the United States was threatened with material injury by reason of the alleged LTFV imports of titanium sponge from Japan and the United Kingdom. 1/ Consequently, Commerce continued its investigations into the nature and extent of the alleged LTFV sales.

On May 11, 1984, Commerce published in the Federal Register (49 F.R. 20042) its preliminary determinations that there was a reasonable basis to believe or suspect that titanium sponge from Japan and the United Kingdom is being, or is likely to be, sold in the United States at LTFV within the meaning of section 731 of the Tariff Act of 1930 (19 U.S.C. § 1673). Accordingly, effective May 11, 1984, the Commission instituted investigations Nos. 731-TA-161 and 162 (Final) 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 of such merchandise.

Notice of the institution of the Commission's final investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register on May 31, 1984 (49 F.R. 22724). Following a 60-day extension of its final determinations by the Department of Commerce, the Commission revised its hearing date (Federal Register of July 18, 1984, 49 F.R. 29167). 2/ The hearing was held in Washington, DC, on September 26, 1984. 3/ All persons who

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1/ Commissioner Haggart determined that there was a reasonable indication that an industry was materially injured by reason of alleged LTFV imports of titanium sponge from Japan and the United Kingdom. Vice Chairman Liebeler and Commissioner Rohr were not members of the Commission at that time.

2/ Copies of the Commission's notices are presented in app. A.

3/ A list of witnesses appearing at the hearing is presented in app. B.

requested the opportunity were permitted to appear in person or to be represented by counsel.

The Department of Commerce published its final affirmative determinations as to the question of LTFV sales of titanium sponge from Japan and the United Kingdom in the Federal Register on October 1, 1984. 1/ The applicable statute directs that the Commission make its final determinations within 45 days after Commerce's final determinations. 2/ The Commission's briefing and votes in these investigations were held on October 29, 1984.

The Product

Description and uses

Titanium sponge is a porous, brittle form of titanium, a highly ductile metal which has a high strength-to-weight ratio. Titanium has low thermal and electrical conductivity and is one of the most corrosion-resistant structural metals. Sponge is an intermediate product used to produce titanium ingot, which in turn is used to make slab, billet, bar, plate, sheet, and other titanium mill products. 3/

Because of its desirable properties, titanium and its alloys are widely used in both aerospace and nonaerospace applications. Aerospace applications include use in gas turbine engines for both military and commercial aircraft (where use of titanium results in reduced engine weight while maintaining strength), airframes, and in various applications in missiles and space vehicles. Nonaerospace applications include use in valves, pumps, and piping for handling seawater on ships, in chemical processing equipment, and in heat exchangers. Recently, demand for titanium has increased for use in pollution control equipment. Although nonaerospace uses now constitute the fastest growing market for titanium metal, aerospace applications still account for the bulk of domestic consumption. 4/ The remainder is divided primarily between use in steel (and other alloys) and in industrial applications.

Production processes

The production of titanium sponge involves a process of chlorination and reduction of titanium concentrates (ilmenite ($FeTiO_3$) or rutile (TiO_2)).

1/ Copies of Commerce's notices are presented in app. C.

2/ The Commission's administrative deadline for notifying Commerce of its determinations in these cases is Nov. 7, 1984.

3/ In 1983, domestic titanium mill product shipments consisted primarily of billet (40 percent); sheet, strip, plate, pipe, and tubing (40 percent); and bar and rod (15 percent).

4/ According to the Bureau of Mines, in 1983, aerospace applications for titanium metal accounted for 60 percent of consumption, with steel (and other alloys) and industrial uses each accounting for 20 percent. Some estimates place aerospace applications at closer to 75 percent of domestic consumption during the period of investigation (e.g., ICF, Inc., Prehearing Economic Report, pp. 6 and 7).

The concentrates react with chlorine gas and coke in a fluidized-bed reactor to form impure titanium tetrachloride ($TiCl_4$), sometimes referred to as "tickle." The titanium tetrachloride is then combined with magnesium (Kroll process) or with sodium (Hunter process) to form titanium sponge and a chloride salt. The salt and residual magnesium or sodium metal must then be separated from the titanium sponge in a purification process.

In the basic Kroll process, residual magnesium chloride and magnesium metal are separated from the sponge by vacuum distillation, by an inert gas sweep, or by acid leaching, as follows:

Vacuum distillation: In this process, the reactor pot is heated to a temperature of 900°C, and a vacuum (less than 100 microns of mercury) is applied to recover the magnesium chloride by condensation. Vacuum distillation is employed by International Titanium Inc. (ITI), Moses Lake, WA. It is the standard purification step used in the Soviet Union. It is also used in Japan by Toho Titanium Co., Ltd., Osaka Titanium Co., Ltd., and Showa Titanium Co.

Inert gas sweep: This process involves sweeping the heated reaction pot with helium gas to reduce volatile magnesium chloride and magnesium to a low level and subsequently recovering them by condensation. This method is used by Oregon Metallurgical Corp. (Oremet), Albany, OR.

Acid leaching: In this process, the reaction pot is cooled in a "dry" chamber to avoid reaction of retained salts in the sponge with moisture in the air. The magnesium chloride and residual magnesium metal are leached out using buffered nitric/hydrochloric acid solution, and the titanium sponge is recovered. This method is used by Titanium Metals Corp. of America (Timet), Henderson, NE.

In the basic Hunter process, titanium sponge and sodium chloride (the combined reaction product is referred to as "spalt") are mechanically chipped from the reactor pot, crushed to lumps approximately 3/8 inch in diameter, and leached in dilute hydrochloric acid solution to dissolve the salt. The washed sponge is dried, screened to remove fines, and pressed into compact blocks. The Hunter process is used by the petitioner, RMI Co. (RMI), at its Ashtabula, OH, plant. It is also used by Nippon Soda, Ltd., of Japan, and by Deeside Titanium, Ltd., of the United Kingdom.

Both the Kroll process and the Hunter process result in products containing their own characteristic impurities. These impurities can be categorized into two groups: nonvolatiles, such as oxygen and iron; and volatiles, such as magnesium and magnesium chloride in the Kroll process and sodium and sodium chloride in the Hunter process. The Kroll process results in higher iron impurity content near the reaction pot walls; the Hunter process results in a more homogeneous product.

According to a recent study by the National Research Council, 1/ neither leaching nor vacuum distillation can remove all volatiles, although the latter

1/ National Materials Advisory Board, Titanium: Past, Present, and Future, Washington, 1983, pp. 53-54.

method removes considerably more. Minimizing volatiles in the sponge is significant in simplifying and improving subsequent melting operations. Efficiency of the vacuum arc melting of sponge into ingots is reduced by the evolution of volatiles. The volatiles condense on the mold and mar the ingot surface, thereby increasing furnace maintenance costs and requiring the use of larger vacuum pumping systems. The integrated domestic producers have found it economical to employ vacuum arc melting with steam ejectors to back up large vacuum diffusion pumps as the final purification step for acid-leached sponge. This refining is an integral part of the melting and casting of the ingot. However, nonintegrated melters claim they are not adequately equipped to handle high-volatile sponge.

The U.S. General Services Administration (GSA), which purchases titanium sponge for utilization in the National Defense Stockpile, categorizes titanium sponge as type A, B, or C, depending upon the process used in its manufacture. Sponge produced by magnesium reduction/vacuum distillation is classified as type A; that produced by magnesium reduction/inert gas sweep or by magnesium reduction/acid leaching, as type B; and that produced by sodium reduction/acid leaching, as type C. GSA specifications for each type are presented in table 1.

Table 1.--Titanium sponge: GSA specifications for product to be utilized in the National Defense Stockpile, by components

(In percent, dry-weight basis)

Component 1/	Type A	Type B	Type C
Titanium	99.60	99.10	99.60
Nitrogen	.01	.015	.015
Carbon	.02	.025	.02
Sodium	-	-	.19
Magnesium	.08	.50	-
Aluminum	-	.07	-
Chlorine	.10	.20	.10
Iron	.08	.10	.04
Silicon	.04	.04	.04
Hydrogen	.005	.03	.05
Oxygen	.10	.10	.10
Water	.02	.02	.02
Other (max.)	.05	.05	.05

1/ The specifications for titanium content are the minimum allowable; those for the other components are the maximum.

Source: U.S. Department of Commerce.

U.S. tariff treatment

Titanium sponge is currently classified under item 629.14 of the Tariff Schedules of the United States (TSUS). 1/ The column 1 rate of duty 2/ is 16.5 percent ad valorem (table 2). As a result of the Tokyo round of the Multilateral Trade Negotiations, the column 1 rate is scheduled for annual staged reductions to 15 percent ad valorem, effective January 1, 1987.

Table 2.--Titanium sponge: U.S. rates of duty as of Jan. 1, 1980, Jan. 1, 1984, and Jan. 1, 1987

1978 and 1979 TSUSA item No.	1980-84 TSUSA item No.	Article description	Rate of duty				
			Col. 1			"LDDC" column	Col. 2
			Jan. 1, 1980	Jan. 1, 1984	Jan. 1, 1987		
629.1520	629.1420	Titanium sponge.	18% ad val.	16.5% ad val.	15% ad val.	15% ad val.	25% ad val.
833.00	833.00	Articles for the General Services Administration: Materials certified by it to the Commissioner of Customs to be strategic and critical materials procured under the Strategic and Critical Materials Stock Piling Act (50 U.S.C. 98-98h)	Free	Free	Free	1/	Free.

1/ Not applicable.

The rate of duty applicable to imports from least developed developing countries (LDDC's) 3/ is 15 percent ad valorem and the column 2 rate 4/ is

1/ Prior to 1980, the item number for titanium sponge was 629.15.

2/ The col. 1 rates of duty are most-favored-nation (MFN) rates and are applicable to imported products from all countries except those Communist countries and areas enumerated in general headnote 3(f) of the TSUS. The People's Republic of China, Hungary, Romania, and Yugoslavia are the only Communist countries eligible for MFN treatment. However, MFN rates would not apply to products of developing countries if preferential tariff treatment is granted under the GSP or CBI program or under the LDDC rate of duty column.

3/ The preferential rates of duty in the "LDDC" column reflect the full U.S. MTN concession rates implemented without staging for particular items and apply to covered products of the least developed developing countries, enumerated in general headnote 3(d) of the TSUS. Where no rate of duty is provided in the "LDDC" column for a particular item, the rate of duty in col. 1 applies.

4/ The col. 2 rates of duty apply to imported products from those Communist countries and areas enumerated in general headnote 3(f) of the TSUS.

25 percent ad valorem. In addition, antidumping duties are currently being assessed on imports of titanium sponge from the U.S.S.R.

Articles classified under item 629.14 are not eligible for duty-free entry under the Generalized System of Preferences (GSP). 1/ However, imports from designated Caribbean countries may be eligible for duty-free treatment in accordance with the Caribbean Basin Initiative (CBI). 2/

Titanium sponge which is procured by the GSA under the Strategic and Critical Materials Stock Piling Act (50 U.S.C. 98-98h) is imported free of customs duties under TSUS item 833.00. In its final determinations, the Department of Commerce decided to exclude from suspension of liquidation and any bonding or deposit requirements those entries of titanium sponge imported from Japan and the United Kingdom in fulfillment of sales made to the GSA during the period of Commerce's investigations. Commerce reached this decision based on past practice, which it felt the importers had reason to rely on when the GSA contracts were awarded. However, Commerce stated that this decision was not "immutable," and noted its intention to conduct a 6-month review of the waiver of antidumping and countervailing duties under TSUS items 832.00 and 833.00 3/

1/ The GSP is a program of nonreciprocal tariff preferences granted by the United States to developing countries to aid their economic development by encouraging greater diversification and expansion of their production and exports. The GSP, as enacted in title V of the Trade Act of 1974 and implemented by Executive Order No. 11888 of Nov. 24, 1975, applies to merchandise imported on or after Jan. 1, 1976, and is scheduled to remain in effect until Jan. 4, 1985. It provides for duty-free entry of eligible articles imported directly from designated beneficiary developing countries.

2/ The CBI is a program of nonreciprocal tariff preferences granted by the United States to developing countries in the Caribbean Basin area to aid their economic development by encouraging greater diversification and expansion of their production and exports. The CBI, as enacted in title II of Public Law 98-67 and implemented by Presidential Proclamations 5133 of Nov. 30, 1983, and 5142 of Dec. 29, 1983, applies to merchandise entered, or withdrawn from warehouse for consumption, on or after Jan. 1, 1984, and is scheduled to remain in effect until Sept. 30, 1995. It provides for duty-free entry of eligible articles imported directly from designated developing countries in the Caribbean Basin area.

3/ The question of levying duties on imports of strategic and critical materials was addressed by the Continuing Resolution which incorporates the Conference Report on H.R. 5789, the Treasury, Postal Service and General Government Appropriations Act (PL 98-473). This resolution provides that, during the fiscal year ending Sept. 30, 1985, purchases of strategic and critical materials for the National Defense Stockpile must be domestically sourced unless such materials are not mined and refined in the United States or are not available in sufficient quantities to meet strategic requirements.

Nature and Extent of Sales At LTFV

In its final investigations, the Department of Commerce examined the sales of three Japanese producers (Osaka, Nippon Soda, and Toho) and one United Kingdom producer (Deeside) during June 1, 1983, to November 30, 1983. These firms are the only known producers in their respective countries that export titanium sponge to the United States.

To determine whether sales of the subject merchandise in the United States were made at LTFV, Commerce compared the United States price with the foreign market value. Foreign market value was based on the constructed value of the imported merchandise. According to Commerce's final determinations, the following weighted-average LTFV margins (in percent) were found:

Producing firm	Weighted average margin
In Japan:	
Osaka Titanium Co., Ltd	15.09
Nippon Soda Co	56.37
Toho Titanium Co., Ltd	34.25
All other manufacturers, producers, and exporters	28.47
In the United Kingdom:	
Deeside Titanium, Ltd	109.06
All other manufacturers, producers, and exporters	109.06

Commerce arrived at these margins after analyzing both sales made in the commercial market and the sale to the GSA. For Osaka, Commerce examined *** transactions (*** commercial sales and *** shipments to the GSA). The commercial sales involved *** tons of sponge, with margins ranging from *** percent to *** percent. The GSA shipments, totaling *** tons, had margins of *** percent to *** percent.

Commerce examined *** of Toho's transactions (*** commercial sales (*** tons) and *** shipments to the GSA (*** tons)). The margins on Toho's commercial sales ranged from *** percent to *** percent; margins on its GSA shipments ranged from *** percent to *** percent. For Nippon Soda, Commerce examined *** commercial sales involving *** tons of titanium sponge and found margins of *** percent and *** percent. Commerce found a margin of *** percent on Nippon Soda's sale of *** tons to the GSA.

Inasmuch as Deeside's only sale in the United States during the period of Commerce's investigation involved the GSA stockpile purchase, this was the only U.K. sale used in Commerce's determination.

U.S. Producers

The production of titanium sponge is a capital- and technology-intensive operation. Consequently, the total number of sponge producers worldwide is

relatively small. The following four companies presently produce titanium sponge in the United States:

ITI, owned principally by Ishizuka Research Institute and Mitsui & Co., Ltd., both of Japan, and by Wyman-Gordon Co. and other U.S. interests.

Oremet, publicly owned, with Armco Steel Corp. as the major stockholder.

RMI, owned by National Distillers & Chemical Corp. and United States Steel Corp.

Timet, jointly owned by NL Industries and Allegheny International, Inc.

In 1980 and 1981, two domestic zirconium producers, Teledyne Wah Chang Albany, of Albany, OR, and Western Zirconium Co., of Ogden, UT, converted some of their zirconium production capacity to titanium sponge production. Their combined capacity at that time was *** pounds, but they never approached that level of production. Because of the sluggish titanium market in 1982 and 1983, both companies converted their titanium sponge capacity back to zirconium. 1/ Neither firm currently has the capacity to produce titanium sponge.

Two of the present sponge producers, Timet and ITI, purchase rutile from Australia. The rutile is then used to produce titanium tetrachloride for reduction to sponge. The other sponge producers purchase their titanium tetrachloride from SCM (owned by Gulf and Western until mid-1983), a large manufacturer of this raw material.

Two firms---RMI, the petitioner, and Timet---account for *** percent of current domestic capacity to produce titanium sponge, and in 1983 they accounted for almost *** percent of aggregate U.S. production of such merchandise (table 3). RMI has produced sponge by the Hunter process at its Ashtabula, OH, plant since 1957. RMI's recent investments include $3.5 million in a 4-million-pound-per-year expansion of its sponge plant and another $8 million in expanding its Niles, OH, melting plant. RMI's current sponge-producing capacity is *** pounds per year; its ingot-producing capacity is 24.0 million pounds per year.

Timet has used the basic Kroll process since the early 1950's to produce sponge at its Henderson, NV, facility. The company is currently pursuing a $45 million modernization program (most of the plant's electrolytic cells for making magnesium date from World War II), which will include a capacity expansion from its current level of *** pounds per year to 32.0 million pounds per year. As an integrated producer, Timet also has the capacity to produce 34.0 million pounds of titanium ingot per year.

1/ Teledyne Wah Chang Albany ***.

Table 3.--Titanium sponge: Current U.S. producers, types of production processes employed, share of U.S. production in 1983, and annual capacity

Producer	Process	Share of production in 1983	Annual capacity 1/
		Percent	Million pounds
ITI	Magnesium reduction/vacuum distillation.	***	***
Oremet	Magnesium reduction/inert gas sweep.	***	***
RMI	Sodium reduction/acid leach.	***	***
Timet	Magnesium reduction/acid leach.	***	***

1/ As of June 30, 1984.

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

Oremet has produced sponge in Albany, OR, since 1966. The plant, which uses magnesium reduction and an inert gas sweep, is integrated from sponge to finished titanium articles. Oremet recently completed a 50-percent expansion of its sponge facility, as well as a $5 million expansion of its mill products facility. Oremet's current sponge-producing capacity is *** pounds per year; its ingot-producing capacity is 16.0 million pounds per year.

ITI is a newcomer to the industry, producing sponge only since March 1982. ITI uses magnesium reduction followed by vacuum distillation at its new $25 million plant at Moses Lake, WA. ITI's current sponge-producing capacity is about *** pounds per year, but there are plans to double that capacity in the next few years. At present, ITI produces only sponge. However, Wyman-Gordon, which owns more than 40 percent of ITI, has plans to invest $24 million over the next 2 years to build a new 3-million-pound-per-year ingot facility and ingot-forging operation at its Grafton, MA, plant. The melt shop for the ingot facility was completed in May 1984.

U.S. Importers

The net importer file maintained by the U.S. Customs Service identifies *** firms that imported titanium sponge from Japan and the United Kingdom during 1983. Over 98 percent of the imports were from Japan. Both the largest and the second largest importers of titanium sponge in 1983 ***. The third largest importer ***.

U.S. Market and Channels of Distribution 1/

The three major stages in the production of titanium metal products are sponge production, ingot production, and conversion of ingots into mill products. The principal U.S. consumers of titanium sponge are the three integrated (that is, they also produce titanium ingots and mill products) sponge producers, RMI, Timet, and Oremet, and four nonintegrated ingot producers or melters, Martin Marietta Aluminum, Inc., Howmet Turbine Components Corp., Teledyne-Allvac, and Lawrence Aviation Industries, Inc. The integrated producers keep the great bulk of the sponge they make for their own use. In 1983, nearly *** percent of total domestic sponge production was consumed captively by the integrated producers, down somewhat from more than *** percent in 1981 and 1982. The nonintegrated melters, which account for about 30 percent of U.S. ingot-production capacity (table 4), obtain sponge from either domestic or foreign sources and then convert it into ingots. The

Table 4.--U.S. capacity to produce titanium sponge and titanium ingot, by firms, 1982

(In thousands of pounds)

Firm and plant location	Annual capacity to produce--	
	Titanium sponge	Titanium ingot
Timet		
Henderson, NV	30,000	34,000
RMI		
Ashtabula, OH	19,000	--
Niles, OH	--	24,000
Oremet		
Albany, OR	9,000	16,000
ITI		
Moses Lake, WA	5,000	--
Teledyne Wah Chang Albany		
Albany, OR	3,000	2,000
Western Zirconium Co.		
Ogden, UT	1,000	1,000
Howmet Corp., Alloy Division		
Whitehall, MI	--	10,000
Lawrence Aviation Industries, Inc.		
Port Jefferson, NY	--	2,000
Martin Marietta Aluminum, Inc.		
Torrance, CA	--	8,000
Teledyne Allvac		
Monroe, NC		8,000
Total	67,000	105,000

Source: U.S. Department of the Interior, Bureau of Mines, Minerals Yearbook, Vol. I, Metals and Minerals, 1982, p. 849.

1/ A more detailed description of marketing practices and the pricing of titanium sponge is presented in the pricing section of this report.

mill product producers, which number approximately 18, buy either ingots or a more advanced product for further processing. 1/

All four of the current titanium sponge producers have supported the petitions throughout these investigations. The four current nonintegrated producers of titanium ingots oppose the petitions. The latter contend that the integrated sponge producers prefer to captively consume their entire output of sponge--except when demand is low and they are forced to solicit customers in order to better utilize their sponge productive capacity--and only sporadically sell sponge on the open market. Thus, the nonintegrated ingot producers maintain that they have been forced to rely upon import sources (principally Japan) for their supplies of titanium sponge.

Apparent U.S. Consumption

Apparent U.S. consumption of titanium sponge decreased 54 percent between 1981 and 1983, dropping from 68.0 million pounds to 31.4 million pounds (table 5). During January-June 1984, apparent consumption was 30.9 million pounds, up 98 percent over the almost 15.6 million pounds reported during January-June 1983.

Table 5.--Titanium sponge: U.S. production, imports for consumption, exports of domestic merchandise, change in inventories, and apparent U.S. consumption, 1981-83, January-June 1983, and January-June 1984

Item	1981	1982	1983	January-June	
				1983	1984
U.S. production					
1,000 pounds	55,744	33,067	28,410	12,189	22,363
Imports--do	12,981	2,709	2,398	1,516	7,571
Exports--do	116	72	77	24	31
Increase (decrease) in inventories--1,000 pounds	588	1,414	(672)	(1,963)	(1,043)
Apparent consumption					
1,000 pounds	68,021	34,290	31,403	15,644	30,946
Ratio of imports to					
Production--percent	23.3	8.2	8.4	12.4	33.8
Consumption--do	19.1	7.9	7.6	9.7	24.5

Source: Production and change in inventories compiled from data submitted in response to questionnaires of the U.S. International Trade Commission; imports and exports compiled from official statistics of the U.S. Department of Commerce.

1/ Some mill product producers without facilities for converting titanium sponge into ingots occasionally purchase sponge and then pay a fee (toll) to melters for converting the sponge into ingots or a more advanced product.

Table 5 includes imports for consumption during January-June 1984 of titanium sponge destined for the National Defense Stockpile. With regard to the GSA stockpile purchase, 1/ respondents argue that this purchase was separate from the commercial market for titanium sponge in the United States. The stockpile material is not intended for domestic consumption except in a national emergency. The contracts for the GSA sponge purchase were let in October 1983, with delivery scheduled for no later than October 1984. No deliveries were made in 1983. According to the Bureau of Mines, *** pounds of the stockpile sponge were imported during January-June 1984. The following tabulation shows apparent consumption for January-June 1984, with the import data modified to exclude the sponge for the stockpile:

Item	Jan.-June 1984
U.S. production----1,000 pounds----	22,363
Imports----do----	***
Exports----do----	31
Increase (decrease) in inventories----1,000 pounds----	(1,043)
Apparent consumption 1,000 pounds----	***
Ratio of imports to	
Production----percent----	***
Consumption----do----	***

Since sponge is an intermediate product, its consumption is dependent upon the demand for titanium mill products. U.S. consumption of titanium metal products, in turn, depends largely on demand by the aerospace industry, which accounted for between 60 and 80 percent of U.S. titanium metal consumption during 1978-83. Demand for titanium metal was strong during 1979-81 because of a rapid increase in demand for commercial aircraft as airlines replaced their aging fleet of heavy, fuel-inefficient aircraft with lighter, more fuel-efficient planes. At the same time, new markets for titanium metal use in power plants, heat exchangers, and chemical processing equipment began to develop. Consumption of titanium ingot rose from 75.7 million pounds in 1979 to 87.0 million pounds in 1981 (table 6). Mill product shipments peaked at 54.3 million pounds in 1980, then declined to 51.0 million pounds in 1981. Consumption of scrap hovered close to 30.0 million pounds annually during those years.

However, the economic downturn in 1982 brought a decline in air traffic volume and a reduction in the manufacture of commercial aircraft because of surplus inventory. At the same time, nonaerospace industrial markets for titanium also weakened as both power generation and chemical processing industries postponed capital investment plans in response to weak demand. New orders for titanium metal also remained low during this period partly because of a build up of inventories during 1980 and 1981. Consumption of titanium ingot fell to 53.5 million pounds in 1982 and 52.5 million pounds 1983.

1/ The GSA purchase is discussed in detail in a later section of this report.

Table 6.—Titanium metal: U.S. consumption, 1979-83

(In thousands of pounds)

Item	1979	1980	1981	1982	1983
Scrap	27,972	30,812	29,590	17,056	20,934
Ingot	75,736	86,720	87,050	53,454	52,462
Mill products: 1/					
Billet	21,067	25,882	23,904	18,185	15,205
Sheet, strip, plate, tube, pipe, and extrusions	9,205	11,869	18,008	13,660	12,345
Rod and bar	7,415	8,472	7,857	4,166	4,316
Other	8,539	8,043	1,215	397	32
Total	46,226	54,266	50,984	36,408	31,898

1/ Net shipments.

Source: U.S. Bureau of Mines. Mill products shipments data compiled from official statistics of the U.S. Department of Commerce.

Shipments of mill products slipped to 36.4 million pounds in 1982 and 31.9 million pounds in 1983. Use of scrap also declined—from about 30 million pounds annually in 1980 and 1981 to 17.1 million pounds in 1982 and 20.9 million pounds in 1983.

Consideration of Material Injury to an Industry in the United States

The information in this section of the report was compiled from questionnaire data. The Commission sent questionnaires to the six domestic firms which produced titanium sponge during the period under consideration. Of these firms, five (accounting for 100 percent of U.S. production in 1983) responded to the questionnaires.

U.S. production, capacity, and capacity utilization

U.S. production of titanium sponge dropped from 55.7 million pounds in 1981 to 28.4 million pounds in 1983, or by 49 percent (table 7). However, during January-June 1984, production was 22.4 million pounds, or 83 percent higher than the level in the corresponding period of 1983.

The years 1979-81 marked a period of strong demand for titanium, coupled with a shortage of sponge. The dramatic decline in production which followed in 1982 and 1983 reflected a recurring pattern of sharp supply and demand shifts that have plagued the U.S. titanium industry since its beginning in the late 1940's. The dominant factor in the market has been and continues to be the aerospace industry. Unfortunately, titanium producers have had to rely on demand projections (from both the military and commercial sectors) which have tended to be unreliable because of changes in a complex mosaic of factors.

Table 7.--Titanium sponge: U.S. production, practical capacity, 1/ and capacity utilization, 1981-83, January-June 1983, and January-June 1984

Item	1981	1982	1983	January-June	
				1983	1984
Production----1,000 pounds	55,744	33,067	28,410	12,189	22,363
Capacity----do	60,300	64,900	63,000	31,350	31,200
Capacity utilization percent	92.4	51.0	45.1	38.9	71.7

1/ Practical capacity was defined as the greatest level of output a plant can achieve within the framework of a realistic work pattern. Producers were asked to consider only machinery and equipment in place and ready to operate; scheduled downtime for maintenance could be considered as a factor limiting practical capacity, but overtime, materials, and other costs could not.

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

These factors include U.S. military strategies, U.S. Government budget allocations for defense spending, the general state of the economy, the strengths and weaknesses of the U.S. commercial airline industry, and competition from foreign aircraft manufacturers. 1/ The industry has attempted to cultivate the industrial (i.e., nonaerospace) market in order to smooth out demand, but the importance of that market remains secondary to aerospace applications.

The upturn in sponge production during the first half of 1984 is due in large part to Rockwell International's production of the B-1B bomber. Eighteen bombers have been funded through fiscal 1984, with 34 more requested for fiscal year 1985. 2/ Defense-induced consumption of sponge is projected to total 17.4 million pounds during 1984. 3/

Production capacity rose 8 percent in 1982, reaching 64.9 million pounds, compared with 60.3 million pounds in 1981. Capacity fell slightly in 1983 and 1984 because of the departure of Teledyne Wah Chang and Western Zirconium from the industry. Capacity utilization, like production, fell sharply from 92.4 percent in 1981 to 45.1 percent in 1983. During January-June 1984, capacity utilization rose to 71.7 percent, compared with 38.9 percent for the first half of 1983.

1/ National Materials Advisory Board, op. cit., p. 13.
2/ Rosanne Brooks, "Bomber Sparks Sponge Demand," American Metals Market, June 15, 1984, p. 4A.
3/ Forecast by the Defense Economic Impact Modeling System, July 1984.

The great bulk (currently over 90 percent) of total U.S. capacity for and production of titanium sponge is accounted for by Timet, RMI, and Oremet, all of which consume most of their sponge in captive melting operations. Although the fourth producer, ITI, is not itself vertically integrated, part-owner Wyman-Gordon is a producer of downstream titanium products. All of ITI's production is for domestic sale, but to date its production has been limited by the firm's small practical capacity and production inefficiencies inherent in the start up process.

U.S. producers' domestic and export shipments

U.S. producers' domestic market shipments of titanium sponge fell from *** pounds in 1981 to *** pounds in 1982 before rising to almost *** pounds in 1983 (table 8). Domestic shipments were *** pounds during January-June 1984, versus *** pounds during January-June 1983. U.S. producers' export shipments declined from *** pounds in 1981 to *** pounds in 1982. No export shipments were reported in 1983 or the first half of 1984.

Table 8.--Titanium sponge: U.S. producers' domestic market and export shipments, 1981-83, January-June 1983, and January-June 1984

Item	1981	1982	1983	January-June	
				1983	1984
Domestic shipments					
Quantity----1,000 pounds	***	***	***	***	***
Value----1,000 dollars	***	***	***	***	***
Unit value----per pound	***	***	***	***	***
Export shipments					
Quantity----1,000 pounds	***	***	0	0	0
Value----1,000 dollars	***	***	0	0	0
Unit value----per pound	***	***	--	--	--

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

The concentration of integrated producers in this industry accounts for the low level of domestic and export shipments by producers (particularly in 1981 and 1982, when such shipments combined accounted for *** percent and *** percent, respectively, of production). The upturn in domestic shipment levels in 1983 (to *** percent of production) was attributable to ITI's increasing output following its startup in 1982.

U.S. producers' inventories

U.S. sponge producers do not generally keep substantial inventories on hand but instead attempt to tailor production output to either captive needs or arm's-length sales as they arise. In 1981, total yearend inventories amounted to nearly 7 percent of production. However, with poor market conditions in 1982 and 1983, inventories accounted for over 15 percent of production. During the first 6 months of 1984, the ratio of inventories to production (7.5 percent) was somewhat lower than during the same period of 1983 (12.7 percent). End-of-period sponge inventories, as reported by U.S. producers in response to the Commission's questionnaires, are presented in the following tabulation:

	Quantity (1,000 pounds)
As of Dec. 31—	
1980	3,057
1981	3,645
1982	5,059
1983	4,387
As of June 30—	
1983	3,096
1984	3,344

In the Commission's supplemental questionnaires, sponge producers were asked to supply inventory data on waste and scrap and wrought titanium. The data received indicate that inventories of waste and scrap changed very little during the period of investigation, reaching a high of *** pounds in 1982 and a low of *** pounds as of June 30, 1984. Inventories of wrought titanium products increased from *** pounds in 1981 to *** pounds by June 30, 1984, as indicated in the following tabulation:

Date	Waste and scrap (1,000 pounds)	Wrought titanium (1,000 pounds)
As of Dec. 31—		
1981	***	***
1982	***	***
1983	***	***
As of June 30—		
1983	***	***
1984	***	***

U.S. employment, wages, and productivity

In domestic establishments producing titanium sponge, the average employment of all persons decreased by 14.0 percent from 1981 to 1982 and then fell 52.1 percent in 1983 (table 9). During January-June 1984, employment increased by 14.4 percent from the number employed in the corresponding period of 1983. The average number of production and related workers followed a similar pattern. Hours worked by production and related workers producing

Table 9.—Average number of employees, total and production and related workers, in U.S. establishments producing titanium sponge, and hours worked by the latter, 1981-83, January-June 1983, and January-June 1984 1/

Item	1981	1982	1983	January-June	
				1983	1984
Average employment:					
All persons:					
Number	3,656	3,145	1,507	1,458	1,668
Percentage change	2/	-14.0	-52.1	2/	14.4
Production and related workers producing—					
All products:					
Number	2,643	2,148	1,133	1,103	1,324
Percentage change	2/	-18.7	-47.2	2/	20.0
Titanium sponge:					
Number	***	***	***	***	***
Percentage change	2/	-16.9	-14.0	2/	17.0
Hours worked by production and related workers producing—					
All products:					
Number—thousands—	5,916	4,755	2,182	1,184	1,507
Percentage change	2/	-19.6	-54.1	2/	27.3
Titanium sponge:					
Number—thousands—	1,823	1,358	1,187	686	874
Percentage change	2/	-25.5	-12.6	2/	27.4

1/ Data for 1983 and January-June 1984 exclude operations by Teledyne Wah Chang Albany, which ceased sponge production in 1982.
2/ Not available.

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

all products declined by 19.6 percent from 1981 to 1982, and dropped by 54.1 percent in 1983. Compared with hours worked in January-June 1983, those worked in the corresponding period of 1984 were up by 27.3 percent.

The number of production and related workers producing titanium sponge fell by 16.9 percent from 1981 to 1982 and by 14.0 percent from 1982 to 1983. The first 6 months of 1984 showed a 17.0 percent rise in the average number of production and related workers and a 27.4 percent increase in hours worked when compared with those worked in the first 6 months of 1983.

Because the facilities of the integrated producers are dedicated exclusively to titanium products, it may be expected that hours worked by production and related workers producing only titanium sponge followed the

same general trend as that of workers producing all products. If demand for the finished or semifinished product is off, the raw material sponge operation will also be slowed.

Wages and total compensation paid to production and related workers producing all products and those paid to production and related workers producing only titanium sponge are shown in table 10. The difference between total compensation and wages is an estimate of workers' benefits.

Table 10.—Wages and total compensation 1/ paid to production and related workers in establishments producing titanium sponge, 1981–83, January–June 1983, and January–June 1984 2/

Item	1981	1982	1983	January–June	
				1983	1984
Wages paid to production and related workers producing—					
All products:					
Value—1,000 dollars	75,179	64,362	28,022	13,417	16,806
Percentage change	3/	-14.4	-56.5	3/	25.2
Titanium sponge:					
Value—1,000 dollars	22,289	17,144	14,598	7,256	9,132
Percentage change	3/	-23.1	-14.8	3/	25.8
Total compensation paid to production and related workers producing—					
All products:					
Value—1,000 dollars	107,572	95,386	43,194	20,592	25,508
Percentage change	3/	-11.3	-54.7	3/	23.9
Titanium sponge:					
Value—1,000 dollars	30,457	24,090	21,762	10,806	13,437
Percentage change	3/	-20.9	-9.7	3/	24.3

1/ Includes wages and contributions to social security and other employee benefits.

2/ Data for 1983 and January–June 1984 exclude operations by Teledyne Wah Chang Albany, which ceased sponge production in 1982.

3/ Not available.

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

Data on labor productivity, hourly compensation, and unit labor costs in the production of titanium sponge are presented in table 11. Labor productivity declined by 20.6 percent between 1981 and 1982 and then decreased by 1.6 percent in 1983. A sharp increase of 43.8 percent occurred in January–June 1984 over the corresponding period of 1983.

Table 11.--Labor productivity, hourly compensation, and unit labor costs in the production of titanium sponge, 1981-83, January-June 1983, and January-June 1984

Item	1981	1982	1983	January-June	
				1983	1984
Labor productivity:					
Quantity--pounds per hour	30.6	24.3	23.9	17.8	25.6
Percentage change	1/	-20.6	-1.6	1/	43.8
Hourly compensation: 2/					
Value--per hour	$12.23	$12.62	$12.30	$10.58	$10.45
Percentage change	1/	3.2	-2.4	1/	-1.2
Unit labor costs: 3/					
Value--per pound	$0.55	$0.73	$0.77	$0.89	$0.60
Percentage change	1/	32.7	5.5	1/	-32.6

1/ Not available.
2/ Based on wages excluding fringe benefits.
3/ Based on total compensation paid to production and related workers.

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

Hourly compensation (excluding fringe benefits) increased 3.2 percent from $12.23 in 1981 to $12.62 in 1982 before falling 2.4 percent to $12.30 in 1983. The January-June 1984 data show a 1.2 percent drop from January-June 1983. Unit labor costs jumped by 40 percent between 1981 and 1983, probably because producers were reluctant to lay off skilled workers during the slump in demand. With the rise in production during the first half of 1984, these costs decreased by almost one third from the corresponding period of 1983.

Financial experience of U.S. producers

Three U.S. producers, RMI, ITI, and Teledyne Wah Chang Albany, furnished income-and-loss data relative to their titanium sponge operations. As was indicated previously, ITI commenced production of titanium sponge in early 1982, Teledyne Wah Chang ceased producing titanium sponge in 1982, and the bulk of RMI's titanium sponge production is consumed within the company as a raw material in the manufacture of titanium metal products. Two other firms, Oremet and Timet (both of which consume virtually all of their titanium sponge production in the manufacture of titanium metal products) supplied data pertaining to their total company operations, investment in productive facilities, capital expenditures, and research and development expenditures. Because of the diverse nature of the operations of the firms and the data supplied, the following sections discuss each firm's operations separately.

RMI.--Total net sales of titanium sponge by RMI were *** in 1983, up *** percent from the *** level achieved in 1982, but down *** percent from the *** level achieved in 1981 (table 12). Net sales were *** million during January-June 1984, up *** percent from the *** in sales reported for the corresponding period of 1983. Intracompany transfers rose from *** percent of RMI's total titanium sponge sales in 1981 to *** percent and *** percent, respectively, in 1982 and 1983. Intracompany sales accounted for *** percent of total net sales during January-June 1984.

RMI posted an operating *** of ***, or *** percent of net sales, in 1981 but *** an operating *** of ***, or *** percent of net sales, in 1982. The company operated *** in 1983--*** an operating *** of ***, or *** percent of net sales. RMI reported an operating *** of ***, or *** percent of net sales, for the January-June 1984 interim period, compared with an operating *** of ***, or *** percent of net sales, for the corresponding period of 1983.

Manufacturing costs (cost of goods sold) *** from *** percent of net sales in 1981 to *** percent in 1982 and then *** to *** percent in 1983. Such costs *** to *** percent of net sales during January-June 1984, compared with *** percent in the corresponding period of 1983. The company reported ***.

RMI also supplied income-and-loss data concerning its total company operations (table 13). Total company net sales declined *** percent during 1981-83, but then rose *** percent during January-June 1984, compared with sales in the like period of 1983. RMI *** operating *** equal to *** percent and *** percent of net sales in 1981 and 1982, respectively, but *** an operating *** equal to *** percent of net sales in 1983. RMI *** an operating *** equal to *** percent of net sales during January-June 1984, compared with an operating *** equal to *** percent of net sales during the corresponding period of 1983.

ITI.--International Titanium, Inc., commenced production of titanium sponge in March 1982 and reported its first sales during its accounting year ended May 31, 1983. Net sales were *** during this period and *** during the 6-month period ended November 30, 1983 (table 14). Net sales were *** for the 7-month period ended June 30, 1984. The value of such sales ***. As a result, the company *** equal to *** percent of net sales during the period ended May 31, 1983, *** percent for the 6-month period ended November 30, 1983, and *** percent for the 7-month period ended June 30, 1984. Overall, ITI has *** since it began operations, and it has accumulated a *** of ***.

Table 12.—Income-and-loss experience of RMI Co. on its operations producing titanium sponge, 1981-83, January-June 1983, and January-June 1984 1/

Item	1981	1982	1983	January-June—	
				1983	1984
Net sales: 2/					
Trade:					
Value———1,000 dollars—	***	***	***	***	***
Quantity———short tons—	***	***	***	***	***
Intracompany transfers:					
Value 3/—1,000 dollars—	***	***	***	***	***
Quantity———short tons—	***	***	***	***	***
Total net sales					
1,000 dollars—	***	***	***	***	***
Cost of goods sold: 2/					
Raw materials———do———	***	***	***	***	***
Direct labor———do———	***	***	***	***	***
Other factory costs—do———	***	***	***	***	***
Total———do———	***	***	***	***	***
Gross income or (loss)					
do———	***	***	***	***	***
General, selling, and administrative expenses					
1,000 dollars—	***	***	***	***	***
Operating income or (loss)					
do———	***	***	***	***	***
Other income or (expense), net———1,000 dollars—	***	***	***	***	***
Net income or (loss) before income taxes———do———	***	***	***	***	***
Depreciation and amortization:					
expense———1,000 dollars—	4/ ***	***	***	***	***
Cash flow from operations					
1,000 dollars—	***	***	***	***	***
Ratio to net sales:					
Cost of goods sold					
percent—	***	***	***	***	***
Operating income or (loss)					
percent—	***	***	***	***	***
Net income or (loss) before:					
income taxes——percent—	***	***	***	***	***
Ratio of intracompany net sales to total net sales					
percent—	***	***	***	***	***

1/ RMI's accounting year ends on Dec. 31.

2/ Sales and cost data include operations producing pot sponge, fines, and so forth.

3/ The intracompany value is the standard cost value. The market value of such transfers was *** in 1981, *** in 1982, *** in 1983, *** during interim 1983, and *** during interim 1984.

4/ A change was made in RMI's method of calculating depreciation.

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

Table 13.--Income-and-loss experience of RMI Co. on its total company operations, 1981-83, January-June 1983, and January-June 1984 1/ 2/

Item	1981	1982	1983	January-June	
				1983	1984
Net sales----1,000 dollars	***	***	***	***	***
Cost of goods sold----do	***	***	***	***	***
Gross income or (loss)--do	***	***	***	***	***
General, selling, and administrative expenses 1,000 dollars	***	***	***	***	***
Operating income or (loss)----do	***	***	***	***	***
Other income or (expense), net----1,000 dollars	***	***	***	***	***
Net income or (loss) before income taxes--do	***	***	***	***	***
Ratio to net sales:					
Cost of goods sold percent	***	***	***	***	***
Operating income or (loss)----percent	***	***	***	***	***
Net income or (loss) before income taxes----percent	***	***	***	***	***

1/ RMI's accounting year ends on Dec. 31.

2/ RMI, a partnership, is owned by U.S. Steel Corp. and National Distillers and Chemical.

Table 14.—Income-and-loss experience of International Titanium, Inc., on its operations producing titanium sponge, accounting years ended May 31, 1982, May 31, 1983, Nov. 30, 1983, and the 7-month interim period ended June 30, 1984

Item	Accounting year ended—			Interim period ended
	May 31, 1982	May 31, 1983	Nov. 30, 1983	June 30, 1984
Net sales (trade)				
1,000 dollars	***	***	***	***
Cost of goods sold:				
Raw materials—do	***	***	***	***
Direct labor—do	***	***	***	***
Other factory costs—do	***	***	***	***
Total—do	***	***	***	***
Gross loss—do	***	***	***	***
General, selling, and administrative expenses				
1,000 dollars	***	***	***	***
Operating loss—do	***	***	***	***
Other income or (expense), net—1,000 dollars	***	***	***	***
Net loss before income taxes—do	***	***	***	***
Depreciation and amortization expense—1,000 dollars	***	***	***	***
Cash flow from operations—do	***	***	***	***
Ratio to net sales:				
Cost of goods sold percent	***	***	***	***
Gross loss—do	***	***	***	***
General, selling, and administrative expenses percent	***	***	***	***
Operating loss—do	***	***	***	***
Net loss before taxes do	***	***	***	***

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

Teledyne Wah Chang Albany.--Because Teledyne Wah Chang Albany stopped producing titanium sponge in 1982 and converted its capacity back to zirconium in 1983, the data shown in table 15 are from the Commission's preliminary investigations. Total net sales of titanium sponge by Teledyne Wah Chang reached *** in 1981 before declining by *** percent to *** in 1982. Sales during January-September 1983 were down *** percent from those in the corresponding period of 1982. Intracompany sales followed a similar pattern, accounting for *** to *** percent of the firm's total sales of titanium sponge in 1981 and 1982, but *** in January-September 1983.

Teledyne Wah Chang's operating *** from ***, or *** percent of net sales, in 1981 to ***, or *** percent of net sales, in 1982. In January-September 1983, the company reported an operating *** of ***, or *** percent of net sales, compared with an operating *** of ***, or *** percent of net sales, during January-September 1982.

Manufacturing costs (costs of goods sold) *** from *** percent of net sales in 1981 to *** percent of net sales during January-September 1983. General, selling, and administrative expenses varied with net sales, accounting for *** to *** percent of sales.

Oremet.--Oregon Metallurgical Corp., an integrated producer of titanium sponge, supplied income-and-loss data relative to its total company operations. Oremet's net sales and earnings declined sharply during 1981-83. Net sales plunged from $111.5 million to $28.3 million, or by 75 percent, during this period, and operating income fell from an income of $54.8 million, or 49.2 percent of net sales, to a loss of $6.5 million, or 23.1 percent of net sales (table 16). Net sales rose 20 percent to $19.3 million during the 6-month 1984 interim period, compared with $16.0 million for the corresponding period of 1983. Oremet sustained an operating loss of $332,000, or 1.7 percent of net sales, during January-June 1984, compared with an operating loss of $3.1 million, or 19.3 percent of net sales, for the corresponding period of 1983.

Timet.--Titanium Metals Corp. of America, ***, also supplied income-and-loss data relative only to its overall company operations. 1/ Net sales of all mill products declined annually from *** to ***, or by *** percent, during 1981-83 (table 17). Net sales were *** during January-June 1984, up *** percent from the *** in net sales reported for the comparable period of 1983. Operating income *** annually during 1981-83, from ***, or *** percent of net sales, to ***, or *** percent of net sales. Operating *** to ***, or *** percent of net sales, during January-June 1984, compared with ***, or *** percent of net sales, for the corresponding period of 1983.

1/ In its response to the Commission's questionnaires, Timet stated "***."

Table 15.—Income-and-loss experience of Teledyne Wah Chang Albany on its operations producing titanium sponge, 1981, 1982, January-September 1982, and January-September 1983 1/

Item	1981	1982	January-September	
			1982	1983
Net sales:				
Trade—1,000 dollars	***	***	***	***
Intracompany—do	***	***	***	***
Total—do	***	***	***	***
Cost of goods sold:				
Raw materials—do	***	***	***	***
Direct labor—do	***	***	***	***
Other factory costs—do	***	***	***	***
Total—do	***	***	***	***
Gross income—do	***	***	***	***
General, selling, and administrative expenses—1,000 dollars	***	***	***	***
Operating income or (loss)—do	***	***	***	***
Other income or (expense), net 1,000 dollars	***	***	***	***
Net income or (loss) before income taxes—1,000 dollars	***	***	***	***
Depreciation and amortization expense—1,000 dollars	***	***	***	***
Cash flow from operations—do	***	***	***	***
Ratio to net sales:				
Cost of goods sold—percent	***	***	***	***
Operating income or (loss) percent	***	***	***	***
Net income or (loss) before income taxes—percent	***	***	***	***
Ratio of intracompany net sales to total net sales do	***	***	***	***

1/ Teledyne Wah Chang's accounting year ends Dec. 31.

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

Table 16.--Income-and-loss experience of Oregon Metallurgical Corp. on its total company operations, 1981-83, January-June 1983, and January-June 1984 1/

Item	1981	1982	1983	January-June	
				1983	1984
Net sales----1,000 dollars	111,483	43,992	28,282	16,037	19,273
Cost of goods sold----do	54,012	35,425	32,058	17,676	18,308
Gross income or (loss)----do	57,471	8,567	(3,776)	(1,639)	965
Administrative, selling, and metallurgical expenses 1,000 dollars	2,649	3,749	2,754	1,462	1,297
Operating income or (loss)----do	54,822	4,818	(6,530)	(3,101)	(332)
Other income----do	6,178	7,506	5,181	2,434	2,829
Net income or (loss) before income taxes----do	61,000	12,324	(1,349)	(667)	2,497
Depreciation and amortization expenses----1,000 dollars	2,704	4,035	4,643	2/	2/
Cash flow from operations 1,000 dollars	63,704	16,359	3,294	2/	2/
Ratio to net sales:					
Cost of goods sold percent	48.4	80.5	113.4	110.2	95.0
Operating income or (loss)----percent	49.2	11.0	(23.1)	(19.3)	(1.7)
Net income or (loss) before income taxes----percent	54.7	28.0	(4.8)	(4.2)	13.0

1/ Oremet's accounting year ended on Dec. 31.
2/ Not available.

Source: Compiled from data obtained from Oregon Metallurgical Corp.'s annual reports.

Table 17.--Income-and-loss experience of Timet on its total company operations, 1981-83, January-June 1983, and January-June 1984 1/

Item	1981	1982	1983	January-June	
				1983	1984
Net sales, all mill products 1,000 dollars	***	***	***	***	***
Operating income, all mill products--1,000 dollars	***	***	***	***	***
Ratio of operating income to net sales:					
All mill products percent	***	***	***	***	***
Aero Forging--do	***	***	***	***	***
Aero Flat--do	***	***	***	***	***
Industrial--do	***	***	***	***	***
Return on investment do	***	***	***	***	***

1/ Timet's accounting year ended on Dec. 31.

Source: Compiled from data supplied in response to a request by the staff of the U.S. International Trade Commission.

Timet also supplied the Commission with some production and unit cost data pertaining to its titanium sponge operations. Such data are shown in the following tabulation:

Item	1981	1982	1983	January-March		April-June	
				1983	1984	1983	1984
Production 1,000 pounds	***	***	***	***	***	***	***
Unit cost per pound:							
Variable cost	***	***	***	***	***	***	***
Fixed cost	***	***	***	***	***	***	***
Total	***	***	***	***	***	***	***

Capital expenditures.--Capital expenditures of five firms for land, buildings, and machinery and equipment used in the production of titanium sponge averaged $30 million a year during 1981-83 and ranged between $22.6 million in 1982 and $38.3 million in 1983. Such expenditures were $2.1 million during January-June 1984, compared with $7.5 million in the corresponding period of 1983 (table 18).

Table 18.--Titanium sponge: U.S. producers' capital expenditures, valuation of fixed assets, and research and development expenses, 1981-83, January-June 1983, and January-June 1984

(In thousands of dollars)

Item	1981	1982	1983	January-June	
				1983	1984
Capital expenditures--					
All products: 1/					
Land and land improvements	***	***	***	***	***
Buildings or leasehold improvements	***	***	***	***	***
Machinery, equipment, and fixtures	***	***	***	***	***
Total	49,373	50,029	42,757	8,793	3,907
Titanium sponge:					
Land and land improvements	***	***	***	***	***
Buildings or leasehold improvements	***	***	***	***	***
Machinery, equipment, and fixtures	***	***	***	***	***
Total	29,925	22,563	38,284	7,492	2,059
Fixed assets employed in the production of--1/					
All products:					
Original cost	215,022	260,889	302,623	266,671	304,910
Book value	107,382	140,300	166,910	141,753	162,520
Titanium sponge:					
Original cost	87,115	110,974	151,952	114,537	149,892
Book value	47,650	66,186	101,246	68,064	98,466
Research and development expenses 2/	***	***	***	***	***

1/ Data are for 5 firms.
2/ Data are for 3 firms.

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

Research and development expenses.--Three firms supplied data on research and development expenditures incurred in developing U.S. produced titanium sponge (table 18). During 1981-83, their expenditures ranged between *** in 1982 and *** in 1981. Such expenditures were *** during January-June 1984, compared with *** in the corresponding period of 1983.

Investment in productive facilities.--Five firms supplied data concerning their investment in productive facilities employed in the production of titanium sponge (table 18). Their aggregate investment in such facilities,

valued at cost, rose annually from $87 million to $152 million during 1981-83, and it was $150 million as of June 30, 1984. The book value of such assets rose from $48 million to $101 million during 1981-83, and it was $98 million as of June 30, 1984.

Capital and investment.--U.S. producers were asked to describe any actual or potential negative effects of imports of titanium sponge from Japan and the United Kingdom on their firm's growth, investment, and ability to raise capital. Excerpts from their replies are as follows:

ITI.--***.

RMI.--***.

Teledyne Wah Chang Albany.--***.

Timet.--***

Consideration of the Threat of Material Injury to an Industry in the United States

In its examination of the question of the threat of material injury to an industry in the United States, the Commission may take into consideration such factors as the rate of increase in LTFV imports, the rate of increase in U.S. market penetration by such imports, the amount of imports held in inventory in the United States, and the capacity of producers in the countries subject to these investigations to generate exports (including the availability of export markets other than the United States). A discussion of the rates of increase in imports of titanium sponge and of their U.S. market penetration is presented in a later section of this report. Discussions of U.S. importers' inventories of titanium sponge and titanium mill products and of the titanium sponge industries in Japan and the United Kingdom follow.

U.S. importers' inventories

End-of-period inventories of titanium sponge from Japan, as reported by importers in response to the Commission's questionnaires, are shown in the following tabulation:

Date	Quantity (1,000 pounds)	Ratio of inventories to reported imports (percent)
Dec. 31, 1981	2,058	22.9
Dec. 31, 1982	895	58.3
June 30, 1983	872	60.5
Dec. 31, 1983	352	11.4
June 30, 1984	1,878	26.2

No end-of-period inventories of sponge from the United Kingdom were reported for any of the above periods, except for a relatively insignificant amount in 1983. The sharp increase in importers' inventories from yearend 1983 to June 30, 1984, is accounted for by one of the nonintegrated melters, which received a shipment of sponge from Japan at the end of 1983.

Importers of titanium sponge were also asked to report information on inventories of their imports of titanium waste and scrap and wrought titanium. There were no inventories of imported wrought titanium products held by such importers during 1981 to June 1984. Inventories of imported waste and scrap fell from the 1981 high of *** pounds to *** pounds in 1983. As of June 30, 1984, the inventory level of imported waste and scrap was *** pounds, as shown below:

Date	Quantity (1,000 pounds)
Dec. 31, 1981	***
Dec. 31, 1982	***
June 30, 1983	***
Dec. 31, 1983	***
June 30, 1984	***

The titanium sponge industry in Japan

There are four producers of titanium sponge in Japan. Their combined production capacity is 81.2 million pounds per year, up from 62.0 million pounds in 1981 1/ and 72.0 million pounds in 1982 (table 19). Increased world demand for sponge in 1980 and 1981 initiated the expansion of capacity. However, because of this expansion and the drop in world demand for sponge, average capacity utilization declined from 88.7 percent during 1981 to 29.3 percent during 1983.

The following tabulation lists the four Japanese producers and their current production capacity:

Producer	Capacity (million pounds per year)
Osaka Titanium Co., Ltd	39.6
Toho Titanium Co., Ltd	32.4
Nippon Soda, Ltd. (New Metals Industries)	4.8
Showa Titanium Co	4.4
Total	81.2

1/ In 1979, Japanese capacity for producing titanium sponge was 35.8 million pounds. The increase in capacity from 1979 to 1984 is almost 127 percent.

Table 19.—Titanium sponge: Japan's production, capacity, capacity utilization, and exports, 1981-83, January-June 1983, and January-June 1984

Item	1981	1982	1983	January-June	
				1983	1984
Production—million pounds	55.0	37.1	23.3	12.2	14.7
Capacity—do	62.0	72.0	79.6	39.8	40.6
Capacity utilization percent	88.7	51.5	29.3	30.7	36.2
Exports to —					
United States million pounds	9.4	1.8	4.3	1.0	6.5
EC—do	12.4	5.6	1.7	0.6	2.8
All other countries—do	0.2	0.3	0.3	0.1	0.2
Total—do	22.0	7.7	6.3	1.7	9.5

Source: Production data are from the Ministry of International Trade and Industry (MITI); capacity data are published by the U.S. Bureau of Mines; export data are from Japan Exports and Imports, published by Japan Tariff Association.

Osaka, founded in 1952, operates its plant at Amagasaki using a magnesium reduction/vacuum distillation process. The most recent phase of its capacity expansion, completed at yearend 1981, resulted in an 11-million-pound-per-year facility which is highly automated, featuring computer control in all phases of production. At yearend 1982, Osaka had reduced its operating rate from 45 percent of capacity to 40 percent. Further reductions to 30 percent followed in December 1983. By May 1984, Osaka's operating capacity was 1.3 million pounds per month, or almost 40 percent of capacity. 1/

Toho operates its plant in Chigasakin Kanagawa Prefecture, also using the magnesium reduction/vacuum distillation process. Toho had closed down its plant in early December 1982 because of high inventories (13 percent of production capacity) and poor demand, but reopened in January 1983. By May 1984, Toho was operating at 50 percent of capacity. 2/ In 1981, Toho had 6 million pounds per year of titanium-ingot-producing capacity. 3/ Toho announced plans in 1983 to expand into other downstream titanium products, namely bar and tube. 4/

Nippon Soda's New Metals Industries plant, operating at Nihougi since 1980, uses a sodium reduction/acid leach process. At yearend 1982, the firm

1/ Metal Bulletin, June 26, 1984, p. 13.
2/ Ibid.
3/ National Materials Advisory Board, op. cit., p. 130.
4/ Metals Week, May 23, 1983, p. 11.

was operating at only half of capacity, and in December 1983, at 40 percent. Nippon Soda was producing at 60 percent of capacity as of May 1984. 1/

Showa Titanium, a joint venture of Showa Denko K.K. and Ishizuka Research Institute, started producing sponge at its Toyama plant in October 1983. The plant utilizes an improved magnesium reduction/vacuum distillation process developed by Ishizuka, a Japanese firm which also has some ownership interest in the U.S. producer ITI. Showa plans to be producing at its full capacity of 4.4 million pounds per year by December 1984. 2/

Japanese production of titanium sponge decreased from 55.0 million pounds in 1981 to 37.1 million pounds in 1982 and to 23.3 million pounds in 1983. Japanese production in the first 6 months of 1984 equaled 14.7 million pounds, compared with production of 12.2 million pounds in the corresponding period of 1983. Osaka, Toho, and Nippon Soda have all attributed their increased production in 1984 to inventory replenishment following the sponge sale to the GSA.

Japanese exports of titanium sponge to all markets declined from 22.0 million pounds in 1981 to 7.7 million pounds in 1982 and 6.3 million pounds in 1983 (table 19). Exports in January–June 1984 totaled 9.5 million pounds, compared with 1.7 million pounds in the like period of 1983. Exports to the United States accounted for 68 percent of total Japanese exports in the first 6 months of 1984, compared with 59 percent in the comparable period of 1983. Much of the increase in 1984 is accounted for by the GSA purchase of sponge for the National Defense Stockpile.

Japan's capacity for producing titanium ingots increased from 14 million pounds in 1981 to about 37 million pounds in 1984. (In comparison, Japan's current annual sponge capacity is 81 million pounds.) The following tabulation shows the Japanese firms that melt sponge and their present annual capacity to produce ingots (in millions of pounds per year): 3/

Producer	Capacity
Kobe	15.9
Sumitomo	10.6
Nippon Mining Group (Toho)	9.2
Daido	1.3
Mitsubishi Metal	.3
Hurakama	1/
Total	37.3

1/ Not available.

1/ Metal Bulletin, June 26, 1984, p.13.
2/ Ibid.
3/ Data obtained by the Bureau of Mines from Industrial Rare Metals Annual Review, Aruma Corp., Tokyo, 1984; and American Metal Market, June 15, 1984, p. 14A.

The titanium sponge industry in the United Kingdom 1/

In 1978, IMI Titanium, Ltd., the sole European titanium sponge producer at the time, announced that it would not replace its old, worn-out equipment and would cease sponge production in 1982. IMI's largest customer, Rolls Royce, which uses titanium in its aerospace operations, then approached the British Government with its concerns about a steady supply of sponge meeting the necessary specifications for aerospace use. The Government agreed to plan and finance a new plant, but soon balked. Rolls Royce then proceeded to carry the project through. Deeside Titanium, Ltd., resulted; it is jointly owned by Rolls Royce (20.0 percent), IMI (17.5 percent), and Billiton, U.K. (62.5 percent).

Deeside's titanium sponge plant, located at Deeside, Wales, began production in November 1982, using a sodium reduction/acid leach process. A substantial part of Deeside's output is intended to go through IMI (for melting/alloying) to Rolls Royce. The remainder is targeted for the European and U.S. markets. Such marketing is handled by Billiton, U.K. In September 1983, Billiton won a bid for the sale of 1 million pounds of sponge to GSA for the National Defense Stockpile.

U.K. production of titanium sponge was 5.2 million pounds annually in 1981 and 1982; production is believed to have declined in 1983 (table 20). 2/ Production in the first 6 months of 1984 was *** pounds. Capacity was 6.0 million pounds during 1981 and 1982. It then dropped to an estimated *** million pounds during 1983 because of operational problems at the Deeside plant. 3/ Capacity has risen to an annual rate of *** pounds for 1984. Capacity utilization declined in 1983 from 86.7 percent in 1981 and 1982, as demand remained flat in the aerospace and industrial sectors. No U.K. exports were reported in 1981 or 1982. In 1983, the United Kingdom exported *** pounds of titanium sponge, *** of which went to the United States; 4/ the remainder went to ***. Exports in January-June 1984 amounted to *** pounds, which went to ***.

In 1978, the European Commission decided to waive its import duty on titanium sponge when the Community's only significant producer ceased sponge production. In 1983, Deeside, with its new plant completed, formally requested a review of the tariff suspension and urged that the duty be reimposed during 1984. In March 1984, the European Commission decided to

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1/ Part of the information in this section is taken from Metal Bulletin Monthly, October 1982.

2/ In a letter dated Oct. 9, 1984, to the Commission's staff, counsel for Billiton Metals, Ltd., stated that "***."

3/ See footnote 1 to table 20. Counsel for Billiton Metals, Ltd., stated that Deeside's 1983 capacity was "***".

4/ Official U.S. statistics indicate that no titanium sponge from the United Kingdom was imported in 1981 or 1982; such imports amounted to 60,000 pounds in 1983 and 10,000 pounds in January-June 1984. In a letter of Sept. 21, 1984, to the Commission, counsel for Billiton stated (counsel was unable to verify this information) that IMI shipped *** pounds of sponge to the United States in 1983 (***) for ***, and noted that "***."

Table 20.--Titanium sponge: The United Kingdom's production, capacity, capacity utilization, and shipments, 1981-83, January-June 1983, and January-June 1984

Item	1981	1982	1983	January-June	
				1983	1984
Production--million pounds	5.2	5.2	1/ ***	2/	***
Capacity--do	6.0	6.0	1/ ***	***	***
Capacity utilization percent	86.7	86.7	1/ 45.4	2/	***
Domestic shipments 3/ million pounds	5.2	5.2	***	2/	***
Exports to--					
United States--do	0	0	***	***	***
EC--do	0	0	***	***	4/
All other countries--do	0	0	***	***	***
Total--do	0	0	***	***	4/

1/ Estimated. The designed production capacity for the sole U.K. sponge producer is 11 million pounds per year. However, counsel for Billiton alleges that the producer's average annual capacity in 1983 was *** metric tons. As noted previously, counsel refused to provide production data for 1983. However, using the 45.4 percent rate of capacity utilization reported by Metal Bulletin (Dec. 20, 1983, p. 11), U.K. production in 1983 may be estimated at approximately *** pounds.

2/ Not available.

3/ Estimated as production less exports.

4/ ***.

Source: Except as noted, production and capacity data are from the U.S. Bureau of Mines; export data were provided by counsel for Billiton Metals, Ltd.

continue its suspension of the import tariff on titanium sponge, probably through 1984. The Commission felt that Deeside's production levels were insufficient to meet EC titanium sponge requirements and that continued reliance on non-EC sponge was necessary. In addition, the Commission noted that Deeside had yet to complete the process of certifying the acceptability of its product with European consumers of sponge. 1/

Besides the United States, the other major world market for titanium sponge and titanium mill products is Europe. Deeside is the only European producer of sponge; European users of titanium rely primarily on Japan and the U.S.S.R. for sponge.

1/ Metal Bulletin, Feb. 17, 1984, p. 9, and Mar. 20, 1984, p. 13.

The European titanium market has had experiences similar to those in the United States market in recent years, with demand increasing in 1984 after a sluggish period in 1982 and 1983. By one estimate, 1984 demand will amount to over 5,500 tons. 1/ The recent agreement between Pan American World Airways and Airbus for delivery of 28 aircraft, between 1987 and 1990, 2/ should provide a boost to the titanium market. There are signs, too, that the European industrial sector's demand for titanium is on the rise. 3/

Recently, a formal EC investigation was begun into charges of dumping of titanium mill products against six U.S. and four Japanese producers. Community officials estimated that imports of mill products from Japan and the United States have increased their share of the European market from 48 to 61 percent over the past 2 years. 4/ Three of the U.S. firms involved are integrated sponge producers and two are nonintegrated melters.

Consideration of the Causal Relationship Between Alleged Material Injury or the Threat Thereof and Imports Sold at LTFV

U.S. imports

Imports from all sources.--U.S. imports of titanium sponge from all sources fell from nearly 13.0 million pounds in 1981 to 2.4 million pounds in 1983 (table 21). Imports during January-June 1984 amounted to 7.6 million pounds, compared with 1.5 million pounds in the corresponding period of 1983. According to the Bureau of Mines, *** pounds of sponge imported in January-June 1984 were for the National Defense Stockpile.

The average unit value of imports from all sources decreased throughout the period. At its peak in 1981, the average unit value of imports was $7.20 per pound. In 1983, the unit value per pound had declined to $3.28; the first half of 1984 showed a further drop to $2.86 per pound.

Japan, the primary source of titanium sponge imports during the entire period, accounted for 81.4 percent of imports in 1983. The U.S.S.R., with 16.1 percent, and the United Kingdom, at 2.5 percent, followed with most of the remainder.

Imports from Japan.--Imports of titanium sponge from Japan decreased from almost 11.4 million pounds in 1981 to 2.0 million pounds in 1983. Such imports rose from 1.3 million pounds during the first half of 1983 to 7.6 million pounds during the first half of 1984. The unit value per pound of Japanese

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1/ J. Russel Kraus, "West Europe sees mild pickup from stock rebuilding plans," American Metal Market, June 15, 1984, p. 12A.

2/ Carole A. Shifrin, "Pan Am Agrees to Acquire 28 Airbus Industrie Aircraft," Aviation Week & Space Technology, Sept. 17, 1984, p. 30.

3/ Metals Week, Sept. 3, 1984, p. 7.

4/ Jack Rogers, "EEC Probing Titanium Dumping," American Metal Market, Sept. 11, 1984, pp. 1 and 14. IMI Titanium, Ltd., part owner of the U.K. sponge producer Deeside, is one of four principal European titanium mill products producers that initiated the antidumping action.

Table 21.—Titanium sponge: U.S. imports for consumption, by principal sources, 1981–83, January–June 1983, and January–June 1984

Item	1981	1982	1983	January–June	
				1983	1984
	Quantity (1,000 pounds)				
Japan	11,384	2,567	1,951	1,259	7,561
U.S.S.R	220	88	386	245	0
United Kingdom	0	0	60	11	1/ 10
China	1,261	48	1	1	0
Canada	0	6	0	0	0
Republic of Korea	110	0	0	0	0
Taiwan	6	0	0	0	0
Total	12,981	2,709	2,398	1,516	7,571
	Value (1,000 dollars)				
Japan	81,031	16,753	6,761	4,449	21,678
U.S.S.R	1,746	160	913	580	0
United Kingdom	0	0	177	36	1/ 4
China	9,823	287	5	5	0
Canada	0	32	0	0	0
Republic of Korea	791	0	0	0	0
Taiwan	124	0	0	0	0
Total	93,515	17,232	7,856	5,070	21,682
	Unit value (per pound)				
Japan	$7.12	$6.53	$3.46	$3.53	$2.87
U.S.S.R	7.94	1.81	2.37	2.36	–
United Kingdom	–	–	2.95	3.40	1/ .37
China	7.79	5.95	4.15	4.15	–
Canada	–	5.75	–	–	–
Republic of Korea	7.18	–	–	–	–
Taiwan	19.32	–	–	–	–
Average	7.20	6.36	3.28	3.34	2.86

1/ The only known sale of titanium sponge from the United Kingdom to the United States in 1984 involves the GSA contract. Because Billiton's first shipment for the stockpile wasn't made until July 1984, and given the very low average unit value per pound reported by Census, the data for January–June 1984 may be incorrect.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.—Due to rounding, data may not add to totals shown.

sponge imports fell from $7.12 in 1981 to $3.46 in 1983. In January-June 1984, the average unit value was $2.87 per pound, down from $3.53 per pound during the corresponding period of 1983.

The Bureau of Mines reports that sponge imports from Japan for the stockpile amounted to *** pounds in the first half of 1984. All sponge imported for the stockpile is first placed in bonded warehouses, where it is weighed and samples are taken. The sponge remains in the warehouses until the GSA accepts each shipment. Once the GSA approves a shipment, it is removed from the bonded warehouse and shipped to GSA depots in California or Ohio.

Imports from the United Kingdom.--There were no imports of titanium sponge from the United Kingdom in 1981 and 1982. In 1983, such imports amounted to 60,000 pounds, with an average unit value of $2.95 per pound. There were 10,000 pounds of imports reported during January-June 1984, compared with 11,000 pounds in January-June 1983. 1/

U.S. market penetration

Imports from all sources.--Market penetration by imports of titanium sponge from all countries declined from 19.1 percent in 1981 to 7.6 percent in 1983 (table 22). The higher 1981 penetration level occurred because domestic production capacity was apparently not sufficient to meet demand. As demand dropped in 1982 and 1983, so did import penetration. Penetration began to rise again in 1984, when the penetration level for January-June was 24.5 percent 2/ compared with 9.7 percent in the corresponding period of 1983.

Table 22.--Titanium sponge: Ratios of imports to apparent U.S. consumption, by specified sources, 1981-83, January-June 1983, and January-June 1984

(In percent)

Source	1981	1982	1983	January-June	
				1983	1984
Japan	16.7	7.5	6.2	8.0	24.4
United Kingdom	-	-	.2	.07	.03
All countries	19.1	7.9	7.6	9.7	24.5

Source: Imports compiled from official statistics of the U.S. Department of Commerce; apparent consumption calculated using these statistics and production and inventory data submitted in response to questionnaires of the U.S. International Trade Commission.

1/ See footnote 1 to table 21.

2/ This includes imports for the stockpile. If such imports were not included in consumption calculations, the ratio of imports to consumption would have been *** percent.

Imports from Japan.--Market penetration by sponge imports from Japan declined from 16.7 percent of apparent U.S. consumption in 1981 to 6.2 percent in 1983. It then increased to 24.4 percent in January-June 1984. If imports of sponge during January-June 1984 for the National Defense Stockpile are excluded from apparent consumption data, the penetration level of sponge imports from Japan falls to about *** percent.

Imports from the United Kingdom.--Market penetration of imports from the United Kingdom was 0.2 percent of apparent consumption in 1983 and 0.03 percent during January-June 1984 (whether or not imports for the stockpile are included in apparent consumption). Imports from the United Kingdom will rise during the second half of 1984 because of the GSA purchase.

Prices

The commercial or merchant market in the United States for titanium sponge consists principally of the four nonintegrated melters: Howmet Turbine Components Corp., Lawrence Aviation Industries, Inc., Martin Marietta Aluminum, Inc., and Teledyne Allvac. 1/ Among these, *** is the largest titanium sponge account in terms of its contracts over the period January 1981-June 1984. Sales to the merchant market accounted for less than 5 percent of total annual production of sponge by domestic producers in 1981 and 1982 but climbed to *** percent of production in 1983.

Titanium sponge is usually sold on contracts, with scheduled monthly deliveries for a period as long as a year or more. Quantities involved range from a minimum of 10,000 to 50,000 pounds to more than 1 million pounds. Prices are quoted in dollars and cents per pound. Because titanium sponge is a high value-to-weight product, transportation costs are a negligible share of the delivered purchase price. 2/ Lead time on contracts is generally 2 or 3 months. Contracts are let on a competing bid basis that is formal at times but more often is an informal comparison of competing quotes or offer prices. According to RMI, melters at times limit the opportunity to quote to selected vendors and do not always offer competing vendors the opportunity to quote on the same quantity of product. It is not a policy among domestic producers to announce contract awards to the media, nor do purchasers divulge the facts of an award in terms of quantity or price in many instances.

As a basis for obtaining data for price comparisons, the Commission requested that producers and importers provide price quotes made to melters of titanium sponge for the 10 largest tonnage contracts on which they bid,

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1/ The Commission received responses to its purchaser's questionnaires from firms accounting for more than 75 percent of the titanium sponge sold commercially (as measured by imports for consumption plus domestic market shipments by U.S. producers) in the United States during January 1981-June 1984. The 3 largest nonintegrated ingot producers (see table 4)--Howmet, Martin Marietta, and Teledyne Allvac--accounted for *** percent of sponge purchases during this period.

2/ Importers and domestic producers estimate transportation costs at about 4 cents per pound to 11 cents per pound. Prices are quoted either f.o.b. mill or c.i.f. port of entry, or (less frequently) delivered.

whether or not their respective firms were awarded the contract, for each of the periods 1981, 1982, 1983, and January-June 1984. The data so obtained are presented in aggregate form in table 23. They show the overall quantity of titanium sponge on which bids were made, the number of bids made, the number of bids or contracts won, and the ratios of quantity won to overall quantity on which bids were made. The data base consists of responses from two producers, RMI and Oremet, 1/ and from one importer, Philipp Brothers, Inc. (Phibro). 2/

RMI and Phibro provided the only consistent data for comparing market presence and competitive position on an annual aggregate basis. In 1981, when demand was strong and supply somewhat constrained, RMI bid on *** contracts that totaled *** to *** pounds, 3/ but was awarded *** contract for *** to *** pounds by ***. That contract amounted to *** percent of the total quantity on which RMI had bid. Phibro bid on *** contract in 1981; this contract ***. Although both RMI and Phibro were awarded contracts to supply ***, the contracts were not in response to the same request for bids and were for different quantities. Oremet did not provide any instances of bids made in 1981.

As demand plummeted in 1982, prices declined and the number of requests for quotes to supply titanium sponge shrank. RMI and Phibro each supplied *** instances of bids. RMI bid for *** contracts which together amounted to *** pounds of titanium sponge; 4/ ***. Phibro won *** contracts to supply *** pounds of sponge. 5/ In no instance were RMI and Phibro quoting to the same melter. Oremet quoted on *** pounds of titanium sponge overall in responding to *** possible contracts, but won *** contracts for a total of *** pounds. *** of the *** contracts were to supply sponge to ***. Although RMI and Oremet *** in 1982, neither domestic producer ***. 6/

Competition quickened in 1983, according to data received from RMI and Phibro. RMI bid on *** contracts involving *** melters and a total of *** pounds of titanium sponge; it won *** pounds from ***. 7/ Phibro quoted on *** contracts involving *** melters and *** pounds of titanium sponge; 8/ it won *** of the *** contracts. In two instances, Phibro and RMI were in head-to-head competition for the awards. The first instance involved competing quotes to *** for *** contracts for a total amount ranging from *** to *** pounds of sponge to be delivered ***. RMI won the contract. 9/ The second contract involved competing quotes to *** to supply *** pounds of titanium sponge in ***. Phibro won that contract.

1/ ITI, which accounts for a substantial proportion of open market sales of titanium sponge in the United States by domestic producers, did not provide the data requested in the Commission's questionnaire.

2/ Importer's questionnaire responses were received from three melters that purchased titanium sponge for their own account, not for resale to others.

3/ *** purchasers were involved: ***. Each of these firms requested quotes on a quantity range, rather than on a single specific amount.

4/ RMI responded to requests for quotes from ***.

5/ Phibro quoted to ***.

6/ The purchaser's questionnaire returned by *** showed that ***.

7/ RMI also quoted to ***.

8/ Phibro responded to requests for bids from ***.

9/ ***.

Table 23.--Titanium sponge: Total quantity of contracts bid on by domestic producers and importers and number and quantity of bids won and lost, 1981-83 and January-June 1984

* * * * * * * *

A comparison of competing prices received by RMI and Phibro is presented in table 24. No head-to-head bid comparisons are possible for 1981 or 1982. However, the price series for both domestic sponge and sponge imported from Japan do show a downward trend that began in December 1981 and continued through 1982 and into 1983. As noted previously, RMI and Phibro competed in bids to *** and *** in 1983. RMI underbid Phibro by *** per pound, or *** percent, to win the *** contract in *** with a bid of *** per pound. In contrast, Phibro underbid RMI on ***--by *** per pound, or by *** percent, respectively. In January-June 1984, demand for titanium sponge improved somewhat, at least for RMI. That firm bid on *** contracts to supply sponge, ranging in quantity from *** pounds to *** pounds. RMI won *** contracts. No other respondent firm submitted data on bids made in January-June 1984 to supply titanium sponge.

Titanium sponge prices quoted to purchasers.--The Commission also asked purchasers of titanium sponge to provide data on price quotes by producers and importers on contracts awarded by purchasers during January 1981-June 1984. The data provided by five purchasers on prices quoted, winning bids, quantities purchased, and total value of contracts won are presented, in chronological order by date of award, in table 25 for imported sponge and table 26 for domestic sponge.

Based on the data received, 26 contracts were awarded to importers of titanium sponge for delivery during the subject period. 1/ Contract award dates, however, extended only through August 1983. In quantity terms, contracts awarded ranged from *** pounds to *** pounds; in value terms, these contracts ranged from *** to ***. Phibro won *** contracts for a total of *** pounds of titanium sponge. One of the largest contracts for imported titanium sponge was awarded to *** in ***; this contract was for *** pounds of sponge from China. The three remaining contracts were awarded in *** to importers of Russian titanium sponge; these contracts totaled *** pounds.

Price trends.--The data on winning bids reflect the decline in demand for titanium mill products, and thus titanium sponge, as well as the increased availability of domestic and imported sponge that marked the subject period. Prices quoted by Phibro for Japanese titanium sponge slid from a range of *** to *** per pound during January 1980-June 1981 to *** per pound in February 1982. As the market softened in 1982 and 1983, prices quoted by Phibro fell steadily to *** per pound in April-May 1983 and to a period low in August 1983 of *** (c.i.f.), which amounted to *** per pound duty paid and delivered. 2/

Based on data received from purchasers, domestic producers of titanium sponge were awarded eight contracts that ranged in quantity from *** pounds to *** pounds; the contracts totaled *** pounds. In value terms, these awards ranged from almost *** to an estimated *** (the *** contract). The downward trend in prices is readily apparent in producer price quotes. Quoted prices fell from a range of *** to *** per pound in 1980 and 1981 to a period low of *** per pound in July 1983. A contract awarded to *** in March 1984 showed a slight upturn in the price quoted, to *** per pound.

1/ Two of the awards for sponge shown in table 25 were made in 1980.
2/ This price includes *** cents per pound for inland freight costs.

Table 24.— Titanium sponge: Contracts awarded, by awarding and winning firms, 1981-83 and January-June 1984

* * * * * * * *

Table 25.—Chronology of price quotes and winning bids made to purchasers of titanium sponge and contracts awarded to importers, by quantity and value, January 1980-June 1984, by award date

* * * * * * * *

Table 26.—Chronology of price quotes and winning bids made to purchasers of titanium sponge and contracts awarded to domestic producers, by quantity and value, January 1980–June 1984, by award date

* * * * * * * *

Competing quotes to purchasers.--*** was the only purchaser that provided competing quotes for each of its awarded contracts. The first of ***'s four contracts, for *** pounds, went to *** in *** 1982 at a bid price of *** per pound. (A competing U.S. producer's price was *** per pound.) No importers quoted on that contract. In *** 1982, *** quoted a winning bid of *** per pound for *** pounds of Russian sponge. Phibro's bids were *** and ***, compared with U.S. producers' bids that ranged from *** to *** per pound. On a third contract, Phibro quoted a winning bid of *** delivered (*** CIF) for *** pounds of sponge in *** 1983. Billiton's competing quote was *** per pound delivered, compared with a range of U.S. producers' bids of *** to *** per pound. In August 1983, Phibro quoted a winning bid of *** per pound delivered (*** c.i.f.) for *** pounds of Japanese titanium sponge. ***'s competing bid for Russian sponge was *** per pound, Billiton's was *** per pound, and U.S. producers' bids ranged from *** to *** per pound.

Prices of mill products.--The Commission also requested data from U.S. sponge and ingot producers and from purchasers on prices of titanium mill products. Representative mill products selected were billet, plate, strip, and sheet. The data received are presented in appendix D. These data are shown by firm in order to avoid any distortion in price trends that could result from aggregating data. Table D-1 shows the prices reported for the four products by two integrated sponge producers, RMI and Timet, and two nonintegrated producers, Howmet and Martin Marietta. These data are generally complete for the integrated firms, but only a few sales of billet were reported by the nonintegrated firms.

Table D-2 shows purchase prices reported for titanium billet. Data from two purchasers span the entire subject time period and reflect a downward trend in prices that began in early or mid-1982 and continued to April-June 1984. Prices fell from a range of *** to *** per pound in April-June 1982 to a range of *** to *** per pound in April-June 1984, a slide of 33 percent. A third purchaser of billet submitted prices that reflect an even sharper drop--from *** per pound in January-March 1982 to *** per pound in April-June 1984, or almost a 58 percent decline. Tables D-3 through D-5 reflect similar downward trends in prices paid for titanium plate, strip, and sheet.

Inasmuch as demand for titanium sponge and titanium ingot is a derived demand dependent on the demand for mill products, the decline in demand and prices for such products must have affected the prices of titanium sponge and ingot. At the same time, the price of titanium scrap also declined sharply. 1/ To the extent that nonintegrated melters use relatively more scrap than sponge in producing titanium ingots than do the integrated producers, 2/ the sharp decline in the price of scrap provided the non-integrated melters an input cost advantage over the cost to the integrated firms. To the extent that imported titanium sponge may have been priced below the integrated producers' cost of producing sponge, nonintegrated melters added to their raw material cost advantage in producing ingots or mill products.

1/ See RMI posthearing brief, question 7.

2/ According to testimony at the Commission's hearing (transcript at p. 170), integrated producers typically use about 25 percent scrap in producing titanium ingots, whereas nonintegrated producers typically use about 75 scrap.

GSA purchase of titanium sponge for the National Defense Stockpile

Because of titanium's importance in defense applications, the U.S. Government maintains a stockpile of titanium sponge. Stockpile objectives have often been revised; the most recent goal of 195,000 tons was announced by the Federal Emergency Management Agency (FEMA) in May 1980. 1/ The Stockpile Report to the Congress for October 1982-March 1983 showed that the GSA had 32,331 tons of titanium sponge in stock.

On August 2, 1983, GSA's Federal Property Resources Service (FPRS) announced that it would purchase 4,500 tons of titanium sponge for the National Defense Stockpile. Not since 1972, when RMI and Timet each won contracts to supply 3,250 tons of sponge, had the GSA sought to procure sponge for the stockpile. The 1983 solicitation requested specific price quotes on three types of titanium sponge--types A, B, and C--in nine lots of 500 tons each. 2/ The logic behind the request for bids on each of the three types was to permit small producers to bid and to enable FPRS to aggregate a combination of the lowest prices for types A, B, and C titanium sponge for the lowest overall expenditures in purchasing 4,500 tons.

GSA set a relatively short turnaround time for response to the bid request. Solicitations were to be returned in 30 days, and the bid awards were scheduled to be announced on September 2, 1983. Between the return of the bids and the announcement of the awards by GSA, two protests were filed with the General Accounting Office by bidding vendors, one by Oremet and one by Billiton Metals. Oremet objected to the lack of a Buy American preference clause in the GSA solicitation. Billiton criticized the fact that import duties were added to the bid price. With regard to the Oremet protest, GSA officials explained that William Brock, the United States Trade Representative, had stated in a letter to the GSA 3/ that there were insufficient grounds for a national security "Buy American" exception for the stockpile purchase of sponge. In that same letter, Ambassador Brock advised the GSA that, from the standpoint of U.S. trade policy, import duties should at least be calculated for purposes of evaluating the bids received. The GSA followed this advice. 4/

GSA informed all bidders of the two protests. Bidders had 10 days to respond to the two protests. RMI responded but missed the 10-day period, so the awards were made on October 28, 1983. The awards were made on the basis of price quotes on supplying increments of 500 tons of titanium sponge, not on a tripartite equal allocation for each of the three categories of sponge.

1/ Langtry E. Lynd, "Titanium," Mineral Commodity Profiles, 1983, p. 3.

2/ Initially a type D titanium sponge was included. Type D is titanium sponge produced in granules by an electrolytic process. Although Dow Chemical and Howmet have made type D sponge in pilot production efforts, there are no existing facilities for producing the type D product. Reportedly highly energy efficient, this process might be a prime candidate for any future titanium plant that might be considered.

3/ A copy of the letter is presented in app. E.

4/ The GSA did not, however, follow Ambassador Brock's suggestion to state in its bid solicitations that, in the event antidumping duties were imposed, such duties would not be waived and would not be borne by the U.S. Government.

FPRS awarded contracts to three firms. Phibro received two contracts to supply titanium sponge imported from Japan. One contract involved 2,500 tons of type A titanium sponge bid in five increments of 500 tons each at $7,387 per ton, or $3.69 per pound. 1/ A smaller contract was awarded to Phibro to supply 500 tons of type C titanium sponge from Japan at the same price. Timet was awarded a contract for 1,000 tons of type B titanium sponge at an average price of $7,140 per ton, or $3.57 per pound. Billiton Metals won an award to supply 500 tons of type C titanium sponge imported from the United Kingdom at $6,741 per ton, or $3.37 per pound. 2/ The quantity and prices (including imputed duty on imports) of the four contracts awarded to each firm are shown in the following tabulation (a summary of all bids received by GSA is shown in app. E):

Firm	Type of sponge	Quantity (short tons)	Price (per pound)
Phibro	A	2,500	$3.69
Phibro	C	500	3.69
Timet	B	1,000	3.57
Billiton Metals	C	500	3.37

Announcement of the awards triggered a legal move by RMI, which had submitted a losing bid ($3.79 per pound). Counsel for RMI sought temporary and permanent injunctions to prevent the implementation of the awards. Judge Pratt of the U.S. District Court of Washington, DC, denied the injunction. GSA had argued that the need for the titanium sponge is high priority. A letter to GSA from FEMA said there is a "compelling and urgent need" for the titanium sponge. Judge Pratt indicated that he based his determination on this argument.

Appreciation of the U.S. dollar

Table 27 presents indexes of producer prices in the United States, Japan, and the United Kingdom and indexes of the nominal and real exchange rates for the U.S. dollar against the Japanese yen and the British pound from January-March 1981 (the base period) through June 1984. As shown in the table, the yen depreciated in nominal terms by about 11 percent against the dollar since the base period, whereas the pound depreciated by almost 40 percent against the dollar. Because of Japan's low inflation rate (about 1 percent) over the 14-quarter period, the yen depreciated in real terms by approximately 17 percent against the dollar, or 6 percentage points more than the nominal depreciation. In contrast, the United Kingdom's high inflation rate over the same period (approximately 18 percent) resulted in a depreciation of the pound in real terms by approximately 30 percent against the dollar, or 9 percentage points less than the nominal depreciation.

1/ This includes imputed import duties. Without such duties included, the bid price was $6,400 per ton, or $3.20 per pound.

2/ Again, this includes imputed import duties. The bid price without such duties included was $5,840 per ton, or $2.92 per pound.

Table 27.--Indexes of producer prices in the United States, Japan, and the United Kingdom, and indexes of the nominal and real exchange rates for the U.S. dollar against the Japanese yen and the British pound, by quarters, January 1981-June 1984

(January-March 1981=100.0)

Period	U.S. producer price index	Japan			United Kingdom		
		Producer price index	Nominal exchange rate index 1/	Real exchange rate index 2/	Producer price index	Nominal exchange rate index 1/	Real exchange rate index 1/
1981:							
January-March	100.0	100.0	100.0	100.0	100.0	100.0	100.0
April-June	102.4	101.1	93.4	94.5	103.3	90.1	90.9
July-September	103.3	102.4	88.6	87.9	105.5	79.5	80.5
October-December	103.2	102.1	91.5	90.5	107.9	81.5	84.3
1982:							
January-March	104.0	102.5	88.0	86.7	108.9	80.0	84.1
April-June	104.2	102.8	84.2	83.1	110.6	77.0	82.2
July-September	104.8	103.8	79.4	78.7	111.8	74.7	79.9
October-December	104.8	103.7	79.2	78.3	113.1	71.4	77.4
1983:							
January-March	104.9	101.7	87.2	84.6	114.7	66.3	72.9
April-June	105.2	100.7	86.5	82.8	116.9	67.3	75.2
July-September	106.3	100.9	84.8	80.5	117.8	65.4	72.8
October-December	106.8	100.3	87.7	82.5	120.0	63.6	71.5
1984:							
January-March	108.0	100.4	89.0	82.8	122.0	62.1	70.2
April-June	108.7	100.3	89.5	82.6	124.9	60.5	69.5

1/ Based on nominal exchange rates expressed in U.S. dollars per unit of foreign currency.

2/ The real exchange rate of a currency is the nominal rate adjusted for the differences between inflation rates in the U.S. and the foreign country as measured by the respective producer price indexes.

Source: International Monetary Fund, International Financial Statistics, various issues.

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Lost sales

The only alleged sales of titanium sponge lost by domestic producers to LTFV imports of such merchandise from Japan or the United Kingdom involved the GSA stockpile purchase. As indicated in appendix E, five U.S. producers (including Teledyne Wah Chang, which is no longer an active sponge producer) bid on at least part of that purchase. Timet, the only U.S. producer to win part of the GSA award, bid on all nine 500-ton lots at prices ranging from $3.50 to $4.15 per pound. RMI bid on four 500-ton lots at a price of $3.79 per pound for each lot. Oremet bid on three 500-ton lots, at prices of $3.97, $3.89, and $3.86 per pound for the respective lots. ITI bid on one lot of 500 tons at a price of $4.12 per pound.

In its prehearing brief, counsel for RMI submitted data purporting to show the cost to the firm of the loss of the GSA contract. RMI estimated the cost to the firm of the loss of efficiencies that would have resulted from higher operating rates at more than ***. In addition, because RMI had excess capacity of *** pounds from November 1983 to June 1984, the estimated lost profits on this excess capacity were alleged to amount to ***. The total alleged cost to RMI directly attributable to the lost GSA contract amounted to *** according to these calculations.

Lost revenue

Three domestic producers provided 20 instances of alleged lost revenue as a result of reducing prices because of competing titanium sponge imported from Japan. The two examples provided by *** involved *** and could not be confirmed. RMI, in its prehearing and posthearing briefs, submitted one instance of lost revenue involving nearly *** pounds of sponge. *** provided *** examples, which involved *** purchasers and *** pounds of sponge.

The RMI allegation concerned its Martin Marietta contract. RMI alleged that it lost over *** on this contract because of low Japanese sponge prices. The contract, which ***, provided for a sponge price of *** per pound. It also contained price escalators, as well as a competitive offer clause and the right for Martin Marietta to cancel the contract upon giving RMI 30 days notice. In September 1983, RMI and Martin Marietta negotiated a 1984 sponge price of *** per pound. On October 31, 1983, Phibro submitted an unsolicited bid for titanium sponge to Martin Marietta, at a c.i.f. price of *** per pound. Martin Marietta advised RMI of the Phibro offer. Phibro subsequently withdrew its offer to supply Martin Marietta with Japanese sponge. 1/ Martin Marietta then told RMI of its "desire to pursue discussions for them to remain competitive." 2/ At the Commission's hearing, Mr. George Simek, Director of Purchasing for Martin Marietta, confirmed that in January 1984, RMI agreed to a price change which amounted to approximately a 1.3 percent reduction of the previously negotiated price. This reduction, to *** per pound, was to be in

1/ According to the respondents' posthearing brief (app. 3I), the offer was withdrawn on Nov. 29, 1983.

2/ Transcript of the hearing, p. 200.

effect during January-June 1984, 1/ after which time the price reverted to the originally negotiated figure of *** per pound. RMI contends that its 1985 negotiated price increase to *** per pound for *** pounds of sponge was limited by the low Japanese sponge prices available in the market. This limitation is figured into RMI's claimed *** revenue loss.

With regard to the *** lost revenue allegations, five instances attributable to sales made in 1984 could not be confirmed because initial quote data were not provided. 2/ Of the remaining 12 allegations, no quantity data were provided on one 1983 sale to ***. The other allegations by *** of revenues lost because of competition from titanium sponge from Japan are discussed below.

One instance named ***, as the purchaser of *** pounds of sponge in 1983 after *** reduced its initial offer price from *** to *** per pound. Alleged lost revenue in this instance amounted to ***. *** explained the circumstances of the competition. *** did ask *** for a quote on the stated amount. *** was not an approved vendor, but *** was willing to let a contract to *** in order to initiate the qualification process to make *** an approved vendor of the subject product for *** uses. 3/ Only recently has *** been approved by ***, and *** is not yet approved by ***, according to ***.

*** attached two conditions to the purchase--that *** quote a price competitive with Japanese-produced titanium sponge and that *** offer the necessary terms. *** did not state the Phibro price for Japanese titanium sponge. *** reduced its price to less than the price *** was paying, *** per pound delivered. *** quoted *** f.o.b. mill. *** said that transportation costs for the competing products are about the same. As for terms, because of ***, a vendor not approved is required to sell on a 6-month consignment basis. *** offered a 3-month consignment in order to obtain the necessary approval as a vendor. *** would like to have a dependable domestic source and views *** as able to become such a supplier.

At about the same time as the above transaction, *** asked *** to bid on *** pounds of sponge for *** delivery. *** has not responded to the request. *** noted that *** does have some problems with the *** sponge that *** produces. *** can't handle the *** product adequately, said ***, adding that it would take *** in capital expenditures per furnace to correct this problem. No such investment is required for the *** or *** product.

Another instance named *** as purchasing from *** in *** after *** reduced its initial offer prices. The first instance involved *** pounds of sponge offered *** at an initial price of *** per pound, which was then reduced to *** per pound. *** involved *** pounds of titanium sponge offered *** at *** per pound and then reduced to *** per pound. ***'s alleged lost revenue *** totaled ***. *** were allegedly made in the face of competition from titanium sponge imported from Japan. *** of *** confirmed both

1/ The amount of sponge delivered in 1984 at the *** per pound price was *** pounds.

2/ These allegations involved ***.

3/ ***.

purchases. *** emphasized that the need to be competitive in the downstream mill product market required buying titanium sponge at the lowest possible price. Even then, *** loses sales to integrated producers, according to ***. *** recently lost an order for *** to ***, which quoted *** per pound against the *** quote of *** per pound. According to ***, the *** price for the *** sponge would have to be in the realm of *** per pound to ***. *** commented that prices in 1981 were artificially high because of demand and the industry structure. He added that as a result, the drop in prices since then is "exaggerated" and has not matched the drop in mill product prices, thus creating a cost/price squeeze in the downstream titanium products. 1/

*** also identified *** alleged instances of sales made to *** in 1983 after price reductions because of competing Japanese products. These 1983 purchases involved *** pounds of sponge in ***. Offer prices were cut from *** and ***. Alleged lost revenue totaled ***. *** checked the firm's records in response to the staff's inquiry. *** verified the purchases and stated that the allegations were roughly correct on the quantities involved in the contracts. *** does not keep records of initial quotes but can attest to the fact that the prices were negotiated with competing Japanese sponge prices in mind. 2/ ***'s records do show that the prices paid on these purchases were as cited by ***.

One purchaser, ***, was named by *** in *** instances of alleged lost revenue, ***. 3/ The quantities involved in the *** instances amounted to about *** pounds of sponge. The offer price on *** purchases in *** was *** per pound, which was allegedly cut to *** per pound. In ***, an initial quote of *** per pound was reduced to *** per pound, and a *** offer at *** per pound was cut to *** per pound. ***'s alleged lost revenue totaled ***. *** explained that, although ***, it also buys sponge from other suppliers. *** noted that ***'s sponge is qualified for most, but not all, uses. The prices that *** pays for ***'s sponge are negotiated prices, with competing import prices known.

1/ *** also confirmed *** purchase of *** pounds of titanium sponge from *** in *** after the initial offer price was reduced from *** to *** per pound. *** noted that this was a higher-than-usual market price at the time, but the need was urgent. He added that *** had purchased sponge from *** at *** per pound in 1983.

2/ As indicated previously, ***.

3/ As indicated previously, ***.

APPENDIX A

FEDERAL REGISTER NOTICES OF THE COMMISSION'S INVESTIGATIONS AND RESCHEDULING OF HEARING

[Investigations Nos. 731-TA-161 and 162 (Final)]

Titanium Sponge From Japan and the United Kingdom

AGENCY: International Trade Commission.

ACTION: Institution of final antidumping investigations and scheduling of a hearing to be held in connection with the investigations.

EFFECTIVE DATE: May 11, 1984.

SUMMARY: As a result of affirmative preliminary determinations by the U.S. Department of Commerce that there is a reasonable basis to believe or suspect that imports from Japan and the United Kingdom of titanium sponge, provided for in items 629.1420 or 833.00 of the Tariff Schedules of the United States, are being sold in the United States at less than fair value, the United States International Trade Commission hereby gives notice of the institution of investigations Nos. 731-TA-161 and 162 (Final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) 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 of such merchandise. The Department of Commerce will make its final determinations of sales at less than fair value in this case on or before July 23, 1984, and the Commission will make its final injury determinations by September 7, 1984 (19 CFR 207.25).

FOR FURTHER INFORMATION CONTACT: Judith Zeck (202-523-0339), Office of Investigations, U.S. International Trade Commission.

SUPPLEMENTARY INFORMATION:

Background

On January 5, 1984, the Commission determined on the basis of the information developed during the course of its preliminary investigations that there was a reasonable indication that an industry in the United States was threatened with material injury by reason of imports of titanium sponge from Japan and the United Kingdom. The preliminary investigations were instituted in response to a petiton filed on November 28, 1983, by counsel on behalf of RMI Co., Niles, Ohio.

Participation in the Investigation

Persons wishing to participate in the investigations as parties must file an entry of appearance with the Secretary of the Commission, as provided in section 201.11 of the Commission's Rules of Practice and Procedure (19 CFR 201.11), not later than 21 days after the publication of this notice in the **Federal Register**. Any entry of appearance filed after this date will be referred to the Chairman, who shall determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Upon the expiration of the period for filing entries of appearance, the Secretary shall prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations, pursuant to § 201.11(d) of the Commission's rules (19 CFR 202.11(d)). Each document filed by a party to these investigations must be served on all other parties (as identified by the service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate of service (19 CFR 201.16(c)).

Staff Report

A public version of the staff report containing preliminary findings of fact in these investigations will be placed in the public record on July 19, 1984, pursuant to § 207.21 of the Commission's Rules (19 CFR § 207.21).

Hearing

The Commission will hold a public hearing in connection with these investigations beginning at 10:00 a.m. on August 2, 1984, at the U.S. International Trade Commission Building, 701 E Street NW., Washington, D.C. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on July 19, 1984. All

persons desiring to appear at the hearing and make oral presentations should file prehearing briefs and attend a prehearing conference to be held at 11:00 a.m. on July 25, 1984, in room 117 of the U S. International Trade Commission Building. The deadline for filing prehearing briefs is July 30, 1984.

Testimony at the public hearing is governed by section 207.23 of the Commission's rules (19 CFR 207.23). This rule requires that testimony be limited to a nonconfidential summary and analysis of material contained in prehearing briefs and to information not available at the time the prehearing brief was submitted. All legal arguments, economic analyses, and factual materials relevant to the public hearing should be included in prehearing briefs in accordance with § 207.22 (19 CFR 207.22). Posthearing briefs must conform with provisions of § 207.24 (19 CFR 207.24) and must be submitted not later than the close of business on August 7, 1984.

Written Submissions

As mentioned, parties to this investigation may file prehearing and posthearing briefs by the dates shown above. 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 August 7, 1984. A signed original and fourteen (14) true copies of each submission musts be filed with the Secretary to the Commission in accordance with § 201.8 of the Commission's rules (19 CFR 201.8). All written submissions except for confidential business data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any business information for which confidential treatment is desired shall be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform with the requirements of § 201.6 of the Commission's rules (19 CFR 201.6).

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

This notice is published pursuant to § 207.20 of the Commission's rules (19 CFR § 207.20).

Issued: May 24, 1984.

By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 84–14540 Filed 5–30–84, 8:45 am]

BILLING CODE 7020–02–M

[Investigations Nos. 731-TA-161 and 162 (Final)]

Titanium Sponge From Japan and the United Kingdom

AGENCY: United States International Trade Commission.

ACTION: Rescheduling of the hearing to be held in connection with the subject investigations.

EFFECTIVE DATE: June 27, 1984.

SUMMARY: The Commission hereby announces the rescheduling of the hearing to be held in connection with these investigations from 10:00 a.m. on August 2, 1984, to 10:00 a.m., on September 26, 1984.

FOR FURTHER INFORMATION CONTACT: Cynthia Wilson (202-523-0291), Office of Investigations, U.S. International Trade Commission.

SUPPLEMENTARY INFORMATION:

Background

On May 11, 1984, the Commission instituted these final antidumping investigations involving titanium sponge from Japan and the United Kingdom and scheduled a hearing to be held in connection with the investigations for August 2, 1984 (49 FR 22724, May 31, 1984). Subsequently, the Department of Commerce extended the date for its final determinations in the investigations from July 23, 1984, to September 24, 1984. The Commission, therefore, is revising its schedule in the investigations to conform with Commerce's new schedule. Pursuant to section 735(b)(2)(B) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)(2)(B)), the Commission must make its final determinations within 45 days of Commerce's final determinations, or in this case by November 7, 1984.

Staff Report

A public version of the staff report containing preliminary findings of fact in these investigations will be placed in the public record on September 14, 1984, pursuant to § 207.21 of the Commission's Rules (19 CFR 207.21).

Hearing

The hearing in connection with these investigations will begin at 10:00 a.m. on Spetember 26, 1984, at the U.S. International Trade Commission Building, 701 E Street NW., Washington, D.C. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on September 17, 1984. All persons desiring to appear at the hearing and make oral presentations should file prehearing briefs and attend a prehearing conference to be held at 10:00 a.m. on September 20, 1984, in room 117 of the U.S. International Trade Commission Building. The deadline for filing prehearing briefs is September 24, 1984.

Testimony at the public hearing is governed by § 207.23 of the Commission's rules (19 CFR 207.23). This rule requires that testimony be limited to a nonconfidential summary and analysis of material contained in prehearing briefs and to information not available at the time the prehearing brief was submitted. All legal arguments, economic analyses, and factual materials relevant to the public hearing should be included in prehearing briefs in accordance with § 207.22 (19 CFR 207.22). Posthearing briefs must conform with provisions of § 207.24 (19 CFR 207.24) and must be submitted not later than the close of business on October 5, 1984.

Written Submissions

As mentioned, parties to these investigations may file prehearing and posthearing briefs by the dates shown above. In addition, any person who has not entered an appearance as a party to the investigations may submit a written statement of information pertinent to the subject of the investigations on or before October 5, 1984. A signed original and fourteen (14) true copies of each submission must be filed with the

Secretary to the Commission in accordance with § 201.8 of the Commission's rules (19 CFR 201.8). All written submissions except for confidential business data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any business information for which confidential treatment is desired shall be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform with the requirements of § 201.6 of the Commission's rules (19 CFR 201.6).

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

This notice is published pursuant to section 207.20 of the Commission's rules (19 CFR 207.20).

By order of the Commission.

Issued: July 13, 1984.

Kenneth R. Mason,

Secretary.

[FR Doc. 84-19018 Filed 7-17-84; 8:45 am]

BILLING CODE 7020-02-M

APPENDIX B

LIST OF WITNESSES AT THE COMMISSION'S HEARING

CALENDAR OF PUBLIC HEARING

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

Subject : Titanium Sponge from Japan and the United Kingdom

Inv. Nos. : 731-TA-161 and 162 (Final)

Date and time: September 26, 1984 - 10:00 a.m.

Sessions were held in the Hearing Room of the United States International Trade Commission, 701 E Street, N.W., in Washington.

In support of the imposition of antidumping duties:

Wilmer, Cutler & Pickering--Counsel
Washington, D.C.
Verner, Liipfert, Bernhard and McPherson, Chartered--Counsel
Washington, D.C.
on behalf of

RMI Company

L. Frederick Gieg, Jr., President, RMI Company

John F. Hornbostel, Jr., General Counsel and Secretary, RMI Company

Richard Ivory, Assistant Controller, RMI Company

Wilmer, Cutler & Pickering

John D. Greenwald)
Robert Cassidy, Jr.) --OF COUNSEL

Verner, Liipfert, Bernhard and McPherson

Alan Wm. Wolff)
Ms. Elaine M. Frangedakis) --OF COUNSEL

- more -

Plaia, Schaumberg & deKieffer--Counsel
Washington, D.C.
on behalf of

Titanium Metals, Inc. ("Timet")

Frederick Steinberg)
Donald E. deKieffer)--OF COUNSEL
George W. Thompson)

Covington & Burling--Counsel
Washington, D.C.
on behalf of

International Titanium, Inc. ("ITI"), Moses Lake, Washington

Harvey M. Applebaum--OF COUNSEL

ARMCO Corporate Offices, ARMCO, INC.
Washington, D.C.
on behalf of

Oregon Metallurgical Corporation

George F. Vary, International Trade Counsel

In opposition to the imposition of antidumping duties:

Busby, Rehm and Leonard, P.C.--Counsel
Washington, D.C.
on behalf of

Philipp Brothers, Inc. (Phibro)

John F. Lee, Vice-President, Phibro, New York, N.Y.

ICF Incorporated, Washington, D.C.

John Reilly, Principal

Lance Graef, Project Manager

- more -

Ward Minkler, President, ALS Metals Company, Pittsburgh, Pennsylvania

Robert F. Nagy, General Manager, Howmet Turbine Components Corporation, Whitehall, Michigan

Tom Williams, Director of Communications, Teledyne-Alvac, Monroe, North Carolina

Gerald Cohen, Vice President, Lawrence Aviation Industries, Inc., Port Washington, New York

George J. Simek, Director of Purchasing, Martin Marietta Aluminum, Inc., Bethesda, Maryland

David Busby)
Will E. Leonard)
Ms. Ruth Bale Lippincott)--OF COUNSEL

Arnold & Porter--Counsel
Washington, D.C.
on behalf of

Nippon Sode Company, Ltd., a Japanese producer of titanium sponge

Patrick F.J. Macrory--OF COUNSEL

Wender, Murase & White--Counsel
Washington, D.C.
on behalf of

Osaka Titanium Co., Ltd.

Matthew J. Marks--OF COUNSEL

Graham & James--Counsel
Washington, D.C.
on behalf of

Toho Titanium Co., Ltd.

Yasuhiro Hagihara)
Denis H. Oyakawa)
Stuart Benson)--OF COUNSEL
Yoshihiro Saito)

- more -

Whitney & Dempsey--Counsel
Washington, D.C.
on behalf of

Billiton Metals, Inc. and Billiton (UK) Limited

David Dempsey--OF COUNSEL

APPENDIX C

FEDERAL REGISTER NOTICE OF COMMERCE'S FINAL LTFV DETERMINATIONS

[A-412-013]

Titanium Sponge From the United Kingdom: Final Determination of Sales at Less Than Fair Value

AGENCY: International Trade Administration/Import Administration, Commerce.

ACTION: Notice.

SUMMARY: We have determined that titanium sponge from the United Kingdom is being, or is likely to be, sold in the United States at less than fair value. We have notified the U.S. International Trade Commission (ITC) of our determination, and the ITC will determine, within 45 days of publication of this notice, whether a U.S. industry is materially injured, or is threatened with material injury, by imports of this merchandise. We have directed the U.S.

Customs Service to continue to suspend the liquidation of all entries of the subject merchandise which are entered, or withdrawn from warehouse, for consumption, on or after the date of publication of this notice and to require a cash deposit or bond for each such entry in an amount equal to the estimated dumping margin as described in the "Suspension of Liquidation" section of this notice. We have decided, however, to exclude those entries being imported in fulfillment of the sale to the General Services Administration for the National Defense Stockpile made during the period of investigation from suspension of liquidation and any bonding or deposit requirements.

EFFECTIVE DATE: October 1, 1984.

FOR FURTHER INFORMATION CONTACT: John J. Kenkel, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, D.C. 20230; telephone: (202) 377-3965.

Final Determination

We have determined that titanium sponge from the United Kingdom is being, or is likely to be, sold in the United States at less than fair value, as provided in section 735 of the Tariff Act of 1930, as amended (19 U.S.C. 1673d) (the Act).

We have found that the foreign market value of titanium sponge exceeded the United States price on the single sale made during the period of investigation. The margin on this sale amounted to 109.06 percent.

Case History

On November 28, 1983, we received a petition from RMI Company on behalf of the domestic titanium sponge industry. In compliance with the filing requirements of § 353.36 of our regulations (19 CFR 353.36), the petitioner alleged that imports of titanium sponge from the United Kingdom are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Act, and that these imports are materially injuring, or are threatening material injury to, a United States industry. The petition also alleged that sales of the subject merchandise were being made at less than the cost of production. After reviewing the petition, we determined that it contained sufficient grounds upon which to initiate an antidumping investigation. We notified the ITC of our action and initiated such an investigation on December 16, 1983 (48 FR 56817). On January 12, 1984, the ITC determined that there is reasonable indication that imports of titanium sponge from the United Kingdom are materially injuring a U.S. industry.

On January 13, 1984, we mailed an antidumping questionnaire to Billiton (U.K.) Ltd., the exporter of the merchandise. An extension of time to respond was granted, and on March 2, 1984, we received the response to the questionnaire.

The respondent declined to provide essential cost information requested. Therefore, based on best information available, we preliminarily determined on May 7, 1984, that titanium sponge was being sold at less than fair value (49 FR 20042). The estimated dumping margin was 93.91 percent. The respondent has continued to refuse to cooperate in this investigation.

A hearing was held on August 14, 1984, to allow the parties an opportunity to address the issues arising in this investigation.

Scope of the Investigation

The merchandise covered by this investigation is titanium sponge. The term "titanium sponge" covers titanium sponge, unwrought, as currently provided for in item 629.1420 and of the *Tariff Schedules of the United States Annotated* (TSUSA) and which may enter the United States under item number 833 of the TSUSA for certified government importations for the National Defense Stockpile. Titanium sponge is a porous, brittle metal that has a high strength-to-weight ratio and is highly ductile. It is an intermediate product used to produce titanium ingot, slab, billet, bar, plate and sheet.

This investigation covers the period from June 1 to November 30, 1983. Deeside Titanium Co. Ltd. is the only known U.K. producer that exports the subject merchandise to the United States.

Fair Value Comparison

To determine whether sales of the subject merchandise in the United States were made at less than fair value, we compared the United States price with the foreign market value.

United States Price

As provided in section 776(b) of the Act, we used the best information available to represent the United States price because the respondent refused to provide the Department with an adequate response to our questionnaire. Therefore, we calculated the purchase price for Deeside based on the information provided in the petition, which is the best information otherwise available.

We deducted from the purchase price the petitioner's estimates for ocean freight, U.S. port and inland freight costs and insurance costs incurred in delivering the product.

Foreign Market Value

We declared the respondent to be nonresponsive because it did not provide requested cost information that we needed to conduct our investigation. In accordance with section 776 of the Act, we used the best information available. The petitioner alleged that sales in the home market were at prices below the cost of producing titanium sponge. Therefore, the best information available is constructed value based on the cost estimate provided in the petition. The petitioner added 10 percent to its cost estimate for general expenses, and the statutory eight percent profit to its estimate of the sum of cost of production and general expenses in order to obtain a constructed value in accordance with section 773(e)(1) of the Act. We made an adjustment to foreign market value for the petitioner's estimate for commissions.

Petitioner's Comments

Comment 1: Petitioner claims that the respondent has not provided the Department with even the most basic data needed for an analysis of the cost of production of Deeside Titanium Co., Ltd. Accordingly, the data submitted by the petitioner is the "best information available."

DOC Position: We agree. The period of investigation is June 1 through November 30, 1983. The respondent refused to provide cost of production information for this period, despite repeated requests. Accordingly, we have used best information available as provided in the petition.

Comment 2: Petitioner contends that the Department should use exporter's sale price instead of purchase price to calculate the United States price because Billiton Metals, Inc. (the U.S. seller) is related to Billiton (U.K.) Ltd. (the exporter).

DOC Position: We disagree. Exporter's sales price is used to determine United States price when the sale is made after importation. Here, the merchandise was sold to the General Services Administration (GSA) prior to its importation by a U.S. company, Billiton Metals, Inc. (BMI). Therefore, we calculated the dumping margin predicated on purchase price.

Comment 3: Petitioner claims that antidumping duties should be applied to dumped articles classified under Tariff

Schedules of the United States item 833.00..

DOC Position: See our response to respondent's comment six.

Respondent's Comments

Comment 1: Respondent argues that the period of investigation should be 1984 instead of 1983 because that is when Deeside intended to produce the titanium sponge destined for the United States.

DOC Position: We disagree. The Department determines whether the respondent sold the merchandise at less than fair value by comparing the price at the time of sale to home market sales. If the home market is not viable, the Department then uses third country sales. If neither of these markets is viable the constructed value is used for comparison. Deeside had a home market sale and third country sales during 1983. To determine the viability of the home market or third country sales we cannot use 1984 costs to determine if sales were above the cost-of-production. 1983 sales must be compared to the actual costs incurred to produce the merchandise to determine if the sales price could recover all costs. When comparing sales to cost, it is apparent that 1983 sales could not be compared to 1984 costs.

Comment 2: Respondent contends that the Department is required to accept and verify all information relevant to the investigation. In addition, the information submitted by the respondent is the best available.

DOC Position: We disagree. The respondent has submitted 1984 cost data, rather than the 1983 data requested by the Department. When relevant data are not provided, we will neither accept nor verify nonrelevant data. Respondent has misconstrued the meaning of the term of art, "best information available." To reach a determination, we use the questionnaire responses. Where the respondent does not cooperate, we use the best information otherwise avaiable. We usually dismiss the entire response when the respondent submits only partial information because the selection of information submitted may be self-serving. The only information on cost of production for the period under investigation was submitted by the petitioner. Thus, it is the best information available.

Comment 3: Respondent argues that there have been no sales at less than fair value because the producer has priced the product so as to recoup its capital expenditures and labor learning curve losses over a reasonable period of time in anticipation of rising demand.

DOC Position: We could not address this issue because respondent did not provide the requested cost information.

Comment 4: Respondent states that the Department should respect the confidentiality agreement among its shareholders and, therefore, not penalize it for its non-response to certain questions.

DOC Position: The shareholders' confidentiality agreement does not relieve them of the consequences of refusing to cooperate in our investigation. Therefore, we have used the best information available, in accordance with section 776 of the Act (19 U.S.C. 1677e(b)) and § 353.51 of our regulations (19 CFR 353.51(b)).

Comment 5: Respondent maintains that GSA purchases of certified strategic and critical materials for National Defense Stockpile, such as titanium sponge, are not subject to antidumping duties under TSUSA item 833 because the "exemption" for importation under 833 is absolute and because the Department's interpretation of item 832 as free of antidumping duties is equally applicable to imports under item 833.

DOC Position: We have determined that it was reasonable for Billiton Metals, Inc., to expect, at the time it enetered into a contract with GSA, that imports of titanium sponge certified for the National Defense Stockpile would enter free of duties, including antidumping duties. It had this expectation based on the longstanding administrative practice of exempting articles imported for defense procurement under TSUS 832. Because of Billiton's reliance on this past practice, we have excluded entries within the current titanium sponge procurement contract from the scope of our determination. We credit reliance here only because of twenty-five years of unbroken practice by two federal agencies, and apparent congressional acquiescence in the practice.

Nevertheless, we do not view this decision as immutable. Further reliance on this agency's past practice would not be well advised. We intend to undertake a careful and thorough review of issues relevant to the waiver of antidumping and countervailing duties under sections 832 and 833, and will publish the results of this review within six months. During the course of this review, we will invite comments from all interested parties. We have decidied to undertake this review in recognition of serious implications for the domestic industry of a waiver of such duties, and our obligation to enforce vigorously the unfair trade laws.

Comment 6: Respondent contends that procurements under the Trade Agreements Act of 1979 and Department of Defense memoranda of understanding require that all bidders be treated on an equal basis.

DOC Position: Respondent's interpretation of the Trade Agreements Act of 1979 as requiring equal treatment for foreign bidders is incorrect. Section 301 of the Act, 19 U.S.C. 2511, provides that the President *may* waive discriminatory purchasing requirements, such as the Buy American provisions. Also, the GATT Procurement Code, which is in force under the Act, states that its equal treatment provision does not prevent imposition of duties. The Department of Defense memoranda of understanding with other countries do not require equal treatment; duties may not be considered, even at the bid evaluation stage. These memoranda, however, concern only defense procurement.

Comment 7: Respondent argues that any change in the Department's long-established position may occur only in accordance with the notice and public comment requirements of the Administrative Procedure Act.

DOC Position: Our investigations are not subject to the rulemaking provisions of the Administrative Procedure Act and our procedures have received judicial approval. *NLRB* v. *Bell Aerospace Company*, 416 U.S. 267, 290–95 (1973); *Michelin Tire Corp.* v. *United States*, slip op. 83–136 at 5 (Ct. Int'l Trade Dec. 22, 1983). We followed our normal procedures in this investigation, providing full notice and opportunity to comment to all interested parties.

Verification

Because the respondent did not provide the information requested in our questionnaire, we were unable to conduct a verification.

ITC Notification

In accordance with section 735(d) of the Act, we will notify the ITC of our determination. In addition, we are making available to the ITC all non-privileged and non-confidential information relating to this investigation. We will allow the ITC access to all privileged and confidential information in our files, provided the ITC confirms that it will not disclose such information, either publicly or under an administrative protective order, without the written consent of the Deputy Assistant Secretary for Import Administration. The ITC will make its determination whether these imports are

materially injuring, or threatening material injury to, a U.S. industry within 45 days of the publication of this notice. If the ITC determines that material injury or the threat of material injury does not exist, this proceeding will be terminated and all securities posted as a result of the suspension of liquidation will be refunded or cancelled. If, however, the ITC determines that such injury does exist, we will issue an antidumping order, directing Customs officers to assess an antidumping duty on titanium sponge from the United Kingdom entered, or withdrawn from warehouse, for consumption after the suspension of liquidation, equal to the amount by which the foreign market value of the merchandise exceeds the U.S. prices.

Suspension of Liquidation

In accordance with section 733(d) of the Act, we have directed the United States Customs Service to suspend liquidation of all entries of the subject titanium sponge from the United Kingdom which are entered, or withdrawn from warehouse, for consumption on or after May 11, 1984. The Customs Service shall continue to require a cash deposit or the posting of a bond equal to the estimated average amount by which the foreign market value of the merchandise subject to this investigation exceeds the United States price. This suspension of liquidation will remain in effect until further notice. The Customs Service, however, will exclude those entries being imported in fulfillment of the contract dated October 28, 1983, between the General Services Administration and Billiton Metals, Inc. for the National Defense Stockpile from the suspension of liquidation and any bonding or deposit requirements. The average margin for the respondent is as follows:

	Margin (percent)
Deeside Titanium Co., Ltd.	109.06
All other manufacturers, producers, and exporters	109.06

This determination is being published pursuant to section 735(d) of the Act (19 U.S.C. 1673d(d)).

Dated: September 24, 1984.

William T. Archey,

Acting Assistant Secretary for Trade Administration.

[FR Doc. 84-25952 Filed 9-28-84; 8:45 am]

BILLING CODE 3510-DS-M

[A-588-020]

Titanium Sponge From Japan: Final Determination of Sales at Less Than Fair Value

AGENCY: International Trade Administration/Import Administration, Commerce.

ACTION: Notice.

SUMMARY: We have determined that titanium sponge from Japan is being, or is likely to be, sold in the United States at less than fair value. We have notified the U.S. International Trade Commission (ITC) of our determination, and the ITC will determine, within 45 days of publication of this notice, whether a U.S. industry is materially injured, or is threatened with material injury, by imports of this merchandise. We have directed the U.S. Customs Service to continue to suspend the liquidation of all entries of the subject merchandise which are entered, or withdrawn from warehouse, for consumption, on or after the date of publication of this notice and to require a cash deposit or bond for each such entry in an amount equal to the estimated dumping margin as described in the "Suspension of Liquidation" section of this notice. We have decided, however, to exclude those entries being imported in fulfillment of the sale to the General Services Administration for the National Defense Stockpile made during the period of investigation from suspension of liquidation and any bonding or deposit requirements.

EFFECTIVE DATE: October 1, 1984.

FOR FURTHER INFORMATION CONTACT: John J. Kenkel, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, D.C. 20230; telephone: (202) 377-3965.

SUPPLEMENTARY INFORMATION:

Final Determination

We have determined that titanium sponge from Japan is being, or is likely to be, sold in the United States at less than fair value, as provided in section 735 of the Tariff Act of 1930, as amended (19 U.S.C. 1673d) (the Act).

We have found that the foreign market value of titanium sponge exceeded the United States price on 100 percent of comparisons made for each company. These margins ranged from 1.30 percent to 67.49 percent. The margins for Osaka Titanium Company ranged from 1.30 percent to 18.80 percent. The weighted-average margin for all comparisons made was 15.09 percent. The margins for Toho Titanium ranged from 31.53 percent to 40.29 percent. The weighted-average margin for all comparisons made was 34.25 percent. The margins for Nippon Soda ranged from 55.60 percent to 67.49 percent. The weighted-average margin for all comparisons made was 56.37 percent.

Case History

On November 28, 1983, we received a petition from RMI Company on behalf of the domestic titanium sponge industry. In compliance with the filing requirements of § 353.36 of the Commerce Regulations (19 CFR 353.36), the petitioner alleged that imports of titanium sponge from Japan are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Act, and that these imports are materially injuring, or are threatening material injury to, a United States industry. The petition also alleged sales of the subject merchandise were being made at less than the cost of production. After reviewing the petition, we determined that it contained sufficient grounds upon which to initiate an antidumping investigation. We notified the ITC of our action and initiated such an investigation on December 16, 1983 (48 FR 56815). On January 12, 1984, the ITC determined that there is reasonable indication that imports of titanium sponge from Japan are materially injuring a U.S. industry.

On December 30, 1983, we presented antidumping questionnaires to counsel for Osaka Titanium Co. Ltd. (OTC), Toho Titanium Co. Ltd. (Toho) and Nippon Soda Co. (Nisso). An extension of time to respond was granted, and on February 23, 24 and March 9, 1984, we received their responses to the questionnaires. Based on information contained in those responses, on May 7, 1984, we preliminarily determined that titanium sponge was being sold at less than fair value (49 FR 20042). The estimated weighted-average dumping margins were zero, 15.90 and 62.30 percent, for OTC, Toho and Nisso, respectively. As required by law, we conducted a verification of the correctness of each response through examination of source documents of each company in Japan. We also received a questionnaire response from Philipp Brothers, Inc. (Phibro). Phibro stated that it acts as a purchaser and/or agent of the producer of this product. We also conducted a verification of its responses.

A hearing was held on July 25, 1984, to allow the parties an opportunity to

address the issues arising in this investigation.

Scope of the Investigation

The merchandise covered by this investigation is titanium sponge. The term "titanium sponge" covers titanium sponge, unwrought, as currently provided for in item 629.1420 of the Tariff Schedules of the United States Annotated (TSUSA). Titanium sponge may also enter under item 833 of the TSUSA for certified government importations for the National Defense Stockpile. Titanium sponge is a porous, brittle metal, that has a high strength-to-weight ratio and is highly ductile. It is an intermediate product used to produce titanium ingot, slab, billet, bar, plate and sheet.

This investigation covers the period from June 1 to November 30, 1983. OTC, Nisso and Toho are the only known Japanese producers who export the subject merchandise to the United States. We examined virtually all United States sales made during the period of investigation.

Fair Value Comparison

To determine whether sales of the subject merchandise in the United States were made at less than fair value, we compared the United States price with the foreign market value.

United States Price

As provided in section 772(b) of the Act, we used the purchase price of the subject merchandise to represent the United States price because the merchandise was sold to unrelated U.S. purchasers prior to its importation into the United States.

We calculated the purchase price for Nisso based on the CIF price to the first unrelated United States purchaser. We deducted port charges, inland freight, ocean freight and insurance costs incurred in delivering the product.

We calculated purchase price for OTC based on the CIF or C&F price from Philipp Brothers, Inc. (an unrelated trading company) to the first unrelated United States purchaser on those sales where Phibro acted as agent. We used the price from Sumitomo Corporation of America to the first unrelated purchaser on all other sales. We deducted inland freight, home market brokerage, ocean freight and inland and marine insurance.

We calculated purchase price for Toho based on the CIF price from Mitsui & Co., Ltd. (a related trading company) to the first unrelated United States purchaser. We deducted inland and ocean freight and insurance costs.

Foreign Market Value

In accordance with section 773(a)(2) of the Act, we used constructed value to determine foreign market value. The petitioner alleged that sales in the home market were at prices below the cost of producing titanium sponge. In order to determine the cost of production, we examined production costs, including materials, labor and general expenses.

We found that all non-U.S. sales of the merchandise under investigation were made over an extended period of time in substantial quantities, and at prices that did not permit recovery of all costs within a reasonable period of time in the normal course of trade. Therefore, we disregarded these sales in our analysis in accordance with section 773(b) of the Act. Instead, we used constructed value to determined foreign market value. In accordance with section 773 of the Act, we calculated constructed value, where appropriate, by adding the costs of materials, fabrication, general expenses, and profit. For materials, fabrication and general expenses we used the appropriate producer's actual cost figures. We did not use the statutory 10 percent for general expenses since actual expenses for each company exceeded the minimum of 10 percent of the sum of material and fabrication costs prescribed in section 773(e)(1)(B) of the Act. We used the statutory eight percent for profit since actual profit did not meet the eight percent of the sum of costs and general expenses prescribed in section 773(e)(1)(B) of the Act.

In calculating foreign market value, we made currency conversions from Japanese yen to United States dollars in accordance with § 353.56(a)(1) of our regulations using the certified daily exchange rates.

We found that all U.S. sales for each company were made at less than the constructed value.

Petitioner's Comments

Comment 1: Petitioner claims that for OTC, United States price should be the price at which OTC sells titanium sponge to Sumitomo Corporation, a Japanese trading company, and not the price charged by Sumitomo to the first unrelated U.S. customer.

DOC Position: We disagree. We found that OTC does not sell the merchandise to Sumitomo. Instead, Sumitomo acts as agent for OTC and receives a commission for its services.

Comment 2: Petitioner argues that if the Department uses Sumitomo's price to the first unrelated customer as the basis for United States price, it should deduct the commission paid to Sumitomo since Sumitomo is conducting an arm's length transaction with OTC.

DOC Position: We disagree. We have determined that if a producer owns five percent or more of an agent, or vice versa, we will treat them as related companies. Therefore, we did not deduct Sumitomo's commission from purchase price.

Comment 3: Petitioner contends that deductions for selling commissions in calculating United States price should not be offset by non-comparable selling expenses for home market sales.

DOC Position: We disagree. Under § 353.15(c) of our regulations, reasonable allowance for actual selling expenses in one market will be made where commissions are paid in the other market. The allowance is limited by the lesser of the two amounts. The expenses in the two markets do not have to be comparable.

Comment 4: Petitioner contends that in its response, Osaka improperly modified its inventory accounting methodology in reporting its raw material costs. Cost of production is, as a rule, based on the normal accounting practices of the company involved. Absent compelling reasons to do otherwise, Osaka's normal accounting method for raw materials must provide the basis for the Departments analysis of Osaka's raw material cost.

DOC Position: We agree. In calculating the cost of production, the Department values the inputs based on the company's accounting methods used in the ordinary course of business, unless the Department concludes that such methods do not appropriately reflect the cost of the product under investigation. Therefore, as OTC's normal accounting practice follows generally accepted accounting principles and appropriately reflected the cost of the product, the Department rejected the methodology used by OTC in its response and instead used OTC's normal accounting method for calculating the material cost in cost of production.

Comment 5: Petitioner claims that titanium tetrachloride produced by OTC is an intermediate product in the production process of titanium sponge, and not a by-product as claimed by respondent. Because it is an intermediate product, OTC should not be allowed to reduce the cost of producing titanium sponge by the revenue earned from sales of excess titanium tetrachloride.

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DOC Position: We agree. We analyzed the production of titanium tetrachloride and determined that such product was not a by-product but was

an intermediate product because (1) it was manufactured in separate facilities, (2) the quantity of production could be determined by management and is not determined by the production of titanium sponge, and (3) its production was not an unavoidable consequence of the manufacturing of titanium sponge. Therefore, we have not offset the cost of producing titanium sponge by the revenues from outside sales of titanium tetrachloride.

Comment 6: Petitioner contends that in its questionnaire response, Osaka improperly excluded depreciation on plant and equipment which, because of the depressed market conditions, was not in production. Depreciation expense is a fixed cost of production. Facilities have a depreciable life and must be depreciated over that period whether or not they are in operation.

DOC Position: We agree. Depreciation of equipment which, due to economic conditions, has been temporarily idled is considered to be a cost incurred for the manufacturing of the product under investigation and must be included in the cost of production. Therefore, the cost of production employed in the determination of fair value has been adjusted to reflect the depreciation of idle plant capacity.

Comment 7: Petitioner argues that Osaka understated selling, general and administrative expenses by excluding research and development expense, business taxes, legal expenses and other expenses. Each of the specific items that was excluded is a necessary expense incurred in the titanium sponge production business.

In addition, Osaka improperly allocated its SG&A expenses on the basis of *net* sales, in order to lower the costs allocated to titanium sponge production.

Osaka's SG&A costs should also include the selling costs absorbed by Sumitomo and Sumitomo Corporation of America.

DOC Position: Research and development costs directly attributable to titanium sponge have been included in the cost of production employed in the determination of fair value. All other costs have been included in selling, general and administrative expenses, a portion of which have been allocated to sales of titanium sponge. The methods used to allocate the selling, general and administration expenses were (1) to identify those expenses which could be tied specifically to the product or (2) to allocate unidentified expenses on the basis of cost of production.

The administrative costs of Sumitomo Corporation and Sumitomo Corporation of America have not been included in the cost of production included in the comparison of home market sales because these companies are employed in export sales only.

Comment 8: The petitioner contends that by allocating financial income and expense on the basis of net sales rather than the cost of goods sold, OTC understates the real cost of financing titanium sponge. In addition, Osaka failed to report financing costs borne by Sumitomo and Sumitomo Corporation of America.

DOC Position: We disagree with the petitioner for the following reasons. Financial income unrelated to the production of titanium sponge was not included in the cost of production to allocate financial expenses on the net sales or cost-of-goods-sold basis and would not appropriately be identifying such costs with titanium sponge. The company produces and sells titanium sponge and silicon products. Some of the silicon products are purchased from a subsidiary and resold by the company. The balance of the silicon products is manufactured by the company. The financial expenses pertains only to the production of titanium sponge and silicon products manufactured by the company, not to the silicon produced by the subsidiary. Therefore, to allocate this cost by sales value or cost-of-goods sold would be apportioning some of the expense to the silicon produced by the subsidiary. For calculating the cost of production, financial expense has been allocated on the basis of the relative cost of direct, long-term plant assets of the company. The financial expense of Sumitomo and Sumitomo Corporation of America have not been included in the cost of production because they engage only in export sales.

Comment 9: Petitioner argues that Osaka takes a significant cost of production credit for dividend income and income from the sale of negotiable securities. Established Department practice has been to disallow claims for cost of production credits from non-operational revenue that cannot be directly related to sales of the product under investigation. Under this precedent, the non-related income reported by Osaka cannot be factored into its production costs.

DOC Position: We agree. Dividend and securities sales income have been excluded from the interest calculation, because the securities were held by the company for investment purposes and were not related to the cost of production of titanium sponge.

Comment 10: Petitioner claims that for Toho, the United States price should be the price at which Toho sells its titanium sponge to Mitsui & Co., if the Department uses Toho's home market sales to Mitsui as the basis for determining whether home market sales are above cost of production.

DOC Position: We disagree. We found that Toho does not sell the merchandise to Mitsui in the United States market. Mitsui is Toho's agent and receives a commission for it services. Therefore, we have used the price charged by Mitsui to the first unrelated U.S. purchaser.

Comment 11: Petitioner argues that if the Department uses the Mitsui price to the first unrelated customer on U.S. sales as the basis for United States prices, it must reduce the price by the amount of the commission paid to Mitsui because that price reflects selling expenses in addition to Toho's indirect selling expenses.

DOC Position: We disagree. See DOC position to petitioner's comment two.

Comment 12: Petitioner contends that in its questionnaire response, Toho modified its normal accounting methodology in order to lower the cost of raw materials reported to the Department. DOC must use Toho's normal accounting practices provided they follow accepted principles.

DOC Position: We agree. See our response to petitioner's comment four.

Comment 13: Petitioner asserts that in responding to the Department's questionnaire, Toho excluded a good portion of its labor costs from the cost of production response submitted to the Department. Toho adjusted its labor costs by eliminating "excess labor" due to production problems at a plant that had been in operation for over two years. Respondent must report all labor costs so that the Department can accurately determine cost of production.

DOC Position: We agree. Actual labor costs incurred by the respondent were included in the cost of production for the determination of fair value. The Department does not permit the adjustment of actual costs incurred to a hypothetical efficient production cost model.

Comment 14: Petitioner claims that Toho understated its depreciation costs in its questionnaire response by treating depreciation on its idle facilities as a financial expense and by modifying its normal method of depreciation from a double declining balance to a straight line method.

DOC Position: We agree. See our response to Petitioner's comments four and six.

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Comment 15: Petitioner argues that Toho improperly excluded its research and development directly related to titanium sponge costs from its stated

cost of production. The data must be corrected.

DOC Position: We agree. In conformity with department policy, the cost of production has been adjusted to reflect the cost of research and development in the measurement of fair value.

Comment 16: Petitioner contends that costs incurred by a plant that is dedicated to the production of titanium sponge are properly allocated to titanium sponge production. Toho erroneously included a number of plant costs in SG&A. Accuracy in cost calculation requires that these costs be allocated only to titanium sponge production.

DOC Position: We agree. The cost of production has been adjusted to reflect the full cost of factory administration allocated to the production of titanium sponge.

Comment 17: Petitioner argues that to the extent that Toho allocated SG&A expenses on the basis of gross margin, they should be recalculated.

In addition, Toho's SG&A expenses should be recalculated to (1) exclude dividend income, income from the sale of securities, and income from the sale of land, and (2) include retirement benefits for officers of the corporation.

DOC Position: The Department agrees that allocation of SG&A expenses on the basis of gross margin (the difference between sales revenue and cost of goods sold) is not a reasonable allocation method. For example on such basis, a product which is being sold at a price below the cost of sales would not absorb any selling, general and administrative expenses. Therefore, the allocation method has been changed to a method based on cost of production.

The income from dividends on stock held in other companies, security sales and land sales are not considered to be related to the production of titanium sponge. Therefore, we did not include the benefits of this income in the measurement of fair value.

The retirement benefits for officers of the corporation are considered a necessary expense of the corporation and the portion allocated to titanium sponge production has been included in the cost of production.

Comment 18: Petitioner argues that Nisso's United States price should be that to its unrelated trading company. Alternatively, if the Department uses the price from the unrelated trading company to the first unrelated U.S. purchaser, it should not allow any offset for indirect selling expenses in the home market because the U.S. commission is not comparable to any selling expense incurred in the home market.

DOC Position: We disaree. Nisso does not sell the merchandise to an unrelated trading company. Therefore, we used the price from the trading company to the first unrelated U.S. purchaser as the purchase price. We allowed an adjustment for indirect selling expenses as explained in our response to petitioner's comment three.

Comment 19: Petitioner objects to a number of major adjustments that Nisso claimed to its production costs resulting from the start-up of its titanium tetrachloride plant in April 1983, *e.g.*, labor, rent, raw materials, depreciation. A number of the adjustments requested cannot reasonably be viewed as legitimate "start-up" costs and were start-up costs might fairly be claimed, the absence of detailed supporting data is conspicuous. Petitioner claims that Nisso also cannot reasonably claim that lower-than-expected output levels where a "start-up" phenomenon when, instead, they were caused by the collapse of the market.

DOC Position: We agree. Under section 773(b) of the Act, one of the tests of selling below the cost of producing the product under investigation is that such sales "are not at prices which permit recovery of all costs within a resonable period of time in the normal course of trade." We believe that this provision contemplates start-up as a period when sales prices may not exceed production costs because cost may be extraordinary. Therefore, the Department usually would consider the cost related to start-up to determine if the sales price could meet the requirements of the above section. However, adjustments for start-up must be supported by sufficient documentation that would allow us to verify their accuracy. Because the Department considers the supporting documentation submitted by Nisso insufficient to support the accuracy of the start-up adjustment, the adjustment has been denied. Therefore, the cost of production employed in the calculation of fair value is based on the actual cost of producing titanium sponge for the period of the investigation.

Comment 20: Petitioner objects to Nisso's claim for electricity cost savings specifically related to titanium sponge production when most other costs to Nisso are budgeted on a plant-wide basis. To grant such a claim would allow Nisso to elect the specificity and method for stating individual costs.

DOC Position: We disgree. During the verification, Nisso submitted extensive information to support the allocation of electricity cost. We verified the information. Therefore, the submitted cost of electricity has been employed in the calculation of cost of production.

Comment 21: Petitioner contends that Nisso excluded a number of items from its reported selling, general, and administrative expenses. These are noted in the verification report and except for profits and loss from the sale or disposal of securities and fixed assets, they are properly attributable to titanium sponge production. There also appears to be a problem of understating financing costs.

DOC Position: The Department agrees with the petitioner. Therefore, the selling, general and administrative expenses have been adjusted to reflect all costs attibutable to the production of titanium sponge. Also, the allocation of financing expenses has also been corrected.

Respondents' Comments

Phibro

Comment 1: Even if Commerce issues an antidumping order as a result of this investigation, importations of titanium sponge certified for the National Defense Stockpile are exempt from all duties, including antidumping duties, according to long-standing administrative practice regarding a related tariff provision for defense procurement.

DOC Position: We have determined that it was reasonable for Phibro to expect, at the time it entered into a contract with GSA, that imports of titanium sponge certified for the National Defense Stockpile would enter free of duties, including antidumping duties. It had this expectation based on the longstanding administrative practice of exempting articles imported for defense procurement under TSUS 832. Because of Phibro's reliance on this past practice, we have excluded entries within the current titanium sponge procurement contract from the scope of our determination. We credit reliance here only because of twenty-five years of unbroken practice by two federal agencies, and congressional acquiescence in the practice.

Nevertheless, we do not view this decision as immutable. Further reliance on this past practice would not be well advised. We intend to undertake a careful and thorough review of issues relevant to the waiver of antidumping and countervailing duties under Sections 832 and 833, and will publish the results of this review within six months. During the course of this review, we will invite comments from all interested parties. We have decided to undertake this review in recognition of serious

implications for the domestic industry of a waiver of such duties, and our obligation to enforce vigorously the unfair trade laws.

Osaka Titanium Company

Comment 1: Osaka claims that it properly calculated the amounts for depreciation, titanium tetrachloride as a by-product, cost of manufacturing at current costs, R&D not related to production and sale of the product in 1983, reduction of finance costs by amount of income and Japanese enterprise tax exclusion in its response for the cost of production for titanium sponge.

DOC Position: See the DOC position to petitioner's comments four through eight.

Comment 2: OTC contends that Phibro and Sumitomo are OTC's agents and are related to OTC within the meaning of the antidumping law.

DOC Position: We have determined whether a producer and its agent are considered to be related, for the purposes of an antidumping investigation, by examining the percentage ownership one company has in the other. If a producer owns five percent or more of the agent, or vice versa, we will treat them as related. The degree of ownership between OTC and Sumitomo meets this test. The degree of ownership, however, between OTC and Phibro is so small as to be negligible. Therefore, for purposes of this investigation, we do not consider them to be related. It is clear that Sumitomo acts as an agent for OTC on U.S. sales. We also found evidence supporting OTC's and Pilbro's claims that Phibro acted as OTC's agent on non-GSA sales. Therefore, we have treated Phibro accordingly.

Toho Titanium Company

Comment 1: Toho asserts that the Department must determine that its home market sales at less than the cost of production (1) have been made over an extended period of time and (2) are not at prices which permit recovery of all costs within a reasonable period of time in the normal course of trade, pursuant to section 773(b) of the Act. Toho argues that the six-month period which the Department examined is not an "extended period of time" nor a "reasonable period" within the meaning of the Act.

DOC Position: Toho submitted the company's plant utilization data for 10 years to support its allegation that the titanium sponge industry was in a trough in its business cycle during the period of investigation and that Toho's prices would allow recovery of all costs over a "reasonable period of time," were that period to include an entire business cycle. The adjustment was not considered by the Department because the information (1) did not justify Toho's position that its prices would recover all costs over a "reasonable period of time," and (2) was not submitted in a timely manner.

Comment 2: Toho claims that the Department should make an adjustment for extraordinary expenses such as excessive labor costs it incurred in the start-up of its new reduction facility.

DOC Position: We disagree. Section 773 of the Act and § 353.7 of the Commerce regulations (19 CFR 353.7) require the inclusion of labor costs in cost of production. While the Department recognizes that in certain circumstances such as during a start-up phase, there could be appropriate adjustments to the cost of production, in this case the plant had been in operation beyond a reasonable start-up period.

Comment 3: Toho claims that because Toho and Phibro are related, the Department should use prices charged by Phibro to its United States customers to calculate U.S. price, alternatively if Phibro is not related to Toho, then the Department should allow an adjustment for indirect selling expenses in the home market equivalent to Phibro's commission.

DOC Position: We disagree. We found that Phibro is not an agent for Toho but is the first unrelated U.S. purchaser. Therefore, we did not allow an offset for Phibro's commission.

Comment 4: The petitioner's assertion that Toho changed its cost accounting methodology to straight line depreciation solely for this investigation is wrong because Toho currently, for its financial and tax reporting, uses straight line depreciation.

DOC Position: We disagree. See DOC position to petitioner's comment four. The depreciation method used by the company on its books during the period of investigation was the double-declining balance methods not straight line. The Department accepted the method that the company used on its books during the period of investigation.

Comment 5: The Department should exclude all non-operating income and expenses from GS&A.

DOC Position: We disagree. See DOC position to petitioner's comment eight and nine.

Comment 6: Toho contends that the Department should exclude contributions to the retirement fund because Japanese law distinguishes these funds from salaries; the contributions are clearly non-operating in nature.

DOC Position: We disagree. See DOC position to petitioner's comment 17.

Nippon Soda Company

Comment 1: Nisso claims that the Department must adjust its computation of cost of production and constructed value to make due allowance for Nisso's start-up costs, including production inefficiencies and quality control problems. The production inefficiencies included area of problems in input usage rate, factory overhead costs, and labor costs.

DOC Position: We disagree. See DOC position to petitioner's comment 19.

Comment 2: Moreover. Nisso argues that the Department must amortize start-up costs over a reasonable cost recovery period in determining cost of production and constructed value. Nisso proposes using a five-year period for cost recovery.

DOC Position: We disagree. See DOC position to petitioner's comment 19.

Comment 3: The Department should exclude Nisso's interest expenses for long-term debt in calculating cost of production because Nisso rents facilities for production of sponge from its wholly-owned subsidiary. Its subsidiary's long-term debt costs are reflected in the rent paid by Nisso to the subsidiary. Inclusion of this expense in both rent and financing will result in double counting.

DOC Position: We disagree. The interest expense included in the cost of production was Nisso's expense, not the interest expense of its subsidiary. Therefore, Nisso's interest expense and the rent paid to its subsidiary were included in the calculation of cost of production. This did not result in double counting.

Comment 4: Nisso claims that the Department must grant it an adjustment for all indirect selling expenses in the home market because Commerce regulations provide that sales commissions paid in one market but not the other may be offset by indirect selling expenses in the market where no commissions and paid. Nisso, further contends that the decision in *Silver Reed America, Inc.* v. *United States,* slip op. 84-8 (Ct. of Int'l Trade. Feb. 1, 1984) invalidates the cap that the Department's regulation places on the offset provision.

DOC Position: We do not agree, that our regulation is invalid insofar as it limits the permissible offset to the amount of indirect selling expenses or the amount of commission paid in the other market, whichever is less. *Silver Reed,* which Nisso cites, addresses only the offset cap provision for exporter's

sales price, rather than the commission offset. Furthermore, that case is on appeal.

Verification

In accordance with section 776(a) of the Act, we verified the information provided by each company by using standard verification procedures, including examination of relevant sales and financial records of the company. Only data considered verified were used in arriving at our final determination. We also verified the responses submitted by Phibro, a purchaser and/or agent of the producer of this product.

ITC Notification

In accordance with section 735(d) of the Act, we will notify the ITC of our determination. In addition, we are making available to the ITC all non-privileged and non-confidential information relating to this investigation. We will allow the ITC access to all privileged and confidential information in our files, provided the ITC confirms that it will not disclose such information, either publicly or under an administrative protective order, without the written consent of the Deputy Assistant Secretary for Import Administration. The ITC will make its determination whether these imports are materially injuring or threatening materially injury, to a U.S. industry within 45 days of the publication of this notice. If the ITC determines that material injury or the threat of material injury does not exist, this proceeding will be terminated and all securities posted as a result of the suspension of liquidation will be refunded or cancelled. If, however, the ITC determines that such injury does exist, we will issue an antidumping order, directing Customs officers to assess an antidumping duty on titanium sponge from Japan entered, or withdrawn from warehouse, for consumption after the suspension of liquidation, equal to the amount by which the foreign market value of the merchandise exceeds the U.S. price.

Suspension of Liquidation

In accordance with section 733(d) of the Act, we have directed the United States Customs Service to suspend liquidation of all entries of the subject titainium sponge from Japan, which are entered, or withdrawn from warehouse, for consumption on or after May 11, 1984. The Customs Service shall continue to require a cash deposit or the posting of a bond equal to the estimated weghted-average amount by which the foreign market value of the merchandise subject to this investigation exceeds the United States price. This suspension of liquidation will remain in effect until further notice. The Customs Service, however, will exclude those entries being imported in fulfillment of the contract dated October 28, 1983, between the General Services Administration and Philipp Brothers, Inc., for the National Defense Stockpile, from the suspension of liquidation and any bonding or deposit requirements. The weighted-average margin for each company is as follows:

	Margin (percent)
Osaka Titanium Co	16.08
Toho Titanium Co	34.25
Nippon Soda Co	56.37
All other manufacturers, producers and exporters	28.47

This determination is being published pursuant to section 735(d) of the Act (19 U.S.C. 16783d(d)).

William T. Archey,

Acting Assistant Secretary for Trade Administration.

September 24, 1984.

[FR Doc. 84-25861 Filed 9-28-84; 8:45 am]

BILLING CODE 3510-DS-M

APPENDIX D

TITANIUM MILL PRODUCT PRICES

Tables D-1 through D-5.--Titanium mill products: Prices reported by U.S. producers and by purchasers, by products, by firms, and by quarters, January 1981-June 1984

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APPENDIX E

CERTAIN DOCUMENTS RELATING TO THE STOCKPILE PURCHASE BY GSA

THE UNITED STATES TRADE REPRESENTATIVE
WASHINGTON
20506

June 23, 1983

To	Rec'd	Due
D	6/29	7/12
Coord with		
Signature of	A	
Appro Action		
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Mr. Gerald P. Carmen
Administrator, General Services
Administration
18th and F Streets N.W.
Washington, D.C. 20405

Dear Gerry:

As you may know, I recently reviewed a request from the Federal Emergency Management Agency(FEMA) for a national security exception from the international Government Procurement Code for GSA's purchases of titanium sponge for the National Defense Stockpile. FEMA's desire was to limit competition for these purchases to domestic sources.

Having reviewed the facts of this case, including the views of GSA, I determined that there were not sufficient grounds for a national security exception. However, in the course of our review of FEMA's request, it came to our attention that there was a related trade policy question involving tariffs.

It is our understanding that GSA normally has the Customs Service waive duties in the case of stockpile purchases and does not include these duties in evaluating bids. I am writing to advise you that from the standpoint of U.S. trade policy, I believe that duties should not be waived in this case, at least in the evaluation process.

Tariffs are a legitimate form of protection to domestic industry which is employed by almost all countries. As foreign tariffs impair U.S. exports and domestic tariffs raise costs for our own end users, we are committed to negotiating reciprocal tariff reductions with our trading partners. However, I believe that it is unwise and counter productive to our efforts to reduce tariffs on a reciprocal basis for us to waive tariffs on a unilateral basis.

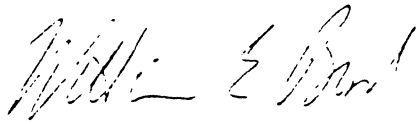
In this particular case, I understand that the only likely foreign competitors are Japanese firms. Given our current trade situation, I believe that it would be difficult to justify giving the Japanese the benefits of duty free treatment without getting anything in return for U.S. exports to Japan. It would be even more difficult to justify such waiver of duties in light of the depressed state of the domestic titanium sponge industry. These concerns would be

alleviated if duties were included at the bid evaluation stage.

Another point which you may wish to consider involves allegations that Japanese firms may offer titanium at dumped prices. It is impossible to evaluate these allegations before bidding has even begun. Nevertheless, you may wish to consider this possibility in preparing bid documentation. In particular, you could make clear in your solicitation documentation and contract clauses that in the event that injurious dumping is found and anti-dumping duties are imposed, such duties, bonds or duty deposits will not be waived and that they will not be borne by the government. This would protect GSA from the possibility of unanticipated and unnecessary expenses.

I appreciate your taking the time to consider these concerns. Please feel free to contact me or my staff if you have any questions.

Very truly yours,



WILLIAM E. BROCK

WEB:sdps

General Services Administration — Federal Property Resources Service Washington, DC 20406

Date : September 29, 1983

r to
of : DSA

Subject: Recommended Titanium Awards - Solicitation-GS0083-DxxC-0011

To : DS

The attached abstract shows the recommended awards discussed 9/27/83 in your office at the meeting attended by LD, DSM, DSS, and Mr. Norton. Lots circled in red would result in the following:

Contractor	Type	Quantity	Total Amount
Philipp Brothers	A	2,500st	$16,000,000.00
Timet	B	1,000st	$7,140,000.00
Philipp Brothers	C	500st	$3,200,000.00
Billiton Metals	C	500st	$2,920,000.00
	Total	4,500st	$29,260,000.00

Summary

Type	Quantity	Source
A	2,500st	Japan
B	1,000st	Domestic
C	1,000st	United Kingdom

The approach used awards to the lowest bidder in increments of 500st each until the maximum quantity authorized by FEMA letter of July 20, 1983, is reached.

Based on available market information and the competition evident in the bidding pattern, award as outlined is recommended as fair and reasonable and in the best interests of the Government.

James D. Clark
Acting Director
Stockpile Acquisitions Division

Concurrences: LD _____

DSM _____

SUMMARY OF BIDS MADE TO THE GSA

Opening date: September 2, 1983
Award date: October 28, 1983
Delivery date: Before October 28, 1984

Bidder and type sponge	Lot A	Lot B	Lot C	Lot D	Lot E	Lot F	Lot G	Lot H	Lot I
Billiton:									
A	—	—	—	—	—	—	—	—	—
B	—	—	—	—	—	—	—	—	—
C	3.37	4.06	4.06	4.06	4.06	4.06	3.90	3.90	3.90
ITI:									
A	—	—	—	—	4.12	—	—	—	—
B	—	—	—	—	—	—	—	—	—
C	—	—	—	—	—	—	—	—	—
Oremet:									
A				—	—	—	—	—	—
B	3.97	3.89	3.86	—	—	—	—	—	—
C	—	—	—	—	—	—	—	—	—
Phibro:									
A	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69
B	—	—	—	—	—	—	—	—	—
C	—	3.69	—	—	—	—	—	—	—
RMI:									
A	—	—	—	—	—	—	—	—	—
B	—	—	—	—	—	—	—	—	—
C	3.79	3.79	3.79	3.79	—	—	—	—	—
Teledyne Wah Chang:									
A	6.25	—	—	—	—	—	—	—	—
B	—	—	—	—	—	—	—	—	—
C	—	—	—	—	—	—	—	—	—
Timet:									
A	—	—	—	—	—	—	—	—	—
B	4.15	4.15	3.95	3.95	3.95	3.79	3.79	3.64	3.50
C	—	—	—	—	—	—	—	—	—

Notes:

1. The numbers are bid prices in dollars per pound.
2. Winning bids are underlined.
3. Bid lots were 500 short tons (1 million pounds) each.
4. The regular customs duty on sponge of 17 percent ad valorem is included in bid prices of the importers, Billiton and Phibro.
5. Oremet's bid on any one lot was contingent upon its being awarded all three lots on which it bid.
6. For a minimum order of 4 items, Timet offered to deduct 5 cents per pound ($100 per short ton) from all items priced above $3.50 per pound. For a minimum order of 3 items, it offered to deduct 3 cents per pound ($60 per short ton) from all items priced above $3.50 per pound.