# CERTAIN BIMETALLIC CYLINDERS FROM JAPAN

Determination of the Commission in Investigation No. 731-TA-383 (Preliminary) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigation

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# UNITED STATES INTERNATIONAL TRADE COMMISSION

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Paul Bardos, Attorney

Robert Carpenter, Supervisory Investigator

**Address all communications to**
**Kenneth R. Mason, Secretary to the Commission**
**United States International Trade Commission**
**Washington, DC 20436**

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UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, DC

Investigation No. 731-TA-383 (Preliminary)

BIMETALLIC CYLINDERS FROM JAPAN

Determination

On the basis of the record 1/ developed in the subject investigation, the Commission determines, 2/ pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), that there is a reasonable indication that an industry in the United States is threatened with material injury by reason of imports from Japan of certain bimetallic cylinders, 3/ provided for in item 678.35 of the Tariff Schedules of the United States, that are alleged to be sold in the United States at less than fair value (LTFV).

Background

On August 4, 1987, a petition was filed with the Commission and the Department of Commerce by counsel on behalf of Xaloy, Inc., Pulaski, VA, and Bimex Corp., Wales, WI, alleging that an industry in the United States is materially injured and threatened with material injury by reason of LTFV imports of certain bimetallic cylinders from Japan. Accordingly, effective August 4, 1987, the Commission instituted preliminary antidumping investigation No. 731-TA-383 (Preliminary).

Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade

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1/ The record is defined in sec. 207.2(i) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(i)).
2/ Chairman Liebeler dissenting.
3/ Such items consist of an outer shell of steel and an inner lining of an alloy which are metallurgically bonded, and are, if imported, reported under items 678.3570 and 678.3575 of the Tariff Schedules of the United States Annotated.

Commission, Washington, DC, and by publishing the notice in the Federal Register of August 12, 1987 (52 FR 29900). The conference was held in Washington, DC, on August 28, 1987, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF VICE CHAIRMAN BRUNSDALE, COMMISSIONER ECKES, COMMISSIONER LODWICK, AND COMMISSIONER ROHR

We determine that there is a reasonable indication that an industry in the United States is threatened with material injury by reason of imports of certain bimetallic cylinders from Japan that are allegedly sold at less than fair value (LTFV). 1/ We base our determination on, among other factors, the recent deterioration in the domestic industry's performance, the rapid increase in the penetration of the domestic market by the allegedly dumped imports, and the likelihood that market penetration will increase further to injurious levels. 2/

Like Product/Domestic Industry

As a threshold inquiry, the Commission must identify the domestic industry to be examined for the purpose of making an injury assessment.

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1/ Chairman Liebeler makes a negative determination in this investigation. She joins the majority on the definition of the like product/domestic industry. See her additional views on condition and causation.

2/ As part of the legal framework for his affirmative determination in this investigation, Commissioner Eckes refers to the standard for making preliminary negative determinations in Title VII investigations as established in American Lamb v. United States, 785 F.2d 994 (Fed. Cir. 1986), his colloquy with the General Counsel's Office during the Commission meeting of September 15, 1987, and his dissenting views in Portland Hydraulic Cement and Cement Clinker from Colombia, France, Greece, Japan, Mexico, the Republic of Korea, Spain, and Venezuela, Invs. Nos. 731-TA-356 through 363 (Preliminary), USITC Pub. No. 1925 (Dec. 1986). In particular, he notes the absence of data for producers accounting for a significant portion of the value of domestic shipments, as well as the absence of data on production and capacity for Japanese producers accounting for a significant portion of alleged LTFV imports.

Section 771(4)(A) of the Tariff Act of 1930 defines "industry" as "the domestic producers as a whole of a like product . . . ." [3/] "Like product", in turn, is defined 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 . . . ." [4/]

The imports subject to investigation are certain bimetallic cylinders used in machines for extrusion and injection molding. [5/] The bimetallic cylinder is used as a mixing vessel. A screw inserted inside the cylinder

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3/ 19 U.S.C. § 1677(4)(A).

4/ 19 U.S.C. § 1677(10). The legislative history of Title VII makes it clear that "the requirement that a product be 'like' the imported article should not be interpreted in such a narrow fashion as to permit minor differences in physical characteristics and uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under investigation." S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

5/ The Commerce Department's notice of institution of its investigation covers cylinders used in processing plastics. The Commission instituted its investigation and collected import data on bimetallic cylinders used in extruding and injection-molding machines, whether the extruded or molded product was plastic or not. Importers and domestic producers have stated that essentially the same cylinders are used in the processing of plastics, food, rubber, and other materials. Report to the Commission ("Report") at A-1. We therefore have not differentiated between bimetallic cylinders used for processing plastics and those used for processing other materials, but note that the import data obtained in the investigation may be slightly overstated if the Commerce investigation is restricted to cylinders used in processing plastics.

pushes heated materials such as plastics through the cylinder, thereby either extruding them in a continuous line or injecting them into a mold. The materials are abrasive and corrosive, necessitating a hardened cylinder.

The Commission, in considering the like-product question, examines factors relating to physical characteristics and uses, interchangeability between products, channels of distribution, common manufacturing facilities and production employees, and customer or producer perceptions. 6/ In this preliminary investigation, four issues have arisen. First, petitioners urge the Commission to find one like product, bimetallic cylinders. 7/ Respondents agree, but argue that such cylinders be defined to include "sleeves." 8/ A sleeve is used to reline the interior of a worn bimetallic cylinder so as to restore its wear-resistant qualities. Relined cylinders have the same uses as standard bimetallic cylinders. Moreover, sleeves are produced by the same domestic bimetallic cylinder producers using the same processes and production plants as they use to produce bimetallic cylinders. 9/ Therefore, we find that sleeves should be included in the definition of the like product.

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6/ E.g., Tapered Roller Bearings and Parts Thereof, and Certain Housings Incorporating Tapered Rollers from Italy and Yugoslavia, Invs. Nos. 731-TA-342 and 346 (Final), USITC Pub. 1999 (1987); Certain Copier Toner from Japan, Inv. No. 731-TA-373 (Preliminary), USITC Pub. 1960 (1987).

7/ Petitioners' postconference brief at 4-9.

8/ Respondents' postconference brief at 3-5.

9/ Report at A-3.

A second like-product issue, which was not raised by the parties, is suggested by the fact that the Tariff Schedules of the United States Annotated (TSUSA) classify imports of bimetallic cylinders according to whether they are to be used for extrusion, injection-molding, or blow-molding machines. Although such a classification does not constrain the Commission's like-product definition, 10/ it does nevertheless suggest that there might be distinctions among these three types of cylinders. The record indicates, however, that essentially the same bimetallic cylinders are used in these various machines. 11/ Accordingly, we determine that our like-product definition includes the bimetallic cylinders used in extrusion, injection-molding, and blow-molding machines.

A third issue was raised by the petitioner's reference to a kind of cylinder, called the "nitrided cylinder," which can be substituted for bimetallic cylinders in certain injection-molding machines. 12/ However, nitrided cylinders and bimetallic cylinders are produced by different U.S. manufacturers and different processes. The nitrided process results in

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10/ Royal Business Machines, Inc., v. United States, 1 CIT 80, 507 F. Supp. 1007 (1980). aff'd 669 F.2d 692 (C.C.P.A. 1982).

11/ Report at A-2. Because the petition's scope did not mention blow-molding machines, the Commission did not seek data on cylinders produced or imported for use in such machines. However, the staff subsequently learned that blow-molding machines are variations of injection-molding and extrusion machines. Furthermore, domestic producers reported data including operations related to production of bimetallic cylinders for blow-molding machines. However, import data may be somewhat understated.

12/ None of the parties argues that nitrided cylinders should be part of the like-product definition.

considerably less resistance to corrosion or abrasion than the bimetallic process, a fact that limits the interchangeability of the two types of cylinders. 13/ Moreover, nitrided cylinders generally cost less than bimetallic cylinders. 14/ Therefore, we find that nitrided cylinders should not be included in our like-product definition.

A fourth like-product question relates to the fact that imported and domestically produced bimetallic cylinders can be modified by venting and/or downsizing. A vented cylinder has the advantage of allowing harmful gases to escape during the processing of materials. Downsizing reduces the capacity of a cylinder and is useful when a cylinder is run at less than full capacity. 15/ These conversions change the physical characteristics of the cylinders to meet a demand for which standard cylinders are unsuited. In addition, the different process required to convert cylinders adds significant value to the resulting product and makes it more costly than the standard cylinder. 16/ Finally, different production facilities are generally used to make downsized or vented cylinders. Therefore, we determine that vented and downsized cylinders should be excluded from the definition of the like product.

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13/ Most new extrusion machines use bimetallic cylinders exclusively, as do at least half of the new injection-molding machines. Respondents estimate that 80 percent of injection-molding machines use bimetallic cylinders exclusively. Transcript of the conference ("Tr.") at 103. Further, more bimetallic cylinders are sold in the replacement market than nitrided cylinders, because bimetallic cylinders are more resistant to wear. Report at B-10.

14/ Report at B-10.

15/ Tr. at 66; Report at A-3.

16/ Tr. at 104-5.

Accordingly, for purposes of this preliminary investigation, we conclude that there is one like product, consisting of bimetallic cylinders including sleeves, and one domestic industry consisting of the domestic producers of the like product. 17/ 18/

Condition of the Domestic Industry

In assessing the condition of the domestic industry, the Commission considers, among other factors, domestic consumption, production, capacity, capacity utilization, shipments, inventories, employment, and profitability. 19/

From 1984 to 1986 the domestic industry producing bimetallic cylinders experienced a generally prosperous period of growth and profitability. Reported production, capacity, employment, and net sales all increased during that period. In the interim period January-June 1987, however, these trends abruptly reversed, and the performance indicators of the domestic industry fell compared to interim 1986.

U.S. production increased steadily from 1984 to 1986, then decreased in January-June 1987 compared to January-June 1986. 20/ Average domestic

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17/ Report at A-4.

18/ Vice Chairman Brunsdale agrees with this definition of like product for purposes of this preliminary investigation. She will, however, closely consider the arguments for excluding sleeves and nitrided cylinders and for including vented and downsized cylinders in the like-product definition in the final investigation.

19/ 19 U.S.C. § 1677(7)(C)(iii).

20/ Report at A-10-A-11. While production declined in the interim period, producers' end-of-period inventories of bimetallic cylinders increased throughout the period of investigation, with the rate of increase rising in the last six months. Id. at A-12-A-13. We note that U.S. producers accounting for a significant portion of the value of domestic shipments did not provide production data. Since the available data are confidential, they are discussed here only in general terms.

capacity to produce bimetallic cylinders fell from 1984 to 1985, rose by a large amount in 1986, and fell again from interim 1986 to interim 1987. 21/ Capacity utilization increased from 1984 to 1985, fell slightly in 1986, and rose again in interim 1987. 22/

The value of domestic shipments increased steadily from 1984 to 1986, but declined in January-June 1987 compared to interim 1986. However, the average unit value of such shipments decreased steadily from 1984 to 1986, and from interim 1986 to interim 1987 as well. 23/

For all reporting U.S. producers, the number of production and related workers and hours worked increased during 1984-1986, but then dropped in January-June 1987 compared with the corresponding period in 1986. 24/ Net sales and gross profits also increased from 1984 to 1986, before dropping in interim 1987 compared to interim 1986. Operating income as a share of net sales declined from 1984 to 1986 and declined significantly in the interim 1986-87 comparison. 25/

We conclude from the foregoing that the domestic industry, while not currently experiencing material injury, is vulnerable to increased levels of alleged LTFV imports.

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21/ Report at A-11-A-12.
22/ Id.
23/ Id. at A-11.
24/ Id. at A-13.
25/ Id. at A-15.

Reasonable indication of threat of material injury by reason of allegedly LTFV imports

In examining whether there is a reasonable indication that the domestic industry is threatened with material injury by reason of allegedly LTFV imports, we are directed to consider, among other factors, any existing unused foreign capacity, increases in imports to the United States, any rapid increase in U.S. market penetration, the likelihood that such penetration will increase to an injurious level, the probability that imports will enter the United States at prices that will have a depressing or suppressing effect on domestic prices, any substantial increase in inventories in the United States, and the potential for product-shifting. 26/ In addition, the Commission must base a finding of reasonable indication of threat of material injury on "evidence that the threat of material injury is real and that actual injury is imminent," and not on "mere conjecture." 27/

The value of imports of bimetallic cylinders from Japan rose slowly but steadily from 1984 to 1986, capturing only a small U.S. market share, and then soared in interim 1987, with the market share rising accordingly. 28/ 29/ 30/ There is evidence that imports from Japan

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26/ 19 U.S.C. § 1677(7)(F)(i).
27/ 19 U.S.C. § 1677(7)(F)(ii).
28/ Report at A-20-A-22.
29/ In this investigation, consideration of data on value rather than volumes is preferable because of the large variation in sizes and types of cylinders.
30/ In addition, Vice Chairman Brunsdale notes that the alleged dumping margins in the case are moderate to high, ranging from 17.38 percent to 37.37 percent. She considers these margins to be further evidence of a reasonable indication of a threat of material injury by allegedly dumped imports in this case.

have continued to enter the United States in increasing quantities even after January-June 1987. 31/

Available data show that Hitachi's capacity utilization declined during the period of investigation, and that the unused capacity currently available could allow Japanese imports to increase their market penetration significantly in the immediate future. 32/ The possibility that Hitachi Metals, Ltd., the largest Japanese producer, is likely to continue to increase its exports to the United States is clearly evidenced by its initiation in early 1987 of an exclusive distribution arrangement with Hitachi Metals America and the domestic distributor Spirex Corp. 33/ 34/ Hitachi also made a major switch from supplying primarily OEM bimetallic cylinders in 1986 to selling to the replacement market in 1987. 35/

The Commission's effort to obtain comparable price data was complicated by the differing specifications of bimetallic cylinders. 36/ The few direct

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31/ Report at A-8.

32/ Id. at A-9. We note that Japanese producers accounting for a significant portion of exports to the U.S. did not provide data on their production and capacity.

33/ Tr. at 59.

34/ We note that, based on available information, a sharply increasing share of Japanese exports in 1986 and the first half 1987 has been directed to the United States. Report at A-8-A-9, Table 4.

35/ Report at A-23.

36/ Other factors may affect the comparability of transaction prices, such as delivery times required by purchasers, urgency of need, and "imperfect market information available to end users." Report at A-26.

price comparisons available showed mixed underselling and overselling. 37/ 38/

Since bimetallic cylinders are generally custom-designed to order, significant inventories are not normally maintained. In spite of this, importers' inventories rose from 1984 to 1986, and increased sharply in interim 1987 compared to interim 1986. 39/

Accordingly, we determine that there is a reasonable indication that the domestic industry is threatened with material injury by reason of Japanese imports of bimetallic cylinders allegedly sold at LTFV.

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37/ Report at A-24-A-27. We note, however, that there is evidence that future imports may undersell domestic bimetallic cylinders. Petitioners' postconference brief at Confidential Exhibit 18.

38/ Vice Chairman Brunsdale would like parties to brief her on several fundamental issues about prices should this investigation continue to the final phase. If the dumped imports are less expensive than their domestic counterparts (what the Commission calls "underselling"), she would like to know why they are less expensive. Similarly, if the dumped imports are more expensive than their domestic counterparts (what the Commission calls "overselling"), she would like this to be explained. Finally, regardless of whether there is underselling or overselling, she would like parties to analyze and provide quantitative estimates for the following: (1) how dumping has affected the prices of the subject imports and the relative magnitudes of these effects, (2) how the changed prices of the subject imports have affected the prices of the like product and the relative magnitudes of these effects, and (3) how the changed prices of the like product have affected domestic shipments and domestic industry sales and the relative magnitudes of these effects.

39/ Report at A-19.

DISSENTING VIEWS OF CHAIRMAN LIEBELER

Certain Bimetallic Cylinders from Japan
Inv. No. 731-TA-383 (Preliminary)

I determine that there is no reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of bimetallic cylinders from Japan which are allegedly being sold at less than fair value.[1]

I concur with the majority in its definition of the like product and the domestic industry. My views on the condition of the domestic industry, material injury and threat of material injury by reason of bimetallic cylinders from Japan are provided below.

Condition of the Domestic Industry

To evaluate the condition of the domestic industry, the Commission considers, among other factors, domestic consumption, production, capacity, capacity utilization, shipments, inventories, employment, and profitability.[2]

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[1] Material retardation was not an issue in these investigations and will not be discussed.

[2] 19 U.S.C. § 1677(7)(C)(iii).

Historically, the domestic industry producing bimetallic cylinders has been very healthy and profitable. The domestic industry experienced a generally prosperous period of growth and profitability from 1984 to 1986. Reported production, capacity, employment, and net sales all increased during that period. Although some trends dipped in the interim period January-June 1987, the domestic industry overall remained in good condition.

U.S. production increased steadily from **** cylinders in 1984 to **** cylinders in 1986. Production then decreased to **** cylinders in January-June 1987 compared to **** cylinders in January-June 1986.[3] Average domestic capacity to produce bimetallic cylinders decreased from **** cylinders in 1984 to **** cylinders in 1985, then rose to **** in 1986, and declined slightly from **** cylinders in interim 1986 to **** cylinders in interim 1987.[4] Capacity utilization increased from 1984 to 1985, then fell in 1986. Capacity utilization rose again in interim 1987.[5]

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[3] Report at A-10-11. Data on production and most other indicators do not include responses from Wexco, which accounted for ** percent of the value of U.S. shipments in 1986. Data are therefore only for three firms instead of four in these cases.

[4] Id. Data on 3 firms.

[5] Id.

The value of domestic shipments increased steadily from 1984 to 1986. During January-June 1987 shipments declined in value from the comparable period in 1986. Although the total value of U.S. produced domestic shipments increased during 1984-86, the average unit value of such shipments decreased steadily from 1984 to 1986, and from interim 1986 to interim 1987.[6]

All reporting U.S. producers increased their average number of production and related workers and the number of hours worked during 1984-1986. The number of workers and the total hours worked then dropped in January-June 1987 compared with the corresponding period in 1986.[7]

U.S. producers' end-of-period inventories of bimetallic cylinders increased throughout the period of investigation, with the rate of increase rising toward the end of the period.[8]

Net sales and gross profits increased from 1984 to 1986, before dropping in interim 1987 compared to interim 1986. As a share of net sales, operating income declined

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[6] Id. at A-11-12.

[7] Id. at A-13.

[8] Id. at A-12-13.

from 1984 to 1986, and from interim 1986 to interim 1987.[9]

The foregoing data indicate that the domestic bimetallic cylinder industry has demonstrated solid performance over the period of investigation, with some performance indicators dropping only in the interim period of 1987. This decline must be viewed with the caveat that the financial figures are based on unaudited data from three firms representing approximately **% of the industry. Moreover, the largest domestic producer representing more than **% of domestic shipments, Xaloy, did a leveraged buyout in 1986. This increased interest expense and depressed net income.

Of additional concern in the analysis of the condition of the domestic industry is the absence of data from Wexco, which accounted for **% of domestic shipments in 1986. The exclusion of Wexco's numbers on production, capacity, capacity utilization, capital expenditures, profits, employment, etc., biases the industry numbers. There are indications that inclusion of data on Wexco would show the industry to be in even better

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[9] Id. at A-15.

condition.[10] Finally the small number of firms in the industry leads me to expect unevenness in capital outlays as new plants and production lines go on-line.

In short, in light of the foregoing considerations, I conclude that one weak six month period is simply insufficient in this case to reach a conclusion that the domestic industry is materially injured. Accordingly, I determine that there is no reasonable indication that the domestic industry is experiencing material injury.

Threat of Material Injury

A finding that the domestic industry is threatened with material injury requires evidence that the threat is real and actual injury is imminent.[11] There is no evidence of any increase in production capacity in Japan, and while Japanese producers may have the potential to increase their capacity utilization and import more cylinders to the U.S. market, there is no evidence that they are likely to do so.

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[10] The Commission should make every effort to obtain this information in a final investigation.

[11] 19 U.S.C. sec. 1677(7)(F)(ii)(supp.III 1985).

As noted above, there has been an increase in the Japanese share of the U.S. market during the first 6 months of 1987, but it is not likely that penetration will increase to an injurious level. Hitachi Metals of America (HMA), a division of Hitachi Metals International, Ltd, a wholly owned subsidiary of Hitachi Metals Ltd. (Hitachi) has entered into a distribution agreement with Spirex Corporation whereunder Spirex has the right to make

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[12] Report at A-23.

[13] **********
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Report at A-5.

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Pricing information in this case is inconclusive. Inventories of Japanese cylinders in the United States have increased, but this is in accord with Hitachi's contract with Spirex, which, as noted above, is not expected to lead to an injurious level of imports.[14] Therefore, I determine that the domestic industry producing bimetallic cylinders is not threatened with material injury by reason of dumped imports of bimetallic cylinders from Japan.

Because the Commission has found that there is a reasonable indication that the domestic industry is threatened with material injury, for purposes of argument, I will assume that there is a reasonable indication that the domestic industry is threatened with material injury and consider the issue of causation.

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[14] The potential for product-shifting is not at issue in this case because there are no outstanding orders on other products made by the bimetallic cylinder producers under investigation.

Causation: Material Injury, or Threat of Material Injury by Reason of Imports

In order for a domestic industry to prevail in a preliminary investigation, the Commission must determine that there is a reasonable indication that the dumped or subsidized imports cause or threaten to cause material injury to the domestic industry producing the like product. The Commission must determine whether there is a reasonable indication that the domestic industry producing the like product is materially injured or is threatened with material injury, and whether any injury or threat thereof is by reason of the allegedly dumped or subsidized imports. Only if the Commission finds a reasonable indication of both injury (or threat) and causation, will it make an affirmative determination in the investigation.

Before analyzing the data, however, the first question is whether the statute is clear or whether one must resort to the legislative history in order to interpret the relevant sections of the this import relief law. In general, the accepted rule of statutory construction is that a statute, clear and unambiguous on

its face, need not and cannot be interpreted using secondary sources. Only statutes that are of doubtful meaning are subject to such statutory interpretation.[15]

The statutory language used for both parts of the analysis is ambiguous. "Material injury" is defined as "harm which is not inconsequential, immaterial, or unimportant."[16] As for the causation test, "by reason of" lends itself to no easy interpretation, and has been the subject of much debate by past and present commissioners. Clearly, well-informed persons may differ as to the interpretation of the causation and material injury sections of title VII. Therefore, the legislative history becomes helpful in interpreting title VII.

The ambiguity arises in part because it is clear that the presence in the United States of additional foreign supply will always make the domestic industry worse off. Any time a foreign producer exports products to the United States, the increase in supply, ceteris paribus, must

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15 Sands, Sutherland Statutory Construction § 45.02 (4th ed.).

16 19 U.S.C. § 1977(7)(A)(1980).

result in a lower price of the product than would otherwise prevail. If a downward effect on price, accompanied by a Department of Commerce dumping or subsidy finding and a Commission finding that financial indicators were down were all that were required for an affirmative determination, there would be no need to inquire further into causation.

But the legislative history shows that the mere presence of LTFV imports is not sufficient to establish causation. In the legislative history to the Trade Agreements Acts of 1979, Congress stated:

> [T]he ITC will consider information which indicates that harm is caused by factors other than the less-than-fair-value imports.[17]

The Finance Committee emphasized the need for an exhaustive causation analysis, stating, "the Commission must satisfy itself that, in light of all the information presented, there is a sufficient causal link between the less-than-fair-value imports and the requisite injury."[18]

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[17] Report on the Trade Agreements Act of 1979, S. Rep. No. 249, 96th Cong. 1st Sess. 75 (1979).

[18] Id.

The Senate Finance Committee acknowledged that the causation analysis would not be easy: "The determination of the ITC with respect to causation, is under current law, and will be, under section 735, complex and difficult, and is a matter for the judgment of the ITC."[19] Since the domestic industry is no doubt worse off by the presence of any imports (whether LTFV or fairly traded) and Congress has directed that this is not enough upon which to base an affirmative determination, the Commission must delve further to find what condition Congress has attempted to remedy.

In the legislative history to the 1974 Act, the Senate Finance Committee stated:

> This Act is not a 'protectionist' statute designed to bar or restrict U.S. imports; rather, it is a statute designed to free U.S. imports from unfair price discrimination practices. * * * The Antidumping Act is designed to discourage and prevent foreign suppliers from using unfair price discrimination practices to the detriment of a United States industry.[20]

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19 Id.

20 Trade Reform Act of 1974, S. Rep. 1298, 93rd Cong. 2d Sess. 179.

Thus, the focus of the analysis must be on what constitutes unfair price discrimination and what harm results therefrom:

> [T]he Antidumping Act does not proscribe transactions which involve selling an imported product at a price which is not lower than that needed to make the product competitive in the U.S. market, even though the price of the imported product is lower than its home market price.[21]

This "complex and difficult" judgment by the Commission is aided greatly by the use of economic and financial analysis. One of the most important assumptions of traditional microeconomic theory is that firms attempt to maximize profits.[22] Congress was obviously familiar with the economist's tools: "[I]mporters as prudent businessmen dealing fairly would be interested in maximizing profits by selling at prices as high as the U.S. market would bear."[23]

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21 Id.

22 See, e.g., P. Samuelson & W. Nordhaus, Economics 42-45 (12th ed. 1985); W. Nicholson, Intermediate Microeconomics and Its Application 7 (3d ed. 1983).

23 Trade Reform Act of 1974, S. Rep. 1298, 93rd Cong. 2d Sess. 179.

An assertion of unfair price discrimination should be accompanied by a factual record that can support such a conclusion. In accord with economic theory and the legislative history, foreign firms should be presumed to behave rationally. Therefore, if the factual setting in which the unfair imports occur does not support any gain to be had by unfair price discrimination, it is reasonable to conclude that any injury or threat of injury to the domestic industry is not "by reason of" such imports.

In many cases unfair price discrimination by a competitor would be irrational. In general, it is not rational to charge a price below that necessary to sell one's product. In certain circumstances, a firm may try to capture a sufficient market share to be able to raise its price in the future. To move from a position where the firm has no market power to a position where the firm has such power, the firm may lower its price below that which is necessary to meet competition. It is this condition which Congress must have meant when it charged us "to discourage and prevent foreign suppliers from using unfair price discrimination practices to the detriment of a United States industry."[24]

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[24] Trade Reform Act of 1974, S. Rep. 1298, 93rd Cong. 2d Sess. 179.

In Certain Red Raspberries from Canada, I set forth a framework for examining what factual setting would merit an affirmative finding under the law interpreted in light of the cited legislative history.[25]

> The stronger the evidence of the following . . . the more likely that an affirmative determination will be made: (1) large and increasing market share, (2) high dumping margins, (3) homogeneous products, (4) declining prices and (5) barriers to entry to other foreign producers (low elasticity of supply of other imports).[26]

The statute requires the Commission to examine the volume of imports, the effect of imports on prices, and the general impact of imports on domestic producers.[27] The legislative history provides some guidance for applying these criteria. The factors incorporate both the statutory criteria and the guidance provided by the legislative history. Each of these factors is evaluated in turn.

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25 Inv. No. 731-TA-196 (Final), USITC Pub. 1680, at 11-19 (1985) (Additional Views of Vice Chairman Liebeler).

26 Id. at 16.

27 19 U.S.C. § 1677(7)(B)-(C) (1980 & cum. supp. 1985).

First I turn to import penetration. Examining import penetration is important because unfair price discrimination has as its goal, and cannot take place in the absence of, market power. The penetration ratio for imports from Japan was ** percent in 1984, ** percent in 1985, and ** percent in 1986. It rose from ** percent in interim 1986 to *** percent in interim 1987.[28][29] The small market share of imported Japanese cylinders is not consistent with an affirmative determination.

The second factor is a high margin of dumping or subsidy. The higher the margin, ceteris paribus, the more likely it is that the product is being sold below the competitive price[30] and the more likely it is that the domestic producers will be adversely affected. In a preliminary investigation, the Commerce Department has not yet calculated any dumping margins. I therefore generally

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28 Given the low base in this instance, any percentage increase will be very large. The absolute increase of * percentage points is quite small, as is the resulting market share.

29 Report at A-20(Table 12).

30 See text accompanying note 21, supra.

give the petitioner the benefit of the doubt and rely on the alleged margins, which are between 17.38 and 37.37 percent. These margins are low to moderate and are inconclusive.

The third factor is the homogeneity of the products. The more homogeneous the products, the greater will be the effect of any allegedly unfair practice on domestic producers. Bimetallic cylinders are differentiated products custom-made for specific injection-molding or extrusion machines, either as original equipment, or as replacement parts. Replacement cylinders are ordered when cylinder wear starts to cause a decline in the quality of plastic being produced. Foreign manufactuturers cannot deliver customized cylinders as quickly as can domestic producers. This is important for purchasers of replacement cylinders since long delivery times can necessitate production shutdowns. The product differentiation minimizes the effect of any unfair practice.

As to the fourth factor, evidence of declining domestic prices ceteris paribus might indicate that domestic producers were lowering their prices in order to

maintain market share. The Commission obtained extensive data on sales of both domestic and imported cylinders. The Report concluded that "[s]ince bimetallic cylinders are made to a detailed set of end-user specifications, and the purchasing dynamics are very complex, direct price comparisons are rare and difficult to document."[31] The Report did not trace the price of a standard domestic product over time but did show that the prices paid for a standard product varied considerably,[32] a factor that makes it difficult to discern any trend. The pricing information in this case is inconclusive.

The fifth factor is foreign supply elasticity (barriers to entry). If there is a low foreign elasticity of supply (or high barriers to entry) it is more likely that a producer can gain market power as a result of predatory pricing. Imports of bimetallic cylinders from non-Japanese producers were ** times the value of imports from Japan in 1986, and ****** the value in January-June

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[31] Report at A-25.

[32] Report at A-26.

1987.[33] Petioner's predecessor invented the bimetallic cylinder in 1959[34] and there seem to be no patents inhibiting production by new entrants here or abroad. This suggests that the potential supply response is relatively elastic. This factor is not consistent with an affirmative determination.

These five factors must be considered in each case to reach a sound determination. Market share is very low and inconsistent with an affirmative finding. In addition, none of the other factors supports an affirmative determination. Dumping margins are not large, the products are differentiated, pricing data are inconclusive, and foreign supply appears very elastic. In this case I have analyzed and weighed each of these factors and determined that there is no reasonable indication that imports of bimetallic cylinders from Japan threaten the domestic industry with material injury.

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[33] Actual import penetration ratios are confidential, and cannot be reported. Report at A-22(Table 13).

[34] Report at A-4.

Conclusion

Therefore, I determine that there is no reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of bimetallic cylinders from Japan that are allegedly sold at less than fair value.

# INFORMATION OBTAINED IN THE INVESTIGATION

## Introduction

On August 4, 1987, a petition was filed with the U.S. International Trade Commission and the U.S. Department of Commerce by counsel on behalf of Xaloy, Inc., Pulaski, VA, and Bimex Corp., Wales, WI. The petition alleges that imports from Japan of certain bimetallic cylinders, provided for in item 678.35 of the Tariff Schedules of the United States (TSUS), are being sold in the United States at less than fair value (LTFV), and that an industry in the United States is materially injured and threatened with material injury by reason of such imports.

Accordingly, effective August 4, 1987, the Commission instituted preliminary antidumping investigation No. 731-TA-383 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), to determine whether or not there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded by reason of imports of such merchandise 1/ into the United States.

Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of August 12, 1987 (52 F.R. 29900). 2/ The conference was held in Washington, DC, on August 28, 1987. 3/ The Commission voted on this investigation on September 15, 1987, and transmitted its determination to the U.S. Department of Commerce on September 18, 1987.

## The Product

### Description and uses

A bimetallic cylinder is a hollow metal cylinder that serves as part of an injection-molding or extrusion machine to process plastics and, to a lesser extent, materials such as rubber, food, oil, concrete, and fireplace logs. 4/ The product consists of an outer shell of steel and an inner lining of an alloy, which are metallurgically bonded. The inner lining is resistant to corrosive and abrasive environments, and may be composed of various metals such as nickel, boron, tungsten carbide, and silica.

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1/ The subject articles are certain parts for injection-molding or extrusion machines--namely, hollow steel cylinders to whose inner surfaces an alloy of various metals, such as nickel, boron, and silica has been metallurgically bonded, reported under items 678.3570 and 678.3575 of the TSUS (Annotated).
2/ Copies of the Commission's and Commerce's initiation notices are presented in app. A.
3/ A list of witnesses appearing at the conference is presented in app. B.
4/ Commerce's notice of initiation defines the bimetallic cylinder under investigation to be "...a hollow metal cylinder which serves as part of a machine to process plastics materials, either by injection molding or by extrusion." U.S. producers and importers of bimetallic cylinders responding to the Commission's questionnaires reported sales to end users processing plastics, rubber, food, and other materials.

In plastics working machinery, a hopper feeds plastic filler or resin into the cylinder (commonly referred to in the industry as a barrel). A rotating screw inside the cylinder mixes and moves the material, and heaters on the outside of the cylinder melt the material. The melt is conveyed to a mold (for the injection process) or a die (for the extrusion process).

Bimetallic cylinders may be used as original equipment, or as replacement parts in injection-molding machines and extrusion machines. 1/ Original-equipment manufacturers (OEM's) of injection-molding machines, in particular, can use an alternative product, nitrided cylinders, as original equipment. Nitrided cylinders are less expensive and less wear resistant than bimetallic cylinders and are produced by different firms employing a different manufacturing process. 2/ In lieu of purchasing new bimetallic cylinders as replacement parts, some end users prefer to have worn bimetallic cylinders reconditioned, or to have sleeves or liners custom made for use inside reconditioned cylinders.

Manufacturing process

A bimetallic cylinder consists of an outer shell and an inner lining that are metallurgically bonded together. The outer shell, or backing steel, is raw alloy steel, usually specified as "grade 4140." The raw steel is cut to specified length and machined to within 0.375 inch of finished outside diameter. U.S. producers normally buy such steel in solid form, although unusually larger sizes may be prebored. When boring out a large internal diameter, the by-product can sometimes be saved to make a smaller cylinder, but typically the steel that is removed is sold as scrap.

A charge of premixed and carefully measured alloy is loaded inside the cylinder. The alloy is made of various materials depending on the requirements of the end user/processor with respect to corrosive and abrasive characteristics of the material being processed. Caps are welded to each end, and the cylinder slowly rotates inside a heated furnace. The furnace is set at a temperature high enough to melt the alloy, but at a lower melt temperature than the backing steel. After reaching the proper temperature, the cylinder is transferred to a centrifugal casting station where it is rotated at a rate to produce approximately 75 gravitational units of force. This process creates a metallurgical bonding of the alloy to the backing steel.

The bimetallic cylinder is then transferred to an insulated vertical or horizontal cooling pit to cool gradually to a temperature of 400 °F. Vertical

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1/ A variation on these machines is a blow-molding machine, which is an injection-molding or extrusion machine that has been modified at the downstream end to permit it to form hollow articles by expanding a hot plastic element against the internal surfaces of the mold. Petitioners state that "Blow molding involves the use of a modified extrusion or a modified injection machine. The machines use the same basic bimetallic cylinders and screws that can be found in injection molding and extrusion applications." (Postconference brief, pp. 5 and 6.) Respondents state that "...bimetallic cylinders for extrusion machines, injection machines and blow molding machines constitute one like product." (Postconference brief, p. 4.)

2/ See app. C for a description of nitrided cylinders, their uses, and production processes.

pits are used for the shorter cylinders to ensure straightness. Larger bimetallic cylinders are straightened horizontally. After the bimetallic cylinder is cooled, the caps are removed and the cylinder is rough honed to within 0.009 inch to 0.012 inch of the finished diameter. At this point, the cylinders are inspected for slag inclusions, cracks, and hardness. Some that do not meet standards can be repaired, but others must be scrapped. If accepted, the cylinder is further machined, straightened, honed, milled, and drilled to the specified bore and outside dimensions required by the engineer's drawings.

Bimetallic cylinders may be modified in a number of ways, particularly through venting and downsizing. In the former process, vents are cut into the cylinder to remove moisture and other volatiles from the materials being processed. A vented cylinder can eliminate the need for a dryer and reduces a mold venting problem. In downsizing, the front end of the cylinder is reduced in diameter to eliminate unneeded shot capacity 1/ and reduce excessive residence time for the polymers. Mr. Paul Colby, president of Spirex Corp., the U.S. distributor of cylinders produced by Hitachi Metals, Ltd., stated that vented cylinders account for * * * percent of Spirex's sales, and downsized cylinders account for * * * percent. 2/

Reconditioning.--All U.S. producers of bimetallic cylinders do some manufacturing of sleeves and relining of worn cylinders. To produce a sleeve, the old bimetallic cylinder must be rebored to create a larger inside diameter. The producer manufactures a sleeve or lining with a bimetallic anticorrosive quality using techniques similar to those used in producing a new bimetallic cylinder. The sleeve is then welded or fitted to the old cylinder. The sleeve may be short for the high-pressure area of an injection-molding machine, or full length for an extrusion machine.

## U.S. tariff treatment

Imports of bimetallic cylinders are classified in TSUS item 678.35 and reported for statistical purposes under TSUSA items 678.3570 and 678.3575, which include parts for injection-molding machines and parts for extrusion machines, respectively. 3/ As of January 1, 1987, the most-favored-nation (MFN) or column 1 rate of duty, applicable to imports from Japan, is 3.9 percent ad valorem. The column 2 rate of duty, applicable to most Communist-controlled countries and areas, is 35 percent ad valorem.

## The Nature and Extent of Alleged Sales at Less Than Fair Value

The petitioner calculated LTFV margins by comparing the U.S. purchase price, based on the sales prices of a Japanese manufacturer to its unrelated U.S. distributor, with the foreign-market value, based on the Japanese

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1/ Shot capacity is the volume of material that can be processed within the cylinder at any point in time.

2/ Staff meeting with Paul Colby, Aug. 17, 1987.

3/ In addition, such cylinders would be reported for statistical purposes elsewhere in the TSUSA if they entered as parts for machines used for molding, or otherwise forming pneumatic tires (item 678.3555); as parts for blow-molding machines (item 678.3580); or as parts for other machines (item 678.3585).

manufacturer's retail price quotes to a Japanese user of bimetallic cylinders. Based upon comparisons of U.S. prices and foreign-market values, petitioners allege dumping margins of between 17.38 percent and 37.37 percent. 1/

## The U.S. Market

### U.S. producers

There are four known U.S. manufacturers of bimetallic cylinders. 2/ The two petitioners, Xaloy, Inc., Pulaski, VA, and Bimex Corp., Wales, WI, are in support of the petition. Wisconsin Bimetallic Casting Corp., Sullivan, WI, is also in support of the petition. Wexco Corp., Lynchburg, VA, takes no position in this investigation and did not provide the Commission with a complete questionnaire response. 3/ The shares of U.S. production and apparent U.S. consumption of bimetallic cylinders accounted for by each firm in 1986 are presented in table 1.

Table 1
Bimetallic cylinders: U.S. producers' shares of the value 1/ of U.S.-produced domestic shipments and apparent U.S. consumption, by firms, 1986

(In percent)

| Firm | Share of U.S.-produced domestic shipments | Share of apparent U.S. consumption |
|---|---|---|
| Xaloy, Inc. | *** | *** |
| Bimex Corp. | *** | *** |
| Wexco Corp. | *** | *** |
| Wisconsin Bimetallic | *** | *** |
| Total | 100.0 | 91.7 |

1/ Shares are based on the value, rather than the quantity, of shipments. Fluctuations in shipments expressed in units may simply reflect shifts in product mix rather than actual trends because of the wide variation in unit values of bimetallic cylinders.

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

Xaloy, Inc., Pulaski, VA, is the largest U.S. producer of bimetallic cylinders. Xaloy was originally known as Industrial Research, the firm responsible for inventing the bimetallic cylinder in 1959 for Honolulu Research and Development, a producer of slush pump liners used in oil drilling. Xaloy's plant in Pulaski, VA, has been 100-percent devoted to production and reconditioning of bimetallic cylinders since 1964 (reconditioning and sleeve sales have accounted for * * * percent of the value

1/ As reported in the Department of Commerce's initiation notice.
2/ The petition alleged that there are only three U.S. producers of bimetallic cylinders: Bimex, Xaloy, and Wexco. Petition, pp. 2-3. * * *. * * *.
3/ Mr. Jack Congrove, President, Wexco Corp., stated that the petition * * *. Telephone conversation with staff, Aug. 12, 1987.

of domestic shipments). Xaloy produces single and twin bimetallic cylinders. According to a * * * representative, only Xaloy and certain European manufacturers can produce cylinders * * *, representing an estimated * * * percent of total world demand. 1/ Xaloy has a plant in Newburyport, MA, which is devoted to producing screws for use in conjunction with bimetallic cylinders.

Bimex Corp., Wales, WI, was purchased on July 1, 1986, by Littleford Group, Inc., Cincinnati, OH. Mr. Donald Lomax, president, founded Bimex in 1975. He had been a metallurgist and salesman for Xaloy. In 1985, the Bimex plant was expanded by 9,000 square feet. This plant produces only new and reconditioned bimetallic cylinders; relining and sleeve sales accounted for * * * percent of the value of domestic shipments during the period of investigation. Bimex offers more alloys than any other supplier to the U.S. market. 2/ * * *. * * *.

Wexco Corp., Lynchburg, VA, was founded by Mr. Jack Congrove, president, in 1964. Mr Congrove had formerly been the plant manager of Xaloy. Wexco is the * * * U.S. producer of bimetallic cylinders and is not taking a position in this investigation. Wexco recently built and moved to a new plant in Lynchburg, VA, which * * * the firm's capacity to produce bimetallic cylinders, the only product the firm manufactures. Mr. Congrove stated that * * *. 3/ Mr. Congrove estimates that * * * percent of the value of Wexco's domestic sales are reconditioned or sleeved cylinders. Wexco can produce bimetallic cylinders * * * in length.

Wisconsin Bimetallic Casting Corp., Sullivan, WI, was founded in 1985 by Mr. Ronald Boggs, a former employee of Bimex. The firm produces only bimetallic cylinders; Mr. Boggs estimates that * * * percent of the value of domestic sales are reconditioned or sleeved bimetallic cylinders.

U.S. importers

Imports of bimetallic cylinders are reported under TSUSA numbers that include various parts for injection-molding and extrusion machines. The Commission sent questionnaires to approximately 150 importers of products entered under those TSUSA numbers. Questionnaires and notices were received from approximately 70 importers that indicated that they do not import bimetallic cylinders. The Commission received questionnaires from 17 importers of bimetallic cylinders that are believed to account for the vast majority of total imports of bimetallic cylinders from all countries.

Four firms reported imports of the subject merchandise from Japan. The largest importer from Japan is the Hitachi Metals America (HMA) division of Hitachi Metals International, Ltd., Purchase, NY. HMA accounted for * * * percent of imports from Japan in 1986. On January 26, 1987, HMA signed a 5-year exclusive agreement with Spirex Corp., Youngstown, OH. The agreement states that Spirex * * *. Spirex has reported * * *. The agreement also allows Spirex to * * *. Spirex has * * *. HMA has * * *. Additional details regarding this agreement are provided in the section entitled "Channels of distribution."

1/ Staff meeting with Mr. Jack Congrove, president, Wexco Corp., Aug. 19, 1987.
2/ Petition, Exhibit 2.
3/ Staff meeting with Mr. Jack Congrove, President, Wexco Corp., Aug. 19, 1987.

Spirex performs custom work on bimetallic cylinders, including changing the cylinder sizes (principally downsizing) and converting standard cylinders to vented cylinders. Vented cylinders provide a means to remove water, liquids, and gases from the heated materials that may otherwise discolor or distort the finished products. Spirex sells only to the plastics industry. The firm also manufactures screw devices that fit inside Hitachi and U.S.-produced bimetallic cylinders.

* * *, is the second largest importer of bimetallic cylinders from Japan. * * * is * * * percent owned by * * *. * * * and * * * other firms import bimetallic cylinders that are produced by * * *. The * * * other firms are * * *. These * * * sell injection-molding and extrusion plastics machinery made by * * *. The warranties on the machines' components include bimetallic cylinders. Once the warranties have expired, the U.S. processors may ask for bids from other U.S. sources of the subject merchandise.

Questionnaires reporting imports of bimetallic cylinders were received by three firms reporting imports from Switzerland, four firms reporting imports from the United Kingdom, and seven firms reporting imports from West Germany. The only firm reporting imports from two countries was * * *. The following tabulation presents information on these importers, their locations, source of imports, and each importer's share of reported 1986 import values, by sources (in percent):

| Importer | | Location | | Country | | Share of imports |
|---|---|---|---|---|---|---|
| * | * | * | * | * | * | * |

Apparent U.S. consumption 1/

The data on apparent U.S. consumption of bimetallic cylinders presented in table 2 are the values of domestic shipments of the subject merchandise as reported by U.S. producers and importers in questionnaire responses. Apparent U.S. consumption of bimetallic cylinders increased from $25.7 million in 1984 to $27.7 million in 1985, or by 7.8 percent, and rose again to $30.2 million in 1986, or by 9.4 percent. Apparent U.S. consumption of bimetallic cylinders was $15.8 million during January-June 1987, a slight decrease compared with consumption during the corresponding period in 1986 of $15.9 million.

## The Japanese Industry 2/

Hitachi Metals, Ltd., (Hitachi) is the largest producer of bimetallic cylinders in Japan, accounting for approximately * * * percent of the Japanese

1/ Apparent U.S. consumption of nitrided cylinders is presented in app. C.
2/ Counsel for Hitachi Metals, Ltd., Japan, and Hitachi Metals America division of Hitachi Metals International, Ltd., provided the data in this section on the Japanese industry (letter dated Aug. 27, 1987). U.S. Department of State Telegram 6760, Aug. 20, 1987, reported that MITI Industrial Machinery Division confirmed that Hitachi Metals, Ltd., is a manufacturer of bimetallic cylinders, but that the MITI Division had no readily available statistics and the Embassy was unable to collect the requested data.

Table 2
Bimetallic cylinders: U.S. producers' domestic shipments, domestic shipments of imports, and apparent U.S. consumption, by value, 1984-86, January-June 1986, and January-June 1987

(In thousands of dollars) 1/

| Item | 1984 | 1985 | 1986 | January-June-- 1986 | 1987 |
|---|---|---|---|---|---|
| U.S. producers' domestic shipments | 23,009 | 25,235 | 27,732 | 14,429 | 13,376 |
| Domestic shipments of imports from: | | | | | |
| Japan | *** | *** | *** | *** | *** |
| United Kingdom | *** | *** | *** | *** | *** |
| West Germany | *** | *** | *** | *** | *** |
| Switzerland | *** | *** | *** | *** | *** |
| Total, all imports | 2,654 | 2,425 | 2,515 | 1,445 | 2,393 |
| Apparent U.S. consumption | 25,663 | 27,660 | 30,247 | 15,874 | 15,769 |

1/ Shipments and consumption are presented in terms of value rather than quantity. Fluctuations in shipments expressed in units may simply reflect shifts in product mix rather than actual trends because of the wide variation in unit values of bimetallic cylinders.

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

market. The second largest producer is * * *, which accounts for approximately * * * percent of the market. Counsel for HMA reports that most * * *. Other Japanese producers accounting for approximately * * * percent of the market * * *.

No specifics are presently available on the manufacturing process used by Hitachi. According to sales literature, Hitachi has developed its own techniques for producing bimetallic cylinders, including applying a metallurgical bond between the alloy lining material and the steel shell by means of a centrifugal casting process. Hitachi's "H-ALOY" is available in four grades. Its bimetallic cylinders are best suited for plastics machinery used in processing fiber-reinforced plastics and flame-resistant polymers. Hitachi can produce cylinders with a maximum outside diameter of 12.6 inches, an inside diameter of 7.87 inches, and a length of 137.8 inches. 1/ Spirex reports that Hitachi is * * *.

Spirex Corp. sells several different Hitachi bimetallic cylinders in the United States, each with alloys providing different corrosive and abrasive characteristics suited to particular types of processing materials. U.S. producers manufacture alloys that are comparable with * * * of the Hitachi alloys. In addition, Spirex is selling * * * other Hitachi cylinders with alloys that may be roughly similar to those offered by * * *.

1/ Petition, exhibit 3, p. 4.

Available information on Hitachi's operations producing bimetallic cylinders is presented in tables 3 and 4.

Hitachi's production of bimetallic cylinders decreased irregularly during 1984-86. Such production declined by * * * percent from * * * cylinders in 1984 to * * * cylinders in 1985, then increased by * * * percent, to * * * cylinders in 1986. Hitachi reported production of * * * cylinders during January-June 1987, representing a * * *-percent increase over production during the corresponding period of 1986. Hitachi's capacity to produce cylinders increased by * * * percent from * * * cylinders in 1984 to * * * cylinders in 1985, where capacity is projected to remain through 1987. Hitachi's capacity utilization tracked the same trend as production, decreasing irregularly from * * * percent in 1984 to * * * percent in 1986. Capacity utilization during January-June 1987 was * * * percent, an increase compared with * * * percent during January-June 1986.

Hitachi's value of home-market shipments increased steadily by nearly * * * percent during 1984-86, and the value of such shipments was * * * percent higher during January-June 1987 than the value during the corresponding period of 1986. The value of Hitachi's home-market shipments as a share of the firm's value of total shipments was approximately * * * percent during 1984-86 and then declined to * * * percent during January-June 1987.

The value of Hitachi's shipments to the United States also increased steadily, by nearly * * * during 1984-86, and the value of such shipments was more than * * * higher during January-June 1987 than the value during January-June 1986. As a share of the firm's value of total shipments, the value of shipments to the United States was approximately * * * percent during 1984-86 and then rose to nearly * * * percent during January-June 1987.

Hitachi's value of shipments to * * * increased irregularly by nearly * * * percent from 1984 to 1986. The value of such shipments was * * * percent higher during January-June 1987 than the value of such shipments in the corresponding period of 1986. As a share of the firm's value of total shipments, the value of shipments to * * * fluctuated between * * * and * * * percent during the period of investigation.

The value of total shipments of Hitachi increased by * * * percent from 1984 to 1985 and by * * * percent from 1985 to 1986. The value of the firm's total shipments was * * * percent higher during January-June 1987 than the value of such shipments during the corresponding period of 1986.

At the public hearing, counsel for petitioners, Mr. Caldwell Butler, stated that, "We have very recent information which we are prepared to support by a postconference submission to the effect that a substantial shipment of bimetallic cylinders from Hitachi to Spirex is presently on the way." 1/ On page 6, petitioner's confidential exhibit 17, * * * states that * * *. On pages 4 and 5, respondent's postconference confidential exhibit 9, Hitachi reports * * *.

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1/ Transcript of the public conference, p. 14.

Table 3
Bimetallic cylinders: Hitachi's production, capacity, and capacity utilization, 1984-86, January-June 1986, and January-June 1987

| Item | 1984 | 1985 | 1986 | January-June-- 1986 | 1987 |
|---|---|---|---|---|---|
| Production.....cylinders.. | *** | *** | *** | *** | 1/ *** |
| Capacity.....do.... | *** | *** | *** | *** | 2/ *** |
| Capacity utilization.percent.. | *** | *** | *** | *** | *** |

1/ Production is estimated to be *** bimetallic cylinders during July-December 1987.
2/ Capacity to produce bimetallic cylinders is estimated to be *** during July-December 1987.

Source: Compiled from data submitted by counsel for Hitachi Metals America.

Table 4
Bimetallic cylinders: Hitachi's home-market shipments, exports to the United States, and exports to all other countries, by cylinder units and U.S. currency, 1984-86, January-June 1986, and January-June 1987

| Item | 1984 | 1985 | 1986 | January-June-- 1986 | 1987 |
|---|---|---|---|---|---|
| Home-market shipments cylinders.. | *** | *** | *** | *** | *** |
| Exports to-- | | | | | |
| United States....cylinders.. | *** | *** | *** | *** | *** |
| * * *.....do.... | *** | *** | *** | *** | *** |
| * * *.....do.... | *** | *** | *** | *** | *** |
| * * *.....do.... | *** | *** | *** | *** | *** |
| * * *.....do.... | *** | *** | *** | *** | *** |
| * * *.....do.... | *** | *** | *** | *** | *** |
| Other countries.....do.... | *** | *** | *** | *** | *** |
| Total exports.....do.... | *** | *** | *** | *** | *** |
| Home-market shipments 1,000 dollars.. | *** | *** | *** | *** | *** |
| Exports to-- | | | | | |
| United States.1,000 dollars.. | *** | *** | *** | *** | *** |
| Three largest non-U.S. export markets 1/..1,000 dollars.. | *** | *** | *** | *** | *** |
| Other countries.....do.... | *** | *** | *** | *** | *** |
| Total exports.....do.... | *** | *** | *** | *** | *** |
| Total shipments.....do.... | *** | *** | *** | *** | *** |

1/ * * *.

Source: Compiled from data submitted by counsel for Hitachi Metals America.

Counsel for Hitachi reported that some of the major Japanese plastic production machinery manufacturers produce nitrided cylinders for use in their own machines. Possible Japanese producers of nitrided cylinders are * * *. Counsel is unaware of significant exports of Japanese nitrided cylinders to the United States, but stated that there may be occasional spare parts exported for use in Japanese-manufactured plastics production machines in the United States.

## Consideration of the Question of a Reasonable Indication of Material Injury

The information in this section of the report was compiled from responses to questionnaires of the U.S. International Trade Commission. Wexco Corp., a U.S. producer accounting for * * * percent of U.S.-produced domestic shipments in 1986, provided only the value of its domestic shipments and limited employment data; thus, most of the data reported in this section are understated.

Reported employment and financial data include U.S. producers' operations related to the production of sleeves. However, data on shipments of sleeves was reported separately and is shown in a tabulation in the section entitled "U.S. producers' domestic shipments and export shipments."

* * * reported sales of bimetallic cylinders to OEM's and end users of extrusion and injection blow-molding machinery. However, * * * could not distinguish sales of bimetallic cylinders ultimately used in such machines from sales for use in regular extrusion or injection-molding machines. 1/

### U.S. production, capacity, and capacity utilization

Data on reported U.S. production, average capacity, and capacity utilization related to bimetallic cylinders are presented in table 5. U.S. production increased by * * * percent from * * * cylinders in 1984 to * * * cylinders in 1985, and increased again, by * * * percent, to * * * cylinders in 1986. Wisconsin Bimetallic started production in 1986. U.S. production during January-June 1987 totaled * * * cylinders, a decrease of * * * percent compared with the level of U.S. production in the corresponding period of 1986.

Average U.S. capacity to produce bimetallic cylinders decreased by * * * percent from 1984 to 1985, then rose by * * * percent in 1986 with the arrival of Wisconsin Bimetallic in the market. Capacity was * * * percent lower during January-June 1987 than capacity during January-June 1986. * * * reported capacity utilization levels ranging from * * * percent in 1984 to * * * percent during January-June 1987. * * *. 2/

### U.S.-produced domestic shipments and export shipments

Data on U.S.-produced domestic shipments and export shipments of bimetallic cylinders are presented in table 6. U.S.-produced domestic

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1/ Staff telephone conversations with * * * and * * *, Sept. 9, 1987.
2/ Staff telephone conversation with * * *, Aug. 26, 1987.

Table 5
Bimetallic cylinders: U.S. production, average capacity, and capacity utilization, by quantity, 1984-86, January-June 1986, and January-June 1987 1/

| Item | 1984 | 1985 | 1986 | January-June-- 1986 | 1987 |
|---|---|---|---|---|---|
| Production.....cylinders.. | *** | *** | *** | *** | *** |
| Average capacity.....do.... | *** | *** | *** | *** | *** |
| Capacity utilization percent.. | *** | *** | *** | *** | *** |

1/ * * *. * * *.

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

Table 6
Bimetallic cylinders: U.S.-produced domestic shipments and export shipments, by quantity, value, and average unit value, 1984-86, January-June 1986, and January-June 1987

| Item | 1984 | 1985 | 1986 | January-June-- 1986 | 1987 |
|---|---|---|---|---|---|
| Domestic shipments: | | | | | |
| Quantity 1/.....cylinders.. | *** | *** | *** | *** | *** |
| Value.....1,000 dollars.. | 23,009 | 25,235 | 27,732 | 14,429 | 13,376 |
| Average unit value 1/ 2/..... | $*** | $*** | $*** | $*** | 3/ $*** |
| Export shipments: 1/ 4/ | | | | | |
| Quantity.....cylinders.. | *** | *** | *** | *** | *** |
| Value.....1,000 dollars.. | *** | *** | *** | *** | *** |
| Average unit value 2/..... | $*** | $*** | $*** | $*** | $*** |

1/ Data do not include * * *, accounting for * * * percent of U.S.-produced domestic shipments by value in 1986.
2/ Average unit values were calculated using data from firms that provided data for both quantity and value of shipments.
3/ During January-June 1987, * * *.
4/ * * * reported export sales to * * *. * * * reported export sales to * * *.

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

shipments increased from * * * cylinders in 1984 to * * * cylinders in 1985, or by * * * percent. Such shipments increased by nearly * * * percent to * * * cylinders in 1986. However, U.S.-produced domestic shipments during January-June 1987 amounted to * * * cylinders, representing a decrease of * * * percent compared with the level of such shipments in the corresponding period of 1986.

The value of U.S.-produced domestic shipments of bimetallic cylinders increased from $23.0 million in 1984 to $25.2 million in 1985, or by 10 percent. The value of such shipments increased in 1986 to $27.7 million, or by 10 percent. The value of U.S.-produced domestic shipments during January-June 1987 amounted to $13.4 million, a decrease of 7 percent compared with the level in the corresponding period of 1986.

Although the value of U.S.-produced domestic shipments increased steadily during 1984-86, the average unit value of such shipments decreased steadily from $* * * per cylinder in 1984 to $* * * in 1986. The average unit value during January-June 1987 was $* * *, representing a slight a decrease compared with the average unit value of $* * * during January-June 1986.

The value of U.S. producers' domestic shipments of sleeves is shown in the following tabulation (in thousands of dollars):

| | | | | January-June-- | |
|---|---|---|---|---|---|
| | 1984 | 1985 | 1986 | 1986 | 1987 |
| Bimex | *** | *** | *** | *** | *** |
| Xaloy | *** | *** | *** | *** | *** |
| Wexco | *** | *** | *** | *** | *** |
| Wisconsin Bimetallic | *** | *** | *** | *** | *** |
| Total | 1,173 | 1,334 | 1,635 | 847 | 786 |

* * * and * * * reported increasing export shipments of U.S.-produced bimetallic cylinders during the period of investigation. The average unit values of export shipments were roughly the same as those of the firms' domestic shipments.

U.S. producers' end-of-period inventories

U.S. producers' end-of-period inventories of bimetallic cylinders increased from * * * cylinders as of yearend 1984 to * * * cylinders as of yearend 1985, or by * * * percent (table 7). Such inventories increased to * * * cylinders as of yearend 1986, or by nearly * * * percent. Inventories as of June 30, 1987, increased to * * * cylinders or by * * * percent, compared with the level of inventories as of June 30, 1986. The ratio of end-of-period inventories to U.S.-produced domestic shipments increased irregularly from * * * percent in 1984 to * * * percent in 1986, and reached a high of * * * percent as of June 30, 1987, compared with * * * percent as of June 30, 1986.

U.S. producers' employment and wages

* * * reporting U.S. producers increased their average number of production and related workers producing bimetallic cylinders steadily during 1984-86 (table 8). However, the average number of workers was nearly * * * percent lower during January-June 1987 than the average number of workers in the corresponding period of 1986, largely as a result of * * *.

Table 7
Bimetallic cylinders: U.S. producers' end-of-period inventories, 1984-86, January-June 1986, and January-June 1987

| Item | 1984 | 1985 | 1986 | January-June-- 1986 | 1987 |
|---|---|---|---|---|---|
| End-of-period inventories cylinders.. | *** | *** | *** | *** | *** |
| Ratio of end-of-period inventories to domestic shipments.....percent.. | *** | *** | *** | 1/ *** | 1/ *** |

1/ Calculated on the basis of annualized shipments.

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

Table 8
Bimetallic cylinders: Average number of production and related workers, hours worked, productivity, hourly wages and total compensation paid, and unit labor costs, 1984-86, January-June 1986, and January-June 1987

| Item | 1984 | 1985 | 1986 | January-June-- 1986 | 1987 |
|---|---|---|---|---|---|
| Average number of workers.. 1/ | *** | *** | *** | *** | *** |
| Percent change..... | *** | *** | *** | *** | *** |
| Hours worked..1,000 hours.. | *** | *** | *** | *** | *** |
| Percent change..... | *** | *** | *** | *** | *** |
| Hourly wages: | | | | | |
| Value..... | $*** | $*** | $*** | $*** | $*** |
| Percent change..... | *** | *** | *** | *** | *** |
| Total hourly compensation: | | | | | |
| Value..... | $*** | $*** | $*** | $*** | $*** |
| Percent change..... | *** | *** | *** | *** | *** |
| Productivity: | | | | | |
| Cylinders per hour..... | *** | *** | *** | *** | *** |
| Percent change..... | *** | *** | *** | *** | *** |
| Unit labor cost: | | | | | |
| Per cylinder..... | $*** | $*** | $*** | $*** | $*** |
| Percent change..... | *** | *** | *** | *** | *** |

1/ * * *.

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

The number of hours worked by production and related workers producing bimetallic cylinders tracked the same trends as the number of workers, increasing steadily during 1984-86, and then decreasing by nearly * * * percent in January-June 1987 compared with the number of hours worked during the corresponding period of 1986. Hourly wages and total hourly compensation increased steadily during the period covered by the investigation. Productivity trended upward during the period, and unit labor costs fluctuated without any clear trend.

Financial experience of U.S. producers 1/

* * * provided usable income-and-loss data on the overall operations of their establishments within which bimetallic cylinders are produced. For * * * of these firms, the production of bimetallic cylinders accounted for * * * percent of their operations in these establishments. A * * * reporting firm, * * *; it began operations in early 1986 and, therefore, provided only partial reporting period data, which is presented separately.

Overall establishment (bimetallic cylinder) operations.--Aggregate income-and-loss data on overall establishment operations are presented in table 9. Overall establishment sales of * * * rose from $* * * million in 1984 to $* * * million in 1985, representing an increase of * * * percent, then increased further to $* * * million during 1986, or by * * * percent.

Operating income increased slightly from $* * * million in 1984 to $* * * million in 1985, or by * * * percent, but then fell by * * * percent in 1986 to $* * * million. The operating margins during the 1984-86 period were as follows: * * * percent, * * * percent, and * * * percent, respectively. * * *.

Net sales totaled $* * * million in interim 1987, down * * * percent from $* * * million reported during interim 1986. Operating income significantly declined from $* * * million reported during interim 1986 to $* * * million during interim 1987, or by * * * percent. The operating margins for the 1986 and 1987 interim periods were * * * percent and * * * percent, respectively. One firm reported * * *.

1/ Income-and-loss, asset valuation, and capital expenditure data of U.S. producers of nitrided cylinders are presented separately in app. C.

Table 9
Income-and-loss experience of * * * U.S. producers 1/ on the overall operations of their establishments within which bimetallic cylinders are produced, 2/ accounting years 1984-86 and interim periods ended June 30, 1986, and June 30, 1987

| Item | 1984 | 1985 | 1986 | Interim period ended June 30-- 3/ 1986 | 1987 |
|---|---|---|---|---|---|
| Net sales....1,000 dollars.. | *** | *** | *** | *** | *** |
| Cost of goods sold....do.... | *** | *** | *** | *** | *** |
| Gross profit.....do.... | *** | *** | *** | *** | *** |
| General, selling, and administrative expenses 1,000 dollars.. | *** | *** | *** | *** | *** |
| Operating income or (loss) 1,000 dollars.. | *** | *** | *** | *** | *** |
| Interest expense .....do.... | *** | *** | *** | *** | *** |
| Other income or (expense), net.....1,000 dollars.. | *** | *** | *** | *** | *** |
| Net income or (loss) before income taxes 1,000 dollars.. | *** | *** | *** | *** | *** |
| Depreciation and amortization expense included above.....1,000 dollars.. | *** | *** | *** | *** | *** |
| Cash flow.....do.... | *** | *** | *** | *** | *** |
| As a share of net sales: | | | | | |
| Cost of goods sold percent.. | *** | *** | *** | *** | *** |
| Gross profit.....do.... | *** | *** | *** | *** | *** |
| General, selling, and administrative expenses percent.. | *** | *** | *** | *** | *** |
| Operating income or (loss) percent.. | *** | *** | *** | *** | *** |
| Net income or (loss) before income taxes percent.. | *** | *** | *** | *** | *** |
| Number of firms reporting operating losses..... | *** | *** | *** | *** | *** |
| Number of firms reporting... | *** | *** | *** | *** | *** |

1/ Firms reporting data are * * *.
2/ The production of bimetallic cylinders accounted for *** percent of their operations in these establishments.
3/ * * *.

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

Selected financial data for * * * are presented separately in the following tabulation (in thousands of dollars):

| Item | 1984 | 1985 | 1986 | Interim period ending June 30--1/ 1986 | 1987 |
|---|---|---|---|---|---|
| Net sales: | | | | | |
| * * *..... | *** | *** | *** | *** | *** |
| * * *..... | *** | *** | *** | *** | *** |
| Total..... | *** | *** | *** | *** | *** |
| Gross profit: | | | | | |
| * * *..... | *** | *** | *** | *** | 2/ *** |
| * * *..... | *** | *** | *** | *** | *** |
| Total..... | *** | *** | *** | *** | *** |
| Operating income or (loss): | | | | | |
| * * *..... | *** | *** | *** | *** | *** |
| * * *..... | *** | *** | *** | *** | *** |
| Total..... | *** | *** | *** | *** | *** |
| Operating income (loss) as a percent of sales: | | | | | |
| * * *..... | *** | *** | *** | *** | *** |
| * * *..... | *** | *** | *** | *** | *** |
| Weighted-average..... | *** | *** | *** | *** | *** |

1/ * * *.
2/ A representative of * * * indicated that the firm's * * *.

* * *. The following tabulation shows the firm's financial data separately (in thousands of dollars):

| Item | 1986 | 6-month interim period ended June 30-- 1986 | 1987 |
|---|---|---|---|
| Net sales..... | *** | *** | *** |
| Cost of goods sold..... | *** | *** | *** |
| Gross profit..... | *** | *** | *** |
| GS&A expenses..... | *** | *** | *** |
| Operating income or (loss)... | *** | *** | *** |
| Interest expense..... | *** | *** | *** |
| Other income or (expense).... | *** | *** | *** |
| Net income or (loss)..... | *** | *** | *** |
| Depreciation and amortization expense included above..... | *** | *** | *** |

Value of plant, property, and equipment.--The data provided by * * * on their end-of-period investment in productive facilities in which bimetallic cylinders are produced are shown in table 10. The aggregate investment in productive facilities, valued at cost, increased from $* * * million in 1984 to $* * * million in 1985, and then rose to $* * * million in 1986. The book value of such assets increased from $* * * million in 1984 to $* * * million in 1985, and then rose further to $* * * million in 1986.

The aggregate investment by the * * * firms in productive facilities, valued at original cost, declined slightly from $* * * million as of June 30, 1986, to $* * * million as of June 30, 1987. The book value of such assets increased from $* * * million at the end of interim 1986 to $* * * million at the end of interim 1987.

Capital expenditures.--The data provided by * * * relative to their capital expenditures for land, buildings, and machinery and equipment used in the manufacture of bimetallic cylinders are shown in table 11. Capital expenditures relating to bimetallic cylinders declined from $* * * in 1984 to $* * * in 1985, then fell further to $* * * in 1986. Total capital expenditures by the * * * producers relating to bimetallic cylinders declined from $* * * during the interim period ended June 30, 1986, to $* * * during interim 1987.

Table 10
Bimetallic cylinders: Value of property, plant, and equipment of U.S. producers, 1/ accounting years 1984-86 and interim periods ended June 30, 1986, and June 30, 1987

| Item | 1984 | 1985 | 1986 | Interim period ended June 30--2/ 1986 | 1987 |
|---|---|---|---|---|---|
| Original cost....1,000 dollars.. | *** | *** | *** | *** | *** |
| Book value.....do.... | *** | *** | *** | *** | *** |
| Number of firms reporting..... | *** | *** | *** | *** | *** |

1/ The firms are * * *.
2/ * * *.

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

Table 11
Bimetallic cylinders: Capital expenditures by U.S. producers, 1/ accounting years 1984-86 and interim periods ended June 30, 1986, and June 30, 1987

| Item | 1984 | 1985 | 1986 | Interim period ended June 30--2/ 1986 | 1987 |
|---|---|---|---|---|---|
| Land and land improvements 1,000 dollars.. | *** | *** | *** | *** | *** |
| Building or leasehold improvements.....do.... | *** | *** | *** | *** | *** |
| Machinery, equipment, and fixtures.....do.... | *** | *** | *** | *** | *** |
| Total.....do.... | *** | *** | *** | *** | *** |
| Number of firms reporting.... | *** | *** | *** | *** | *** |

1/ The firms are * * *.
2/ * * *.

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

The following tabulation shows * * *'s asset valuation and capital expenditure data separately (in thousands of dollars):

| Item | 1986 | 6-month interim period ended June 30-- 1986 | 1987 |
|---|---|---|---|
| Asset valuation: | | | |
| Original cost..... | *** | *** | *** |
| Book value..... | *** | *** | *** |
| Capital expenditures..... | *** | *** | *** |

Research and development expenses.--Research and development expenses relating to bimetallic cylinders for * * * and for * * * are shown in the following tabulation for 1984-86 and interim periods 1986-87 (in thousands of dollars):

| | 1984 | 1985 | 1986 | Interim period ended June 30--1/ 1986 | 1987 |
|---|---|---|---|---|---|
| * * *..... | *** | *** | *** | *** | *** |
| * * *..... | *** | *** | *** | *** | *** |

1/ * * *.

## Consideration of the Question of a Reasonable Indication of Threat of Material Injury

In its examination of the question of threat of material injury to an industry in the United States, the Commission may take into consideration such factors as the rate of increase of the subject imports, the rate of increase in U.S. market penetration by such imports, the rate of increase of imports held in inventory in the United States, the capacity of producers in the exporting country to generate exports (including the existence of underutilized capacity and the availability of export markets other than the United States), and the price depressing or suppressing effect of the subject imports on domestic prices.

Discussions of rates of increase in imports and their U.S. market penetration, as well as available information on their prices, are presented in the section of the report entitled "Consideration of the causal relationship between imports of the subject merchandise and the alleged injury." Information regarding the capacity of Japanese producers of bimetallic cylinders to generate exports was discussed in the section of this report entitled "The Japanese industry." Available information on inventories of the subject imports in the United States is presented below.

Bimetallic cylinders are generally custom designed to meet the specifications of the end users' processing machinery. When an end user orders a replacement cylinder, it has to be custom made or at least modified to meet the customer's requirements. U.S. importers' inventories of bimetallic cylinders from Japan trended upward during 1984-86 and increased sharply as of June 30, 1987, as shown in the following tabulation: 1/

| | | | | January-June-- | |
|---|---|---|---|---|---|
| | 1984 | 1985 | 1986 | 1986 | 1987 |
| End-of-period inventories: | | | | | |
| * * *.....units.. | *** | *** | *** | *** | *** |
| * * *.....do.... | *** | *** | *** | *** | *** |
| * * *.....do.... | *** | *** | *** | *** | *** |
| Total.....do.... | *** | *** | *** | *** | *** |
| Inventories as a share of imports: | | | | | |
| * * *.....percent.. | *** | *** | *** | *** | *** |
| * * *.....do.... | *** | *** | *** | *** | *** |
| * * *.....do.... | *** | *** | *** | *** | *** |
| Average.....do.... | *** | *** | *** | *** | *** |

## Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged Injury

### U.S. imports

Data on U.S. imports of bimetallic cylinders from Japan and all other countries known to be sources of imports of the subject merchandise are presented in table 12. The Commission received questionnaires from

1/ * * *, accounting for * * * percent of imports from Japan, by value, in 1986, did not provide inventory data.

Table 12
Bimetallic cylinders: U.S. imports, by principal sources, 1984-86, January-June 1986, and January-June 1987

| Source | 1984 | 1985 | 1986 | January-June-- 1986 | 1987 |
|---|---|---|---|---|---|
| | C.i.f. duty-paid value (1,000 dollars) | | | | |
| Japan | *** | *** | *** | *** | *** |
| Switzerland | *** | *** | *** | *** | *** |
| United Kingdom | *** | *** | *** | *** | *** |
| West Germany | *** | *** | *** | *** | *** |
| Total | 2,200 | 2,069 | 2,151 | 1,267 | 2,217 |
| | Quantity (cylinders) 1/ | | | | |
| Japan | *** | *** | *** | *** | *** |
| Switzerland | *** | *** | *** | *** | *** |
| United Kingdom | *** | *** | *** | *** | *** |
| West Germany | *** | *** | *** | *** | *** |
| Total | 443 | 386 | 236 | 196 | 305 |
| | Average unit value (per cylinder) 2/ | | | | |
| Japan | *** | *** | *** | *** | *** |
| Switzerland | *** | *** | *** | *** | *** |
| United Kingdom | *** | *** | *** | *** | *** |
| West Germany | *** | *** | *** | *** | *** |
| Average | 2,125 | 2,326 | 2,864 | 2,342 | 4,472 |
| | Percent of total value | | | | |
| Japan | *** | *** | *** | *** | *** |
| Switzerland | *** | *** | *** | *** | *** |
| United Kingdom | *** | *** | *** | *** | *** |
| West Germany | *** | *** | *** | *** | *** |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

1/ Data are understated. In 1986, 12 importers, accounting for 32 percent of total imports, by value, reported data on the quantity of their imports.
2/ Average unit values were calculated using data from firms that provided both quantity and value import data.

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

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

17 importers of bimetallic cylinders that are believed to account for the vast majority of total imports of bimetallic cylinders from all countries.

The c.i.f. duty-paid value of U.S. imports of bimetallic cylinders from Japan nearly tripled from $* * * in 1984 to $* * * in 1985. Such imports then doubled in value to $* * * in 1986. Imports of bimetallic cylinders from Japan during January-June 1987 were valued at $* * *, more than three times the value of such imports in the corresponding period of 1986.

Market penetration

Shares of apparent U.S. consumption calculated on the basis of value are presented in table 13. The data presented in the table were compiled from responses to the Commission's questionnaires.

Domestic shipments of imports of bimetallic cylinders from Japan accounted for * * * percent of apparent U.S. consumption in 1984, and increased steadily to * * * and * * * percent in 1985 and 1986, respectively. Such imports reached a high of * * * percent of apparent U.S. consumption during January-June 1987, portraying a substantial increase when compared with the * * * percent they accounted for during the corresponding period of 1986.

Domestic shipments of imports from Switzerland and West Germany accounted for relatively stable shares of apparent U.S. consumption during the period of investigation. However, such shipments of imports from the United Kingdom decreased from * * * percent of apparent U.S. consumption in 1984, to * * * percent in 1985, and fell to a low of * * * percent in 1986. Such imports were * * * percent of apparent U.S. consumption during January-June 1987 compared with * * * percent during the corresponding period of 1986.

As a share of apparent U.S. consumption, U.S.-produced domestic shipments increased from 89.7 percent in 1984 to 91.2 percent in 1985, and rose to a high of 91.7 percent in 1986. U.S.-produced domestic shipments accounted for 84.8 percent of apparent U.S. consumption during January-June 1987, a decrease from 90.9 percent during January-June 1986.

Channels of distribution

U.S. producers of bimetallic cylinders sell the subject merchandise to either OEM's of injection-molding or extrusion machines, or to end users of these machines as replacement parts. In the replacement market, U.S. producers of cylinders sell either directly to the end users, or through distributors. Distributors in turn compete with U.S. producers and importers of bimetallic cylinders for sales to the end users.

Hitachi Metals America (HMA) is the largest importer of bimetallic cylinders from Japan, accounting for * * * percent, by value, of such imports in 1986. HMA competed with U.S. producers for sales to OEM's as well as for sales to distributors in 1986. On January 26, 1987, HMA signed a 5-year contract with Spirex Corp., Youngstown, OH, allowing Spirex to * * *.

Table 13
Bimetallic cylinders: Shares, in terms of value, of domestic shipments of imports and of U.S.-produced domestic shipments to apparent U.S. consumption, 1984-86, January-June 1986, and January-June 1987

| Item | 1984 | 1985 | 1986 | January-June-- 1986 | 1987 |
|---|---|---|---|---|---|
| | Value (1,000 dollars) 1/ | | | | |
| Shipments of imports from-- | | | | | |
| Japan | *** | *** | *** | *** | *** |
| Switzerland 2/ | *** | *** | *** | *** | *** |
| United Kingdom 2/ | *** | *** | *** | *** | *** |
| West Germany 2/ | *** | *** | *** | *** | *** |
| Subtotal, imports 2/ | 2,654 | 2,425 | 2,515 | 1,445 | 2,393 |
| U.S.-produced domestic shipments | 23,009 | 25,235 | 27,732 | 14,429 | 13,376 |
| Total | 25,663 | 27,660 | 30,247 | 15,874 | 15,769 |
| | Percent of total | | | | |
| Shipments of imports from-- | | | | | |
| Japan | *** | *** | *** | *** | *** |
| Switzerland 2/ | *** | *** | *** | *** | *** |
| United Kingdom 2/ | *** | *** | *** | *** | *** |
| West Germany 2/ | *** | *** | *** | *** | *** |
| Subtotal, imports 2/ | 10.3 | 8.8 | 8.3 | 9.1 | 15.2 |
| U.S.-produced domestic shipments | 89.7 | 91.2 | 91.7 | 90.9 | 84.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

1/ Shipments are presented in terms of value rather than quantity. Fluctuations in shipments expressed in units may simply reflect shifts in product mix rather than actual trends because of the wide variation in unit values of bimetallic cylinders.
2/ Shipments of imports from countries other than Japan may be understated as a result of a less than complete response to the Commission's importer's questionnaire.
3/ Less than 0.05 percent.

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

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

In 1986, Spirex was an independent distributor of bimetallic cylinders purchasing from * * * U.S. producers: * * *, and also purchasing from * * *. Since Spirex was competing for the end-user replacement market with these U.S. sources as well as with distributors, Spirex approached Wexco with an offer to be Wexco's exclusive U.S. sales agent. 1/ Mr. Paul Colby, president of

1/ Transcript of the public conference, p. 76.

Spirex, stated that Spirex had valuable technology to add in the form of downsizing and vented conversions to differentiate their cylinders from those available from other U.S. sources, and that an exclusive agreement would allow them to advertise their cylinders as better products without giving indirect advertising to other suppliers or distributors competing for the same end-user replacement sales. Apparently Wexco * * *. Spirex then sought the agreement with HMA.

Under the HMA/Spirex agreement, HMA * * *, and Spirex * * *. * * *. Spirex has agreed to * * *. Spirex informed the Commission staff that the contract * * *. 1/

In 1986, prior to this agreement, HMA competed with U.S. producers for all sales, including sales to Spirex. HMA sold approximately * * * bimetallic cylinders in 1986; * * * were sold to * * * and the remaining * * * went to * * *. During January-July 1987, HMA sold * * * bimetallic cylinders; approximately * * * cylinders were sold to * * * and the remaining * * * cylinders went to * * *. HMA and Spirex have made * * *.

Xaloy, the largest U.S. producer, sold * * * bimetallic cylinders to * * *, * * * units directly to * * *, and * * * units to * * * in 1986. During the same period, Bimex sold * * * bimetallic cylinders to * * * and * * * to * * *. Bimex's * * *. Wisconsin Bimetallic reported * * * sold to * * *. * * *. The channels of distribution are diagramed in figure 1.

Figure 1.--Channels of Distribution

* * * * * * *

## Prices

Market dynamics.--Both petitioners and respondents agree that a variety of factors may influence the sale of cylinders. Sales are normally made on an f.o.b. plant basis in response to phone orders, salesmen's calls, or requests for quotes. Some larger OEM's and end users make formal bid requests from a preselected set of vendors. Price, service, the characteristics of the alloys used, and the brand name of the cylinder influence the purchasing decision.

Since the majority of bimetallic cylinders are customized to the end users' detailed specifications, delivery time and reliability of supply are critical factors in making a sale. * * * explained that an end user will purchase a cylinder in the replacement market when the quality of the plastic from his processing machine begins to decline because of cylinder wear. The end user demands a replacement cylinder as soon as possible to avoid down time on his machines. Mr. Paul Colby, president of Spirex, testified at the public conference that delivery time was an area in which his firm had a distinct disadvantage. He stated that average delivery time from a U.S. producer such as Xaloy is 6 to 8 weeks. Mr. Colby testified that in the past, when he purchased bimetallic cylinders from Wexco, he could get the cylinders in as

1/ Staff meeting with Paul Colby, president of Spirex, Aug. 17, 1987.

little as 2 weeks in an extreme situation. Presently, Spirex offers delivery schedules of 10 to 12 weeks for Hitachi cylinders. 1/

Finance terms are generally not available in this market as producers and importers sell on a net 30-day basis with no discounts available. Under the HMA/Spirex agreement, HMA agrees to provide Spirex with * * *. * * *.

Transportation of cylinders is usually by truck. Since U.S. producers and importers sell on an f.o.b. plant basis, transportation costs do not generally enter into sales negotiations. Although the size and weight of the cylinders may push transportation costs to higher levels, transportation costs are not extensive relative to the value of bimetallic cylinders.

World market.--Since the plastics processing industry is present in most industrialized countries, and because there are a relatively limited number of bimetallic cylinder producers worldwide, there is an established world market for bimetallic cylinders. The petition identifies 11 major producers worldwide. Xaloy claims to have had a * * * percent share of the world market in 1986, with sales predominately in * * *. Mr. Cox, president of Xaloy, attributed Xaloy's * * *.

Price trends.--The Commission requested pricing information from the four U.S. producers, HMA, and Spirex. U.S. producers were requested to provide pricing data on all sales of bimetallic cylinders in three ranges of bore sizes. The quantity of these reported sales represents * * * percent of Xaloy's sales and * * * percent of Bimex's sales during January 1986-June 1987. Wisconsin Bimetallic provided pricing data on * * *. * * *, accounting for * * * percent of U.S-produced domestic shipments, by value, in 1986, * * *.

Spirex provided pricing information on * * * of the Hitachi bimetallic cylinders it sold during January 1986-June 1987. Mr. Paul Colby, president of Spirex, stated during the public conference that most of the units sold by Spirex were not in competition with those sold by U.S. producers. 2/ Mr. Colby explained that Spirex's main business has always been screw design and manufacturing. Most of the cylinders that Spirex sells are in conjunction with a screw that allegedly will accomplish a particular engineering goal, or correct a production problem. During January 1986-June 1987, Spirex sold * * * bimetallic cylinders, or * * * percent of its imports from HMA, within a screw package.

An important technological advancement that Spirex specializes in is downsizing. Downsizing becomes viable when a plastic processor is operating a machine well below its capacity. This causes a number of problems including inefficiency. Downsizing the cylinder corrects these problems without forcing the processor to purchase additional processing machinery. Spirex has sold * * * units, or * * * percent of its sales volume in January 1986-June 1987, in downsized units. Mr. Colby estimated that Spirex sold 90 to 95 percent of the downsized units introduced into the market during the period of investigation. 3/

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1/ Transcript of the public conference, p. 88.
2/ Transcript of the public conference, pp. 81-82 and 89.
3/ Transcript of the public conference, p. 113.

Spirex has also specialized in vented conversions of bimetallic cylinders. Venting a cylinder may correct a number of problems associated with volatiles in the processed materials. Spirex introduced a number of new designs and equipment to improve the venting process. Spirex has sold * * * units as vented conversions or with venting packages during January 1986-June 1987; this represented * * * percent of its sales of Hitachi cylinders. Spirex, unlike U.S. producers, offers installation and training with the vented conversions it sells.

Overall, Spirex sold * * * units, or * * * percent of its sales of HMA's bimetallic cylinders, in one of the previously mentioned value-added packages and only * * * standard cylinders in head-to-head competition with U.S.-produced standard cylinders during January 1986-June 1987.

Since bimetallic cylinders are made to a detailed set of end-user specifications, and the purchasing dynamics are very complex, direct price comparisons are rare and difficult to document. Although Xaloy and Bimex provided detailed information on over * * * bimetallic cylinder sales, comparisons for only * * * of * * *'s * * * standard cylinder sales could be found. The following tabulation details the specifics of these * * * price comparisons:

| | Domestic-*** | | | Imported-*** | | |
|---|---|---|---|---|---|---|
| Description | Date | Quantity | Price | Date | Quantity | Price |
| *** | *** | *** | $*** | *** | *** | $*** |
| *** | *** | *** | $*** | *** | *** | $*** |
| *** | *** | *** | $*** | *** | *** | $*** |
| *** | *** | *** | $*** | *** | *** | $*** |

In addition to * * *'s sales, * * * made a number of sales in 1986 and 1987 to * * * and * * *. * * * purchased one particular cylinder from both * * * and * * *. The following tabulation details the chronological order of * * *'s purchases:

| Description | Date | Price | Quantity | Seller |
|---|---|---|---|---|
| *** | *** | $*** | *** | *** |
| | *** | $*** | *** | *** |
| | *** | $*** | *** | *** |
| | *** | $*** | *** | *** |

The weighted-average price to * * * from * * * was $* * * per cylinder compared with $* * * per cylinder from * * *. Both of the above tabulations illustrate the wide variation of prices for bimetallic cylinders. Price variations are also evident from data submitted by * * *. The following

tabulation details the variations in price for three popular cylinders sold by * * *:

| Part number | High price | Low price | Weighted-average price |
|---|---|---|---|
| *** 1/ | $*** | $*** | $*** |
| *** 2/ | $*** | $*** | $*** |
| *** 3/ | $*** | $*** | $*** |

1/ The specifications for Part *** are inside dimension, *** inches; outside dimension, *** inches; and length, *** inches.
2/ The specifications for Part *** are inside dimension, *** inches; outside dimension, *** inches; and length, *** inches.
3/ The specifications for Part *** are inside dimension, *** inches; outside dimension, *** inches; and length, *** inches.

One explanation for the wide variation in prices may be the nature of the machinery for which this part is intended. Extrusion and injection-molding machines are very expensive and vital to the processing of plastics. Machine costs can be from $30,000 to as high as $3.5 million, making a replacement bimetallic cylinder a small cost relative to the value of the processing machine. When a bimetallic cylinder begins to wear, the efficiency of the machine declines and the production process becomes more costly. Therefore, the delivery time of a replacement bimetallic cylinder is crucial. Machine downtime may cost the firm much more than the few hundred additional dollars for a cylinder that has a shorter delivery time. Customer service, reliability, and technological enhancements, such as vented conversions and downsizing, have real value to the end user. Savings generated by efficiency gains and the reduction of lost machine time may easily exceed the value of the cylinder.

Another explanation for variations in price is the imperfect market information available to end users. Those end users that are not knowledgeable about the U.S. producers and importers of bimetallic cylinders typically return to the OEM of their machinery to purchase replacement cylinders and other parts. * * * stated that his firm sells some bimetallic cylinders as replacements but at much higher prices than the purchaser would pay if he went directly to the bimetallic cylinder producers or importers. * * * explained that some end users do not take the time to receive competitive quotes, and would rather buy a bimetallic cylinder from the OEM of the machine, whom they perceive to have a better understanding of the expensive processing machine they have purchased.

In 1986, another area of competition between U.S. producers and importers was sales made to Spirex. Spirex acted as an independent distributor in 1986, purchasing * * *. Spirex purchased * * * bimetallic cylinders from * * * and * * * units from * * * in 1986. * * * of the units Spirex purchased in 1986 from * * * are directly comparable with cylinders purchased from * * * in

1987. The following tabulation shows that the cylinders from * * * were priced * * * on all three occasions:

| | Domestic-*** | | | Imported-*** | | |
|---|---|---|---|---|---|---|
| Description | Date | Quantity | Price | Date | Quantity | Price |
| *** | *** | *** | $*** | *** | *** | $*** |
| *** | *** | *** | $*** | *** | *** | $*** |
| *** | *** | *** | $*** | *** | *** | $*** |

* * * provided one direct quote received from * * * in competition with * * *. * * * offered * * * cylinders for a total price of $* * * and a delivery time of * * * weeks. * * * offered the same cylinders for $* * * with a delivery time of * * * weeks.

* * * provided the Commission with detailed information on * * * formal bids they made in competition with U.S. producers in 1987. * * * claims that they lost * * * sales, which included * * * cylinders, with a value of $* * *, to U.S. producers because the * * * barrels were too expensive. Using the detailed price information provided by * * *, the staff was able to confirm that * * * of the * * * cylinders sold by * * * and * * * to * * * were priced lower than * * *'s bid.

Lost sales

The U.S. producers provided * * * instances of sales lost to Japanese competition. One of those sales was * * *. * * *.

The other * * * allegations of lost sales were for * * * cylinders, valued at over $* * *. The first allegation involved a * * * cylinder sold to * * *. * * *'s records indicate that it has * * * during the period of investigation.

Another allegation detailed * * *'s loss of a sale to * * * for a * * *. * * *'s records indicate that the * * *.

Another allegation involved a * * * sold to * * *. * * * informed the staff that * * *. * * *. There was no one available at * * * to provide information regarding this particular sale.

The * * * allegation involves a * * * cylinder sold to * * *. Neither * * *'s nor * * *'s records show any sales of * * * cylinders to * * *. * * * states that his firm purchased the * * * cylinder from * * * in * * * 1987, for $* * * in direct competition with * * *, which was offering the same cylinder for $* * *. * * *'s records show * * * cylinder sold during 1986-87, and that sale was for * * * priced at $* * *.

Exchange rates

Quarterly data reported by the International Monetary Fund indicate that during January 1984-June 1987, the value of the Japanese yen appreciated relative to the U.S. dollar by 62.9 percent (table 14). 1/ Generally falling prices in Japan compared with relatively stable prices in the United States moderated the impact of the rapidly appreciating yen during most of the period. The value of the yen adjusted for differences in relative inflation rates decreased during January 1984 through March 1985, and then increased almost steadily from April-June 1985 through April-June 1987. The real value of the Japanese yen as of April-June 1987 had achieved a level that was 40.9 percent above its January-March 1984 level.

1/ International Financial Statistics, July 1987.

Table 14
Exchange rates: 1/ Nominal-exchange-rate equivalents of the Japanese yen in U.S. dollars, real-exchange-rate equivalents, and producer price indicators in the United States and Japan, 2/ indexed by quarters, January 1984-June 1987

| Period | U.S. Producer Price Index | Japan Producer Price Index | Nominal-exchange-rate index | Real-exchange-rate index 3/ |
|---|---|---|---|---|
| | | | ----US dollars/yen---- | |
| 1984: | | | | |
| Jan.-Mar. | 100.0 | 100.0 | 100.0 | 100.0 |
| Apr.-June | 100.7 | 99.9 | 100.6 | 99.8 |
| July-Sept | 100.4 | 100.7 | 94.9 | 95.1 |
| Oct.-Dec | 100.2 | 100.4 | 93.9 | 94.1 |
| 1985: | | | | |
| Jan.-Mar | 100.0 | 100.8 | 89.7 | 90.4 |
| Apr.-June | 100.1 | 100.1 | 92.1 | 92.1 |
| July-Sept | 99.4 | 99.0 | 96.8 | 96.4 |
| Oct.-Dec | 100.0 | 96.7 | 111.6 | 107.9 |
| 1986: | | | | |
| Jan.-Mar | 98.5 | 94.4 | 123.0 | 117.8 |
| Apr.-June | 96.6 | 90.4 | 135.8 | 127.1 |
| July-Sept | 96.2 | 87.9 | 148.3 | 135.6 |
| Oct.-Dec | 96.5 | 86.6 | 144.1 | 129.2 |
| 1987: | | | | |
| Jan.-Mar | 97.7 | 86.2 | 150.8 | 132.9 |
| Apr.-June | 99.0 | 85.7 | 162.9 | 140.9 |

1/ Exchange rates expressed in U.S. dollars per unit of foreign currency.
2/ Producer price indicators--intended to measure final product prices--are based on average quarterly indexes presented in line 63 of the International Financial Statistics.
3/ The indexed real exchange rate represents the nominal exchange rate adjusted for the relative economic movement of each currency as measured here by the Producer Price Index in the United States and a similar index in Japan. Producer prices in the United States decreased 1.0 percent during the period January 1984 through June 1987 compared with a decrease of 14.3 percent in Japan.

Source: International Monetary Fund, International Financial Statistics, July 1987.

Note.--January-March 1984=100.0.

# APPENDIX A

## FEDERAL REGISTER NOTICES

## INTERNATIONAL TRADE COMMISSION

**[Investigation No. 731-TA-383 (Preliminary)]**

### Certain Bimetallic Cylinders From Japan

**AGENCY:** United States International Trade Commission.

**ACTION:** Institution of a preliminary antidumping investigation and scheduling of a conference to be held in connection with the investigation.

**SUMMARY:** The Commission hereby gives notice of the institution of preliminary antidumping investigation No. 731-TA-383 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or whether the establishment of an industry in the United States is materially retarded, by reason of imports from Japan of certain parts for injection-molding or extrusion machines,[1] provided for in item 678.35 of the Tariff Schedules of the United States, that are alleged to be sold in the United States at less than fair value. As provided in section 733(a), the Commission must complete preliminary antidumping investigations in 45 days, or in this case by September 18, 1987.

For further information concerning the conduct of this investigation and rules of general application, consult the Commission's Rules of Practice and Procedure, Part 207, Subparts A and B (19 CFR Part 207), and Part 201, Subparts A through E (19 CFR Part 201).

**EFFECTIVE DATE:** August 4, 1987.

**FOR FURTHER INFORMATION CONTACT:** Martha Mitchell (202-523-0291), Office of Investigation, U.S. International Trade Commission, 701 E Street NW., Washington, DC 20436. Hearing-impaired individuals are advised that informatio on this matter can be obtained by contacting the Commission's TDD terminal on 202-724-

[1] Such parts are hollow steel cylinders to whose inner surfaces an alloy of nickel, boron, and silica has been metallurgically bonded, and are, if imported, reported under items 678.3570 and 678.3575 of the Tariff Schedules of the United States Annotated.

0002. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-523-0161.

**SUPPLEMENTARY INFORMATION:**

*Background*—This investigation is being instituted in response to a petition filed on August 4, 1987, by Xaloy Inc., Pulaski, VA, and Bimex Corp., Wales, WI.

*Participation in the investigation*—Persons wishing to participate in this investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission's rules (19 CFR 201.11), not later than seven (7) days after publication of this notice in the **Federal Register**. Any entry of appearance filed after this date will be referred to the Chairman, who will determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

*Service list*—Pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d)), the Secretary will prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance. In accordance with §§ 201.16(c) and 207.3 of the rules (19 CFR 201.16(c) and 207.3), each document filed by a party to the investigation must be served on all other parites to the investigation (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.

*Conference*—The Director of Operations of the Commission has scheduled a conference in connection with this investigation for 9:30 a.m. on August 28, 1987, at the U.S. International Trade Commission Building, 701 E Street NW., Washington, DC. Parties wishing to participate in the conference should contact Martha Mitchell (202-523-0291) not later than August 24, 1987, to arragne for their appearance. Parties in support of the imposition of antidumping duties in this investigation and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference.

*Written submissions*—Any person may submit to the Commission on or before September 2, 1987, a written statement of information pertinent to the subject of the investigation as provided in § 207.15 of the Commission's rules (19 CFR 207.15). A signed original and fourteen (14) copies of each submission must be filed with the Secretary to the Commission in accordance with § 201.8 of the 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 must 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).

**Authority:** This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 201.12 of the Commission's rules (19 CFR 207.12).

By order of the Commission.

Kenneth R. Mason,

*Secretary.*

Issued: August 6, 1987.

[FR Doc. 87-18416 Filed 8-11-87; 8:45 am]

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32326

Notices

Federal Register
Vol. 52, No. 166
Thursday, August 27, 1987

International Trade Administration

[A-588-705]

## Initiation of Antidumping Duty Investigation; Bimetallic Cylinders From Japan

**AGENCY:** Import Administration, International Trade Administration, Commerce.

**ACTION:** Notice.

**SUMMARY:** On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of bimetallic cylinders from Japan are being, or are likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of this product materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before September 18, 1987. If that determination is affirmative, we will make a preliminary determination on or before January 11, 1988.

**EFFECTIVE DATE:** August 27, 1987.

**FOR FURTHER INFORMATION CONTACT:** Raymond Busen or John Brinkmann, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution

Avenue NW., Washington, DC 20230; telephone (202) 377-3464 or 377-3965.

**SUPPLEMENTARY INFORMATION:**

**The Petition**

On August 4, 1987, we received a petition in proper form by Xaloy Incorporated and Bimex Corporation, on behalf of U.S. producers of bimetallic cylinders. In compliance with the filing requirements of 19 CFR 353.36, petitioners allege that imports of bimetallic cylinders 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 Tariff Act of 1930, as amended (the Act), and that these imports materially injure, or threaten material injury to, a U.S. industry.

**United States Price and Foreign Market Value**

United States purchase price was based on the sales prices of a Japanese manufacturer to its unrelated U.S. distributor. Petitioners deducted, where appropriate, ocean freight and marine insurance, handling costs, U.S. Customs duties, and U.S. inland freight.

Petitioners based foreign market value on the Japanese manufacturer's retail price quotes to a Japanese user of bimetallic cylinders.

Based upon a comparison of United States price and foreign market value, petitioners allege dumping margins of between 17.38 and 37.37 percent.

**Initiation of Investigation**

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

We examined the petition on bimetallic cylinders from Japan and found that it meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of bimetallic cylinders from Japan are being, or are likely to be, sold in the United States at less than fair value. If our investigation proceeds normally, we will make our preliminary determination by January 11, 1988.

**Scope of Investigation**

The United States has developed a system of tariff classification based on the international harmonized system of Customs nomenclature. The U.S. Congress is considering legislation to convert the United States to this Harmonized System (HS) by January 1, 1988. In view of this, we will be providing both the appropriate *Tariff Schedules of the United States Annotated* (*TSUSA*) item numbers and the appropriate HS item numbers with our product descriptions on a test basis, pending Congressional approval. As with the *TSUSA*, the HS item numbers are provided for convenience and Customs purposes. The written description remains dispositive.

We are requesting petitioners to include the appropriate HS item number(s) as well as the *TSUSA* item number(s) in all new petitions filed with the Department. A reference copy of the proposed HS schedule is available for consultation at the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230. Additionally, all Customs officers have reference copies and petitioners may contact the Import Specialist at their local Customs office to consult the schedule.

The products covered by this investigation are bimetallic cylinders currently provided for under *TSUSA* item numbers 678.3570 and 678.3575 and currently classifiable under HS item numbers 84779000-0.

The bimetallic cylinder under investigation is a hollow metal cylinder which serves as part of a machine to process plastics materials, either by injection molding or by extrusion. The product consists of an outer shell of steel and an inner lining of an alloy which are metallurgically bonded, the inner lining being of a material which is resistant to a corrosive and abrasive environment.

**Notification of ITC**

Section 732(d) of the Act requires us to notify the ITC of this action and to provide it with the information we used to arrive at this determination. We will notify the ITC and make available to it all nonprivileged and nonproprietary information. We will allow the ITC access to all privileged and business proprietary information in our files, provided it confirms in writing that it will not disclose such information either publicly or under administrative protective order without written consent of the Deputy Assistant Secretary for Import Administration.

**Preliminary Determination by ITC**

The ITC will determine by September 18, 1987, whether there is a reasonable indication that imports of bimetallic cylinders from Japan materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will terminate; otherwise, it will proceed according to the statutory and regulatory procedures.

This notice is published pursuant to section 732(c)(2) of the Act.

August 21, 1987.

Joseph A. Spetrini,

*Acting Deputy Assistant Secretary for Import Administration.*

[FR Doc. 87-19697 Filed 8-26-87; 8:45 am]

BILLING CODE 3510-DS-M

# APPENDIX B

## WITNESSES APPEARING AT THE CONFERENCE

Calendar of Public Conference

Investigation No. 731-TA-383 (Preliminary)

CERTAIN BIMETALLIC CYLINDERS FROM JAPAN

Those persons listed below appeared at the United States International Trade Commission's conference held in connection with the subject investigation on August 28, 1987, in the Hearing Room of the U.S. International Trade Commission, 701 E Street, NW, Washington, DC.

In support of the imposition of antidumping duties

Woods, Rogers & Hazlegrove--Counsel
Roanoke, VA
on behalf of--

Bimex Corporation
Xaloy, Incorporated

Walter G. Cox Jr., President, Xaloy, Incorporated

M. Caldwell Butler)--OF COUNSEL
Joseph W. Milam )--OF COUNSEL

In opposition to the imposition of antidumping duties

Graham & James--Counsel
Washington, DC
on behalf of--

Hitachi Metals, Ltd., Japan
Hitachi Metals America division of Hitachi Metals International, Ltd.
Spirex Corporation

Paul N. Colby, President, Spirex Corporation
Ken Nishigaki, General Manager, Hitachi Metals America

Michael A. Hertzberg)--OF COUNSEL
Brian E. McGill )--OF COUNSEL

# APPENDIX C

## ADDITIONAL INFORMATION CONCERNING NITRIDED CYLINDERS

Description and uses

A nitrided cylinder is a hollow metal cylinder that serves as part of a machine to process plastics or other materials, either by injection molding or by extrusion. The cylinder's inner surface has been hardened and tempered by a nitriding process. During the nitriding process, nitrogen atoms ionize and collect to form metal nitrides on the cylinder's inner surface, imparting hardness and corrosion resistance to the inside of the cylinder. Petitioner alleges that the nitrided cylinder is "a dissimilar article" from a bimetallic cylinder. 1/ 2/

For certain applications, a nitrided cylinder may be substituted for a bimetallic cylinder. Industry sources estimate that U.S. OEM's of injection molding machines include nitrided cylinders in 50 percent of new machines; however, bimetallic cylinders are in the bulk of the new U.S.-produced extrusion machines. The extrusion process is continuous and extruder screws tend to be long and bend, resulting in more wear. More bimetallic cylinders are sold in the U.S. replacement market, because processors will spend more for the longer-lasting part, even in instances in which the nitrided cylinder might serve the purpose. One additional advantage of the bimetallic cylinder is that since it is replaced less frequently, the processor reduces downtime for parts replacement.

Nitrided cylinders cost less than bimetallic cylinders but do not wear as long. They are usually offered on injection machines at the lower end of the price range, and are frequently sold to price conscious, smaller processors. Such cylinders are more appropriate for processing less corrosive and abrasive materials, whereas materials with glass fillers, for example, require bimetallic cylinders for better results. Traditionally, nitrided cylinders have been used more in Japan and Europe, in part due to availability and in part to the tradition (in Europe) of buying a larger machine and running it less, compared with the general practice in the United States of buying the smallest possible machine and running it for long periods of time.

Manufacturing processes

There are several techniques for manufacturing nitrided cylinders, including ion-nitriding, gas-nitriding, and liquid-bath nitriding. Nitrided cylinders are produced from a nitralloy material, or tool steel. First the steel must be bored and cut to specified dimensions. The cylindrical barrel is then hardened and tempered to achieve the desired properties. The inside of the cylinder is then treated by means of one of the nitriding techniques.

The best manufacturing technique for longer cylinder life is ion-nitriding. This method uses a vacuum chamber, nitrogen process gas, and electricity. The nitrogen atoms ionize and collect on the inner barrel surface. These ions combine with the surface constituents to form nitrides that impart hardness to the inner surface layer.

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1/ Petition, p. 1.

2/ Respondents' position is "neutral regarding whether nitrided barrels should be included within the like product definition." (Respondents' postconference brief, p. 3.)

The depth of the nitrided layer is influenced by the steel composition and the particular nitriding process, and is proportional to the time of exposure to the gases. The result is hardness and thickness of the inner surface that should be compatible with the end user's processing requirements. However, the thickness of the nitrided area is less than that of the bimetallic alloy; further, the nitrided layer loses hardness from the surface to the inside of the nitrided layer.

Nitrided cylinders are produced primarily in the United States by OEM's of injection-molding and extrusion machines. Cincinnati Milacron, Inc., Batavia, OH, and Van Dorn Plastic Machinery Co., Strongsville, OH, produce and sell nitrided cylinders both as components of their original machines and in the replacement market.

Available data from U.S. producers and importers of nitrided cylinders are shown in tables C-1 through C-6.

Table C-1
Nitrided cylinders: U.S. producers' domestic shipments, domestic shipments of imports, and apparent U.S. consumption, by value, 1984-86, January-June 1986, and January-June 1987 1/ 2/

(In thousands of dollars)

| Item | 1984 | 1985 | 1986 | January-June-- 1986 | 1987 |
|---|---|---|---|---|---|
| U.S. producers' domestic shipments | *** | *** | *** | *** | *** |
| Domestic shipments of imports from-- | | | | | |
| Japan | *** | *** | *** | *** | *** |
| West Germany | *** | *** | *** | *** | *** |
| Switzerland | *** | *** | *** | *** | *** |
| Finland | *** | *** | *** | *** | *** |
| Subtotal | *** | *** | *** | *** | *** |
| Apparent U.S. consumption | *** | *** | *** | *** | *** |

1/ U.S.-produced domestic shipments are understated to the extent they exclude * * *, a U.S. producer of nitrided cylinders. * * * U.S. producers providing data are: * * *, accounting for more than *** percent of reported U.S. production of nitrided cylinders, and * * *, accounting for *** percent of reported U.S. production of nitrided cylinders. * * *.
2/ Data for U.S. imports of nitrided cylinders are not available from the U.S. Department of Commerce and are understated to the extent that importers did not respond to Commission questionnaires.

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

Table C-2
Nitrided cylinders: Ratios of domestic shipments of imports and of U.S.-produced domestic shipments to apparent U.S. consumption, calculated on the basis of value, 1984-86, January-June 1986, and January-June 1987 1/ 2/

(In percent)

| Item | 1984 | 1985 | 1986 | January-June-- 1986 | 1987 |
|---|---|---|---|---|---|
| Domestic shipments of imports from-- | | | | | |
| Japan | *** | *** | *** | *** | *** |
| West Germany | *** | *** | *** | *** | *** |
| Switzerland | *** | *** | *** | *** | *** |
| Finland | *** | *** | *** | *** | *** |
| Total | *** | *** | *** | *** | *** |
| U.S.-produced domestic shipments | *** | *** | *** | *** | *** |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

1/ U.S.-produced domestic shipments are understated to the extent they exclude * * *, a U.S. producer of nitrided cylinders. * * * U.S. producers providing data are: * * *, accounting for more than *** percent of reported U.S. production of nitrided cylinders, and * * *, accounting for *** percent of reported U.S. production of nitrided cylinders. * * *.
2/ Data for U.S. imports of nitrided cylinders are not available from the U.S. Department of Commerce and are understated to the extent that importers did not respond to Commission questionnaires.

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

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

Table C-3
Nitrided cylinders: Income-and-loss experience of *** U.S. producers 1/ on the overall operations of their establishments within which nitrided cylinders are produced, 2/ accounting years 1984-86 and interim periods ended June 30, 1986, and June 30, 1987

| Item | 1984 | 1985 | 1986 | Interim period ended June 30--3/ 1986 | 1987 |
|---|---|---|---|---|---|
| Net sales....1,000 dollars.. | *** | *** | *** | *** | *** |
| Cost of goods sold....do.... | *** | *** | *** | *** | *** |
| Gross profit.....do.... | *** | *** | *** | *** | *** |
| General, selling, and administrative expenses 1,000 dollars.. | *** | *** | *** | *** | *** |
| Operating income or (loss) 1,000 dollars.. | *** | *** | *** | *** | *** |
| Interest expense .....do.... | *** | *** | *** | *** | *** |
| Other income or (expense), net.....1,000 dollars.. | *** | *** | *** | *** | *** |
| Net income or (loss) before income taxes 1,000 dollars.. | *** | *** | *** | *** | *** |
| Depreciation and amortization expense included above.....1,000 dollars.. | *** | *** | *** | *** | *** |
| Cash-flow.....do.... | *** | *** | *** | *** | *** |
| As a share of net sales: | | | | | |
| Cost of goods sold percent.. | *** | *** | *** | *** | *** |
| Gross profit.....do.... | *** | *** | *** | *** | *** |
| General, selling, and administrative expenses percent.. | *** | *** | *** | *** | *** |
| Operating income or (loss) percent.. | *** | *** | *** | *** | *** |
| Net income or (loss) before income taxes percent.. | *** | *** | *** | *** | *** |
| Number of firms reporting operating losses..... | *** | *** | *** | *** | *** |
| Number of firms reporting... | *** | *** | *** | *** | *** |

1/ The firms reporting data are * * *.
2/ * * *.
3/ * * *.

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

Table C-4
Nitrided cylinders: Income-and-loss experience of *** U.S. producers 1/ on their operations producing nitrided cylinders, 2/ accounting years 1984-86 and interim periods ended June 30, 1986, and June 30, 1987

| Item | 1984 | 1985 | 1986 | Interim period ended June 30-- 3/ 1986 | 1987 |
|---|---|---|---|---|---|
| Net sales....1,000 dollars.. | *** | *** | *** | *** | *** |
| Cost of goods sold....do.... | *** | *** | *** | *** | *** |
| Gross profit.....do.... | *** | *** | *** | *** | *** |
| General, selling, and administrative expenses 1,000 dollars.. | *** | *** | *** | *** | *** |
| Operating income or (loss) 1,000 dollars.. | *** | *** | *** | *** | *** |
| As a share of net sales: | | | | | |
| Cost of goods sold percent.. | *** | *** | *** | *** | *** |
| Gross profit.....do.... | *** | *** | *** | *** | *** |
| General, selling, and administrative expenses percent.. | *** | *** | *** | *** | *** |
| Operating income or (loss) percent.. | *** | *** | *** | *** | *** |
| Number of firms reporting operating losses..... | *** | *** | *** | *** | *** |
| Number of firms reporting... | *** | *** | *** | *** | *** |

1/ The firms reporting data are * * *.
2/ * * *.
3/ * * *.

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

Table C-5
Nitrided cylinders: Value of property, plant, and equipment of *** U.S. producers, 1/ accounting years 1984-86 and 6-month interim periods ended June 30, 1986, and June 30, 1987

| Item | 1984 | 1985 | 1986 | Interim period ended June 30-- 1986 | 1987 |
|---|---|---|---|---|---|
| All products of establishment: 2/ | | | | | |
| Original cost..1,000 dollars.. | *** | *** | *** | *** | *** |
| Book value.....do.... | *** | *** | *** | *** | *** |
| Number of firms reporting..... | *** | *** | *** | *** | *** |
| Nitrided cylinders: | | | | | |
| Original cost..1,000 dollars.. | *** | *** | *** | *** | *** |
| Book value.....do.... | *** | *** | *** | *** | *** |
| Number of firms reporting..... | *** | *** | *** | *** | *** |

1/ The firms reporting data are * * *.
2/ * * *.

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

Table C-6
Nitrided cylinders: Capital expenditures by *** U.S. producers, 1/ accounting years 1984-86 and 6-month interim periods ended June 30, 1986, and June 30, 1987

| Item | 1984 | 1985 | 1986 | Interim period ended June 30-- 1986 | 1987 |
|---|---|---|---|---|---|
| All products of the establishments: | | | | | |
| Land and land improvements 1,000 dollars | *** | *** | *** | *** | *** |
| Building or leasehold improvements.....do.... | *** | *** | *** | *** | *** |
| Machinery, equipment, and fixtures.....do.... | *** | *** | *** | *** | *** |
| Total.....do.... | *** | *** | *** | *** | *** |
| Number of firms reporting.. | *** | *** | *** | *** | *** |
| Nitrided cylinders: 2/ | | | | | |
| Land and land improvements 1,000 dollars.. | *** | *** | *** | *** | *** |
| Building or leasehold improvements.....do.... | *** | *** | *** | *** | *** |
| Machinery, equipment, and fixtures.....do.... | *** | *** | *** | *** | *** |
| Total.....do.... | *** | *** | *** | *** | *** |
| Number of firms reporting.. | *** | *** | *** | *** | *** |

1/ The firms reporting data are * * *.
2/ * * *.

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