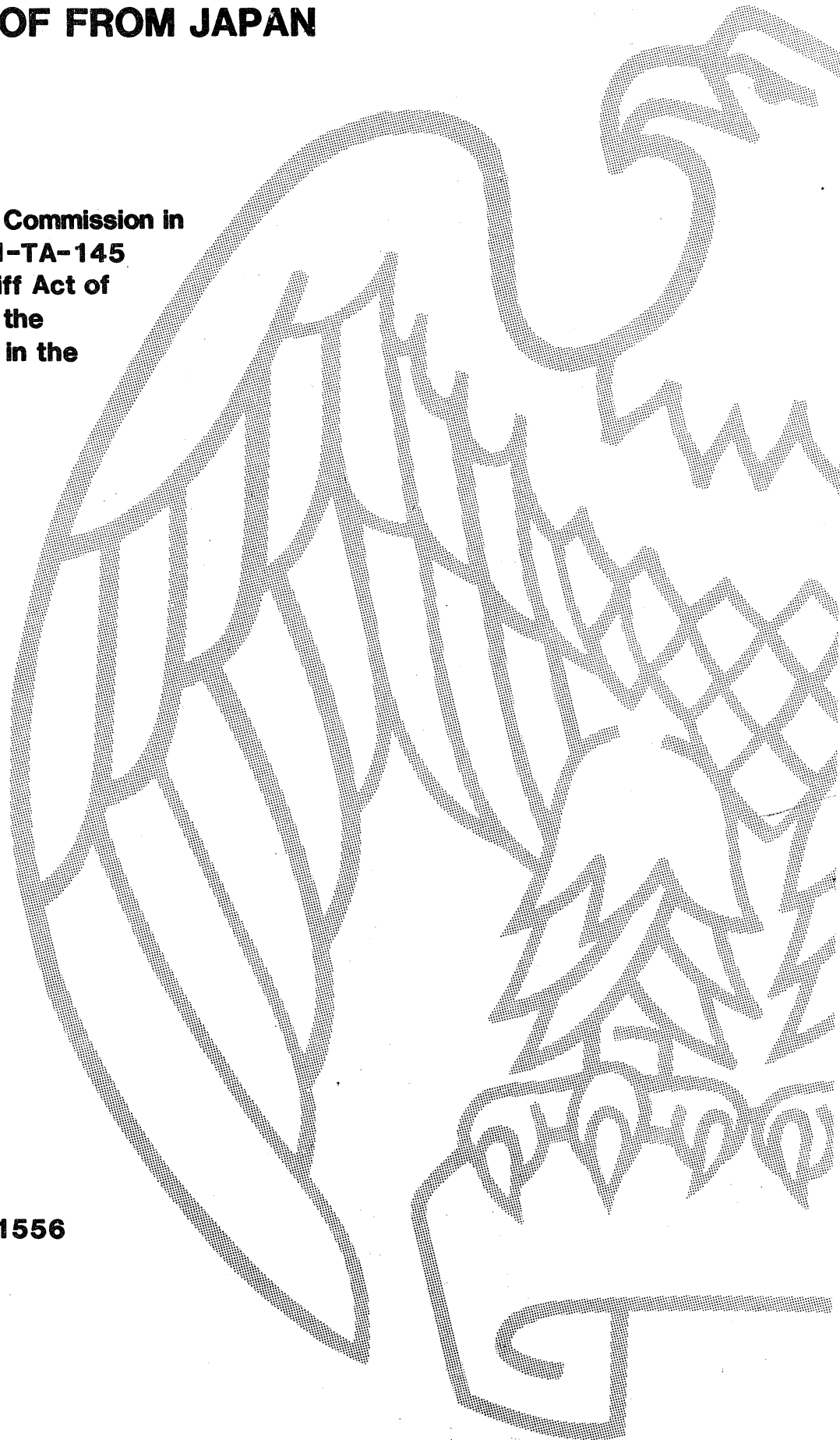


CERTAIN STEEL VALVES AND CERTAIN PARTS THEREOF FROM JAPAN

**Determination of the Commission in
Investigation No. 731-TA-145
(Final) Under the Tariff Act of
1930, Together With the
Information Obtained in the
Investigation**

USITC PUBLICATION 1556

JULY 1984



UNITED STATES INTERNATIONAL TRADE COMMISSION

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**Address all communications to
Office of the Secretary
United States International Trade Commission
Washington, D.C. 20436**

C O N T E N T S

	<u>Page</u>
Determination-----	1
Views of Chairwoman Stern, Vice Chairman Liebelser, Commissioner Lodwick, and Commissioner Rohr-----	3
Views of Commissioner Eckes-----	19
Information obtained in the investigation:	
Introduction-----	A-1
Previous investigations concerning the subject products-----	A-2
The products:	
Description and uses-----	A-2
U.S. tariff treatment-----	A-14
Nature and extent of sales at LTFV-----	A-14
The domestic market:	
Apparent consumption-----	A-15
U.S. producers-----	A-18
U.S. importers-----	A-21
Channels of distribution-----	A-21
The industry in Japan-----	A-22
Consideration of alleged material injury-----	A-24
U.S. production-----	A-25
U.S. producers' capacity and capacity utilization-----	A-25
U.S. producers' domestic shipments-----	A-28
U.S. producers' exports-----	A-31
U.S. producers' inventories-----	A-33
U.S. producers' employment and wages-----	A-33
Financial experience of U.S. producers:	
Steel valve operations-----	A-36
Cash flow from operations-----	A-40
Establishment operations-----	A-40
Research and development and capital expenditures-----	A-42
Impact of imports on domestic producers' growth, investment, and ability to raise capital-----	A-42
Consideration of the threat of material injury-----	A-44
Consideration of the causal relationship between the LTFV imports and the alleged material injury:	
U.S. imports-----	A-44
Purchases of imports by U.S. producers-----	A-52
Market penetration of imports-----	A-56
Prices-----	A-60
Cast carbon steel valves-----	A-61
Forged wedge gate valves-----	A-61
Cast stainless steel valves-----	A-63
Cast carbon steel globe valves-----	A-63
Swing check valves-----	A-65
Prices of valves from other import sources-----	A-65
Exchange rates-----	A-65
Lost sales-----	A-66
Lost revenues-----	A-70

CONTENTS

	<u>Page</u>
Appendix A. List of petitioners-----	A-71
Appendix B. Notice of the Commission's institution of a final antidumping investigation-----	A-73
Appendix C. Notice of Commerce's final determination-----	A-77
Appendix D. List of witnesses appearing at the public hearing-----	A-83

Tables

1. Certain steel valves: Estimated shares of the types of domestically produced valves used by major consuming industries and total industry, by types, 1981-83-----	A-11
2. Steel wedge gate, globe, and swing check valves: 3 Japanese producer/exporters' sales in the United States, share of sales at less than fair value (LTFV), and margins, April- September 1983-----	A-15
3. Steel wedge gate, globe, and swing check valves: Apparent U.S. con- sumption, by types, 1981-83, January-March 1983, and January-March 1984-----	A-16
4. Certain steel valves: U.S. producers' plant locations, types of subject valves produced, and shares of shipments, 1983-----	A-19
5. Certain steel valves: U.S. production, by types, 1981-83, January- March 1983, and January-March 1984-----	A-26
6. Wedge gate, globe, and swing check valves: U.S. producers' capacity and capacity utilization, by types, 1981-83, January-March 1983, and January-March 1984-----	A-27
7. Certain steel valves: U.S. producers' domestic shipments, by types, 1981-83, January-March 1983, and January-March 1984-----	A-29
8. Certain steel valves: U.S. producers' shipments, by types, 1981-83--	A-31
9. Certain steel valves: U.S. producers' exports, by types, 1981-83, January-March 1983, and January-March 1984-----	A-32
10. Certain steel valves: U.S. producers' end-of-period inventories and inventories as a share of domestic shipments, Dec. 31 of 1980-83, Mar. 31, 1983, and Mar. 31, 1984-----	A-34
11. Average number of employees and production and related workers employed in establishments producing certain steel valves, and hours worked by such production and related workers, 1981-83, January-March 1983, and January-March 1984-----	A-35
12. Wages paid and average hourly wages of production and related workers producing the subject products, 1981-83, January-March 1983, and January-March 1984-----	A-36
13. Income-and-loss experience of U.S. producers on their operations on certain steel valves and certain parts thereof, by types of steel, accounting years 1981-83, interim period 1983, and interim period 1984-----	A-38
14. Income-and-loss experience of U.S. producers on the overall operations of the establishments within which subject steel valves and parts thereof are produced, accounting years 1981-83, interim period 1983, and interim period 1984-----	A-41

CONTENTS

	<u>Page</u>
15. Certain steel valves and certain parts thereof: U.S. producers' research and development and capital expenditures, by type of steel, 1981-83, January-March 1983, and January-March 1984-----	A-43
16. Certain steel valves: U.S. importers' end-of-period inventories of imports from Japan, as of Dec. 31 of 1980-83, Mar. 31, 1983, and Mar. 31, 1984-----	A-45
17. Certain steel valves: U.S. imports for consumption, by principal sources, 1981-83, January-March 1983, and January-March 1984-----	A-46
18. Certain steel valves: U.S. imports from Japan, 1981-83, January-March 1983, and January-March 1984-----	A-48
19. Certain steel valves: U.S. imports, by types of valves and by sources, 1981-83, January-March 1983, and January-March 1984-----	A-50
20. Certain steel valves and certain parts thereof: U.S. producers' imports, 1981-83, January-March 1983, and January-March 1984-----	A-53
21. Certain steel valves: U.S. producers' domestic shipments, U.S. importers' shipments, apparent U.S. consumption, and imports from Japan, by types of valves, 1981-83, January-March 1983, and January-March 1984-----	A-57
22. Certain steel valves: U.S. producers' domestic shipments, U.S. importers' shipments, apparent U.S. consumption, and imports from Japan, by types of valves, 1981-83, January-March 1983, and January-March 1984-----	A-59
23. Carbon steel wedge gate valves: Weighted-average prices reported by domestic producers and importers on sales of 4-inch, 150-pound, cast steel, WCB, flanged, wedge gate valves with standard trim, on sales to major customers, by quarters, January 1982-March 1984-----	A-62
24. Wedge gate and globe valves: Prices reported by a single purchaser in * * *, on purchases of 4-inch, 150-pound, cast steel, WCB, flanged wedge gate valves with standard trim and 6-inch, 600-pound, cast steel, WCB, flanged, globe valves with standard trim, by quarters, January 1982-March 1984-----	A-63
25. Stainless steel wedge gate valves: Weighted-average prices reported by domestic producers and importers on sales of 4-inch, 150-pound, cast steel, grade 316, flanged, wedge gate valves with standard trim, on sales to major customers, by quarters, January 1982-March 1984-----	A-64
26. U.S.-Japanese exchange rates: Indexes of the nominal and real exchange rates between the U.S. dollar and the Japanese yen, by quarters, January 1981-March 1984-----	A-66

Figures

1. Types of valves-----	A-4
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Note.--Data which would disclose confidential operations of individual concerns may not be published and therefore have been deleted from this report. Deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

Investigation No. 731-TA-145 (Final)

CERTAIN STEEL VALVES AND CERTAIN PARTS THEREOF FROM JAPAN

Determination

On the basis of the record 1/ developed in the subject investigation, the Commission determines, 2/ pursuant to section 735(b)(1) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)(1)), that an industry in the United States is not materially injured or threatened with material injury, and the establishment of an industry in the United States is not materially retarded, by reason of imports from Japan of wedge gate, swing check, and globe valves, and specified parts of the foregoing, 3/ of steel, provided for in item 680.17 of the Tariff Schedules of the United States, which the Department of Commerce has found to be sold in the United States at less than fair value (LTFV).

Background

The Commission instituted this investigation effective April 2, 1984, following a preliminary determination by the Department of Commerce that wedge gate, swing check, and globe valves, and certain parts of the foregoing, of steel, from Japan, were being, or were likely to be, sold in the United States at LTFV. Notice of the institution of the Commission's investigation and of the public hearing to be held in connection therewith was duly given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and by publishing the notice

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/ Commissioner Eckes determines that an industry in the United States is materially injured by reason of less than fair value imports of the subject steel valves and certain parts thereof.

3/ The parts covered by this determination are machined valve bodies and partially completed valves, the latter consisting of machined valve bodies with one or more of the following parts: bonnet, stem, wedge, handle, or seat rings. ¹

in the Federal Register of April 18, 1984 (49 F.R. 15288) The hearing was held in Washington, D.C. on June 19, 1984, and all persons who requested the opportunity were permitted to appear in person or by counsel. The Commission voted on this investigation in public session on July 23, 1984.

VIEWS OF CHAIRWOMAN STERN, VICE CHAIRMAN LIEBELER,
COMMISSIONER LODWICK, AND COMMISSIONER ROHR

On the basis of the information collected in this investigation, we determine that an industry in the United States is not materially injured or threatened with material injury by reason of less than fair value (LTFV) imports from Japan of steel wedge gate, globe, and swing check valves and certain parts thereof.

Our negative determination is based upon the lack of a causal nexus between the condition of the domestic industry and the LTFV imports from Japan. Although the performance of the domestic industry has declined over the period of investigation, we find that imports from Japan are not causing material injury to the domestic industry.

Definition of the domestic industry

The Tariff Act of 1930 defines the term "industry" as "the domestic producers as a whole of the like product, or those producers whose collective output of the like product constitutes a major proportion of total domestic production of that product." 1/ The term like product 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." 2/

The articles that are the subject of this investigation are steel wedge gate, globe, and swing check valves from Japan and certain parts thereof. 3/ These valves are made of carbon steel, stainless steel, and alloy steel.

1/ 19 U.S.C. § 1677(4)(A).

2/ 19 U.S.C. § 1677(10).

3/ "Certain parts" include machined valve bodies and partially completed valves consisting of machined valve bodies imported with one or more of the following parts: bonnet, stem, wedge, handle, or seat rings.

There are domestically produced valves which correspond to each of these types of valves in each of the three types of steel. 4/

In the preliminary investigation, the Commission found that there were nine separate like products, based upon the three types of valves produced in the three types of steel. 5/ In this final investigation, both the petitioners and the respondents urged the Commission to revise the definition of the like products and find a single like product and a single domestic industry. However, as in the preliminary investigation, the parties disagreed over whether certain other types of "quarter-turn" steel valves produced in the United States, i.e., high-performance butterfly (HPB), ball, and lined plug valves (hereinafter "quarter-turn" valves), also should be considered like products and included within the domestic industry.

The additional information collected in the final investigation demonstrate that wedge gate, globe, and swing check valves each have distinct characteristics and uses. The wedge gate and globe valves are multiturn valves, i.e., multiple rotations of a stem are necessary to fully open or close the valve. A wedge gate valve is solely an "on/off" valve. A globe valve is also an "on/off" valve, but unlike a wedge gate valve, it allows for throttling, i.e., the regulation of the rate of flow of a substance through a pipeline. A swing check valve is a "self-actuating" valve which operates to prevent a back-flow by opening when a substance flows in one direction, but

4/ Report of the Commission ("Report") at A-26, table 5.

5/ However, in that preliminary investigation the domestic producers were unable to provide separate data regarding profit and loss for the three types of valves and were unable to provide reliable data separating the valves by steel types. Pursuant to section 771(4)(D) of the Act, we therefore examined the effect of the imports upon "the narrowest group or range of products, which includes a like product, for which the necessary information [could] be provided," i.e., all steel wedge gate, globe, and swing check valves and parts thereof.

closing automatically when the flow stops or reverses direction. The swing check valve is substantially different in characteristics and uses from both the wedge gate and globe valves. Accordingly, we find that each of these valves are a separate like product.

A second issue is whether the quarter-turn valves are "like" either the wedge gate or globe valves. 6/ The HPB, ball, and lined plug valves are quarter-turn valves, i.e., only a 90 degree turn of a handle is necessary to move the flow controlling element of the valve from a fully opened to closed position. These three valves represent relatively new technology since they have all been introduced since the 1950's. 7/ Although theoretically these quarter-turn valves can be used in a number of instances where wedge gate or globe valves could also be used, the data collected by the Commission indicate that, to date, commercial substitution of these valves is limited. 8/ We note also that substitution of the quarter-turn valve is generally limited to the new construction submarket, as opposed to the maintenance and repair

6/ Clearly these quarter-turn valves are not similar in characteristics and uses to the swing check valve. Report at A-3-4 and A-8.

7/ The HPB valve uses a rotatable flat disc as a closure element and obstructs the flow of a substance when the disc is at a right angle to the flow. It also allows for throttling. The ball valve uses a rotatable ball as a closure element and, when open, a substance flows through a hole in the ball. The ball valve also allows for throttling. A lined plug valve contains a cylindrical or cone shaped closure element, and, in some instances, can be used for throttling. Unlike wedge gate, globe, and swing check valves, all three quarter-turn valves are "soft-seated" in that their seats are lined with teflon or plastic.

8/ Report at A-8-14 and table 1. For example, in one of the primary end-user industries, the hydrocarbon processing industry, globe valves currently account for 75 percent of their control valve purchases, while ball and butterfly valves account for 12 percent and 10 percent, respectively. Similarly, gate valves account for 60 percent of their on-off valve purchases, while butterfly and ball valves account for only 10 percent and 13 percent, respectively, of their purchases. See Post-Hearing submission by petitioners, response to Question #12. See also, Memorandum of Office of Investigations, INV-H-166, Item #8, U.S. Shipments of Certain Valves, 1979-83.

operations (MRO) market, since these valves are usually incompatible with existing pipeline systems utilizing multi-turn valves. Because of recessionary conditions, the new construction submarket has accounted for substantially less valve sales than the MRO market. 9/ Thus, we find that quarter-turn valves are not substantially similar in characteristics and uses, and, therefore, are not "like" wedge gate, globe, and swing check valves.

A third issue is whether valves of carbon steel, stainless steel, and alloy steel constitute separate like product categories. 10/ We note that stainless steel and alloy steel valves are considerably more expensive than carbon steel valves and are chosen for use because of their ability to withstand corrosive environments. Although stainless steel valves have a higher chromium content than alloy steel valves, apparently there is a substantial degree of overlap with respect to uses. 11/ In contrast, carbon steel valves are subject to corrosion. 12/ Thus we find that stainless and alloy steel valves constitute one like product, and that carbon steel valves constitute a separate like product.

However, domestic producers accounting for a substantial share of domestic shipments of the subject valves were unable to provide the Commission with separate profit and loss and other trade data for each of the three types

9/ Id. at A-18.

10/ Commissioner Lodwick finds that valves of carbon steel, stainless steel, and alloy steel constitute one like product category. He notes that neither the petitioner nor the respondent argued for separate products, that the domestic producers consistently considered steel valves as one industry during the investigation, and that a given pipeline system may utilize a variety of types of steel depending upon the location of the valve in the system and the substance flowing through that portion of the system.

11/ Report at A-6.

12/ Although the facts developed in this investigation indicate that an engineer may specify a variety of types of steel depending upon the location of the valve in the pipeline and the substance flowing through that portion of the system (see sample bids provided to the Commission by petitioner Rockwell International and the Valve Manufacturers Association), in instances where corrosion is likely, only stainless and alloy valves will be used.

of valves or separate data corresponding to our like product definition of (1) stainless and alloy and (2) carbon steel valves. Accordingly, under section 771(4)(D) of the Act, we shall assess the effect of LTFV imports from Japan on domestic production of all steel wedge gate, globe, and swing check valves (hereinafter "valves").

Condition of the industry

It is clear that part of the domestic industry producing the subject valves is not doing well. Viewed as a whole, the industry's financial performance has declined, employment has fallen, and inventories have risen over the three-year period investigated.

Aggregate operating income from valves declined by 56 percent, from \$23.3 million, or 9.2 percent of net sales, in 1981 to \$10.2 million, or 3.9 percent of net sales, in 1982, despite increasing sales. ^{13/} In 1983, the industry reported an operating loss of \$737,000, or a negative 0.4 percent of net sales. ^{14/} The financial data for the first quarter of 1984 shows a continuing downward trend with an aggregate operating income of \$4.2 million, or 4.7 percent of net sales, compared with an aggregate operating income of \$6.6 million, or 6.2 percent of net sales, in the corresponding period of 1983. ^{15/}

However, looking at the financial results on a disaggregated basis, forged valve producers operated quite profitably. In particular, this segment attained an operating profit margin of well over 10 percent in all three years for which data are available. This favorable result occurred while imports of

^{13/} Report at table 13, A-38.

^{14/} Id.

^{15/} Id.

forged valves from Japan rose roughly 65 percent from 1981 to 1983.

Conversely, cast valve producers suffered net operating losses in 1982 and 1983. However, cast valve imports from Japan sold at LTFV plummeted nearly 85 percent, falling from 104,000 in 1981 to only 17,000 in 1983.

The number of production and related workers engaged in the production of valves declined from 3,382 in 1981 to 2,994 in 1982, and to 2,130 in 1983. There were 1,971 production and related workers in the first quarter of 1984, compared with 2,264 in the first quarter of 1983. 16/ Total wages paid to these production and related workers also declined over the period. 17/

End-of-period inventories increased irregularly over the period 1980 to 1983, from 342,000 valves in 1980 to 393,000 valves in 1981, 378,000 valves in 1982, and 408,000 valves in 1983. Inventories as of March 31, 1984, were 372,000 valves, compared with inventories of 393,000 valves on March 31, 1983. 18/ Inventories as a share of shipments increased from 16.1 percent in 1981 to 26.5 percent in 1983. 19/

Conditions of trade

Consumption of valves depends heavily upon the economic conditions in the major consuming industries of these valves: the power generation, petroleum refining, petroleum production, chemical, and paper and pulp industries. Specifically, it depends upon investment in new pipeline projects and upon the replacement of valves in existing pipeline systems. Over the period of investigation, it is apparent that the major consuming industries were

16/ Id. at table 11, A-35.

17/ Id. at table 12, A-36.

18/ Id. at table 10, A-34.

19/ Id.

suffering the effects of the recession and drastically curtailed their capital investments. The result was a reduction in new construction projects and hence a decline in the demand for valves. U.S. consumption of valves decreased from 2.7 million valves in 1981 to 2.1 million valves in 1982, and 1.8 million valves in 1983. 20/ Shipments by domestic producers fell by 27.1 percent between 1981 and 1982, from 2.4 million valves to 1.8 million valves and by another 13.5 percent in 1983 to 1.5 million valves. 21/

Declining consumption meant not only declining domestic shipments, but also decreased imports. 22/ Total imports of the subject valves fell by 17 percent in 1982 compared with 1981 and by another 6 percent in 1983. 23/ However, the bulk of the 1981-82 decline and all of the 1983 decline are attributable to the subject imports from Japan. In contrast, imports from countries other than Japan showed somewhat different trends than total imports, declining by 9.7 percent between 1981 and 1982, but then increasing by 8.2 percent in 1983.

20/ Id. at table 3, A-16.

21/ Id. at table 7, A-29.

22/ Among the primary countries from which the subject valves have been imported are Japan, Italy, the United Kingdom, and Yugoslavia.

23/ Id. at table 19, A-50. We carefully considered the withdrawal of approximately 40,000 valves from the inventories held by importers in the United States of valves produced in Japan. We concluded that in this case withdrawals from importers' stocks were most appropriately compared to changes in distributors' inventories and were not germane for comparing trends in domestic shipments and imports. In this case, importers with the warehousing capability to maintain stocks, such as Zidell, are independent companies who carry a range of supplies from various foreign suppliers. They thus effectively function like distributors. Domestic shipments are not adjusted for changes in distributors' inventories. Furthermore, even assuming arguendo that adjusting imports for withdrawals from importers' inventories is appropriate, the trend is still down in a manner roughly equivalent to the decline in domestic shipments. However, such an assumption also raises the issue of possible double-counting.

The trends for 1984 indicate that the subject imports from Japan continue to follow the trend for domestic shipments and other imports. Domestic producers' shipments rose slightly in the first quarter of 1984 in comparison with the first quarter of 1983. 24/ As in the case of shipments by domestic producers, the subject imports from Japan also increased in the first quarter of 1984 compared to the same period in 1983. 25/ Imports from countries other than Japan increased by 23 percent in the first quarter of 1984 over the same period in 1983. 26/

A second characteristic of this market is that several domestic producers of the subject valves themselves import a significant amount of completed and semifinished valves and valve parts. 27/ During the 1981-83 period, the number of producers' imports, from both Japan and other countries, more than tripled. In addition, the overwhelming majority of these imports were from countries other than Japan. In 1983, less than 20 percent of the imports of valves by domestic producers came from Japan, and less than 6 percent, by weight, of the valve parts imported by domestic producers were from Japan. 28/

No material injury by reason of imports

In considering the issue of material injury, the Act instructs the Commission to consider, among other factors,

- (i) The volume of imports of the merchandise which is the subject of the investigation;

24/ Report at table 7, A-29.

25/ Id. at table 18, A-48.

26/ Id. at table 19, A-50.

27/ Over 30 percent of total imports of valves in 1983, and a major share of LTFV imports from Japan, were accounted for by domestic producers. In addition, 100 percent of all known semifinished valves or valve parts imported from Japan and 100 percent of total known imports of these semifinished valves or parts are imported by domestic producers. Report at table 20, A-53.

28/ Id.

(ii) The effect of imports of that merchandise on prices in the United States for the like products; and

(iii) The impact of imports of such merchandise on the domestic producers of the like product. 29/

Congress has instructed the Commission not to weigh causes of injury.

However, Congress has also instructed the Commission to consider factors indicating that the injury is not by reason of the subject imports. 30/

Congress also specifically instructed the Commission not to assess statistical data regarding imports in a vacuum, but rather, in the context of the overall factors and conditions of trade. 31/

Volume of LTFV imports from Japan--In absolute terms, imports of valves declined substantially between 1981 and 1983 and increased modestly in the first quarter of 1984 compared with the first quarter of 1983. LTFV imports from Japan declined from 119,000 units in 1981 to 78,000 units in 1982, to 42,000 units in 1983. 32/

During the period of investigation, domestic producers' share of the market declined only slightly and appeared to increase in the first quarter of 1984. Thus, domestic producers accounted for 88.8 percent of U.S. consumption in 1981, 86.7 percent in 1982, 83.6 percent in 1983, and 85.3 percent in the period January-March 1984, compared with 82.3 percent in January-March 1983. 33/ However, the market share for LTFV imports from Japan declined from

29/ 19 U.S.C. § 1677(7)(B).

30/ "Of course, in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors." H.R. Rep. 317, 96th Cong., 1st Sess. 47 (1979).

31/ H.R. Rep. 317, 96th Cong., 1st Sess. 46 (1979).

32/ Report at table 18, A-48. The decline in imports of cast valves from Japan was much more severe, from 104,000 in 1981 to only 17,000 in 1983. Memorandum of Office of Investigation, INV-H-166, Item #4.

33/ Memorandum of the Office of Investigations, INV-H-175.

4.3 percent of U.S. consumption in 1981, to 3.8 percent in 1982, and 2.3 percent in 1983. 34/ In the first quarter of 1984, imports from Japan were 2.9 percent of domestic consumption, compared with 2.5 percent during the first quarter of 1983. 35/

Based on the record in this investigation, we have found no significant increase in volume of imports from Japan.

Price of LTFV imports from Japan--Although generally these prices declined over the period of investigation, the price data collected showed substantial variations in the prices of each type of valve. 36/ The prices for imports from Japan, in most instances, were slightly below the price of the comparable domestic product. However, there were exceptions and, in reviewing the price information, we could discern no clear correlation between the prices of LTFV imports from Japan and the prices of the domestic articles.

For example, in the case of 4-inch, 150-pound stainless steel wedge gate valves, the data show that average import prices were consistently lower than average domestic prices throughout 1982-83. However, an examination of the data indicates that average domestic and import prices of these valves often moved in different directions from one quarter to the next. In the case of 4-inch, 150-pound, carbon steel wedge gate valves, the average domestic price was lower than the average import price in three of the eight quarters where comparisons were possible.

34/ Report at A-56.

35/ Id. We note that even if we were to add inventory drawdowns to shipments of valves from Japan, the penetration ratios at best appear relatively stable over the period 1981-83, and declining in the first quarter of 1984. See Memorandum INV-H-175.

36/ Data collected by the Commission indicate that the prices of imported valves from countries other than Japan tended to be below both comparable domestically produced valves and imports from Japan. Report at A-65.

The Commission received similarly inconclusive data on the prices of 4-inch, 150-pound stainless steel wedge gate valves; forged, 2-inch, 800-pound wedge gate valves; cast 6-inch, 600-pound globe valves; and cast, 4-inch, 150-pound swing check valves. 37/ In the case of stainless steel wedge gate valves, although the average prices of imports from Japan were consistently below the average prices for the domestic valves, the average domestic prices showed increases during periods when the average import price declined. 38/ In the case of swing check valves, in the three quarters for which comparisons were possible, the third quarter of 1982 and the third and fourth quarters of 1983, the average import price was substantially above the average domestic price in the 1982 period and then fell below the average domestic price in the third and fourth quarters of 1983. 39/

An examination of a range of valve prices collected by the Commission for specific items indicates considerable overlap between prices for the domestically produced item and the import from Japan. In particular, for 15 quarterly comparisons covering two specific products, in nine instances the range of prices for the domestically produced item encompassed the range of import prices, in two instances the ranges overlapped, in three instances the price range for the domestically produced item was above the price range of the import, and in one instance the price range for the import was above the price range of the domestic product. Such overlapping of prices is typical of competitive markets. No consistent trend of underselling is evident.

We conclude that the price of LTFV imports from Japan have not significantly undercut the price of the domestic product. Further, we

37/ Id. at A-61, A-63, and A-65.

38/ Id. at table 25, A-64.

39/ Id. at A-65.

conclude that the imports from Japan have not depressed or suppressed domestic prices to a significant degree.

Impact of LTFV imports on the domestic industry--

An important factor in this case is that actual head-to-head competition between domestically produced valves and those imported from Japan is very limited. Up until 1983 more than 85 percent of the subject valves from Japan were concentrated in the "cast" valve category. 40/ At best, no more than 18 percent of domestic shipments is in this category. 41/ In 1983, one large purchase of forged valves from Japan made by a domestic producer resulted in a decrease in the cast valve portion of imports from 85 to about 40 percent. As we noted earlier, this relative increase in the forged category was in a segment of the domestic market that has been very profitable. 42/ 43/

The Commission was able to confirm a few lost sales by domestic producers due to imports from Japan in 1982, 1983, and the first quarter of 1984. 44/ However, we do not find these few instances to be significant when considered against total U.S. consumption and against total imports from Japan during these periods. We note, as stated earlier, that over the period of the investigation, domestic producers' shipments and imports from Japan as a share

40/ Cast valves generally are valves with diameters of greater than two inches. Report at A-7.

41/ Memorandum INV-H-166, Item #3. Petitioners provided a trade association survey which estimated that less than 10 percent of domestic production is in this category.

42/ Id. at Item #2.

43/ Chairwoman Stern notes that many major distributors of valves confirmed that competition is further limited by the fact that some purchasers will only purchase domestically produced valves. See discussion of two-tier price system, Report at A-58.

44/ Id. at A-66-69; Alleged and confirmed lost sales accounted for a negligible percentage of U.S. consumption in 1982, 1983, and the first quarter of 1984. Further, confirmed lost sales accounted for only 0.2 percent of U.S. imports from Japan in 1982, 1.8 percent in 1983, and 0.6 percent in the first quarter of 1984. Memorandum INV-H-166, item #1.

of domestic consumption have declined slightly or remained fairly stable, 45/ while imports from other countries have increased their share of consumption. This indicates to us that imports from other countries are affecting both shipments by domestic producers and imports from Japan.

No threat of material injury by reason of imports

In considering whether LTFV imports create a threat of material injury, the Commission analyzes, among other things, the rate of increase of LTFV imports to the U.S. market, the capacity of the manufacturing firms producing the LTFV imports, the availability of other export markets, and the existence of any excess inventory. 46/ In conducting this analysis here, we see no indication of threat of material injury by reason of LTFV imports from Japan.

Over the period 1981 to 1983, imports from Japan have declined substantially and have shown only a modest increase in the first quarter of 1984 compared with the first quarter of 1983. 47/ It appears that Japanese manufacturers in Japan do have excess capacity. Kitz, the largest Japanese producer of these valves, showed declining production over the period of the investigation. 48/ However, Kitz's home market sales account for most of its sales, and an increasing proportion of its exports are to countries other than the United States. 49/ Similarly, although Hitachi exports most of its valves, those exports are increasingly going to countries other than the United States. 50/

45/ Chairwoman Stern notes that in the cast valve submarket, where competition posed by imports from Japan is concentrated, the ratio of imports from Japan to domestic consumption declined between 1981 and 1982, and plummeted between 1982 and 1983. See Memorandum INV-H-166, Item #4.

46/ See, 19 C.F.R. § 207.26(d).

47/ Report at table 18, A-48.

48/ Id. at A-23.

49/ Id. We note that with the exception of 1982, during the period of investigation, Kitz's exports to countries other than the United States substantially exceeded its exports to the United States.

50/ Id. at A-24.

U.S. importers' inventories of valves from Japan have declined over the period of investigation. End-of-year inventories decreased from 78,900 valves in 1981 to 38,500 valves in 1983. 51/ Inventories on March 31, 1984, were 40,400 valves, compared with 66,100 valves on March 31, 1983. 52/

Conclusion

We recognize that the effects from LTFV imports are not to be weighed against the effects associated with other factors, such as the volume and prices of other imports and changes in demand or the pattern of consumption, which may be contributing to overall injury to the domestic industry. 53/ We also note, however, that the Commission may consider information that indicates injury is caused by factors other than LTFV imports. 54/ The petitioner is not, and has not been, required to prove that material injury is not caused by factors other than LTFV imports. The legislative history is clear, however, that the Commission must satisfy itself that "in light of all the information presented, there is a sufficient causal link between the LTFV imports and the requisite injury." 55/ Further, the Commission's determination with respect to causation "is a matter for the judgment of the ITC." 56/ Based on the record developed in this investigation, we have found no significant increase in the volume of imports. Nor have we found that the

51/ Id. at table 16, A-45.

52/ Id.

53/ S. Rep. No. 249, 96th Cong., 1st Sess. 74 (1979). H.R. Rep. No. 317, 96th Cong., 1st Sess. 46-47 (1979).

54/ S. Rep. No. 249, 96th Cong., 1st Sess. 75 (1979). H.R. Rep. No. 317, 96th Cong., 1st Sess. 47 (1979).

55/ Id.

56/ S. Rep. No. 249, 96th Cong., 1st Sess. 75 (1979).

price of LTFV imports has significantly undercut the price of the domestic products or suppressed or depressed the domestic price to a significant degree. Finally, we have not found LTFV imports from Japan to have significantly affected all the relevant economic factors which have a bearing on the state of the domestic industry.

VIEWS OF COMMISSIONER ECKES

In my judgment the facts of this case dictate an affirmative injury determination by the U.S. International Trade Commission.

Our investigation has developed abundant evidence of material injury to the domestic industry. The data show declining profitability, falling shipments, reduced capacity utilization, and declining employment, among other indicators of material injury to U.S. producers.

Furthermore, there is ample evidence connecting imports of unfairly traded Japanese steel valves and parts to the material injury. The data show Japanese imports maintain their U.S. market share and continue to undersell the domestic products. The Commission also has confirmed lost sales. Together these establish a causal connection between the imports, which the Department of Commerce has determined are being sold at less than fair value, and material injury to the domestic industry.

The domestic industry

The term "industry" is defined by section 771(4) (A) of the Tariff Act of 1930 as "the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product." 1/ Section 771(10), in turn, defines a "like product" as one "which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation." 2/

1/ 19 U.S.C. § 1677(4) (A) .

2/ 19 U.S.C. § 1677(10) .

The articles under investigation are carbon steel, stainless steel, and alloy steel wedge gate, globe, and swing check valves from Japan and certain parts thereof. 3/ In the preliminary investigation, the Commission found that there were nine separate like products, based upon three types of valves produced in three types of steel: carbon steel wedge gate, globe, and swing check valves; stainless steel wedge gate, globe and swing check valves; and alloy wedge gate, globe and swing check valves. 4/ Based on the data available in the preliminary stage, the Commission noted differences in characteristics and uses due to steel composition, capabilities, cost of manufacture, size and pressure classes, types of orders and methods of manufacture.

In the final stage of this investigation, however, a substantial amount of information has been gathered which indicates that the differences in the valves subject to this investigation are relatively minor and should not lead to a finding that there are separate like products. 5/

Both the imported and domestic products are mechanical devices used for controlling the flow of solids, fluids, and gases through pipes or piping systems. They may simply start or stop the flow of these materials or they may determine or adjust the quantity, pressure, time, or direction of the

3/ "Certain parts" include machined valve bodies and partially completed valves consisting of machined valve bodies imported with one or more of the following parts: bonnet, stem, wedge, handle, or seat rings.

4/ The Commission further found that the domestically produced parts of these valves were the same like product as the finished product to which they are dedicated. Certain Steel Valves and Certain Parts Thereof From Japan: Determination of the Commission in Investigation No. 731-TA-145 (Preliminary) . . ., USITC Publication 1146 (1983) at 5-6, n. 10.

5/ "The requirement that products be 'like' the imported article should not be interpreted in such a narrow fashion as to permit minor differences in physical characteristics or 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." Sen. Rep. 249, 96th Cong., 1st Sess. 90-91 (1979).

flow. Flow is controlled by the manipulation of the element in the valve. Wedge gate and globe valves are turned manually whereas swing check valves are self-actuated.

The imported and domestic products are often interchangeable. Most, if not all, such steel valves are acceptable in quality and are produced to standards and specifications determined by the American Society for Testing and Materials, the American Petroleum Institute, and the American National Standards Institute. Comparable foreign organizations in other countries have also developed standard specifications for steel valves that are compatible with the U.S. standards and specifications. 6/ Moreover, the products subject to this investigation may be produced in one plant using the same types of equipment and the same employees.

While the domestically produced wedge gate, globe, and swing check valves are thus like those from Japan, 7/ there are domestically produced valves such as high-performance butterfly (HPB), ball, and lined plug valves ("quarter-turn valves") that are alleged by petitioners to be separate and distinct from the imported products. The rationale for this contention is that wedge gate, globe, and swing check valves do not compete with HPB, ball, and lined plug valves, that they are made in separate facilities, and that they are distributed through different channels. This "commercial reality" approach has some conceptual appeal but is unfounded in the facts of this investigation and relies upon secondary considerations in the analysis of "like product."

6/ Commission Report in Investigation No. 731-TA-145 (Final), Certain Steel Valves and Certain Parts Thereof From Japan (Report) at A-7 and A-8.

7/ It should be noted that if my determination as to "like product" were different, separate financial and employment data for different types of valves cannot be provided by domestic producers. Thus, in any case, I would examine data for domestic valve manufacturers as a whole, rather than for each like product, as required by section 771(4) (A).

An examination of whether HPB, ball, and lined plug valves are like, or in the absence of like, similar in characteristics and uses with the valves subject to this investigation indicates that there are some distinctions. These differences do not, however, lead to a conclusion that these are separate like products.

There is a significant degree of overlapping uses of these valves. Quarter-turn valves are manufactured for use in a wide range of pressure and temperature parameters, and they can be used in place of wedge gate and globe valves in most standard applications. Although there are some applications in which quarter-turn valves are less likely to be used (for example, in certain very high temperature and pressure applications, or in instances where a scraper is to be used to clean out a pipeline) for most applications the quarter-turn valves can be used in place of multiturn valves, and are likely to be increasingly so used in the future. The fact that quarter-turn valves are less likely to be widely used in the maintenance and repair operations market is due to customer preference in that market and the fact that existing systems are often designed for gate and globe valves and customers have tended to use gate and globe valves as replacements. Quarter-turn valves both substitute for and complement multiturn valves in piping systems.

Moreover, in a single pipeline system, a variety of valves, in a variety of steels, sizes and pressure and temperature capabilities are likely to be used to create a complete flow control system. Thus, there are a number of related like products (valve types) among which clear dividing lines frequently cannot be drawn and various degrees of interchangeability exist.

There are other considerations which prevent clear delineations among valve types. Orders and bids typically consist of broad mixes of valve types. Further, distributors contacted by the Commission staff generally²² carry a variety of valves rather than specializing in a certain type.

Although there are minor differences in characteristics and uses among the six types of valves, I find that these differences are insufficient to justify finding separate like products. Domestically produced steel valves are like the subject imports and thus the domestic industry consists of the domestic producers of these valves.

Condition of the domestic industry

It is readily apparent that the domestic industry is experiencing material injury. In every segment of the domestic industry, the trends point downward. Whether one looks solely at domestic producers of steel gate, globe, and check valves, or also includes domestic producers of HPB, ball, and lined plug valves, 8/ profitability declined substantially in the period 1981-83, shipments dropped, capacity utilization fell, and employment dwindled.

In the case of domestic producers of steel wedge gate, globe, and swing check valves, aggregate operating income from those operations fell by 56 percent between 1981 and 1982 and showed losses in 1983. 9/ The financial data for domestic producers of HPB, ball, and line plug valves show the same downward trends. 10/

Total shipments of the six types of steel valves fell significantly between 1981 and 1983. 11/ Shipments by domestic producers of gate, globe and check valves, by value, fell by 13 percent between 1981 to 1982 and by

8/ I note that the financial, capacity utilization, and employment data collected by the Commission regarding the domestic production of HPB, ball, and lined plug valves accounts for less than 50 percent of 1983 sales of these valves. Memorandum to the Commission, INV-H-166, July 20, 1984, item #5. However, these data are sufficient to provide sufficient indications of the trends in that segment of the domestic industry.

9/ Report at table 13, A-38.

10/ INV-H-166, item #5.

11/ The precise figures for shipments are confidential. Report at table 8, A-31.

another 26 percent in 1983. 12/ Shipments of HPB, ball, and lined plug valves, in terms of value, also fell. 13/

Capacity utilization rates for domestic production of gate, globe, and check valves declined from 67 percent in 1981 to 49 percent in 1982 and 43 percent in 1983. 14/ Capacity utilization rates for domestic production of the quarter-turn valves also fell precipitously throughout that period. 15/

All segments of the domestic valve industry showed declining employment between 1981 and 1983. The number of workers engaged in the production of steel gate, globe, and check valves declined 11 percent between 1981 and 1982 and another 29 percent between 1982 and 1983. 16/ In the first quarter of 1984, employment in this segment of the market was 13 percent below employment in the first quarter of 1983. 17/ Employment in the quarter-turn segment of the domestic industry similarly declined 31 percent between 1981 and 1982 and by another 30 percent between 1982 and 1983. 18/

From my vantage point the above data provide unmistakable and persuasive evidence of material injury to the domestic industry.

Material Injury by Reason of LTFV Imports from Japan

Another critical issue in an antidumping case is whether a causal link exists between the unfairly traded imports and material injury experienced by the domestic industry. Evidently, my colleagues and I assess the record somewhat differently in the present investigation.

12/ Report at table 7, A-29.

13/ The precise figures for shipments are confidential. INV-H-166, item # 8.

14/ Report at table 6, A-27.

15/ INV-H-166, item #5. I note that although some small producers of HPB and ball valves showed increasing capacity utilization over the period 1981-83, those capacity utilization rates were still low, and those producers sustained losses during the period.

16/ Report at table 11, A-35.

17/ Id.

18/ INV-H-166, item #5.

The statute instructs the Commission to consider, among other factors, these three points: 1) volume of imports of the merchandise under investigation; 2) the effect of such imports on domestic prices for the like product; and 3) the consequent impact of imports on the domestic industry. I want to emphasize that in an antidumping case, unlike escape clause cases with which the Commission has had so much recent experience, imports do not have to be an important cause of injury. It is sufficient for the LTFV imports to be a cause of injury to the domestic industry.

If one looks only at absolute numbers, it would appear that imports of steel gate, globe and check valves declined between 1981 and 1983. Indeed, as a share of apparent consumption imports from Japan also seem to be declining. Import penetration has fallen from 4.3 percent in 1981 to 2.3 percent in 1983.

But these figures, taken in isolation, offer a distorted picture of what actually is happening in the market place. Prior to 1982, importers accumulated inventories of Japanese valves in the United States, and subsequently sales from these inventories have increased steadily. When these inventory drawdowns are added to LTFV imports from Japan, the aggregate data show that domestic shipments of these imports actually increased from 3.8 percent of domestic consumption in 1981 to 4.1 percent in 1982 and 1983. To summarize, the Japanese producers are not withdrawing from the American market. On the contrary, as this Commission found in other investigations, such as motorcycles, the Japanese built up inventories during periods of recession and are selling from this inventory the imports required to maintain market share. ^{19/} In my opinion the Commission majority has underestimated the significance of these data.

^{19/} For an example of inventory buildup and drawdown see Views of Chairman Alfred Eckes, Investigation No. TA-201-47, Heavyweight Motorcycles, and Engines and Power Train Assemblies Therefor. ²⁵

Turning to pricing, Commission data show an unmistakable pattern: Japanese imports generally have undersold domestically produced valves throughout the period of this investigation. To evaluate pricing patterns, the Commission staff requested pricing information for five types of valves. For cast carbon steel valves, for example, Japanese prices undercut domestically produced valves in "five of the eight quarters for which comparisons were possible," according to the Commission Report. In addition, for cast stainless steel valves the Staff report indicates that "prices of Japanese valves were consistently priced lower than domestically produced valves in all quarters where comparisons were possible." Much of the specific pricing information remains confidential, but the same pattern applies to other products examined: Japanese imports repeatedly have undersold the domestic product.

There is another meaningful pattern in the pricing information. Prices received by U.S. producers declined significantly over the past two years. 20/ It is evident to me that there has been, and continues to be, significant underselling of LITV imports, at the same time these imports are maintaining their market share. Twelve of 15 purchasers reported that the presence of Japanese valves has contributed to lower market prices; 4 of the 15 purchasers indicated that imported valves from countries other than Japan have also contributed to lower market prices. 21/

Some of my colleagues have called attention to the fact that imports from countries other than Japan may also have undercut domestic products, as well as undersold imports from Japan. This is an interesting point but it is quite

20/ Report at A-60.

21/ Report at A-70.

irrelevant to the disposition of this case. The Commission is not required to weigh the relative impact on domestic prices of underselling from a variety of countries. It is apparent to me that LTFV imports from Japan have contributed to the declining prices for domestic valves.

It is also important to look at the significance of price to valve purchasers. The Commission staff gathered information from U.S. purchasers and learned that price and quality are both important considerations. Buyers indicated that they will purchase comparable imports if these are priced below the domestic prices, although some purchasers did indicate that they would buy domestic goods at any price. Interestingly, purchasers of the subject valves generally consider imports from countries other than Japan to be of lower quality than domestically produced valves. But, 8 of 16 purchasers surveyed stated that they considered imports from Japan to be equal in quality to the domestic product. Seven others said that they believe the Japanese valves were of equal or better quality than the domestic product, and one purchaser even expressed the opinion that Japanese valves were superior in quality. None of the 16 considered Japanese valves inferior to U.S. made valves.

One must treat purchasing information from a limited number of respondents cautiously, but I do not believe for a minute that many purchasers who can obtain a better quality Japanese import for a lower price than the domestic product will choose to purchase the domestic product. Because of the perceived qualitative advantage held by Japanese valves, the actual margins of underselling may understate the advantage dumping gives Japanese producers in the U.S. market.

Finally, another factor which links LTFV imports to the material injury experienced by the domestic industry is that of lost sales. The Commission staff have confirmed a number of allegations that domestic producers lost sales to imports from Japan. 22/

Conclusion

This case is not difficult. The Department of Commerce has made a final affirmative determination that Japanese imports of valves and valve parts are being sold at less than fair value. The Commission has ample data indicating that the domestic industry is being materially injured and that the imported merchandise is a cause of this material injury. Given the strength of this record, the Commission should have reached an affirmative determination.

INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On September 22, 1983, a petition was filed with the U.S. International Trade Commission and the U.S. Department of Commerce (Commerce) by counsel for 11 U.S. manufacturers of steel valves, 1/ known collectively as the Valve Manufacturers Association Fair Trade Council, on behalf of all U.S. manufacturers of certain steel valves. The petition, as amended, 2/ alleges that an industry in the United States is materially injured, and threatened with material injury, by reason of imports from Japan of wedge gate, swing check, and globe valves, and certain parts of the foregoing, 3/ of steel, provided for in item 680.17 of the Tariff Schedules of the United States (TSUS), which are allegedly sold at less than fair value (LTFV). Accordingly, effective September 22, 1983, the Commission instituted preliminary antidumping investigation No. 731-TA-145 (Preliminary) under section 731 of the Tariff Act of 1930 to determine whether there was a reasonable indication that an industry in the United States was materially injured, or was threatened with material injury, or the establishment of an industry in the United States was materially retarded, by reason of imports from Japan of such merchandise. On November 7, 1983, the Commission unanimously determined that there was a reasonable indication of material injury. 4/

On April 2, 1984, Commerce made a preliminary determination that there is a reasonable basis to believe or suspect that imports from Japan of wedge gate, swing check, and globe valves, and certain parts of the foregoing, of steel, are being, or are likely to be, sold in the United States at LTFV, as provided in section 733 of the Tariff Act of 1930 (19 U.S.C. 1673b). As a result of Commerce's affirmative preliminary determination of LTFV sales, the Commission instituted investigation No. 731-TA-145 (Final), effective April 2, 1984, to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry is materially retarded, by reason of imports from Japan of the subject products. Notice of the institution of the investigation and of the public hearing to be held in connection therewith was given by posting copies of the notice at the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and by publishing the notice in the Federal Register of April 18, 1984 (49 F.R. 15288). 5/

1/ A list of the petitioners is presented in app. A.

2/ On Sept. 27, 1983, and Sept. 28, 1983, the Commission received letters from counsel for the petitioners clarifying the scope of the products covered in the petition. On Oct. 19, 1983, in their postconference brief, the petitioners revised the scope of the products to be covered.

3/ The term "certain parts" covers (1) machined valve bodies and (2) partially completed valves consisting of machined valve bodies imported with one or more of the following parts: bonnet, stem, wedge, handle or seat rings.

4/ Certain Steel Valves and Certain Parts Thereof from Japan: Determination of the Commission in Investigation No. 731-TA-145 (Preliminary). . . . , USITC Publication 1446, November 1983.

5/ A copy of the Commission's notice of institution of the final investigation is presented in app. B.

On June 18, 1984, the Commission received notice of Commerce's final determination that wedge gate, swing check, and globe valves, and certain parts of the foregoing, of steel, from Japan, are being sold at LTFV. ^{1/} Margins were found on 14.8 percent of all sales compared. The weighted-average margin on all valve sales compared was 2.50 percent.

A public hearing was held by the Commission in connection with this investigation on June 19, 1984, in Washington, D.C. ^{2/} The Commission voted on the investigation on July 23, 1984.

Previous Investigations Concerning the Subject Products

In 1979, the Department of the Treasury conducted preliminary countervailing duty investigations concerning imports from Japan and Italy of valves and parts thereof, some of which are the subject of the current investigation. On August 23, 1979 (44 F.R. 49550), and October 24, 1979 (44 F.R. 61279), Treasury announced preliminary affirmative determinations concerning imports of such merchandise from Japan and Italy, respectively. The petitioners in these two investigations, some of which are petitioners in the current investigation, withdrew their petitions on January 31, 1980, and the investigations were terminated on February 12, 1980, with no final determinations being made regarding subsidies or injury.

The Products

Description and uses

A valve is a mechanical device used for controlling the flow of solids, fluids, and gases through pipes or piping systems. The valve may simply start or stop the flow of these materials or may determine or adjust the quantity, pressure, time, or direction of the flow. Flow control is attained by moving a disk, wedge, plug, cylinder, or other flow-controlling element within the valve assembly to either open, close, or partially obstruct the passageway. Valves can range in size from only a fraction of an inch to 30 feet in diameter. They are used at pressures ranging from a vacuum to extremely high pressures and at temperatures from those of cryogenics to those of molten metal.

There are three general classes of valves: multiturn, quarter-turn, and self-actuated. Within each of these classes, there are several major types of valves. ^{3/}

^{1/} A copy of Commerce's final determination is presented in app. C.

^{2/} A list of the witnesses who appeared at the public hearing is presented in app. D.

^{3/} Some of the valve definitions appearing herein have been adopted from Valves for Industry, a publication of the Valve Manufacturers Association.

Multiturn valves are valves in which the flow control elements are moved from fully opened to fully closed by multiple rotations of the valve stem. Among the multiturn valves are (1) gate valves (fig. 1), in which a vertical disc, or gate, slides perpendicularly in or out of the line of flow; (2) globe valves, in which a seat is built into the center of the pipe and a disc or plug is raised and lowered in a cavity to control the rate of flow; (3) angle valves, which are variations of the globe valve that deflect the flow by 90 degrees; and (4) pinch valves, which contain one or more flexible elements such as diaphragms or rubber tubes which can be pressed together to cut off flow.

Quarter-turn valves are valves in which the flow-controlling elements, such as the discs or gates, can be moved from fully open to fully closed with a 90-degree rotation of the valve stems. Among the quarter-turn valves are (1) plug valves, in which the flow is controlled by means of a cylindrical or tapered plug with a hole through the center; (2) ball valves, similar in concept to plug valves, but with a drilled ball (instead of a conical plug) that rotates 90 degrees between open and closed positions; and (3) butterfly valves, which control flow by means of a flat circular disc with its pivot axis at right angles to the direction of the flow. High-performance butterfly (HPB) valves are butterfly valves for use in high-pressure and high-temperature applications.

Self-actuated valves are valves in which the flow control elements (usually held by a spring) are opened and closed by the flow or pressure of the fluid as it passes through the valve. Among the self-actuated valves are (1) check valves, which prevent backflow in a piping system by remaining open when flow is in the proper direction and by closing in response to backup pressure, and (2) relief valves, which are designed to provide accurate, automatic pressure regulation on steam or gas lines. Relief valves are actuated by pressure or temperature or both; when maximum conditions are reached, the valve opens and "lets off steam," and then closes again when a preset level is reached.

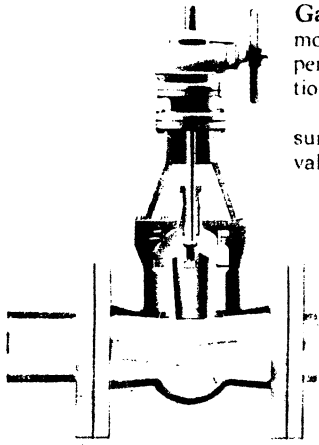
The valves that are the subject of the petition in this investigation are steel wedge gate, globe, and swing check valves, and certain parts thereof, of steel. These valves, according to the petitioners, constitute a family of valves and are generally sold and used together in piping systems. Their salient characteristics allegedly give them a fundamental identity with each other. 1/ These major characteristics have historically led to the use of combinations of these steel valves with each other to achieve effective flow control. 2/ They are generally produced in the same plants with the same workers and often the same equipment. Manufacturers usually include prices of gate, globe, and check valves in a single price list. 3/ It appears from the responses to Commission questionnaires that trade data and profit-and-loss data on the subject stainless steel valves are kept separately from those on carbon and alloy steel valves.

1/ Transcript of the hearing, p. 9.

2/ Ibid.

3/ Ibid., p. 18.

Figure 1. Types of valves.

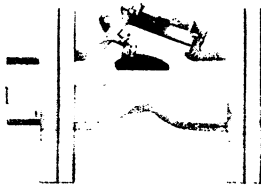
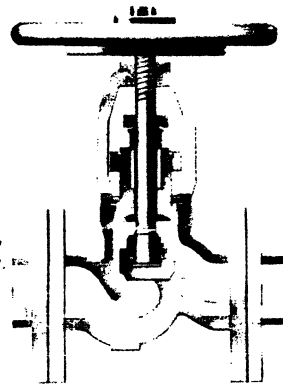


Gate valves, in carbon, alloy and stainless steel, stop or permit flow by moving a wedge-shaped metal gate in or out of the line of flow. Gate valves perform extremely well in high temperature and high pressure applications and corrosive environments.

Because many industrial processes are moving toward higher pressures and temperatures, there is an increasing use of pressure seal gate valves. These valves use line pressure to tighten the seal of the valve body.

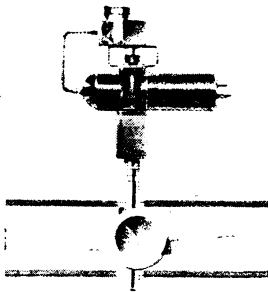
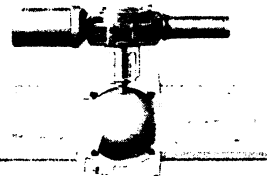
Globe valves stop, start, or regulate fluid flow.

A flat or tapered disc is raised or lowered in a specially designed cavity to increase or decrease the rate of flow. Globe valves are particularly effective in regulating a variety of flow rates.



Check valves prevent backflow in a piping system. They close in response to backup pressure, but remain open when flow is in the proper direction.

Ball valves stop or start flow with a quarter turn of a handle. When open, the flow passes freely through a hole in the ball. Because of the short turn required for on/off operation, ball valves are often automated, which is becoming increasingly important in industrial processes.



Butterfly valves regulate flow by means of a flat disc which is attached to a shaft in the middle of the flow cavity. Butterfly valves open and close with a quarter turn of a handle, and are easily automated. Because they occupy a small amount of in-line space, this type of valve is often used in processes where space is limited. Industrial butterfly valves are fully lined for abrasion resistance, and are available in a broad range of sizes. The development of the high performance butterfly valve has made it possible for this type of valve to be used in higher temperature and pressure applications, making the market for butterfly valves the fastest growing part of the valve industry.

Steel wedge gate, globe, and swing check valves are used primarily in the piping systems of petroleum refineries, petroleum production facilities, chemical plants, electric-power-generating facilities, and pulp and paper manufacturing plants. These three types of steel valves are described below:

Steel wedge gate valve.--A steel multiturn valve used for on/off control of the flow of fluids in a processing system. The flow is controlled by causing a vertical gate-like closing member, known as a wedge or disc, to slide perpendicular to the direction of the flow through the pipe. The valves are used in on/off functions and are not normally used in systems that require variable flow rates. Wedge gate valves have a wedged or tapered gate as their control element with tapered or angled seating surfaces. This distinguishes them, according to the petitioners, from other gate valves (such as thru-conduit, fabricated, knife, and slab gate valves), all of which, claim the petitioners, have parallel, nontapered gates for their control elements and parallel, nontapered seating surfaces.

Steel swing check valve.--A steel safety valve often used in conjunction with a gate valve in a piping system to prevent the reverse flow of fluids in a process system. The swing check valve is opened by the fluid flowing in one direction and is closed automatically when the flow stops or reverses direction. 1/

Steel globe valve.--A steel multiturn valve used for both on/off service and variable flow control, which affects the flow of the fluids by raising and lowering a plug to the seat of the valve.

The wedge gate and globe valves under investigation are hand operated. These valves are generally opened or closed through the use of a handle, handwheel, lever, or pushbutton. The handle is attached to a stem, and the flow-controlling element is attached to the other end of the stem. In contrast, the swing check valve is self-actuated. It is opened and closed by the flow or pressure of the fluid as it passes through the valve.

1/ There are other types of check valves, such as lift check, piston check, and wafer check, but these valves are not the subject of the petition in this investigation, because they apparently are not being imported from Japan--see letter of petitioners to the Commission, Sept. 27, 1983, p. 3.

The articles under investigation may be manufactured from all grades of steel. The grades of steel are defined in the TSUS 1/ principally on the basis of their chromium content, as shown in the following tabulation (in percent, by weight):

Grade of steel	Chromium content	Carbon restrictions
Stainless steel-----	More than 11.5	Less than 1 percent carbon
Other than stainless steel:		
Alloy-----	0.20- 11.5 inclusive <u>1/</u>	None
Carbon-----	0.20 or less	None

1/ Or over 1.65 percent of manganese, or
over 0.25 percent of phosphorus, or
over 0.35 percent of sulphur, or
over 0.60 percent of silicon, or
over 0.60 percent of copper, or
over 0.30 percent of aluminum, or
over 0.30 percent of cobalt, or
over 0.35 percent of lead, or
over 0.50 percent of nickel, or
over 0.30 percent of tungsten, or
over 0.10 percent of any other metallic element.

The definitions of the steel grades presented in the TSUS vary somewhat from those generally used by the domestic industry. For example, the American Iron & Steel Institute (AISI) defines stainless steel as including all grades of steel containing 10 percent or more of chromium and a minimum of 50 percent iron.

In selecting a grade of steel for its valves, an end user frequently has the option of choosing between a longer lasting and more expensive high-alloy valve and a shorter lived and less expensive low-alloy valve. Under varying conditions, a valve's life may range from only hours to many years. It may require service and maintenance after a single cycle or may operate trouble free for many thousands of cycles. The end user's choice of steel grade is likely to be determined by a combination of factors: the initial cost; the ability to withstand the desired temperature and pressure; the degree of corrosion resistance; and the ease with which a worn out valve can be replaced.

The articles under investigation are manufactured to withstand all ranges of pressures. Some of the more common pressures specified for these valves are 150 pounds per square inch (psi), 300 psi, 600 psi, and 900 psi.

1/ See schedule 6, pt. 2, subpt. B, headnote 2 (h)(ii), of the Tariff Schedules of the United States Annotated (1984) (TSUSA).

Steel wedge gate, globe, and swing check valves and parts thereof are produced from steel castings or forgings. Most domestic manufacturers of steel valves, however, produce either forged valves or cast valves, but not both. Such valves manufactured for pipes with outside diameters of 2 inches or less generally are produced from steel forgings, whereas valves manufactured for larger pipes are produced from steel castings. 1/ Cost is the primary reason for producing larger valves from castings.

Most of the domestically produced valves (by quantity) are forged, whereas most of the valves imported from Japan are believed to be cast. According to data collected from 12 major domestic producers for January-June 1983, * * * percent of the quantity and * * * percent of the value of the domestically produced subject valves are presumed to be forged, 2/ whereas only a small portion (perhaps 10 percent by quantity and even less by value) of the subject valves imported from Japan are forged. 3/

The steel castings and forgings require a number of machining operations--drilling, boring, facing, and milling--and are generally produced according to standards and specifications determined by a number of U.S. organizations, including the American Society for Testing & Materials (ASTM), the American Petroleum Institute (API), and the American National Standards Institute (ANSI). Comparable foreign organizations in Japan, the United Kingdom, the U.S.S.R., and other countries have also developed standard specifications for steel valves that are compatible with U.S. standards and specifications.

The parts of valves covered in this investigation include (1) machined valve bodies and (2) partially assembled valves consisting of machined valve bodies and one or more additional parts. The valve body, sometimes called the shell, is the principal part of the framework that holds other valve components together in a valve assembly. The valve body has ends adapted for connection to piping or tubing lines. Partially completed valves consist of machined valve bodies with one or more of the following five components attached:

1/ Some cast valves, however, are less than 2 inches in diameter.

2/ Based on a confidential survey of producers conducted by Economic Consulting Services, Inc. for the preliminary investigation. Estimates compiled by the Commission staff from responses to questionnaires from 17 domestic producers indicate that in 1983, 84 percent of the quantity and 45 percent of the value of U.S. producers' shipments consisted of forged valves (see INV-H-166, memorandum to the Commission of July 20, 1984).

3/ The share of subject forged valves from Japan increased significantly in 1983 due to an increase in imports * * *.

- (a) Bonnet.--The upper part of the valve body assembly which guides the stem and contains the stem packing assembly;
- (b) Stem.--The rod or spindle to which motion is imparted outside the valve assembly to move the disc or wedge inside the valve;
- (c) Wedge.--A flow-controlling element with inclined seating surfaces;
- (d) Handle.--A device connected to the valve stem to permit manual operation; and
- (e) Seat rings.--A soft seat element which is usually an o-ring and is the contact surface of the seat.

The subject products imported from Japan and the domestically produced products are often interchangeable. Most, if not all, such steel valves are acceptable in quality and are produced to standards and specifications determined by a number of organizations, as mentioned earlier.

Generally, the products subject to this investigation may all be produced in one given plant using the same equipment and the same employees; however, different molds and dies may be used, depending on the particular end product. HPB, ball, and lined plug valves are often produced in different plants and by different companies from those producing the steel wedge gate, globe, and swing check valves. 1/

The selection of the proper valve for a given function can be complex. In some cases, end users working with engineering consultants, and sometimes a manufacturer, determine the best valve for a particular application. Among the factors to be considered in the selection of a valve are the type of substance which will flow through the valve and the rate of the flow; the applicable size, pressure, and temperature parameters; dependability in fires; and the specific function to be performed by the valve (e.g., on/off, throttling, or safety functions). For on/off functions, users may be able to choose among gate, ball, plug, and HPB valves, and for throttling functions, users may be able to choose among globe, ball, HPB, and, to a lesser extent, plug valves. 2/ However, not all of these valves are substitutable in all applications. For example, HPB, ball, and plug valves may have temperature and pressure limitations for some applications.

Counsel for Kitz Corp., the principal Japanese exporter of steel valves to the United States, has taken the position that HPB, ball, and line plug valves are sufficiently similar to gate and globe valves in their basic characteristics and uses so as to warrant their inclusion in the definition of the relevant domestic industry in this investigation.

1/ Transcript of the hearing, p. 20.

2/ Based in part on Proposed Findings of Fact, a prehearing submission of counsel for Hitachi.

In order to clarify the extent to which other valves compete with steel wedge gate, globe, and swing check valves, the Commission, in its questionnaires sent to producers and purchasers, included a question on the competitiveness of such valves. The responses are summarized as follows:

Of the 17 responding producers (of which 11 are petitioners) of steel wedge gate, globe, or swing check valves, 8 (5 petitioners), representing * * * percent of domestic producers' value of shipments of the subject valves in 1983, indicated that HPB, ball, or other valves do compete in the marketplace with their production of the subject valves, and 8 (5 petitioners), representing * * * percent of domestic producers' value of shipments of the subject valves, indicated that such valves do not compete in the marketplace with their production of the subject valves. One petitioner, representing * * * percent of domestic producers' value of shipments, did not respond to the question.

The responses of the seven producers which indicated that HPB, ball, or other valves do compete against the subject products are summarized below, by types of valves specified as being competitive.

Type of valve	Petitioners	Other producers	Total
HPB-----	3	1	4
Ball-----	0	2	2
Lined plug-----	0	0	0
Other-----	0	0	0
Not specified-----	1	1	2

Two of the petitioners mentioned that the competition from the HPB valves is in the new construction market and not in the replacement market. Two petitioners indicated that the competition from HPB, ball, or other valves increased during 1981-83, one petitioner indicated that it decreased, and two petitioners indicated that it remained the same.

Of the 23 distributors, suppliers, and end users responding to the purchaser questionnaire or to followup telephone calls by the Commission staff, 14 indicated that HPB, ball, or other valves do compete with the subject valves, and 9 indicated that they do not compete with the subject valves. Principal reasons given for the valves not being competitive were application and installation differences and end user preference.

The responses of the 14 firms answering in the affirmative are summarized below, by types of valves specified as being competitive. The total adds to more than 14, because some respondents specified more than 1 type of valve as being competitive.

Type of valve	Respondents
HPB-----	12
Ball-----	8
Lined plug-----	2
Other-----	0
Not specified-----	2

Two of the respondents indicated that competition from the specified valves increased during 1981-83, and three indicated that it stayed the same.

Steel gate, globe, angle, and check valves are sold primarily to the * * * industries, but ball, plug, and industrial butterfly valves are sold * * *, although there is overlap, as shown in the following tabulation, based on data provided by the Valve Manufacturers Association, by shares of value of sales for each valve type in 1982 (in percent): 1/

* * * * *

Table 1 shows the estimated shares of major end-use markets accounted for by several types of valves. The data are based on estimates of the share of the total valve market by respondents to an annual Valve Manufacturers Association survey. Some caution must be exercised in interpreting the table, since the data are based on rough estimates and on the total value of shipments in each year; a similar table based on quantity of valves shipped would differ substantially. Moreover, the steel "gate, globe, angle, and check" categories include a number of valves other than the subject valves, 2/ and the industrial butterfly category includes butterfly valves other than HPB valves. Nevertheless, the table is somewhat indicative of the trends in share of sales to major end-use industries for each of the valve types.

The share of steel gate, globe, angle, and check valves (other than corrosion-resistant) * * * the industries listed as well * * *. The share of corrosion-resistant steel gate, globe, angle, and check valves * * * in the

1/ 1982 is the most recent year for which actual sales data are available.

2/ Steel wedge gate valves account for between 60 and 90 percent of total U.S. consumption of steel gate valves, and steel swing check valves account for about 66 percent of total U.S. consumption of steel check valves, as stated in a posthearing submission of the petitioners.

Table 1.--Certain steel valves: Estimated shares of the types of domestically produced valves used by major consuming industries and total industry, by types, 1981-83

(In percent)			
Type	1981	1982	1983 <u>1/</u>
Power generation			
Gate, globe, angle, check:			
Corrosion resistant steel-----	***	***	***
Other steel-----	***	***	***
Ball-----	***	***	***
Industrial butterfly-----	***	***	***
Plug-----	***	***	***
All other-----	***	***	***
Total-----	100.0	100.0	100.0
Petroleum refining			
Gate, globe, angle, check:			
Corrosion resistant steel-----	***	***	***
Other steel-----	***	***	***
Ball-----	***	***	***
Industrial butterfly-----	***	***	***
Plug-----	***	***	***
All other-----	***	***	***
Total-----	100.0	100.0	100.0
Petroleum production			
Gate, globe, angle, check:			
Corrosion resistant steel-----	***	***	***
Other steel-----	***	***	***
Ball-----	***	***	***
Industrial butterfly-----	***	***	***
Plug-----	***	***	***
All other-----	***	***	***
Total-----	100.0	100.0	100.0
Chemical			
Gate, globe, angle, check:			
Corrosion resistant steel-----	***	***	***
Other steel-----	***	***	***
Ball-----	***	***	***
Industrial butterfly-----	***	***	***
Plug-----	***	***	***
All other-----	***	***	***
Total-----	100.0	100.0	100.0

See footnote at end of table.

Table 1.--Certain steel valves: Estimated shares of the types of domestically produced valves used by major consuming industries and total industry, by types, 1981-83--Continued

(In percent)				
Type of valve	1981	1982	1983 ^{1/}	
	Total, all industries			
Gate, globe, angle, check:				
Corrosion resistant steel-----	***	***	***	***
Other steel-----	***	***	***	***
Ball-----	***	***	***	***
Industrial butterfly-----	***	***	***	***
Plug-----	***	***	***	***
All other-----	***	***	***	***
Total-----	100.0	100.0	100.0	

^{1/} Projected. Actual data are not available.

Source: Compiled from data provided by the Valve Manufacturers Association.

power generation and petroleum production industries * * * in the petroleum-refining and chemical industries. * * *, the share of industrial butterfly and ball valves * * * industries and * * *. ^{1/} This does not necessarily mean that ball valves are being substituted for steel gate and globe valves, since the table provides no information on the actual applications for each of the valves within each end-use industry. However, it may be an indication of a gradual shift from the traditional steel gate and globe valves towards the newer ball and industrial butterfly valves. ^{2/}

In their 1982 and 1983 annual reports, several domestic producers of both the subject valves and of quarter-turn valves such as HPB or ball valves specifically mentioned the favorable sales performance of their quarter-turn lines, despite the generally poor demand for valves. Crane mentioned the

^{1/} In the hydrocarbon-processing industry (HPI), ball valves have gone from 3 to 13 percent of the market in the past 8 years, and HPB valves have gone from a fraction of 1 percent to approximately 10 percent, as reported by Eugene Swantek, sales manager for Hydrocarbon Processing magazine, in an Apr. 10, 1984, speech at the Valve Manufacturers Association spring meeting in Dallas, Tex. Mr. Swantek stated that the gate valve has lost HPI market share to quarter-turn valves but still retains 60 percent of the market in the HPI.

^{2/} Whether gate, globe, HPB, or ball valves are used, check valves are invariably used as well, since backflow must be controlled in any event.

expansion and emphasis on its quarter-turn lines; 1/ Wm. Powell mentioned that its new butterfly line (but not its ball valves) did well in 1982 despite an overall lack of demand; 2/ and Mark Controls mentioned increased emphasis on its automated valves and increased sales of over 35 percent in 1983 for its automated ball, HPB, and other butterfly valves. 3/

A general consensus on the degree of HPB, ball, and other valves' competitiveness with the subject valves (according to questionnaire responses and many conversations with representatives of producers, importers, distributors, engineers, end users, and other individuals knowledgeable of the valve trade) is that HPB and ball valves, and, to a lesser extent, lined plug valves, are indeed competitive with steel wedge gate and globe valves (but not with steel swing check valves) to a certain extent in the new construction market, but much less so in the maintenance and repair operations (MRO) market. The new construction market has been relatively depressed during the past 2 years.

HPB valves are definitely competitive with steel wedge gate and globe valves in an undetermined number of applications in the new construction market, where systems can be designed especially for the HPB valves, which are lighter, often cheaper, and more readily adaptable to automation. In the MRO market, however, it is difficult to replace steel wedge gate and globe valves with HPB valves, since the existing systems were designed for gate and globe valves; the face-to-face dimensions are sometimes too different to permit the use of HPB valves. A 1981 market study indicated that 95.5 percent of HPB valves were for new construction as opposed to MRO. 4/ The relative downturn in the new construction market (compared with the MRO market) during the past 2 years may have somewhat dampened the expected inroads of HPB valves in the steel wedge gate and globe market. In addition, HPB valves are relatively new in the marketplace 5/ and have not yet been completely accepted by some end users, 6/ although it appears that their acceptance has been increasing 7/ due to the inherent advantages of these valves in many applications and to aggressive advertising by producers of these valves. In the future, HPB valves will probably take business away from the traditional steel wedge gate and globe valves, especially if new capital investment results in new construction which is engineered to utilize the HPB valves. However, HPB valves 8/ cannot be used in some applications (for example, where there is a

1/ Crane Co., Annual Report 1982, p. 18, and Annual Report 1983, p. 4.

2/ The Wm. Powell Co. Annual Report 1982, p. 2.

3/ Mark Controls Corp., 1983 Annual Report, pp. 4 and 12.

4/ A market study conducted for Hills-McCanna, a manufacturer of HPB valves, by J. Hoover and R. Schlegel, High Performance Butterfly Valve Market Study, p. 24.

5/ Transcript of the hearing, p. 54.

6/ Ibid.

7/ The High Performance Butterfly Valve Market Study indicated that of the representatives of major consuming industries that were interviewed, 76 percent said that HPB valves are replacing other valves. Fifty-six percent said that the valves being replaced by HPB valves are gate and globe valves.

8/ The High Performance Butterfly Valve Market Study indicated that 10.3 percent of valves can be replaced by HPB valves, p. 12.

"dirty" flow necessitating the cleaning of a pipeline with a scraper) and to date the unit shipments of HPB valves are still less than 5 percent of the unit shipments for steel wedge gate and globe valves.

Ball valves are also competitive in a number of applications with steel wedge gate and globe valves, especially in sizes of 2 inches and under and in the new construction market. However, it appears that most of the gains to be made by ball valves in the steel wedge gate and globe market had occurred by the late 1970's. It is likely that ball valves have not appreciably increased their market share relative to steel wedge gate and globe valves during the period under investigation.

U.S. tariff treatment

The imported valves and valve parts under investigation are classified in item 680.17 of the TSUS. The most-favored-nation (MFN) (col. 1) 1/ rate of duty for such imports is 9.5 percent ad valorem. As a result of the agreements made during the Tokyo round of Multilateral Trade Negotiations, this rate was reduced from 11 percent ad valorem in 1980 to 10.5 percent in 1982 and to 9.5 percent, the current rate, in 1984. The rate is scheduled to be reduced in stages to 8.0 percent ad valorem, effective January 1, 1987.

Nature and Extent of Sales at LTFV

On June 18, 1984, the Department of Commerce notified the Commission of its final determination that the subject products from Japan are being sold in the United States at LTFV. 2/ Commerce's determination was based on an examination of sales made during the April-September 1983 period by three Japanese producers and exporters--Hitachi Metals, Ltd. (Hitachi), Kitz Corp. (Kitz), and Takamisawa Koki Mfg., Ltd. (TKM). These three companies combined produced and sold approximately 85 percent of the subject valves for export from Japan to the United States during the period of investigation.

In reaching its final determination, Commerce compared the U.S. price of the subject products from Japan with the foreign-market value. Foreign-market value was based on home-market sales, except in the case of some sales by TKM and Kitz in which either sales to third countries or constructed value were used as the basis for foreign-market value. Commerce found that the foreign-market value of the valves it examined exceeded the U.S. price on 14.8 percent of the sales compared. The margins ranged from 0.15 to 72.8 percent. The overall weighted-average margin on all valve sales compared was 2.50 percent. Data on each of the three companies surveyed are shown in table 2.

1/ Col. 1 rates of duty are applicable to imported products from all countries except those Communist countries and areas enumerated in general headnote 3(f) of the TSUSA.

2/ One Japanese manufacturer, Takamisawa Koki Mfg., Ltd., was excluded from Commerce's final determination. This manufacturer accounted for * * * percent of U.S. imports of the subject products from Japan by quantity and * * * percent by value in 1983.

Table 2.--Steel wedge gate, globe, and swing check valves: 3 Japanese producer/exporters' sales in the United States, share of sales at less than fair value (LTFV), and margins, April-September 1983

Producer/exporter	Sales in the United States	Share of sales compared at LTFV	Final weighted-average LTFV margins
		Percent	
Hitachi-----	***	***	1.07
Kitz-----	***	***	13.09
TKM-----	***	***	.16
Total or weighted average-----	***	14.8	1/ 2.50

1/ Applies to all identifiable Japanese producer/exporters other than Hitachi, Kitz, and TKM.

Source: U.S. Department of Commerce.

In June 1984, in accordance with section 733(d) of the Tariff Act of 1930, Commerce directed the U.S. Customs Service to suspend liquidation of all entries of the subject valves from Japan (with the exception of valves produced by TKM) which were entered, or withdrawn from warehouse, for consumption on or after April 5, 1984. The Customs Service was to require a cash deposit or the posting of a bond equal to the estimated weighted-average amount (as shown in table 2) by which the foreign-market value exceeds the U.S. price for entries of merchandise from Kitz and Hitachi. Where sales by trading companies cannot be identified by manufacturer, the Customs Service was to require a cash deposit or the posting of a bond equal to the highest weighted-average margin of 13.09 percent.

The Domestic Market

Apparent consumption

Consumption of steel wedge gate, globe, and swing check valves is based on economic conditions in the major consuming industries of these valves, namely the power generation, petroleum-refining, petroleum production, chemical, and pulp and paper industries. The following tabulation illustrates the shares of major end-use industry destinations of estimated U.S. producers' domestic shipments of wedge gate, globe, angle, and check valves during 1981-84 (in percent): 1/

1/ The data in this tabulation consist of aggregations of individual companies' estimates of the percent of domestic producers' value of domestic shipments used by various end-use industries. The basic data were compiled by the Valve Manufacturers Association, and have been further aggregated by the U.S. International Trade Commission. If data based on the quantity of shipments were available, it would show lower percentages for the * * * industry and higher percentages for the * * *.

End-user industry	1981	1982	1983 <u>1/</u>	1984 <u>2/</u>
Power generation-----	***	***	***	***
Petroleum refining-----	***	***	***	***
Chemical-----	***	***	***	***
Petroleum production-----	***	***	***	***
Pulp and paper-----	***	***	***	***
All other-----	***	***	***	***
Total-----	100.0	100.0	100.0	100.0

1/ Projected, unadjusted.

2/ Projected.

U.S. consumption of steel wedge gate, globe, and swing check valves decreased from 2.7 million valves in 1981 to 2.1 million valves in 1982 and 1.8 million valves in 1983 (table 3). In 1981, demand for the subject valves was strong, particularly for use in the oil-drilling, refining, and petrochemical industries. In 1982, all major user industries suffered declines owing to the recession, especially the petroleum-related industries.

Table 3.--Steel wedge gate, globe, and swing check valves: Apparent U.S. consumption, by types, 1981-83, January-March 1983, and January-March 1984

(In thousands of units)					
Type	1981	1982	1983	January-March--	
				1983	1984
Carbon steel <u>1/</u> -----	***	***	***	***	***
Alloy steel-----	***	***	***	***	***
Stainless steel-----	***	***	***	***	***
Total-----	2,748	2,051	1,842	487	484

1/ Includes an undetermined amount of alloy steel valves.

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

The Mark Controls Co. annual report for 1982 stated that "In 1982, the effects of a lingering worldwide recession and the worst United States recession in 40 years dramatically slowed capital spending in the markets where. . .flow control products are used. . . . The petroleum refining, chemical and pulp and paper markets were especially hard hit. . . . The oil production and power generation markets were also adversely impacted. . . . As this economic scenario unfolded, it became clear that prolonged weakness in end-user markets

would lead to reduced demand for valves in the short-term." Consequently, U.S. consumption of the subject valves declined by 25.4 percent in 1982 and by 10.2 percent in 1983. U.S. consumption during January-March 1984 was 0.6 percent below consumption in the corresponding period of 1983.

Indexes of shipments of petroleum, chemical, and paper products, and production of electric power, as obtained from the Department of Commerce's Survey of Current Business, are shown in the following tabulation:

(1981=100)				
Industry	:	1982	:	1983
Petroleum-----	:	92.1	:	85.2
Chemical-----	:	95.7	:	104.8
Paper-----	:	98.4	:	106.7
Electric power-----	:	97.6	:	103.0

Although the indexes for the chemical, paper, and electric power industries increased in 1983, the index for the petroleum industry (the major end user of the subject valves) continued to decline in 1983. The short-term prospects for the major valve-consuming industries do not indicate an imminent increase in demand for the subject valves. One producer's statement, in its 1983 annual report dated March 9, 1984, was as follows:

We think a recovery in the oil exploration, petrochemical, and power generation fields may be longer in coming. As a consequence, we are not very positive about the probability of a strong recovery for our valve group or our other business serving those industries. 1/

Demand for the valves under investigation is dependent upon investment in new capital goods and upon the replacement of valves in existing piping systems. U.S. capital expenditures on all valves during the period under investigation totaled \$168 million in 1981, \$210 million in 1982, and \$168 million in 1983. 2/

The MRO market was a vital component of the shrinking valve market during the period under investigation. According to a telephone survey of six producers conducted by the petitioners, MRO purchases accounted for 35 percent

1/ White Consolidated Industries, Inc., Annual Report, 1983, p. 3.

2/ From Market Data, various years, prepared by Hydrocarbon Processing, as shown in Exhibit 9 of the prehearing brief of Hitachi Metals, Ltd. et al.

of total valve sales in 1981, 55 percent in 1982, and 63 percent in 1983. 1/ According to Hitachi, the MRO market accounts for 30 percent of total valve sales. 2/

The Commission received estimates of MRO versus new construction markets from 10 purchasers (both distributors and end users) of the subject valves. Summary information on the ten purchasers' responses regarding market shares for the years 1981-83 is shown in the following tabulation (in percent):

	1981	1982	1983
Average estimates			
MRO-----	53	57	59
New construction-----	47	43	41
Total-----	100	100	100
Median estimates			
MRO-----	60	60	65
New construction-----	40	40	35
Total-----	100	100	100

Even though the estimates of the market shares of MRO versus new construction vary widely, it appears that the new construction market experienced a decline relative to the MRO market during the period under investigation.

U.S. producers

In 1983, 17 firms were known to produce steel wedge gate, globe, or swing check valves in the United States. The 17 firms, plant locations, types of valves produced, and share of total 1983 quantity and value of shipments of the subject valves are shown in table 4. Of the 17 firms, 11, representing 91 percent of the quantity and 92 percent of the value of U.S. producers' domestic shipments in 1983, are petitioners in this investigation, and 5 others (Anvil, Jenkins, NIBCO, Prince, and RP & C), representing an additional * * * percent of the quantity and * * * percent of the value of U.S. producers' domestic shipments, have submitted statements to the Commission indicating that they are in support of the petition.

1/ Petitioners' Responses to Questions Posed by the Commission. . . , posthearing submission of Collier, Shannon, Rill & Scott, counsel to the petitioners.

2/ Postconference brief in the preliminary investigation of Graham & James, counsel to Hitachi, p. 9.

Table 4.--Certain steel valves: U.S. producers' plant locations, types of subject valves produced, and shares of shipments, 1983

Producer	Plant location(s)	Share of quantity of 1983 shipments	Carbon steel			Alloy steel			Stainless steel		
			Wedge gate	Globe	Swing check	Wedge gate	Globe	Swing check	Wedge gate	Globe	Swing check
Petitioners:											
Condec Flow Control (Lunkenheimer)	Cincinnati, Ohio	***	***	***	***	***	***	***	***	***	***
Cooper Valve Co	Houston, Tex.	***	***	***	***	***	***	***	***	***	***
Crane Co	Chattanooga, Tenn.	***	***	***	***	***	***	***	***	***	***
	Indian Orchard, Mass.										
Mark Controls Corp	Long Beach, Calif.	***	***	***	***	***	***	***	***	***	***
Wm. Powell Co	Manning, S.C.	***	***	***	***	***	***	***	***	***	***
Rockwell International Corp	Raleigh, N.C.	***	***	***	***	***	***	***	***	***	***
	Sulphur Springs, Tex.										
Smith Valve Corp	Westboro, Mass.	***	***	***	***	***	***	***	***	***	***
Stockham Valves & Fittings, Inc	Birmingham, Ala.	***	***	***	***	***	***	***	***	***	***
Velan Valve Corp	Plattsburgh, N.Y.	***	***	***	***	***	1/	1/	1/	1/	1/
	Williston, Vt.										
Henry Vogt Machine Co	Louisville, Ky.	***	***	***	***	***	***	***	***	***	***
Walworth Co	King of Prussia, Pa.	***	***	***	***	***	***	***	***	***	***
	Linden, N.J.										
	Elizabeth, N.J.										
	Waco, Tex.										
Other producers:											
Anvil	Greencastle, Pa.	***	***	***	***	***	***	***	***	***	***
Ladish	Cynthiana, Ky.	***	***	***	***	***	***	***	***	***	***
Jenkins	Bridgeport, Conn.	***	***	***	***	***	***	***	***	***	***
NIBCO	Middlebury, Ind.	***	***	***	***	***	***	***	***	***	***
Prince	Norman, Okla.	***	***	***	***	***	***	***	***	***	***
RP & C	Fairview, Pa.	***	***	***	***	***	***	***	***	***	***

1/ Unspecified alloy and stainless steel valves account for about ** * percent of Velan's production.

1/ Unspecified alloy and stainless steel valves account for about *** percent of Velan's production.

Beginning in January 1980, the Wm. Powell Co. curtailed operations at its carbon steel valve division in Cincinnati, Ohio. This division was closed in 1982 and relocated to Manning, S.C., in May 1983 due to "* * *."

In 1981, the Walworth Co. closed a steel valve plant in Greensburg, Pa. However, a new plant was opened in Waco, Tex., in 1983.

In May 1982, Lunkenheimer closed its Wadsworth, Ohio, manufacturing facility, where most of its steel valves were produced, "due primarily to * * *." 1/ Lunkenheimer stated that it could no longer * * *." 2/ * * * of Lunkenheimer's employees received trade adjustment assistance from the U.S. Department of Labor in 1981. In the autumn of 1983, Lunkenheimer stopped steel valve production.

In July 1982, Dresser Industries ceased its * * * production of * * *." 3/ Dresser * * *.

On September 22, 1983, Jenkins Bros. ceased producing the valves under investigation (except for * * *) because of "* * *." Jenkins has also discontinued its production of iron valves. In 1983, Jenkins liquidated a wholly owned subsidiary which distributed valves and piping.

Nine of the petitioners produced valves other than the subject valves during the period under investigation. Eight of the nine also produce ball valves, four produce plug valves, three produce HPB valves, and one produces other valves. One non petitioning producer also produces other check valves. Seven of the responding producers indicated that their production of valves other than the subject valves decreased during 1981-83. One indicated that its production of ball valves * * *, and one indicated that its production of HPB valves * * *.

Of the 17 known U.S. producers in 1983, 6 are related to valve producers abroad. Anvil owns * * * percent of Canvil, Ltd., located in Simcoe, Ontario, Canada; Lunkenheimer has a licensee, Energoinvest, located in Sarajevo, Yugoslavia, from which it has imported valves during the period under investigation; Smith has a wholly owned subsidiary, Smith Valve Asia, Ltd., located in Hong Kong, which began production in 1975, and from which Smith has * * *; Walworth is related to PANAVAL, S.A. de C.V., located in Mexico, which is owned in common with Walworth by ARILAN, S.A. de C.V; Rockwell International owns Rockwell Valves, S.A. in Unieux, France; and Velan Corp. is owned by Velan, Inc., of Montreal, Canada. Velan, Inc., has manufactured cast steel valves at a plant in * * *. Velan, Inc., has also manufactured forged steel valves at * * * and owns * * * percent of Velan-Rateau, in La Baule, France, where forged valves have been manufactured since 1978. Velan, Inc., exports * * * from Canada to Velan Valve Corporation's plants in the United States, where the valves are * * *. Velan Valve Corp. also produces steel valves * * * at its U.S. plants.

1/ From Lunkenheimer's response to the Commission's questionnaire.

2/ Ibid.

3/ * * *.

U.S. importers

There are eight known U.S. importers of the subject steel valves or certain parts thereof from Japan. Three importers--Zidell Explorations Corp., Hitachi Metals America, and TKM Valves, Inc.--together account for most of the imports. The three importers' Japanese sources and their shares of the value of total imports from Japan in 1983 are presented in the following tabulation:

Importer	Japanese producer	Share of import value
		<u>Percent</u>
Hitachi Metals America-----	Hitachi Metals Ltd.	***
TKM Valves Inc-----	Takamisawa Koki	***
	Manufacturing	
	Co., Ltd.	
Zidell Exploration Corp-----	Kitz Corp	***
Subtotal-----	-	***
All other-----	-	***
Total-----	-	100

Zidell, the largest importer during the period under investigation, is the exclusive U.S. purchaser of Kitz valves. Zidell is headquartered in Portland, Ore., and has eight warehouses in the United States through which it sells the valves under investigation. In late 1981 the company * * *.

Hitachi Metals America, Inc., a U.S. subsidiary of Hitachi Metals, Ltd. (HML), is the U.S. importer of the subject valves from HML. Hitachi Metals America imports * * * valves.

Takamisawa produces what its importer characterizes as "specialty" valves which are customized, special-order valves generally not produced in large quantities for inventory. Takamisawa has been excluded from the Department of Commerce's final determination in this investigation.

Petitioners alleged at the public hearing that there are significant imports of the subject products directly by end users. The Commission staff did not find any evidence supporting this allegation. Most of the imports from Japan are by Hitachi, TKM, and Zidell.

Channels of distribution

Most U.S. producers of standard valves generally sell to unrelated distributors who then resell the valves to end users. Distributors usually stock pipes and fittings as their major items and handle valves, sometimes both imported and domestic, as a supplemental product line. Distributors contacted by the Commission staff generally handle a variety of valves, as

needed, instead of specializing in a certain type; 1/ some distributors specialize in a general class of valves, such as carbon steel valves.

Some valves, especially those that are custom built, are sold directly to the end users. Such valves are normally built on contract. Sometimes these valves are very large and expensive, costing as much as \$200,000 or more per unit. * * * sell the majority of their valves directly to unrelated end users.

The importers of Japanese valves use the same distribution channels as the domestic producers, selling either directly to end users or through distributors. In recent years, a number of distributors of domestic valves have added the imported valves to their inventories. Both importers and distributors keep stocks of imported valves on hand in order to have competitive delivery times with those of the domestic valve manufacturers.

The Industry in Japan

There are approximately 220 producers of various kinds of valves in Japan. 2/ * * * over 100 of these producers manufacture gate, globe, or check valves. 3/ * * * at least 75 to 80 firms produce valves similar to, if not identical to, the valves that are the subject of this investigation, but that at least 25 to 30 of these are not engaged in exports. 4/ Counsel for Hitachi has stated that "The valve industry in Japan is populated by some large producers and many tiny producers, only a small fraction of which produce the valves at issue and many of which produce only when there is high demand." 5/

Kitz Corp. is the largest Japanese producer of the subject valves. 6/ Kitz also claims that it is the largest valve manufacturer in the world. 7/ Kitz's average monthly production of all valves during April 1983-March 1984 was * * * valves; however, most of these valves are bronze and brass valves. 8/ Average monthly production of the carbon and stainless steel valves subject to this investigation was approximately * * * valves. Data on Kitz' production, home-market sales, exports to the United States, exports to all other countries, 9/ and year end inventories of the subject carbon and stainless steel gate, globe and check valves are shown in the following tabulation (in thousands of valves): 10/

1/ For further discussion, see transcript of the hearing, pp. 61 and 62.

2/ Department of State telegram, Oct. 19, 1983.

3/ Ibid.

4/ Ibid.

5/ Posthearing brief of Hitachi, p. 9.

6/ Posthearing brief of Kitz, p. 10.

7/ From an advertisement appearing in Supply House Times, June 1984, p. 29.

8/ From a posthearing submission of counsel for Kitz.

9/ Kitz exports valves to over * * * countries.

10/ From a posthearing submission of counsel for Kitz.

<u>Fiscal</u> <u>year</u> <u>1/</u>	<u>Production</u>	<u>Home-</u> <u>market</u> <u>sale</u>	<u>Exports to</u> <u>the United</u> <u>States</u>	<u>Other</u> <u>exports</u>	<u>Yearend</u> <u>inventory</u>
1981-----	***	***	***	***	***
1982-----	***	***	***	***	***
1983-----	***	***	***	***	***
1984-----	***	***	***	***	***

1/ Apr. 1-Mar. 31.

Kitz operates * * * valve plants. The * * * plants produce * * * valves. The Ina plant, opened in 1969, produces * * * valves. Kitz installed a new * * * in its Ina plant in June 1982, at a cost of * * *. 1/

Kitz claims that it is not burdened with excess capacity and high capital cost, 2/ as alleged by the petitioners. 3/ Kitz' capacity to produce all valves is * * * metric tons per month; capacity to produce carbon and stainless steel valves is * * * metric tons per month. 4/ Counsel for Kitz claims that Kitz' plants have been operating at a capacity utilization rate of * * * percent in recent months. 5/ However, Kitz did not provide the capacity utilization rate for the subject valves. Kitz indicated that the Ina plant's practical steel valve capacity is * * * metric tons per month, but that if Kitz's finishing operations on its purchases of partially completed valve bodies are included, the Ina plant's total rated production capacity for carbon steel valves is * * * metric tons per month. 6/ Kitz's carbon steel production at the Ina plant has averaged * * * metric tons per month. 7/

Counsel for Hitachi provided the following statement to the Commission concerning Hitachi's valve operations: 8/

* * * * *

1/ Ibid.

2/ Ibid.

3/ Petitioners' Responses to Questions Posed by the Commission. . . , posthearing submission of counsel for the petitioners.

4/ From a posthearing submission of counsel for Kitz.

5/ Ibid.

6/ Ibid.

7/ Ibid.

8/ Posthearing submission of Hitachi, confidential app. 1.

Hitachi's production and sales of cast steel valves by destination are shown in the following tabulation (in metric tons):

	<u>Japanese home market</u>	<u>Exported to the United States</u>	<u>Exported to other countries</u>	<u>Total sales</u>
1980-----	***	***	***	***
1981-----	***	***	***	***
1982-----	***	***	***	***
1983-----	***	***	***	***
Jan.-Mar.--				
1983-----	***	***	***	***
1984-----	***	***	***	***

Cast steel valves represented * * * percent of the quantity of Hitachi's total valve sales in 1980, * * * percent in 1981-83, * * * percent in January-March 1983, and * * * percent in January-March 1984.

In the spring of 1983, the Japanese industrial valve industry hosted a visit by a delegation of the Valve Manufacturers Association, petitioners in this investigation. The visit was organized to allow American companies to learn about productivity advances and new production techniques which the Japanese have developed. 1/

Consideration of Alleged Material Injury

The information in this section of the report has been compiled from responses to questionnaires of the U.S. International Trade Commission. The Commission sent questionnaires to 17 known producers of the subject products and to 6 other companies believed to produce some or all of the subject products.

Information was requested on each of nine types of steel valves and on certain parts of steel valves. Completed questionnaires were received from all of the known producers. The responding producers together accounted for an estimated 99 percent of production of the subject valves. A number of the producers had difficulty in separating the requested data by the valve type or by steel type. Accordingly, the data presented in this section by valve types or by steel types may include undetermined amounts of other valve types or steel types.

1/ As stated by counsel for Hitachi, transcript of the hearing, pp. 152 and 153.

U.S. production

U.S. production of the nine types of valves for which data were collected decreased from 2.6 million valves in 1981 to 1.9 million valves in 1982, or by 27.4 percent, and then decreased to 1.6 million valves in 1983, or by 12.5 percent from the 1982 level (table 5). Production of the valves during January-March 1984 totaled 403,000, representing a decrease of 7.6 percent from that in the corresponding period of 1983. Approximately * * * percent of U.S. production of the subject valves consists of valves of 2 inches or smaller. 1/ Approximately * * * percent of U.S. production of the subject valves consisted of cast valves (as opposed to forged valves) in 1983. 2/

U.S. producers' capacity and capacity utilization

The capacity data presented herein are aggregated by the subject carbon steel, alloy steel, and stainless steel valves. Total capacity to produce the subject valves decreased from 3.83 million in 1981 to 3.77 million in 1982, or by 1.6 percent, and increased in 1983 to 3.80 million valves, or by 0.7 percent, compared with the 1982 level (table 6).

1/ Based on a confidential survey of producers conducted by Economic Consulting Services, Inc. for the preliminary investigation.

2/ Based on a confidential survey of producers conducted by Economic Consulting Services, Inc. for the preliminary investigation. Estimates compiled by the Commission staff from responses to questionnaires from 17 domestic producers indicate that in 1983, 84 percent of the quantity and 45 percent of the value of U.S. producers shipments consisted of forged valves (see INV-H-166, memorandum to the Commission of July 20, 1984).

Table 5.--Certain steel valves: U.S. production, by types, 1981-83,
January-March 1983, and January-March 1984

(In thousands of units)

Type	1981	1982	1983	January-March--	
				1983	1984
Carbon steel:					
Wedge gate <u>1</u> /-----	1,735	1,242	1,104	293	278
Globe <u>2</u> /-----	375	315	280	72	61
Swing check <u>2</u> /-----	34	38	26	6	6
Total <u>1</u> /-----	2,144	1,595	1,410	371	345
Alloy steel: <u>3</u> /					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	4/	4/	4/	4/	4/
Total-----	***	***	***	***	***
Stainless steel: <u>3</u> /					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	***	***	***	***	***
Total-----	***	***	***	***	***
Grand total-----	2,558	1,858	1,626	436	403

1/ Includes undetermined amounts of alloy steel and stainless steel wedge gate, globe, and swing check valves, and carbon steel globe and swing check valves.

2/ Includes undetermined amounts of alloy steel valves.

3/ An undetermined amount of production of these valves is classified under the corresponding carbon steel valve type.

4/ * * *.

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

Table 6.--Wedge gate, globe, and swing check valves: U.S. producers' capacity and capacity utilization, by types, 1981-83, January-March 1983, and January-March 1984

Type	1981	1982	1983	January-March--	
				1983	1984
	Capacity (1,000 units)				
Carbon steel <u>1/</u> -----	3,143	3,073	3,081	774	754
Alloy steel <u>2/</u> -----	***	***	***	***	***
Stainless steel <u>2/</u> -----	***	***	***	***	***
Total-----	3,831	3,769	3,796	966	943
	Capacity utilization (percent)				
Carbon steel <u>3/</u> -----	68.2	51.9	45.8	47.9	45.8
Alloy steel-----	***	***	***	***	***
Stainless steel-----	***	***	***	***	***
Average <u>4/</u> -----	66.8	49.3	42.8	45.1	42.7

1/ Includes undetermined capacity for alloy steel and stainless steel valves.

2/ An undetermined amount of capacity for these valves is included under carbon steel valves.

3/ Includes undetermined capacity for alloy steel and stainless steel valves. The capacity utilization rates are overstated, because * * * reported production data for carbon steel valves but did not report its capacity for those valves.

4/ The capacity utilization rates are overstated, because * * * reported production data for carbon steel valves but did not report its capacity for those valves.

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

Capacity utilization decreased from 66.8 percent in 1981 to 49.3 percent in 1982 and 42.8 percent in 1983. Capacity utilization during January-March 1984 was 42.7 percent, representing a decrease from the level of 45.1 percent in the corresponding period of 1983.

U.S. producers' domestic shipments

Domestic shipments of the 17 reporting U.S. producers of the 9 types of valves for which data were collected decreased from 2.4 million valves in 1981 to 1.8 million valves in 1982, or by 27.1 percent (table 7). U.S producers' domestic shipments decreased to 1.5 million valves in 1983, or by 13.5 percent compared with the 1982 level. U.S. producers' domestic shipments in January-March 1984 totaled 413,000 valves, representing an increase of 3.0 percent over those of the corresponding period of 1983.

Four U.S. producers provided information on their domestic shipments of parts of the subject valves. These shipments increased from * * * in 1981 to * * * in 1982 and * * * in 1983.

Table 7.- Certain steel valves: U.S. producers' domestic shipments,
by types, 1981-83, January-March 1983, and January-March 1984

Type	1981	1982	1983	January-March--	
				1983	1984
	Quantity (1,000 units)				
Carbon steel:					
Wedge gate 1/-----	1,640	1,161	1,025	269	290
Globe 2/-----	333	287	247	62	54
Swing check 2/-----	39	36	28	6	7
Total 1/-----	2,012	1,484	1,300	337	351
Alloy steel: 3/					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	***	***	***	***	***
Total-----	***	***	***	***	***
Stainless steel: 3/					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	***	***	***	***	***
Total-----	***	***	***	***	***
Grand total-----	2,439	1,779	1,539	401	413
	Value (1,000 dollars)				
Carbon steel:					
Wedge gate 1/-----	180,902	145,135	107,230	25,658	22,807
Globe 2/-----	54,118	54,185	36,303	10,012	9,136
Swing check 2/-----	16,844	14,196	9,694	2,352	2,174
Total 1/-----	251,864	213,516	153,227	38,022	34,117
Alloy steel: 3/					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	***	***	***	***	***
Total-----	***	***	***	***	***
Stainless steel: 3/					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	***	***	***	***	***
Total-----	***	***	***	***	***
Grand total-----	319,320	277,101	204,389	51,325	45,975

See footnotes at end of table.

Table 7.--Certain steel valves: U.S. producers' domestic shipments, by types, 1981-83, January-March 1983, and January-March 1984--Continued

Type of valves	1981	1982	1983	January-March--	
				1983	1984
	Unit value (per valve)				
Carbon steel:					
Wedge gate <u>1/</u> -----	\$110.31	\$125.01	\$104.61	\$95.38	\$78.64
Globe <u>2/</u> -----	162.52	188.80	146.98	161.48	169.19
Swing check <u>2/</u> -----	431.90	394.33	346.21	392.00	310.57
Average <u>1/</u> -----	125.18	143.88	117.87	112.82	97.20
Alloy steel: <u>3/</u>					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	***	***	***	***	***
Average <u>1/</u> -----	***	***	***	***	***
Stainless steel: <u>3/</u>					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	***	***	***	***	***
Average-----	***	***	***	***	***
Average, all types-----	\$130.92	\$155.76	\$132.81	\$127.99	\$111.32

1/ Includes undetermined amounts of alloy steel and stainless steel wedge gate, globe, and swing check valves, and carbon steel globe and swing check valves.

2/ Includes undetermined amounts of alloy steel valves.

3/ An undetermined amount of shipments of these valves is classified under the corresponding carbon steel valve type.

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

Information obtained from the Valve Manufacturers Association indicates that domestic producers' shipments of all industrial valves declined from \$2.90 billion in 1981 to \$2.66 billion in 1982 and \$2.24 billion in 1983. Information concerning domestic producers' shipments (including exports) of HPB, ball, and lined plug valves was also provided by the Valve Manufacturers Association; this information and information on steel wedge gate, globe, and swing check valves obtained in this investigation are presented in table 8.

Table 8.—Certain steel valves: U.S. producers shipments, 1/
by types, 1981-83

Type	1981	1982	1983
Quantity (1,000 units)			
Steel wedge gate, globe, and swing check-----	2,556	1,880	1,633
HPB-----	***	***	***
Steel ball-----	***	***	***
Lined plug-----	***	***	***
Total-----	***	***	***
Value (1,000 dollars)			
Steel wedge gate, globe, and swing check-----	345,985	306,653	228,325
HPB-----	***	***	***
Steel ball-----	***	***	***
Lined plug-----	***	***	***
Total-----	***	***	***

1/ Includes exports.

Source: Valve Manufacturers Association, and compilations from responses to questionnaires of the U.S. International Trade Commission.

U.S. producers' exports

U.S. producers' exports of the nine types of valves for which data were collected decreased from 117,000 valves in 1981 to 101,000 valves in 1982, or by 13.7 percent (table 9). Exports declined to 94,000 valves in 1983, or by 6.9 percent, compared with the 1982 level. Exports during January-March 1984 amounted to 25,000 valves, representing a decrease of 3.8 percent compared with the level in the corresponding period of 1983. Principal destinations of exports in recent years have been the Middle East and Western Europe.

Table 9.--Certain steel valves: U.S. producers' exports, by types, 1981-83, January-March 1983, and January-March 1984

Type	1981	1982	1983	January-March--	
				1983	1984
Quantity (1,000 units)					
Carbon steel:					
Wedge gate 1/-----	74	59	50	15	15
Globe 2/-----	20	19	23	6	6
Swing check 2/-----	1	1	1	3/	3/
Total-----	95	79	74	21	21
Alloy steel: 4/					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	3/	3/
Swing check-----	3/	3/	3/	3/	3/
Total-----	***	***	***	***	***
Stainless steel: 4/					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	***	***	***	3/	3/
Total-----	***	***	***	***	***
Grand total-----	117	101	94	26	25
Value (1,000 dollars)					
Carbon steel:					
Wedge gate 1/-----	14,378	15,209	10,313	3,447	2,210
Globe 2/-----	7,172	7,547	***	1,858	1,652
Swing check 2/-----	1,075	882	***	261	178
Total-----	22,625	23,638	18,267	5,566	4,040
Alloy steel: 4/					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	***	***	***	***	***
Total-----	***	***	***	***	***
Stainless steel: 4/					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	***	***	***	***	***
Total-----	***	***	***	***	***
Grand total-----	26,665	29,552	23,936	7,561	5,145

1/ Includes undetermined amounts of alloy steel and stainless steel wedge gate, globe, and swing check valves, and carbon steel globe and swing check valves.

2/ Includes undetermined amounts of alloy steel valves.

3/ * * *.

4/ An undetermined amount of exports of these valves is classified under the corresponding carbon steel valve type.

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

U.S. producers' exports of parts of the subject valves, as reported in responses to questionnaires of the Commission, increased from * * * in 1983.

U.S. producers' inventories

End-of-period inventories of the reporting U.S. producers increased from 342,000 valves in 1980 to 393,000 valves in 1981, decreased to 378,000 valves in 1982, and increased to 408,000 valves in 1983. Inventories on March 31, 1984, totaled 372,000 valves, representing a decrease of 5.3 percent from the corresponding date in 1983 (table 10). Inventories as a share of shipments increased from 16.1 percent in 1981 to 21.2 percent in 1982 and 26.5 percent in 1983.

U.S. producers' employment and wages

The number of production and related workers engaged in the production of the subject valves declined from 3,382 in 1981 to 2,994 in 1982, or by 11.5 percent, and declined to 2,130 in 1983, or by 28.9 percent, in that year (table 11). The number of production and related workers was 1,971 during January-March 1984, representing a decline of 12.9 percent from the corresponding period in 1983. The number of production and related workers producing all products in establishments where the subject valves are produced decreased from 6,698 in 1981 to 5,794 in 1982, or by 13.5 percent, and declined to 4,267 in 1983, or by 26.4 percent in that year.

The number of hours worked by production and related workers engaged in the production of the subject valves decreased from 6.5 million in 1981 to 5.4 million in 1982, or by 17.7 percent, and declined to 3.9 million hours in 1983, or by 27.7 percent, in that year.

Table 10.--Certain steel valves: U.S. producers' end-of-period inventories and inventories as a share of domestic shipments, Dec. 31 of 1980-83, Mar. 31, 1983, and Mar. 31, 1984

Type	Dec. 31--				Mar. 31--	
	1980	1981	1982	1983	1983	1984
Inventories (1,000 units)						
Carbon steel: <u>1/</u>						
Wedge gate-----	269	307	303	328	304	295
Globe-----	33	33	26	35	37	34
Swing check-----	2	3	6	5	4	3
Total-----	304	343	335	368	345	332
Alloy steel: <u>2/</u>						
Wedge gate-----	***	***	***	***	***	***
Globe-----	***	***	***	***	***	***
Swing check-----	3/	3/	3/	3/	3/	3/
Total-----	***	***	***	***	***	***
Stainless steel: <u>2/</u>						
Wedge gate-----	***	***	***	***	***	***
Globe-----	***	***	***	***	***	***
Swing check-----	***	***	***	***	***	***
Total-----	***	***	***	***	***	***
Grand total-----	342	393	378	408	393	372
Percent of total						
Carbon steel:						
Wedge gate-----	<u>4/</u>	18.7	26.1	32.0	<u>5/</u> 28.3	<u>5/</u> 25.4
Globe-----	<u>4/</u>	9.9	9.1	14.2	<u>5/</u> 14.9	<u>5/</u> 15.7
Swing check-----	<u>4/</u>	7.7	16.7	17.9	<u>5/</u> 16.7	<u>5/</u> 10.7
Average-----	<u>4/</u>	17.0	22.6	28.3	<u>5/</u> 25.6	<u>5/</u> 23.6
Alloy steel:						
Wedge gate-----	<u>4/</u>	***	***	***	<u>5/</u> ***	<u>5/</u> ***
Globe-----	<u>4/</u>	***	***	***	<u>5/</u> ***	<u>5/</u> ***
Swing check-----	<u>4/</u>	***	***	***	<u>5/</u> ***	<u>5/</u> ***
Average-----	<u>4/</u>	***	***	***	<u>5/</u> ***	<u>5/</u> ***
Stainless steel:						
Wedge gate-----	<u>4/</u>	***	***	***	<u>5/</u> ***	<u>5/</u> ***
Globe-----	<u>4/</u>	***	***	***	<u>5/</u> ***	<u>5/</u> ***
Swing check-----	<u>4/</u>	***	***	***	<u>5/</u> ***	<u>5/</u> ***
Average-----	<u>4/</u>	***	***	***	<u>5/</u> ***	<u>5/</u> ***
Average, all of the above-----	<u>4/</u>	16.1	21.2	26.5	<u>5/</u> 24.5	<u>5/</u> 22.5

1/ Includes undetermined amounts of alloy and stainless steel valves.

2/ An undetermined amount of inventory of these valves is classified under the corresponding carbon steel valve type.

3/ * * *.

4/ Not available.

5/ Based on annualized shipment data.

Table 11.--Average number of employees and production and related workers employed in establishments producing certain steel valves, and hours worked by such production and related workers, 1981-83, January-March 1983, and January-March 1984

Item	1981	1982	1983	January-March	
				1983	1984
All persons employed in the reporting establishments-----	10,842	9,228	7,533	7,776	6,903
Production and related workers producing:					
All products-----	6,698	5,794	4,267	4,456	3,926
Wedge gate, globe, and swing check valves:					
Carbon steel <u>1</u> /-----	1,450	1,232	802	890	741
Alloy steel <u>2</u> /-----	***	***	***	***	***
Stainless steel-----	***	***	***	***	***
Total <u>3</u> /-----	3,382	2,994	2,130	2,264	1,971
Hours worked by production and related workers producing:					
All products-----1,000 hours--	15,230	12,600	10,508	2,609	2,471
Wedge gate, globe, and swing check valves:					
Carbon steel <u>1</u> /-----					
1,000 hours--	3,070	2,482	1,719	495	468
Alloy steel <u>2</u> /-----do-----	***	***	***	***	***
Stainless steel-----do-----	***	***	***	***	***
Total <u>4</u> /-----do-----	6,543	5,384	3,892	1,042	1,032

1/ Includes some data on alloy steel valves.

2/ Some alloy steel valve data are reported under carbon steel valves.

3/ Includes production and related workers producing unspecified steel valves.

4/ Includes hours worked by production and related workers on unspecified steel valves.

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

Production and related workers producing the subject products are represented by the following unions: the United Steelworkers of America (six reporting firms), the International Association of Machinists and Aerospace Workers (four reporting firms), the International Brotherhood of Boilermakers

(one firm), the International Diesinkers (one firm), the I.V.E. (one firm), and an unspecified union (one firm). In some firms, workers belong to more than one union. Six firms reported that their workers are not unionized.

Data on wages of production and related workers producing the subject products are shown in table 12.

Table 12.--Wages paid and average hourly wages of production and related workers producing the subject products, 1981-83, January-March 1983, and January-March 1984

Type of valves	1981	1982	1983	January-March--	
				1983	1984
	Wages paid (1,000 dollars)				
Carbon steel 1/-----	22,452	19,677	14,385	3,889	3,706
Alloy steel 2/-----	***	***	***	***	***
Stainless steel-----	***	***	***	***	***
Total 3/-----	58,536	52,024	37,646	9,951	9,796
	Average hourly wage				
Carbon steel-----	4/	4/	4/	4/	4/
Alloy steel-----	4/	4/	4/	4/	4/
Stainless steel-----	4/	4/	4/	4/	4/
Total-----	\$8.95	\$9.66	\$9.67	\$9.55	\$9.49

1/ Includes some wages paid on alloy steel valve operations.

2/ Some alloy steel wage data are reported under carbon steel valves.

3/ Includes wages paid for production of unspecified steel valves.

4/ Not applicable due to differences in methodology used by respondents in response to questions on wages paid and on hours worked.

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

Financial experience of U.S. producers

Steel valve operations.--The Commission requested separate income-and-loss data on U.S. producers' operations on (1) carbon steel, (2) alloy steel, and (3) stainless steel wedge gate, globe, and swing check valves, and certain parts thereof. Only four producers, accounting for * * * percent of U.S. shipments of the subject alloy steel valves in 1983, provided separate data on their alloy steel valve operations. The data for one of the four, * * *, which accounted for * * * percent of the four companies' total

sales of the subject alloy steel valves in 1983, reflected a pattern that was similar to the company's financial experience on its carbon steel valve operations. Another producer, * * *, submitted combined income-and-loss data for its carbon and alloy steel valve operations. Hence, income-and-loss data for carbon and alloy steel valves presented in this section have been combined.

Ten producers, accounting for 62 percent of total U.S. shipments of the subject carbon and alloy steel valves in 1983, provided income-and-loss data on their operations on carbon and alloy steel wedge gate, globe, and swing check valves, and certain parts thereof. Income-and-loss data were received from 10 firms which together accounted for 78 percent of U.S. shipments of stainless steel wedge gate, globe, and swing check valves and certain parts thereof in 1983.

Most of the machinery and equipment used to produce steel wedge gate, globe, and swing check valves are common to the production of all of these valves. Producers generally do not keep separate profit-and-loss data on each type of valve. The profit-and-loss data developed here by most companies are based on allocations and hence limited in their use as an absolute measure of profitability. However, if each producer was consistent from year to year in its use of its respective allocation base (and there is no evidence to the contrary), the data presented in this section should represent a reasonable profit trend on each product line.

Aggregate net sales of the subject steel valves increased slightly, by 2 percent, from \$254.7 million in 1981 to \$259.3 million in 1982, and then declined to \$185.3 million in 1983, or by 27 percent below the level in 1981 (table 13). During the interim period ending March 31, 1984, net sales dropped by 16 percent to \$89.8 million compared with \$106.8 million in the corresponding period of 1983.

Aggregate operating income on the subject steel valves declined by 56 percent, from \$23.3 million, or 9.2 percent of net sales, in 1981 to \$10.2 million, or 3.9 percent of net sales, in 1982, despite increasing sales. In 1983, the industry reported an operating loss of \$737,000, equivalent to 0.4 percent of net sales. During the interim period ended March 31, 1984, U.S. producers reported an aggregate operating income of \$4.2 million, equivalent to 4.7 percent of net sales compared with such income of \$6.6 million, or 6.2 percent of net sales, in the corresponding period of 1983. Gross profit and pretax income-or-loss margins followed a trend similar to that of operating income-or-loss margins except in the interim period ended March 31, 1984, when pretax income margin slightly increased due to the other income of \$1.2 million reported in that period.

Table 13.--Income-and-loss experience of U.S. producers on their operations on certain steel valves and certain parts thereof, by types of steel, accounting years 1981-83, interim period 1983, and interim period 1984

Item and period	Net sales	Cost of goods sold	Gross profit	General, selling, and administrative expenses	Operating income or (loss)	Interest expense	Other income or (expense), net	Net income or (loss) before taxes	Ratio to net sales of--			Cash flow or (deficit) from operations
									Gross profit	Operating income or (loss)	Pretax net income or (loss)	
												1,000 dollars
												Percent--
												dollars
Carbon and alloy steel: 1/												
1981-----	213,768	161,377	52,391	31,638	20,753	987	(850)	18,916	24.5	9.7	8.8	22,955
1982-----	215,903	173,037	42,866	30,482	12,384	1,033	(1,297)	10,054	19.9	5.7	4.7	14,467
1983-----	150,911	123,480	27,431	24,317	3,114	1,285	(5,185)	(3,356)	18.2	2.1	(2.2)	1,187
Interim period ended:												
Mar. 31-- 2/	94,796	71,945	22,851	16,006	6,845	914	(152)	5,779	24.1	7.2	6.1	8,168
1984-----	81,135	62,876	18,259	13,894	4,365	737	1,172	4,800	22.5	5.4	5.9	7,375
Stainless steel: 3/												
1981-----	40,934	31,318	9,616	7,022	2,594	692	344	2,246	23.5	6.3	5.5	3,654
1982-----	43,417	37,432	5,985	8,199	(2,214)	594	(159)	(2,967)	13.8	(5.1)	(6.8)	(1,377)
1983-----	34,432	30,526	3,906	7,757	(3,851)	500	349	(4,002)	11.3	(11.2)	(11.6)	(2,248)
Interim period ended:												
Mar. 31-- 4/	12,044	9,800	2,244	2,505	(261)	294	(9)	(564)	18.6	(2.2)	(4.7)	(80)
1983-----	8,711	7,130	1,581	1,710	(129)	220	33	(316)	18.1	(1.5)	(3.6)	146
Total:												
1981-----	254,702	192,695	62,007	38,660	23,347	1,679	(506)	21,162	24.3	9.2	8.3	26,609
1982-----	259,320	210,469	48,851	38,681	10,170	1,627	(1,456)	7,087	18.8	3.9	2.7	13,090
1983-----	185,343	154,006	31,337	32,074	(737)	1,785	(4,836)	(7,358)	16.9	(0.4)	(4.0)	(1,061)
Interim period ended:												
Mar. 31--	106,840	81,745	25,095	18,511	6,584	1,208	(161)	5,215	23.5	6.2	4.9	8,088
1983-----	89,846	70,006	19,840	15,604	4,236	957	1,205	4,484	22.1	4.7	5.0	7,521

1/ Data for 10 firms which together accounted for 62 percent of U.S. shipments of the subject carbon and alloy steel valves in 1983. 1 firm, **, did not report data for 1981.

2/ 1 firm, **, did not report data for the 1983 interim period; hence it is not included in the interim data.

3/ Data for 10 firms which together accounted for 78 percent of U.S. shipments of the subject stainless steel valves in 1983. 1 firm, **, did not report data for 1981.

4/ 1 firm, **, did not report data for the 1983 interim period and had no activity for the 1984 interim period.

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

The trends for carbon and alloy steel valves' and stainless steel valves' net sales and operating income were the same as total valves' net sales except during the interim period ended March 31, 1984, when stainless steel valve operations showed a reduction of over 50 percent of their operating losses, despite rapidly declining sales. Stainless steel valve operations suffered a more severe decline in profitability, with U.S. producers sustaining losses in 1982 and increasing losses in 1983.

***, which represented *** percent of the value of U.S. producers' shipments in 1983, instead of providing its requested income-and-loss data in the questionnaire, submitted indexes of net income before income taxes for its fiscal years 1979-83, which are presented below (1979=100):

Item	:	1979	:	1980	:	1981	:	1982	:	1983
Carbon steel valves-----	:	100.0	:	***	:	***	:	***	:	***
Stainless steel valves-----	:	100.0	:	***	:	***	:	***	:	***

These indexes indicated that *** experienced *** on both its carbon and stainless steel valve operations in 1983.

***, which accounted for *** percent of the value of U.S. producers' shipments of the subject carbon steel valves in 1983, started its manufacturing operation in 1980 and reported the following financial data on its carbon steel valves which are not included in the aggregate data:

Item	:	1981	:	1982	:	1983	:	Interim period ended Mar. 31--	
	:		:		:		:	1983	1984
Net sales-----1,000 dollars--	:	***	:	***	:	***	:	***	***
Operating loss-----do-----	:	***	:	***	:	***	:	***	***
Ratio of operating loss to net sales-----percent--	:	***	:	***	:	***	:	***	***

The following tabulation shows the ratio of operating income or (loss) to net sales for the subject steel valves, all domestically produced valves, and all manufacturing corporations (in percent):

Item	1981	1982	1983
Certain steel valves-----	9.2	3.9	(0.4)
All domestically produced valves <u>1/</u> -----	12.6	8.9	6.2
All manufacturing corporations <u>2/</u> -----	6.8	5.1	5.7

1/ All valves--Annual Financial and Operating Ratio Study conducted by Peat, Marwick, Mitchell & Co. for the Valve Manufacturers Association, provided in chart 5 of the petitioners' posthearing brief.

2/ Averaged from data published in the Quarterly Financial Report by the Federal Trade Commission and the U.S. Department of Commerce, Bureau of the Census.

In 1982, producers of certain steel valves earned a lower operating income margin than did producers of all valves and also all manufacturing corporations, but in 1981, reported an average operating income margin higher than that of all manufacturing corporations but lower than that of all valves. In 1983, producers of certain steel valves sustained operating losses compared with the operating income margins earned by all valve producers and all manufacturing corporations.

Cash flow from operations.--Cash flow generated by reporting producers on their valve operations, by types of steel, is also shown in table 13. Cash flow from operations on the steel valves under investigation decreased from \$26.6 million in 1981 to \$13.1 million in 1982. In 1983, the industry reported a negative cash flow of \$1.1 million. Cash flow declined to \$7.5 million in the interim period of 1984 compared with \$8.1 million in the corresponding period of 1983.

Establishment operations.--The income-and-loss data for U.S. producers' establishments in which the subject steel valves and parts thereof are produced are presented in table 14. Total sales of the subject steel valves accounted for one-half or slightly more than one-half of establishment sales during 1981-83. The trends for overall establishment gross, operating, and pretax net income or loss ratios are similar to those for total subject steel valve operations during 1981 through March 31, 1984. However, operating income or loss margins on overall establishment operations were higher than those on total steel valve operations during 1981-83. During the interim period in 1984, operating income margin on overall establishment operations declined more slowly than that on total steel valves. From the 1983 interim period to the 1984 interim period, operating income (as a share of net sales) declined from 5.9 to 5.4 percent for establishment operations but from 6.2 to 4.7 percent for total steel valves.

Table 14.--Income-and-loss experience of U.S. producers ^{1/} on the overall operations of the establishments within which subject steel valves and parts thereof are produced, accounting years 1981-83, interim period 1983, and interim period 1984

Item	Net sales	Cost of goods sold	Gross profit	General, selling, and administrative expenses	Operating income or (loss)	Interest expense	Other income or (expense), net	Net income or (loss) before taxes	Ratio to net sales of--			Cash flow or (deficit) from operations
									Gross profit	Operating income (loss)	Pretax net income or (loss)	
1981-----	511,029	379,432	131,597	70,291	61,306	2,531	(2,230)	56,545	25.8	12.0	11.1	70,499
1982-----	482,916	378,995	103,921	71,900	32,021	2,455	53	29,619	21.5	6.6	6.1	44,974
1983-----	346,196	296,848	49,348	63,266	(13,918)	4,703	(12,909)	(31,530)	14.3	(4.0)	(9.1)	(14,981)
Interim period ended												
Mar. 31-- 2/												
1983-----	174,004	133,937	40,067	29,818	10,249	2,254	(428)	7,567	23.0	5.9	4.3	13,858
1984-----	155,311	120,424	34,887	26,559	8,328	1,662	2,061	8,727	22.5	5.4	5.6	14,973

^{1/} Data for 12 firms which accounted for 69 percent of U.S. producers' shipments of the subject steel valves in 1983.

^{2/} One firm, * * *, did not report data for the 1983 interim period; hence it is not included in interim data.

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

Research and development and capital expenditures.--U.S. producers' research and development and capital expenditures relative to their valve operations, by types of steel, are presented in table 15. Research and development expenses for total steel valves increased from \$2.3 million in 1981 to \$2.6 million in 1982 and then fell drastically by 70 percent to \$773,000 in 1983. Such expenditures dropped to \$128,000 during January-March 1984 compared with \$218,000 in the corresponding period of 1983.

Capital expenditures for land, buildings, and machinery and equipment used in the production of all steel valves declined from \$12.1 million in 1981 to \$4.3 million in 1983. Such expenditures further declined to \$667,000 during January-March 1984 compared with \$1.7 million in the corresponding period of 1983.

Impact of imports on domestic producers' growth, investment, and ability to raise capital

The Commission requested information on the negative effects of imports of certain steel valves and certain parts thereof subject to this investigation from Japan on producers' growth, investment, and ability to raise capital. The responding firms generally asserted that imports, especially from Japan, depressed the market selling price for the subject products in the United States; some firms drastically reduced their own prices to levels which were below their costs of production, which in turn resulted in losses. During the period under investigation, domestic producers lost their volume of sales, which forced them to reduce their operations to one shift. This caused a decline in their capacity utilization and forced them to close and/or consolidate some of the facilities and cancel their proposed expansion programs. Because of erosion in profitability, no internal funds were available for future investment to modernize the facilities. The depressed earnings made it difficult and costly to raise capital in the equity market. Two producers indicated that there is no economic reason for new growth or investment, because the future for the valve industry in the United States is very doubtful.

Table 15.--Certain steel valves and certain parts thereof: U.S. producers' research and development and capital expenditures, by types of steel, 1981-83, January-March 1983, and January-March 1984

(In thousands of dollars)			
Item and period	Research and development expenditures	Capital expenditures	
Carbon and alloy steel: <u>1/</u>			
1981-----	***		9,971
1982-----	***		6,230
1983-----	***		3,419
January-March--			
1983-----	***		1,199
1984-----	***		544
Stainless steel: <u>2/</u>			
1981-----	***		2,138
1982-----	***		1,832
1983-----	***		881
January-March--			
1983-----	***		487
1984-----	***		123
Total:			
1981-----	2,306		12,109
1982-----	2,572		8,062
1983-----	773		4,300
January-March--			
1983-----	218		1,686
1984-----	128		667

1/ Research and development expenditures reported by 7 firms, which together accounted for 25 percent of shipments of the subject carbon and alloy steel valves in 1983. Capital expenditures reported by 10 firms, which together accounted for 42 percent of shipments of the subject carbon and alloy steel valves in 1983.

2/ Research and development expenditures reported by 3 firms, which together accounted for * * * percent of shipments of the subject stainless steel valves in 1983. Capital expenditures reported by 7 firms, which together accounted for 63 percent of shipments of the subject stainless steel valves in 1983.

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

Consideration of the Threat of Material Injury

In its examination of the question of a reasonable indication of the threat of material injury to an industry in the United States, the Commission may take into consideration such factors as the rate of increase of the alleged LTFV imports, the rate of increase of U.S. market penetration by such imports, the quantities of such imports held in inventory in the United States, and the capacity of producers in Japan to generate exports (including the availability of export markets other than the United States).

Trends in imports and U.S. market penetration are discussed in the section of this report that addresses the causal relationship between the alleged injury and the imports allegedly sold at LTFV. Information regarding the capacity of the Japanese producers to generate exports appears in the section of this report on the industry in Japan.

U.S. importers' end-of-period inventories of the subject products are shown in table 16, which indicates that end-of-year inventories of the subject valves during the period under investigation decreased from a high of 78,900 valves in 1981 to a low of 38,500 valves in 1983. Inventories on March 31, 1984 were 40,400 valves, representing a decrease of 38.8 percent from the level of March 31, 1983.

Consideration of the Causal Relationship Between the LTFV Imports and the Alleged Material Injury

U.S. imports

Official import data of the U.S. Department of Commerce indicate that U.S. imports from Japan of iron and steel gate, globe, and check valves, and parts thereof, decreased from 18.4 million pounds, valued at \$40.6 million, in 1981, to 7.5 million pounds, valued at \$17.4 million, in 1983 (table 17). Total U.S. imports decreased from 72.0 million pounds, valued at \$167.8 million, in 1981, to 38.5 million pounds, valued at \$75.7 million, in 1983. However, the official data include iron valves, gate valves other than wedge gate, check valves other than swing check, and unfinished castings and other nonmachined parts, all of which are not subject to this investigation. Accordingly, import data shown in this report are from responses to questionnaires of the U.S. International Trade Commission.

Table 16.--Certain steel valves: U.S. importers' end-of-period inventories of imports from Japan, as of Dec. 31 of 1980-83, Mar. 31, 1983, and Mar. 31, 1984

(In thousands of units)							
Type	Dec. 31--				Mar. 31--		
	1980	1981	1982	1983	1983	1984	
Carbon steel: <u>1/</u>							
Wedge gate-----	***	***	***	***	***	***	***
Globe-----	***	***	***	***	***	***	***
Swing check-----	***	***	***	***	***	***	***
Total-----	***	***	***	***	***	***	***
Alloy steel: <u>2/</u>							
Wedge gate-----	***	***	***	***	***	***	***
Globe-----	<u>3/</u>	***	***	***	***	***	***
Swing check-----	***	***	***	***	***	***	***
Total-----	***	***	***	***	***	***	***
Stainless steel:							
Wedge gate-----	***	***	***	***	***	***	***
Globe-----	***	***	***	***	***	***	***
Swing check-----	***	***	***	***	***	***	***
Total-----	***	***	***	***	***	***	***
Grand total-----	63.7	78.9	72.2	38.5	66.1	40.4	

1/ Includes an undetermined amount of alloy steel valves.

2/ An undetermined amount of alloy steel valves are reported under carbon steel valves.

3/ * * *.

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 17.--Certain steel valves: 1/ U.S. imports for consumption, by principal sources, 1981-83, January-March 1983, and January-March 1984

Source	1981	1982	1983	January-March--	
				1983	1984
Quantity (1,000 pounds)					
Japan-----	18,377	14,784	7,463	2,596	2,635
Italy-----	13,825	11,027	5,709	1,868	1,603
United Kingdom-----	6,300	4,663	3,290	1,092	532
Canada-----	5,042	4,476	3,196	920	1,268
Mexico-----	3,626	5,865	5,409	926	1,588
All other-----	24,831	26,222	13,391	3,464	5,639
Total-----	72,001	67,037	38,457	10,865	12,995
Value (1,000 dollars)					
Japan-----	40,616	32,472	17,440	5,177	6,038
Italy-----	29,115	23,685	11,224	3,847	2,909
United Kingdom-----	16,966	20,199	8,687	4,616	1,199
Canada-----	12,098	12,603	7,279	2,091	2,906
Mexico-----	10,044	11,847	6,442	1,247	1,916
All other-----	58,942	68,140	24,643	9,153	5,628
Total-----	167,782	168,947	75,714	26,132	20,596
Unit value (per pound)					
Japan-----	\$2.21	\$2.20	\$2.34	\$1.99	\$2.29
Italy-----	2.11	2.15	1.97	2.06	1.82
United Kingdom-----	2.69	4.33	2.64	4.23	2.25
Canada-----	2.40	2.82	2.28	2.27	2.29
Mexico-----	2.77	2.02	1.19	1.35	1.21
All other-----	2.37	2.60	1.84	2.64	1.05
Total-----	2.33	2.52	1.97	2.41	1.58

1/ Hand-operated gate, globe, and check valves of iron or steel, and parts thereof.

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

According to responses to questionnaires of the U.S. International Trade Commission, U.S. imports from Japan 1/ of the subject valves decreased from 118,514 valves in 1981 to 78,130 valves in 1982, or by 34.1 percent, and decreased in 1983 to 41,581 valves, or 46.8 percent below the 1982 level. U.S. imports from Japan during January-March 1984 were 14,015 valves, or 18.4 percent above the 11,833 valves imported in the corresponding period of 1983 (table 18). U.S. imports from Japan of each of the nine types of valves decreased between 1981 and 1983, except for increases in imports of carbon steel globe valves.

The value of U.S. imports from Japan 1/ of the subject valves decreased from \$34.6 million in 1981 to \$25.9 million in 1982, or by 25.2 percent, and decreased again to \$8.4 million in 1983, or 67.4 percent below the 1982 level. The value of U.S. imports from Japan during January-March 1984 was \$3.4 million, representing an increase of 10.2 percent from the value in the corresponding period of 1983.

Japan accounted for approximately * * * percent of the quantity and * * * percent of the value of U.S. imports of the subject valves in 1983. Table 19 shows known imports of the subject valves from Japan and estimated imports of such valves from countries other than Japan according to data submitted in response to Commission questionnaires mailed principally to importers of Japanese valves. Principal sources of imports, by value, are apparently (in alphabetical order) Italy, Japan, the United Kingdom, and Yugoslavia.

1/ Excluding imports of TKM, which was excepted from Commerce's final determination.

Table 18.--Certain steel valves: U.S. imports 1/ from Japan, 1981-83,
January-March 1983, and January-March 1984

Type	1981	1982	1983	January-March--		
				1983	1984	
	Quantity (units)					
Carbon steel: 2/						
Wedge gate-----	68,729	40,193	23,504	***	***	
Globe-----	6,864	8,233	***	***	***	
Swing check-----	8,687	6,095	***	***	***	
Total-----	84,280	54,521	37,373	10,966	7,482	
Alloy steel: 3/						
Wedge gate-----	***	***	***	***	***	
Globe-----	***	***	***	***	***	
Swing check-----	***	***	***	***	***	
Grand total-----	***	***	***	***	***	
Stainless steel:						
Wedge gate-----	***	***	***	***	***	
Globe-----	***	***	***	***	***	
Swing check-----	***	***	***	***	***	
Total-----	***	***	***	***	***	
Grand total-----	118,514	78,130	41,581	11,833	14,015	
	Value (1,000 dollars)					
Carbon steel: 2/						
Wedge gate-----	22,285	18,985	5,669	***	***	
Globe-----	2,302	1,849	***	***	***	
Swing check-----	2,951	1,910	***	***	***	
Total-----	27,538	22,744	7,066	2,730	2,338	
Alloy steel: 3/						
Wedge gate-----	***	***	***	***	***	
Globe-----	***	***	***	***	***	
Swing check-----	***	***	***	***	***	
Total-----	***	***	***	***	***	
Stainless steel:						
Wedge gate-----	***	***	***	***	***	
Globe-----	***	***	***	***	***	
Swing check-----	***	***	***	***	***	
Total-----	***	***	***	***	***	
Grand total-----	34,648	25,929	8,449	3,046	3,356	

See footnotes at end of table.

Table 18.--Certain steel valves: U.S. imports 1/ from Japan, 1981-83, January-March 1983, and January-March 1984--Continued

Type	1981	1982	1983	January-March--	
				1983	1984
Unit value (per unit)					
Carbon steel: <u>2/</u>					
Wedge gate-----	\$324.24	\$472.35	\$241.19	***	***
Globe-----	335.37	224.58	***	***	***
Swing check-----	339.70	313.37	***	***	***
Average-----	326.73	417.16	189.07	\$248.95	\$312.48
Alloy steel: <u>3/</u>					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	***	***	***	***	***
Average-----	***	***	***	***	***
Stainless steel:					
Wedge gate-----	***	***	***	***	***
Globe-----	***	***	***	***	***
Swing check-----	***	***	***	***	***
Average-----	***	***	***	***	***
Average, all of the above---	\$292.35	\$331.87	\$203.19	\$257.42	\$239.46

1/ Excludes imports of TKM, which was excepted from Commerce's final determination.

2/ Includes an undetermined amount of alloy steel valves.

3/ An undetermined amount of alloy steel valves is included in carbon steel valves.

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

Table 19.--Certain steel valves: U.S. imports, by types of valves and by sources, 1981-83, January-March 1983, and January-March 1984

Type and source	1981	1982	1983	January-March--	
				1983	1984
Quantity (units)					
Carbon steel wedge gate, globe, and swing check valves: 1/					
Japan 2/-----	***	***	***	***	***
All other-----	***	3/ ***	***	***	***
Total-----	***	***	***	***	***
Alloy steel wedge gate, globe, and swing check valves: 4/					
Japan 2/-----	***	***	***	***	***
All other-----	***	***	***	***	***
Total-----	***	***	***	***	***
Stainless steel wedge gate, globe, and swing check valves:					
Japan 2/-----	***	***	***	***	***
All other-----	5/ ***	6/	5/ ***	5/ ***	5/ ***
Total-----	5/ ***	5/ ***	5/ ***	5/ ***	5/ ***
Total:					
Japan 2/-----	***	***	***	***	***
All other-----	5/ 222,412	5/ 200,854	5/ 217,342	5/ 50,609	5/ 62,226
Grand total-----	5/ ***	5/ ***	5/ ***	5/ ***	5/ ***
Value (1,000 dollars)					
Carbon steel wedge gate, globe, and swing check valves: 1/					
Japan 2/-----	***	***	***	***	***
All other-----	***	***	***	***	***
Total-----	***	***	***	***	***
Alloy steel wedge gate, globe, and swing check valves: 4/					
Japan 2/-----	***	***	***	***	***
All other-----	***	***	***	***	***
Total-----	***	***	***	***	***
Stainless steel wedge gate, globe, and swing check valves:					
Japan 2/-----	***	***	***	***	***
All other-----	***	***	***	***	***
Total-----	***	***	***	***	***

A-50

See footnotes at end of table.

Table 19.--Certain steel valves: U.S. imports, by types of valves and by sources, 1981-83, January-March 1983, and January-March 1984--Continued

Type and source	1981	1982	1983	January-March--	
				1983	1984
Value (1,000 dollars)					
Total:					
Japan <u>2</u> /-----	***	***	***	***	***
All other-----	49,257	39,875	22,650	4,871	5,602
Grand total-----	***	***	***	***	***
Unit value (per valve)					
Carbon steel wedge gate, globe, and swing check valves: <u>1</u> /					
Japan <u>2</u> /-----	***	***	***	***	***
All other-----	***	***	***	***	***
Average-----	***	***	***	***	***
Alloy steel wedge gate, globe, and swing check valves: <u>4</u> /					
Japan <u>2</u> /-----	***	***	***	***	***
All other-----	***	***	***	***	***
Average-----	***	***	***	***	***
Stainless steel wedge gate, globe, and swing check valves:					
Japan <u>2</u> /-----	***	***	***	***	***
All other-----	***	***	***	***	***
Average-----	***	***	***	***	***
Total:					
Japan <u>2</u> /-----	***	***	***	***	***
All other-----	\$221.47	\$198.53	\$104.21	\$96.25	\$90.03
Average-----	***	***	***	***	***

1/ Includes an undetermined amount of alloy steel valves.

2/ Includes imports of TKM.

3/ * * * did not report unit imports but did report value of imports.

4/ An undetermined amount of alloy steel valves is included in carbon steel valves.

5/ * * * did not report unit imports but did report value of imports.

6/ Not available.

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

Purchases of imports by U.S. producers

Five U.S. producers (***) are known to have imported steel valves during the period under investigation, and five U.S. producers (***) have imported certain parts of steel valves.

Table 20 shows U.S. producers' imports of steel valves and certain parts of steel valves. Imports of steel valves decreased from *** units in 1981 to 13,000 units in 1982 and then increased to *** units in 1983. The large increase in unit imports in 1983 and most of the unit imports in January-March 1984 were due to purchases of *** valves from *** by ***. The value of U.S. producers' imports of steel valves decreased from *** in 1981 to \$4.7 million in 1982 and \$2.7 million in 1983. U.S. producers' imports of steel valves *** in January-March 1984 compared with that in the corresponding period of 1983.

U.S. producers' imports of certain parts of steel valves *** in 1981 to *** in 1982 and *** in 1983. Imports of certain parts in January-March 1984 totaled ***, representing *** of such parts imported during the corresponding period of 1983.

Total U.S. producers' imports of steel valves and certain parts of steel valves increased from \$24.7 million in 1981 to *** in 1982 and decreased to *** in 1983. Imports totaled \$3.9 million in January-March 1984. U.S. producers' imports of steel valves in 1983 represented *** percent by quantity and 1.3 percent by value of U.S. producers' domestic shipments in that year and *** percent by quantity and *** percent by value of total U.S. imports of the subject valves. U.S. producers' imports of certain parts of the subject valves in 1983 represented *** percent of the value of U.S. producers' domestic shipments of the subject valves; this excludes data on imports of castings and all other parts that are nonmachined valve bodies, since these articles are not the subject of this investigation.

Table 20.--Certain steel valves and certain parts thereof: U.S. producers' imports, 1981-83, January-March 1983, and January-March 1984

Item	1981	1982	1983	January-March--	
				1983	1984
Certain steel valves:					
From Japan:					
Quantity---1,000 units--:	0	***	***	***	<u>1/</u>
Value---1,000 dollars--:	-	***	***	***	***
Unit value---per valve--:	-	***	***	***	***
From all other countries:					
Quantity---1,000 units--:	***	<u>2/</u> ***	***	***	***
Value---1,000 dollars--:	***	***	***	***	***
Unit value---per valve--:	***	<u>2/</u> ***	***	***	***
Total:					
Quantity---1,000 units--:	***	<u>1/</u> 13	***	***	***
Value---1,000 dollars--:	***	4,687	2,692	644	***
Unit value---per valve--:	***	<u>2/</u> \$361	***	***	***
Certain parts of steel valves:					
From Japan:					
Quantity--1,000 pounds--:	***	***	297	***	***
Value---1,000 dollars--:	***	***	532	***	***
Unit value---per pound--:	***	***	\$1.79	***	***
From all other countries:					
Quantity--1,000 pounds--:	<u>3/</u> ***	***	***	***	***
Value---1,000 dollars--:	<u>3/</u> ***	***	***	***	***
Unit value---per pound--:	<u>3/</u> ***	***	***	***	***
Total:					
Quantity--1,000 pounds--:	<u>3/</u> ***	***	***	***	***
Value---1,000 dollars--:	<u>3/</u> ***	***	***	***	***
Unit value---per pound--:	<u>3/</u> ***	***	***	***	***
Total, certain steel valves and certain parts thereof:					
Value---1,000 dollars--:	<u>3/</u> 24,660	***	***	***	3,880

1/ * * *.2/ * * * did not report its quantity of imports for 1982.3/ * * * did not report its imports of parts of valves for 1981.

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

The four major U.S. producers that imported steel valves or certain parts of valves during the period under investigation were * * *. * * *'s imports of valves are shown in the following tabulation:

Period	Quantity	Value
	<u>1,000 units</u>	<u>1,000 dollars</u>
1981-----	***	***
1982-----	***	***
1983-----	***	***
January-March--		
1983-----	***	***
1984-----	***	***

All of * * * imports of valves are * * *. * * *'s imports consist of * * *.

* * * imports * * *. * * *'s imports of these parts are shown in the following tabulation:

Period	Quantity	Value
	<u>1,000 pounds</u>	<u>1,000 dollars</u>
1981-----	***	***
1982-----	***	***
1983-----	***	***
January-March--		
1983-----	***	***
1984-----	***	***

Japan accounted for * * * percent of the quantity and * * * percent of the value of * * *'s imports of the subject parts in 1983.

* * * has imported steel valves but not parts of such valves. * * *'s imports are shown in the following tabulation:

Period	Quantity		Value	
	<u>1,000 units</u>		<u>1,000 dollars</u>	
1981-----	***	***	***	***
1982-----	***	***	***	***
1983-----	***	***	***	***
January-March--				
1983-----	<u>1/</u>			***
1984-----	***	***	***	***
<u>1/</u> * * *.				

All of * * * 's imports of valves were from * * *. Most of the valves consisted of * * *. * * * 's imports of the subject valves between 1981 and 1983 were * * * percent of the quantity and * * * percent of the value of shipments of * * *. However, * * * 's imports of valves never * * *. 1/

* * * 's imports of steel valves (all from * * *) and certain parts of steel valves (all from * * *) are shown in the following tabulation:

Period	Valves		Parts of valves	
	Quantity	Value	Quantity	Value
	<u>1,000 units</u>	<u>1,000 dollars</u>	<u>1,000 pounds</u>	<u>1,000 dollars</u>
1981-----	***	***	<u>1/</u>	<u>1/</u>
1982-----	<u>1/</u>	***	***	***
1983-----	***	***	***	***
January-March--				
1983-----	***	***	***	***
1984-----	***	***	***	***
<u>1/</u> Not available.				

In addition to those U.S. producers which import either steel valves or certain parts of steel valves, some U.S. producers import unfinished castings, forgings, or other parts for use in their manufacture of steel valves. * * * imported nearly * * * pounds of such parts, valued at nearly * * *, during 1981-83. The Wm. Powell Co. is now importing component rough castings from * * * for 3- to 8-inch carbon steel gate valves "in order to try to survive

as a domestic steel valve manufacturer." 1/ * * * imports castings from * * *. Rockwell has allegedly solicited bids from Hitachi Metals America for steel valve castings, 2/ and Stockham allegedly solicited a quote from Hitachi for valve body castings but allegedly informed Hitachi that it could obtain the castings at a much lower price from Israel. 3/ * * * imports castings from * * *. * * * imports castings and forgings from several different countries. A representative of * * * has indicated that * * * is considering importing valves or parts of valves in the future.

Counsel for Hitachi claims that the domestic producers' purchases of imported components have led to a substantial reduction of U.S. value added, 4/ and that most, if not all, the domestic producers are now assembling rather than manufacturing. 5/ A number of the domestic producers are indeed utilizing imported components, especially castings or forgings (few, if any, of these are imported from Japan). This use of imported castings may have led to some decrease in employment in the domestic producers' foundries. However, it appears that the domestic producers are not merely assemblers of the subject valves. The imported castings undergo finishing in the United States, and a number of domestic producers still use domestic castings and perform all the finishing operations in the United States. Most of the value added still occurs in the United States.

Market penetration of imports

Imports 6/ of the subject valves from Japan as a share of apparent U.S. consumption are shown in table 21. Japan's share of consumption decreased from 4.3 percent in 1981 to 3.8 percent in 1982 and 2.3 percent in 1983. The share during the January-March 1984 period was 2.9 percent compared with 2.5 percent in the corresponding period of 1983.

The ratio of imports of the subject valves from Japan to U.S. producers' domestic shipments decreased from 4.9 percent in 1981 to 4.4 percent in 1982 and 2.7 percent in 1983. The ratio was 3.0 percent in January-March 1983 and 3.4 percent in January-March 1984.

1/ Transcript of the hearing, p. 98.

2/ Posthearing brief of Hitachi, app. 1.

3/ Transcript of the hearing, p. 160.

4/ Transcript of the hearing, p. 159.

5/ Ibid.

6/ Excluding imports of TKM, which was excepted from Commerce's final determination.

Table 21.--Certain steel valves: U.S. producers' domestic shipments, U.S. importers' shipments, apparent U.S. consumption, and imports 1/ from Japan, by types of valves, 1981-83, January-March 1983, and January-March 1984

Item and period	U.S. producers' domestic shipments	U.S. importers' shipments			Apparent consumption	Imports from Japan	Ratio of imports from Japan to--	
		From Japan	From all other countries	Total			Domestic shipments	Apparent consumption
		1,000 valves					Percent	
Carbon steel wedge gate, globe, and swing check valves:								
1981-----	2,012	***	***	***	***	84	4.2	***
1982-----	1,484	***	***	***	***	55	3.7	***
1983-----	1,300	***	***	***	***	37	2.8	***
January-March--								
1983-----	337	***	***	***	***	11	3.3	***
1984-----	351	***	***	***	***	7	2.0	***
Alloy steel wedge gate, globe, and swing check valves:								
1981-----	***	***	***	***	***	***	***	***
1982-----	***	***	***	***	***	***	***	***
1983-----	***	***	***	***	***	2/	3/	3/
January-March--								
1983-----	***	***	***	***	***	2/	3/	3/
1984-----	***	***	***	***	***	2/	3/	3/
Stainless steel wedge gate, globe, and swing check valves:								
1981-----	***	***	***	***	***	***	***	***
1982-----	***	***	***	***	***	***	***	***
1983-----	***	***	***	***	***	***	***	***
January-March--								
1983-----	***	***	2/	***	***	***	***	***
1984-----	***	***	2/	***	***	***	***	***
Total:								
1981-----	2,439	112	197	309	2,748	119	4.9	4.3
1982-----	1,779	98	174	272	2,051	78	4.4	3.8
1983-----	1,539	89	214	303	1,842	42	2.7	2.3
January-March--								
1983-----	401	26	60	86	487	12	3.0	2.5
1984-----	413	24	47	71	484	14	3.4	2.9

1/ Excludes imports of TKM, which was excepted from Commerce's final determination.

2/ * * *

3/ Not available.

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.

The ratios shown in table 21 are based on quantity of valves, not on value. Accordingly, the table understates the Japanese penetration ratios in the market for cast steel valves of 2 inches and above--most of the quantity of domestically produced valves consists of forged valves of 2 inches and smaller, and most of the valves imported from Japan are cast valves of 2 inches and larger. The ratios based on value are shown in table 22.

Of 13 purchasers of the subject valves responding to a question in the Commission's purchasers questionnaire on "factors. . .in your firm's decision to purchase the subject valves from Japan in lieu of those produced in the United States," 12 indicated that price was very important in their decision to purchase the subject valves from Japan; 10 indicated that delivery time was very important; and 9 indicated that quality was very important. Credit terms and "traditional source" were not generally considered to be important factors in purchase decisions.

Eight of 16 purchasers indicated that the Japanese valves were equal in quality with that of the domestically produced valves, 7 indicated that they were equal or better, and one indicated that they were generally of higher quality compared with that of the domestically produced valves.

Twelve of 16 end users and distributors responded in the affirmative to the question "In your market area(s), can you identify a particular supplier of the subject products that has been most aggressive in terms of price competition." Suppliers named as being most aggressive in terms of price competition were Zidell (seven times) (Zidell's valves are imported not only from Japan, but also from China and Italy), Kitz (three times), TKM (three times), Raimondi (Italy) (three times), Hitachi (two times), Newmans (an importer of valves from * * *) (two times), and Lunkenheimer (Yugoslavia), NIBCO (U.S.), Velan (U.S.), * * * (U.S.), * * * (Italy), * * *, and * * * (unknown), all one time each.

The possible existence of a "two-tier" market, i.e., a market for domestic valves at one price level and set of customers and a market for imported valves at another price level and set of customers, was one of the topics discussed at the public hearing. A telephone survey was subsequently made by the Commission staff to 15 major distributors and buyers of the subject valves to solicit their views on the possible existence of a two-tier market. Most of the persons contacted confirmed the existence of a two-tier market based on user preference, i.e., the fact that some end users prefer to buy domestic valves or will buy only domestic valves regardless of any price premium they may have to pay. However, this "Buy American" attitude is apparently not as prevalent as in the past. Many end users may pay a premium for domestic valves (and do so), but will buy Japanese or other imported valves if the price is right (assuming that the quality and delivery times of the imported valves are acceptable). Japanese cast steel valves are apparently available for most applications, and are acceptable to many, if not most, buyers in the market, based on price, quality, and delivery considerations.

Table 22.--Certain steel valves: U.S. producers' domestic shipments, U.S. importers' shipments, apparent U.S. consumption, and imports 1/ from Japan, by types of valves, 1981-83, January-March 1983, and January-March 1984

Item and period	10 U.S. producers' domestic shipments	U.S. importers' shipments			Apparent consumption	Imports from Japan	Ratio of imports from Japan to--	
		From Japan	From all other countries	Total			Domestic shipments	Apparent consumption
		1,000 dollars					Percent	
Carbon steel wedge gate, globe, and swing check valves:								
1981-----	251,864	***	***	90,259	342,123	27,538	10.9	8.0
1982-----	213,516	***	***	73,825	287,341	22,744	10.7	7.9
1983-----	153,227	***	***	51,801	205,028	7,066	4.6	3.4
January-March--								
1983-----	38,022	***	***	16,186	54,208	2,730	7.2	5.0
1984-----	34,117	***	***	14,709	48,826	2,338	6.9	4.8
Alloy steel wedge gate, globe, and swing check valves:								
1981-----	15,338	***	***	***	***	***	***	***
1982-----	15,020	***	***	***	***	***	***	***
1983-----	11,569	***	***	***	***	***	***	***
January-March--								
1983-----	3,139	***	***	***	***	***	***	***
1984-----	2,774	***	***	***	***	***	***	***
Stainless steel wedge gate, globe, and swing check valves:								
1981-----	52,118	***	***	***	***	***	***	***
1982-----	48,565	***	***	***	***	***	***	***
1983-----	39,593	***	***	***	***	***	***	***
January-March--								
1983-----	10,164	***	***	***	***	***	***	***
1984-----	9,084	***	***	***	***	***	***	***
Total:								
1981-----	319,320	45,425	57,025	102,450	421,770	34,648	10.9	8.2
1982-----	277,101	41,238	43,464	84,702	361,803	25,929	9.4	7.2
1983-----	204,389	28,618	32,814	61,432	265,821	8,449	4.1	3.2
January-March--								
1983-----	51,325	10,241	8,327	18,568	69,893	3,046	5.9	4.4
1984-----	45,975	9,188	8,054	17,242	63,217	3,356	7.3	5.3

1/ Excludes imports of TKM, which was excepted from Commerce's final determination.

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.

Prices

Domestic producers and importers have both been discounting significantly from published list prices on sales of standard types of valves throughout the investigation period. It has been a common practice in the industry to apply a series of discounts to the items that are being marketed. Thus, if the list price of a valve is \$100 and the customer is given a 20-percent discount and two additional 10-percent discounts, the price of the valve would first be reduced to \$80. This amount would then be lowered by 10 percent to \$72. The final 10-percent discount would reduce the price to \$64.80. The actual size and number of discounts in a given transaction would depend upon the type of valve and the overall size of the sale.

Because of the many types of valves that are sold in the United States, it was necessary to select some standard types of gate, globe, and check valves for use in price comparisons. Five basic items were chosen. These included a cast, 4-inch, 150-pound carbon steel wedge gate valve, a stainless steel wedge gate valve with the same characteristics, a forged, 2-inch, 800-pound wedge gate valve, a cast 6-inch, 600-pound globe valve, and a cast, 4-inch, 150-pound swing check valve. Unlike the highly specialized valves that are sold to end-use customers under formal bidding arrangements, all of these valves are commonly marketed to distributors. Price information was requested from producers, importers, and purchasers by quarters for the period from January 1982 through March 1984. Nine producers, three importers, and several purchasers provided varying amounts of price data. ^{1/}

Despite problems posed by the wide ranges of prices reported by producers, importers, and purchasers for all types of valves, and the limited information that was obtained for some categories, the data were sufficient for examining trends and for comparing domestic prices with prices of imported valves from Japan. The evidence indicates that prices received by U.S. producers have declined significantly during the past 2 years. Industry sources have attributed the decline to a weakness in demand stemming from low levels of capital expenditures and new construction during 1982 and 1983 and intensified price competition from imports. The data also show that prices of imported valves from Japan have generally been lower than domestic prices during this period. Separate discussions of price trends and comparisons for each of the five types of valves for which information were requested are presented in the following sections.

^{1/} Seven producers and three importers provided both f.o.b. and delivered prices. The data indicate that transportation costs generally account for less than 4 percent of the delivered price and are a relatively unimportant factor with respect to competition between imports and domestically produced steel valves.

Cast carbon steel valves.--Weighted-average prices charged by domestic producers and importers for 4-inch, 150-pound cast carbon steel valves are presented in table 23. Prices reported by individual U.S. producers ranged widely during the period, from less than \$200 per unit to over \$700. Prices of imports from Japan, which were reported by three importers, also ranged widely, from about * * * to nearly twice this amount. The average domestic and import prices for these valves both registered significant declines during the 2-year period. The U.S. price fell steadily from * * * in January-March 1982 to * * * in July-September 1983. It recovered moderately to * * * in October-December 1983 and then fell back to * * * in January-March 1984. The price of the Japanese valves declined irregularly, by 41 percent, from * * * per unit in January-March 1982 to * * * in January-March 1984. Prices of Japanese valves were lower than prices of domestically produced valves in five of the eight quarters for which comparisons were possible. In July-September and October-December 1982, margins of underselling amounted to 13 and 14 percent, respectively. Between July-September 1983 and January-March 1984, the margin ranged from 4 to 15 percent.

Additional price information on these 4-inch, 150-pound, cast carbon valves was provided by three purchasers. Data provided by * * * show that the prices it paid for the domestically produced and Japanese valves that were delivered to its * * * location decreased sharply between 1982 and the early part of 1984, as shown in table 24. The price of the domestic valves decreased from * * * per unit in the second quarter of 1982 to * * * in January-March 1984, and the price of the imported valves decreased from * * * to * * * during this period. The Japanese price was well below the domestic price in all quarters. Another purchaser of these wedge gate valves, * * *, reported that prices paid for domestic valves at its * * *, location averaged * * * in 1982, * * * in 1983, and * * * in January-March 1984; delivered prices paid for Japanese valves in * * * averaged * * * in 1982, * * * in 1983, and * * * in January-March 1984. A third purchaser, * * *, reported a purchase price of * * * for domestic valves delivered to its * * *, location in January-March 1982. During this period, the delivered price of imported valves from Japan at * * * amounted to only * * *.

Forged wedge gate valves.--Although data were sufficient for developing a complete price series on domestically produced forged, 2-inch, 800-pound, wedge gate valves, prices of imports from Japan were only available for three quarters. Average domestic prices of these valves declined irregularly by * * * percent from * * * per unit in January-March 1982 to * * * in January-March 1984. Prices of the Japanese valves were lower than the domestic prices in the three quarters where comparisons were possible. In October-December 1982, the Japanese price of * * * was 5 percent lower than the U.S. price of * * *. In April-June of 1983, the Japanese price of * * * was 1 percent less than the U.S. price, and in October-December 1983, the Japanese price of * * * was 1 percent below the U.S. price.

Table 23.--Carbon steel wedge gate valves: Weighted-average prices reported by domestic producers and importers on sales of 4-inch, 150-pound, cast steel, WCB, flanged, wedge gate valves with standard trim, on sales to major customers 1/, by quarters, January 1982-March 1984

Period	(Per unit)							
	Domestically produced		Imported from Japan		Margins of underselling or overselling (-)			
	Range	Average	Range	Average	Amount	Percent		
1982:								
January-March-----	\$235-395	***	***	***	***	***	-9	
April-June-----	235-770	***	-	2/	2/	***	-	
July-September-----	235-564	***	***	***	***	***	13	
October-December-----	197-716	***	***	***	***	***	14	
1983:								
January-March-----	197-754	***	***	***	***	***	-11	
April-June-----	159-307	***	***	***	***	***	-60	
July-September-----	159-436	***	***	***	***	***	8	
October-December-----	189-247	***	***	***	***	***	15	
1984: January-March-----	159-219	***	***	***	***	***	4	

1/ Prices reported on an f.o.b. basis.

2/ Not available.

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

Table 24.--Wedge gate and globe valves: Prices reported by a single purchaser in * * *, on purchases of 4-inch, 150-pound, cast steel, WCB, flanged wedge gate valves with standard trim and 6-inch, 600-pound, cast steel, WCB, flanged, globe valves with standard trim, by quarters, January 1982-March 1984

Period	Wedge gate valves		Globe valves	
	Domestically produced	Imported from Japan	Domestically produced	Imported from Japan
1982:				
January-March-----	***	2/	***	2/
April-June-----	***	***	***	***
July-September-----	***	***	***	***
October-December-----	***	***	***	***
1983:				
January-March-----	***	***	***	***
April-June-----	***	***	***	***
July-September-----	***	***	***	***
October-December-----	***	***	***	***
1984: (January-March)-----	***	***	***	***

1/ The purchaser is * * *.

2/ Not available.

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

Cast stainless steel valves.--Prices of cast, 4-inch, 150-pound, stainless steel valves are presented in table 25. The data show that domestic and import prices of these valves have declined between 1982 and 1984. The U.S. price decreased irregularly from * * * in January-March 1982 to * * * in January-March 1984; the price of imported valves from Japan declined from * * * to * * * during this period. Prices of Japanese valves were consistently priced lower than domestically produced valves in all quarters where comparisons were possible. Margins of underselling ranged from a low of 4 percent in January-March 1982 and October-December 1983 to a high of 35 percent in October-December 1982.

Cast carbon steel globe valves.--Weighted-average prices charged by U.S. producers for 6-inch, 600-pound globe valves were obtained for most of the period under investigation, but importers' prices were available only for January-June 1982. The data show that the average U.S. price of these expensive valves fluctuated irregularly with no apparent trend between January-March 1982 and October-December 1983. In January-March 1982, the average Japanese price of * * * was 17 percent higher than the average U.S. price of * * *. However, in April-June 1982, the Japanese price of * * * was 11 percent lower than the U.S. price.

Table 25.--Stainless steel wedge gate valves: Weighted-average prices reported by domestic producers and importers on sales of 4-inch, 150-pound, cast steel, grade 316, flanged, wedge gate valves with standard trim, on sales to major customers 1/, by quarters, January 1982-March 1984

Period	(Per unit)							
	Domestically produced				Imported from Japan			
	Range	Average	Range	Average	Range	Average	Amount	Percent
1982:								
January-March-----	\$483-545	***				***	***	4
April-June-----	459-546	***	2/ 2/			***	***	5
July-September-----	463-546	***				-	-	-
October-December-----	431-551	***	***			***	***	35
1983:								
January-March-----	278-546	***	***			***	***	14
April-June-----	431-470	***	***			***	***	17
July-September-----	375-468	***	2/			***	***	4
October-December-----	390-544	***	-			-	-	-
1984: January-March-----	401-443	***	***			***	***	10

1/ Prices reported on an f.o.b. basis.

2/ Only 1 importer provided price data.

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

Additional price data received from a purchaser, * * *, indicate that domestic and import prices of these globe valves declined significantly between 1982 and 1984 in the * * * area, and that the price of the Japanese valves was consistently well below the U.S. price during this time span (table 24). From January-March 1982 to January-March 1984, the domestic price decreased from * * * to * * *. The price of Japanese imports fell from * * * to * * * during this period.

Swing check valves.--Comparisons between domestic and import prices for 4-inch, 150-pound, swing check valves were only possible in three quarters. In July-September 1982, the average Japanese price of * * * was 60 percent higher than the average U.S. price of * * * during this period. However, in July-September 1983, the average Japanese price of * * * was 6 percent lower than the average U.S. price of * * * in this period. In October-December 1983, the average Japanese price of * * * was 19 percent below the U.S. price of * * *. The average U.S. price of swing check valves decreased irregularly from * * * in January-March 1982 to * * * in January-March 1984.

Prices of valves from other import sources.--Although Japanese valves are generally lower priced than comparable domestically produced valves, the results of a survey that was conducted by the Commission staff indicates that imported valves from other countries tend to be priced lower than Japanese products. The Commission staff contacted 18 companies that purchase valves and asked whether imported valves from other countries are priced lower than comparable imported valves from Japan. Twelve of the purchasers said that prices of these other imports are lower than the Japanese, and four were unwilling to generalize. Only 2 of these 18 purchasers stated that Japan offers the lowest priced imported valves. Eight of these companies stated that imported valves from Italy are priced lower than the comparable Japanese valves. However, two of these buyers also stated that the Italian valves are inferior in quality to the Japanese valves. Three buyers said that Chinese valves are cheaper than Japanese valves. But all of these buyers said that the Chinese valves are inferior to Japanese valves in quality. One buyer also stated that imported valves from * * * are cheaper than the Japanese valves, and another indicated that imported valves from Yugoslavia are priced lower than imports from Japan.

Exchange rates

The value of the Japanese yen depreciated significantly in relation to the U.S. dollar both in nominal terms and in real terms during 1981-83 (table 26). From January-March 1981 through January-March 1984, the nominal rate declined irregularly by 11 percent. The real exchange rate, which takes into account the relative rates of inflation in Japan and the United States declined by more than 20 percent during this period.

Table 26.--U.S.-Japanese exchange rates: Indexes of the nominal and real exchange rates between the U.S. dollar and the Japanese yen, by quarters, January 1981-March 1984 1/

(January-March 1981=100)			
Period	: Nominal exchange-rate	: Real exchange-rate	
	: index 1/	: index 1/	
1981:	:	:	
January-March-----	100 :	100	
April-June-----	93 :	91.8	
July-September-----	89 :	88.2	
October-December-----	91 :	90.0	
1982:	:	:	
January-March-----	88 :	86.7	
April-June-----	84 :	82.8	
July-September-----	79 :	78.2	
October-December-----	79 :	78.1	
1983:	:	:	
January-March-----	87 :	84.3	
April-June-----	86 :	82.3	
July-September-----	84 :	79.7	
October-December-----	88 :	81.8	
1984: (January-March)-----	89 :	77.4	
	:	:	

1/ Based on exchange rates expressed in U.S. dollars per unit of yen.

Source: Compiled from data reported by the International Monetary Fund in the June 1984 issue and earlier issues of International Financial Statistics.

Lost sales

Three U.S. producers provided a large number of lost sales allegations. In many cases the allegations did not identify the quantities or exact types of valves that were involved. The Commission staff attempted to contact 18 purchasers to verify 26 allegations, involving sales of over 14,000 carbon and stainless steel valves.

Three of the allegations involved sales to * * *. * * * alleged that it lost sales of * * * valued at about * * * and * * * said that it lost sales of * * * valued at * * * in * * *, and sales of * * * valued at * * *. * * *, the spokesman for * * *, stated that he was not able to verify these allegations since his company does not keep detailed purchase records at a centralized location. However, he did state that his company buys large quantities of valves from Japan, partly because the price of the Japanese valves is lower than the price of comparable U.S. valves. He also stated that imported valves from * * * and from * * * are priced lower than U.S. valves.

* * * alleged that it lost sales of * * * valued at * * * to * * * as a result of competition from imports. A spokesman for * * * stated that his firm did not have information on this transaction. * * * indicate that all of the company's purchases of imported valves came from Japan. However, * * * that * * * bought a combined total of only * * * valves from Japan in all of 1982--a quantity that was less than half of the level cited by * * * in its allegation. During 1983, * * * purchased a total of only * * * from Japan, a * * * percent reduction from the level in the previous year. Although these imported valves from Japan accounted for * * * percent or less of * * *'s total purchases of * * * in 1982 and 1983, the spokesman stated that they are generally priced lower than domestically produced valves, and that suppliers of these Japanese valves are very dependable in making deliveries.

Two of the allegations involved lost sales to * * *. In one case, * * * reported an allegation that it had made in the preliminary investigation. * * * alleged that it lost a sale of * * * valued at * * * as a result of price competition from Japanese imports. * * *, a spokesman for * * *, stated that 11 companies competed for this order, which consisted of a large quantity of valves with different specifications. * * * and six other companies lost out in the first round of competition for the order because they could not meet technical specifications. In the final competition between a Japanese company, * * * company, and * * *, the Japanese supplier captured most of the order because its prices were 20 percent lower than the U.S. producers' prices and were slightly lower than the offer of the * * * supplier. The remainder of the order, which consisted of valves for * * *, went to one of the U.S. producers which was the low bidder for this portion of the bid. The spokesman further stated that his company has significantly increased its purchases of valves from Japan during the past two years because of the low Japanese prices and high technical qualities of these valves.

An additional allegation reported by * * * in the current investigation involved the loss of a sale of * * * valued at * * * to * * *. * * * stated that he did not have records of this particular transaction available. He again stated that his company is continuing to increase its purchases of imported valves from Kitz, Hitachi and other Japanese companies because of their low prices. However, he believes that the large differential between Japanese and U.S. prices that had prevailed during much of the past 2 years has narrowed in recent months. * * * also stated that the imported valves produced by * * * of Italy are priced lower than comparable items offered by Kitz and Hitachi.

An allegation by * * * involved the loss of a sale of * * * valves valued at * * * to * * *. * * *, the president of * * *, which manufacturers * * *, did not remember this particular transaction. However, he stated that * * * buys most of its valves from domestic producers but that it was steadily increasing its purchases of valves from Hitachi and Kitz because they are priced lower than comparable domestic products.

* * * also alleged that it lost a sale of * * * valves valued at * * * to * * * as a result of competition from imports. * * * was listed as the buyer to contact. Since * * * buys valves from many different sources, * * * was not able to state whether or not the allegation was valid. However, he did state that he had not personally bought any imported * * * valves during 1984. He further stated that he had not purchased any steel valves produced by Kitz, or any other Japanese supplier during the past two years.

Other allegations by * * * included the losses of sales of * * * valued at * * * to * * *. * * * was unable to verify the allegation. He did state that * * * does buy valves produced by Kitz and other Japanese manufacturers. * * * further stated that these valves are less expensive, on average, than comparable domestically produced valves. According to * * *, * * * has significantly increased its purchases of imported valves from Japan during the past 10 years. However, he does not believe that these purchases have increased during the past 2 years.

* * * also alleged that it lost a sale of * * * valued at * * * to * * * as a result of competition from Japanese imports. * * * of * * * indicated that the contract for these valves had been divided between a U.S. producer and Kitz. He further stated that some of the valves that were supplied by Kitz had been produced in * * * and * * *. According to * * * the prices offered by Kitz were * * *. The decision to award part of the contract to Kitz was due to * * * confidence in the reliability of the distributor offering the imported products rather than low import prices.

Another allegation by * * * involved a lost sale of a total of * * * valued at * * * to * * * in * * * as a result of import competition. * * *, the spokesman for * * *, was reluctant to discuss the details of this transaction. He stated that bids were received from a domestic producer, an Italian company, and a Japanese company for the order. Although the Japanese supplier offered the lowest bid, the Italian company received the order. The Italian price was lower than the price offered by the domestic producer.

* * * further alleged that it lost a sale of * * * valued at * * * in * * * and * * * valued at * * * to * * * as a result of competition from imports from Japan. * * *, who purchases valves for * * *, did not have records available on these specific transactions. However, he did state that his company has increased its purchases of valves from Hitachi and Kitz relative to domestically produced valves during the past two years because they are priced lower than comparable U.S. products. He also indicated that * * * has increased its purchases of Italian valves. According to * * *, the Italian valves are priced even lower than the Japanese valves. * * * also indicated that sales of ball valves and higher performance butterfly valves are rapidly capturing an increased share of the new construction market, because they are priced lower than the conventional gate and globe valves.

* * * further alleged that it lost a sale of * * * valves valued at * * * to * * * due to competition from * * *. * * *, the spokesman for * * *, acknowledged the fact that * * * had lost out in the competition for this order. However, he stated that this particular order was awarded to * * * instead of * * *. * * * further stated that * * * has increased its purchases of Kitz and Hitachi valves relative to domestically produced valves in recent years, because they are superior in quality to the domestic valves, and are priced lower. He also said that imported valves from Italy and China are even cheaper than the Japanese valves, but they often have serious quality defects. * * * also stated that high-performance butterfly and ball valves have not been used extensively by * * * thus far, because they are not suitable under high-pressure and high-temperature conditions.

* * * alleged that it lost * * * as a result of competition from Japanese imports. According to * * *, the contract had been serviced through * * *, a distributor. * * * of * * * acknowledged that the * * * had been lost to another distributor. However, he did not know whether * * * was buying imported valves from Japan, imports from other sources, or domestically produced valves from this new distributor. The Commission staff contacted * * * at its facility in * * * to determine the source of its valve purchases. However, * * *, who is responsible for purchasing valves for * * *, was unwilling to respond to a telephone inquiry.

In another allegation, * * * stated that it lost sales of an unspecified quantity of * * * to * * * as a result of competition from imports. * * *, the spokesman for * * *, stated that his company buys exclusively from domestic sources. According to * * * buys most of its valves from * * *, because they offer the best price among the U.S. producers. * * * also said that his company buys some valves from * * *. However, he stated that his company has not been able to buy a full line of valves from more than one distributor at one time, because of the depressed condition of the market for valves.

Lost revenues

One producer, * * *, provided 10 instances of lost revenues in its response to the Commission questionnaire. However, quantities and types of valves and dollar estimates of lost revenues were not included. The Wm. Powell Co. * * * stated in its Annual Report, 1982, that: "Foreign valves have become widely accepted by our major customers and, despite the quality of some of this product, its only real appeal is a low price. Some of our domestic competitors have lowered their selling prices in an effort to meet this competition and, generally, have only succeeded in driving foreign valve prices down." Another producer, * * *, provided information on its lowered prices due to "an effort to meet the usual prices quoted by Kitz and Hitachi."

Twelve of 15 purchasers reported that the presence of Japanese valves has contributed to lower market prices; 4 of the 15 purchasers indicated that imported valves from countries other than Japan have also contributed to lower market prices.

APPENDIX A
LIST OF PETITIONERS

Members of the Valve Manufacturers
Association Fair Trade Council

Condec Flow Control Group
The Lunkenheimer Co.
Chicago, Ill.

Cooper Valve Co.
Houston, Tex.

Crane Co.
Valves & Fittings Division
New York, N.Y.

Mark Controls Corp.
Evanston, Ill.

The Wm. Powell Co.
Cincinnati, Ohio

Rockwell International Corp.
Flow Control Division
Pittsburgh, Penn.

Smith Valve Corp.
Westboro, Mass.

Stockham Valves & Fittings, Inc.
Birmingham, Ala.

Velan Valve Corp.
Williston, Vt.

Henry Vogt Machine Co.
Louisville, Ky.

Walworth Co.
Valley Forge, Pa.

... ..

APPENDIX B

**NOTICE OF THE COMMISSION'S INSTITUTION OF A FINAL
ANTIDUMPING INVESTIGATION**

(Investigation No. 731-TA-145 (Final))

Certain Steel Valves and Certain Parts Thereof From Japan

AGENCY: International Trade Commission.

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

EFFECTIVE DATE: April 2, 1984.

SUMMARY: As a result of an affirmative preliminary determination by the U.S. Department of Commerce that there is a reasonable basis to believe or suspect that imports from Japan of certain steel valves and certain parts thereof,¹ provided for in item 680.17 of the Tariff Schedules of the United States, are being, or are likely to be, sold in the United States at less than fair value (LTFV) within the meaning of section 731 of the Tariff Act of 1930 (19 U.S.C. 1673), the United States International Trade Commission hereby gives notice of the institution of investigation No. 731-TA-145 (Final) under section 735(b) of the act (19 U.S.C. 1673d(b)) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of such merchandise. Unless the investigation is extended, the Department of Commerce will make its final dumping determination in the case on or before June 13, 1984, and the Commission will make its final injury

¹ The term "certain steel valves and certain parts thereof" means wedge gate, swing check, and globe valves and specified parts of such valves, all the foregoing of steel. The parts covered by this investigation are machined valve bodies and partially completed valves, the latter consisting of machined valve bodies imported with one or more of the following parts: bonnet, stem, wedge, handle, or seat rings. Bellows seal valves and non-machined valve bodies are specifically excluded.

determination by July 30, 1984 (19 CFR § 207.25).

FOR FURTHER INFORMATION CONTACT:
George L. Deyman (202-523-0481),
Office of Investigations, U.S.
International Trade Commission.

SUPPLEMENTARY INFORMATION:

Background

On November 7, 1983, the Commission determined, on the basis of the information developed during the course of its preliminary investigation, there was a reasonable indication that industries in the United States were materially injured by reason of alleged LTFV imports from Japan of steel wedge gate, globe and swing check valves and certain parts thereof (other than bellows seal valves and non-machined valve bodies). The preliminary investigation was instituted in response to a petition filed on September 22, 1983, by counsel for the Valve Manufacturers Association Fair Trade Council and 11 U.S. producers.

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

Upon the expiration of the period for filing entries of appearance, the Secretary shall prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to the investigation, pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d)). Each document filed by a party to this investigation must be served on all other parties 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 (19 CFR 201.16(c)).

Staff Report

A public version of the staff report containing preliminary findings of fact in this investigation will be placed in the public record on June 1, 1984, pursuant to § 207.21 of the Commission's rules (19 CFR 207.21).

Hearing:

The Commission will hold a hearing in connection with this investigation beginning at 10:00 a.m., on June 19, 1984, at the U.S. International Trade Commission Building, 701 E Street NW., Washington, D.C. 20436. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on June 4, 1984. All persons desiring to appear at the hearing and make oral presentations should file prehearing briefs and attend a prehearing conference to be held at 10:00 a.m., on June 8, 1984, in room 117 of the U.S. International Trade Commission Building. The deadline for filing prehearing briefs is June 12, 1984.

Testimony at the public hearing is governed by § 207.23 of the Commission's rules (19 CFR 207.23). This rule requires that testimony be limited to a nonconfidential summary and analysis of material contained in prehearing briefs and to information not available at the time the prehearing brief was submitted. All legal arguments, economic analyses, and factual materials relevant to the public hearing should be included in prehearing briefs in accordance with § 207.22 (19 CFR 207.22). Posthearing briefs must conform with the provisions of § 207.24 (19 CFR 207.24) and must be submitted not later than the close of business on June 28, 1984.

Written Submissions

As mentioned, parties to this investigation may file prehearing and posthearing briefs by the dates shown above. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before June 28, 1984. A signed original and fourteen (14) true copies of each submission must be filed with the Secretary to the Commission in accordance with § 201.8 of the Commission's rules (19 CFR 201.8). All written submissions except for confidential business data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any business information for which confidential treatment is desired shall be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform

with the requirements of § 201.8 of the Commission's rules (19 CFR 201.8).

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

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

By order of the Commission.

Issued: April 10, 1984.

Kenneth R. Mason,
Secretary.

(FR Doc. 84-20383 Filed 4-17-84; 8:45 am)
BILLING CODE 7050-02-M

APPENDIX C

NOTICE OF COMMERCE'S FINAL DETERMINATION

[A-588-013]

Certain Steel Valves and Certain Parts Thereof From Japan; Final Determination of Sales at Less Than Fair Value

AGENCY: International Trade Administration/Import Administration, Commerce.

ACTION: Notice.

SUMMARY: We have determined that certain steel valves and parts thereof from Japan are being, or are likely to be, sold in the United States at less than fair value. We have notified the U.S. International Trade Commission (ITC) of our determination, and the ITC will determine, within 45 days of publication of this notice, whether a U.S. industry is materially injured, or threatened with material injury, by imports of this merchandise. For two of the three firms investigated, we have directed the U.S. Customs Service to continue to suspend the liquidation of all entries of the subject merchandise which are entered, or withdrawn from warehouse, for consumption, on or after the date of publication of this notice and to require a cash deposit or bond for each such entry in an amount equal to the estimated dumping margin as described in the "Suspension of Liquidation" section of this notice. We have determined that one producer should be excluded from this determination. Those firms that are subject to suspension of liquidation and the firm excluded from this action are indicated in the "Suspension of Liquidation" section.

EFFECTIVE DATE: June 20, 1984.

FOR FURTHER INFORMATION CONTACT: Francis R. Crowe, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone; (202) 377-4087.

SUPPLEMENTARY INFORMATION:

Final Determination

We have determined that certain steel valves and certain parts thereof (valves) from Japan are being, or are likely to be, sold in the United States at less than fair value, as provided in section 735 of the

Tariff Act of 1930, as amended (19 U.S.C. 1673d) (the Act). We have found *de minimis* margins for sales of valves produced by one firm investigated. The firms concerned are identified in the "Suspension of Liquidation" section of this notice.

We have found that the foreign market value of valves exceeded the United States price on 14.8 percent of the sales we compared. These margins ranged from 0.15 percent to 72.8 percent. The overall weighted-average margin on all valve sales compared is 2.5 percent. The weighted-average margins for individual companies investigated are presented in the "Suspension of Liquidation" section.

Case History

On September 22, 1983, we received a petition filed by counsel for Condec Flow Control Group of the Lunkenheimer Company; Cooper Valve Company; Crane Company; Mark Controls Corporation; the Wm. Powell Company; Rockwell International Corporation, Flow Control Division; Smith Valve Corporation; Stockham Valves & Fittings, Inc; Velan Valve Corporation; Henry Vogt Machine Company; and Walworth Company as individual petitioners and collectively as the Valve Manufacturers Association Fair Trade Council. In compliance with the filing requirements of § 353.36 of our regulations (19 CFR 353.36), the petitioners alleged that imports of the subject merchandise from Japan are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Act, and that such imports materially injure, or threaten material injury to, a United States industry.

After reviewing the petition, we determined that it contained sufficient grounds upon which to initiate an antidumping investigation. We notified the ITC of our action and initiated such an investigation on October 11, 1983 (48 FR 48267). The ITC found, on November 7, 1983, that there is a reasonable indication that imports of valves materially injure, or threaten material injury to, a United States industry.

The petitioners alleged that at least 13 Japanese companies produce the subject valves for export to the United States. However, we identified 3 producers and exporters which account for approximately 85 percent of the subject valves sold for export to the United States. We presented questionnaires in Japan to these producers and exporters on October 28, 1983.

On November 10 and 21, 1983, we received letters from counsel for the

Japanese valve producers and exporters requesting additional time in which to respond because of the complicated nature of the products involved. Extensions were granted and we received responses on December 16 and 19, 1983. We received responses from the following companies: Hitachi Metals, Ltd. (Hitachi), Kitz Corporation (Kitz) and Takamisawa Koki Mfg., Ltd. (TKM). On February 9, 1984, at the request of the petitioners, we postponed the preliminary determination for 30 days (49 FR 7843).

On March 30, 1984, we preliminarily determined that valves from Japan were being sold in the United States at less than fair value (49 F.R. 13563). At the request of the petitioners, we held a hearing on May 15, 1984, to allow the parties an opportunity to address the issues arising in this investigation.

Scope of Investigation

The merchandise covered by this investigation consists of "wedge gate," "swing check," and "globe" valves, and certain parts of the foregoing, of steel, currently provided for under item number 680.17 of the Tariff Schedules of the United States. "Certain parts" include machined valve bodies and partially completed valves consisting of machined valve bodies imported with one or more of the following parts: bonnet, stem wedge, handle or seat rings. Pursuant to a letter from counsel for the petitioners, dated October 25, 1983, the product description as stated in the Notice of Initiation was amended to exclude bellows seal valves and non-machined valve bodies.

Because Hitachi, Kitz and TKM produced and sold approximately 85 percent of the valves exported from Japan to the United States during the period of investigation (April 1 to September 30, 1983), we limited our investigation to them.

Fair Value Comparison

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

United State Price

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

We calculated the purchase price based on the packed price to unrelated purchasers in the United States under

the following terms: (1) f.o.b. foreign port, (2) f.o.b. delivered to various customer designated locations, or (3) ex-dock. We made deductions, where appropriate, for foreign inland freight, foreign inland insurance, discounts for prompt payment, foreign brokerage and handling charges, ocean freight, marine insurance, U.S. brokerage and handling charges, U.S. customs duties, and U.S. inland-freight. We used exporter's sales price to represent the United States price of a portion of the merchandise sold by Hitachi because the merchandise was sold to unrelated purchasers after importation into the United States. For these sales, we made additional deductions, where appropriate, for credit costs and other selling expenses incurred in the United States.

Foreign Market Value

In accordance with section 773(a) of the Act, with the exception of some sales by TKM and Kitz, we calculated foreign market value based on home market sales. For purposes of determining similar merchandise under section 771(16) of the Act, we made comparisons between valves of the same type (e.g., wedge gate, globe or swing check), body materials (e.g., carbon, alloy, or stainless steel), pressure classification, size and based on whether they were forged or cast. In the cases of TKM and Kitz, there were no sales in the home market to use as a basis for foreign market value for some categories of valves. Accordingly, as required in section 773(a)(1)(B) of the Act, we selected sales for export to a country other than the United States (a "third country") as the basis for foreign market value or, if there were no third country sales for those categories, we determined foreign market value on the basis of constructed value in accordance with section 773(a)(2) of the Act.

Where we used home market prices as the basis for foreign market value, we calculated the home market prices for each type of valve on the basis of delivered packed prices to unrelated purchasers. For these prices, we deducted, where appropriate, rebates, foreign inland freight and foreign inland insurance. We made adjustments, where appropriate, for differences in circumstances of sale, including credit expenses, advertising expenses, inspection and documentation expenses, and warranty and servicing expenses in accordance with § 353.15 of our regulations. When there were commissions on sales in the home market and none on sales to the United States, we made adjustments for the differences between commissions in the

home market and indirect selling expenses on sales to the United States, used as an offset to the home market commissions, in accordance with § 353.15(c) of our regulations. We also made adjustments for the cost of materials, labor and direct factory overhead associated with differences in the physical characteristics of the merchandise in accordance with § 353.16 of our regulations. We also deducted home market packing costs, where appropriate, and added packing costs incurred on sales to the United States.

We disallowed several claims for adjustments in calculating foreign market value. We denied Kitz's requested adjustments for technical consulting service expenses because we determined at verification that these expenses are not directly attributable to sales of the subject merchandise.

We also denied Kitz's request for a deduction of indirect selling expenses in the home market to offset U.S. commissions because Kitz provided no information relating to the amount of its U.S. commissions against which such an offset could be made. In addition, Kitz also claims an adjustment for commissions on sales in the home market. If the amount of the U.S. commission were known, an adjustment for differences in the commissions in the two markets could be made in accordance with §§ 353.15 (a) and (b) rather than allowing an offset under § 353.15(c).

We used sales to third countries as the basis for foreign market value for a portion of TKM's sales. We calculated the third country prices on the basis of the ex-works or f.o.b. Japanese port, unpacked price to unrelated purchasers in four separate countries. We did this because there were no sales to a single country that provided an adequate sample for determining the foreign market value for all categories of valves not sold in the home market. We made deductions, where appropriate, for Japanese brokerage and handling charges and inland freight. We made adjustments, where appropriate, for credit expenses in accordance with § 353.15 of our regulations. Since there were no commissions on sales to the United States, we made adjustments, where appropriate, for the difference between commissions in the third country sales and indirect selling expenses on sales in the United States, as an offset to the third country commissions, in accordance with § 353.15(c) of our regulations. We also made adjustments for the cost of materials, labor and direct factory

overhead associated with differences in the physical characteristics of the merchandise in accordance with § 353.16 of our regulations. We added the packing cost incurred on sales to the United States.

For the remainder of TKM's sales and for a portion of Kitz's sales, we used constructed value as the basis for foreign market value in accordance with section 773(e) of the Act. We calculated the cost of materials, fabrication, general expenses, profit, and the cost of packing. The amounts added for general expenses were the same as those expressed in the companies' financial statements. These amounts were higher than the statutory minimum of 10 percent of the sum of material and fabrication costs. The amount added for profit was the statutory minimum of 8 percent of the sum of materials, fabrication costs, and general expenses.

Where we used exporter's sales price, we deducted home market indirect selling expenses to offset U.S. selling expenses.

Verification

In accordance with section 776(a) of the Act, we verified all data used in reaching this determination by using standard verification procedures, including on-site inspection of the manufacturers' operations and examination of accounting records and selected documents containing relevant information.

Petitioners' Comments

Comment 1

The petitioners state that two of three respondents have understated their prices in the home market. They cite a consultant's report that was submitted with the petition as proof of this fact. Additionally, they state that the respondents' reported prices of stainless steel valves were "unnaturally" low compared with the prices of carbon steel valves in light of the higher material costs of stainless steel valves. They urge us to disregard the responses.

DOC Position

At verification, the verifiers interviewed the consultant who provided the market research data that served as the basis for the petition. They found that the consultant interviewed 10 Japanese home market customers but obtained price data from only three of them. The consultant obtained no documentation from any of these customers. He based list prices on a publicly available standard price list from Kitz and on a catalogue showing prices for cast iron valves. Such valves

are not subject to the investigation. The verifiers established from various company records, including Kitz's internal price list, that the prices shown in the responses of all three respondents represent their actual transaction prices.

The petitioners submitted a second consultant's report which showed much lower Japanese home market prices than did the first report. Petitioners state that, "It is quite possible that the actual home market prices of Kitz Corporation and of Hitachi Metals, Ltd., fell somewhere between the first and second reports' prices." Such "evidence" cannot be taken as proof that the respondents' data are erroneous in light of the significant evidence to the contrary which the verifiers obtained from the companies' records.

Further, the ratio of the cost of materials for stainless steel valves to that of carbon steel valves is not dispositive of the ratio of the prices for these valves, nor, if the ratios do not match, is this proof that the prices are erroneous. Many factors influence the pricing of valves. We found during verification that actual physical differences existed between valves with the same nominal descriptions. The valves in the Kitz response, however, did have a category code which alluded to such differences. The petitioners, in making comparisons of stainless steel valves to carbon steel valves, generally disregarded such differences. Further, the stainless steel valves used in the petitioners' comparison submitted in their April 4, 1984, letter to the Department were not "such or similar" to valves sold to the U.S. market and thus were not a proper basis for comparison.

Comment 2

If the response prices of Kitz and Hitachi are accurate, then sales in the home market are below cost. The Department should have self-initiated a cost of production investigation no later than the verification in April or should conduct a cost inquiry on an expedited basis before the final determination.

DOC Position

The petitioners made their sales below the cost of production allegation with 33 days remaining in the investigation. We have dismissed the allegation on the basis of timeliness. We estimate that the Department would require approximately 105 days to conduct a cost of production investigation. The petitioners have had the company responses since February 7, 1984, enough time to analyze the price data and make any cost allegations in a timely manner.

As to whether the Department should have initiated a cost inquiry on its own, we do not agree with the petitioners' assertion. We developed some cost of production data for Kitz and Hitachi because, for some valves, neither company had sales of "such or similar" merchandise either in the home market or to third countries and we were forced to use constructed value to determine foreign market value. There were, of course, no home market or third country sales to which these costs could be compared, and therefore, there was no evidence of sales below cost of production. Other cost data which we obtained pertained only to the incremental costs for physical differences in merchandise. As stated in the response to Comment 1, after verification of the respondents' actual transaction prices, the Department had no reason to believe that the prices were either erroneous or unnaturally low; thus the Department had no bases upon which to self-initiate a cost of production investigation.

Comment 3

The respondents have underreported their sales to the U.S. Imports during the second and third quarters were \$9.8 million while the respondents initially reported only \$1.7 million or 40 percent of their sales. Even when the respondents allegedly reported 100 percent of their sales, there is a gap of \$5.4 million between the respondents' reported values and the value of valves for the period as reported in official government statistics. There is a corresponding gap in the volume of sales. The Department should reconcile these differences or disregard the responses.

DOC Position

The exporters reported 100 percent of their sales in their initial response, valued at approximately \$4 million. (They reported 100 percent of the sales initially agreed to be supplied to the Department. Hitachi has requested that it be required to report only 85 percent of its exporter's sales price data. The Department agreed, but later requested the remainder of Hitachi's sales which were provided). However, only 40 percent of sales were shipped as of the date of the response. Therefore, certain shipping and credit expenses were not known at the time of the response. The petitioners acknowledged this fact in their February 24, 1984, letter and requested that the Department not include data on unshipped sales in its preliminary determination.

The petitioners' official statistics are for importations of valves into the United States, whereas the respondents' values are for sales during the period. The Department need not reconcile import data with sales data in order to make a determination concerning sales at less than fair value. The Department's task is to verify total sales for the period of investigation, not to reconcile sales with imports. We have verified the total value and volume of sales by all the respondents during the period of investigation.

Comment 4

The respondents have provided inadequate public summaries of their information and have been untimely in submitting their recent, revised submissions. In addition, the supporting documents obtained at verification will not be available to the petitioners.

DOC Position

The Department's practice has been to accept brief non-confidential summaries when respondents agree to release the confidential information under administrative protective order (APO). The respondents have satisfied this requirement.

The Department required the respondents to prepare supplemental sales information in time to allow verification of the data. They fulfilled this requirement, and, as the result of verification, the Department required the respondents to modify certain data. The revised responses were presented to the Department within a reasonable period after verification. Two weeks after the conclusion of the verification the petitioners were briefed by Department officials on the significant findings of the verification. At the briefing, the petitioners were told that even with the changes that resulted from the significant findings, the sales data base remained essentially as reported initially by the respondents. Thus the petitioners have had access to virtually all of the respondents' U.S. sales data since February 7, 1984. The revised responses were released under APO as soon as they were processed.

The Department does not release confidential verification documents under APO. Non-confidential documents obtained during verification have been inserted into the public record of this investigation.

Comment 5

Kitz provided inadequate data concerning "customized" valves in its initial submission and failed to adequately describe its valves in its new product coding system. Kitz has not

made it clear how it wants the Department to treat these valves. The Department should therefore reject Kitz's submission and rely on data contained in the petition.

DOC Position

A review of the initial Kitz response showed certain deficiencies in the product designations used by Kitz, although those designations were generally the actual product codes used by the company. In response to a January 22, 1984, request by the Department, Kitz developed a new coding system and submitted a supplemental response containing the new codes on February 6, 1984. The new codes are described in a non-confidential letter submitted with the supplemental response. The new codes are much more descriptive than the original codes and allow identification of the Kitz valves in accordance with the "such or similar" merchandise criteria described in the "Foreign Market Value" section of this notice. The codes also identify certain other characteristics of the valves which denote differences between valves within the "such or similar" categories. However, the codes developed by Kitz, as well as the codes developed for the same purpose by the other respondents, do not fully describe each valve according to the hundreds of variations in features possible for each valve. It should be added that the actual product descriptions or "product figures" used by the companies are not always fully descriptive of the products either. While all company codes allowed differentiation among "such or similar" valves, the reporting of other characteristics differed from company to company. In addition, because, as a practical matter, all characteristics could not be reported, there were some instances for each company in which there were significant price variations among valves with the same nominal description.

Kitz assigned the letters A-D to its valves in order to distinguish, among the other things, whether a valve was "standard" or "custom". Custom valves have special specifications not identified in the basic code number. Kitz stated that "standard" valves were sold in the U.S. and that these valves should be compared to standard valves sold in the home market. Thus, Kitz reported sales of some valves with the same nominal description which differed as to whether they were "standard" product or "custom". Where non-identical "such or similar" valves were compared (i.e. valves with differing characteristics denoted by the codes), Kitz provided

cost differentials based upon the incremental cost of the physical differences in the merchandise. Where no "such or similar" comparisons could be made, Kitz reported costs of production for use in the determination of foreign market values. The Department sought to resolve questions concerning valve comparisons and apparent price discrepancies for values with the same nominal descriptions during verification.

The Department notified Kitz of its intent to review the differences in standard and custom valves in its verification outline, dated April 4, 1984. A draft of this outline was reviewed by the petitioners. A significant portion of the verification (and the report thereof) was devoted to an analysis of these differences. As noted in the report, certain sales were pre-selected (i.e., denoted in the verification outline prior to verification) for viewing based upon this consideration. At the verification other sales were selected at random to analyze the internal specification sheets with regard to standard/customs features. The standard valves selected (both in the home market and those sold to the U.S.) either had no additional specifications or the specifications indicated features which are considered standard by the company. All "custom" valves contained features which substantially increased the incremental material and/or labor costs. Kitz used the same criteria for determination of standard valves in the U.S. as were used to determine standard valves sold in the home market. The approach utilized by Kitz, and verified by the Department, appears to be reasonable, given the large volume of sales in the home market of standard and non-standard valves. We have therefore used Kitz's response data in making the final determination.

Respondents' Comments

In addition to comments addressed in the analysis section, respondents submitted the following comments:

Comment 1

Counsel for Hitachi maintains that the Department should disregard an imputed inventory carrying cost on exporter's sales price transactions since actual costs are known. They maintain that the cost deducted in the preliminary determination was based on corporate borrowings which were not designated for inventory financing and therefore have no connection to such financing. Further, they claim that because actual warehousing and credit costs were also deducted, the Department is acting against an established practice of not

deducting imputed costs where actual costs are known. In addition, they state that the deduction of both actual and imputed costs involves double (and triple) counting. They argue alternately that if we use the imputed cost, we should not deduct the actual expenses.

DOC Position

We agree with Hitachi and the petitioners that the use of corporate interests expenses is not a good measure of inventory carrying costs. We further agree with the petitioners that the credit costs in this situation consists of two parts, the actual credit costs incurred by Hitachi during approximately one third of the inventory period, and the implicit credit costs of holding the inventory for the remainder of the inventory period. Such imputed credit costs for the latter period do not replace the actual credit expenses incurred by Hitachi, but are in addition to those expenses. Together they represent the expense of holding the inventory for the entire period, for only a part of which actual expenses are known.

We also agree with the petitioner that warehousing costs incurred by Hitachi are independent of credit costs and that to deduct both does not result in double counting.

For this determination, we reduced the deduction for indirect selling expenses by the amount of the imputed carrying cost used in the preliminary determination. We calculated the credit cost for the entire inventory period at the same rate of interest used in the period in which actual credit costs were incurred.

Comment 2

Counsel for Hitachi stated that Hitachi should be excluded from the proceeding on the basis of its preliminary margin of 0.99 percent because this margin is virtually *de minimis* and not a function of international dumping or neglect, but rather arose from technicalities in the law and significantly different economic circumstances present in the sales periods compared.

DOC Position

We see no reason to disregard our *de minimis* rule, under which we consider a weighted average margin of 0.50 percent or more to be significant.

ITC Notification

In accordance with section 735(d) of the Act, we will notify the ITC of our determination. In addition, we are making available to the ITC all non-privileged and non-confidential

information relating to this investigation. We will allow the ITC access to all privileged and confidential information in our files, provided the ITC confirms that it will not disclose such information, either publicly or under an administrative protective order, without the written consent of the Deputy Assistant Secretary for Import Administration.

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

Suspension of Liquidation

In accordance with section 733(d) of the Act, we directed the United States Customs Service to suspend liquidation of all entries of the subject valves from Japan with the exception of valves produced by Takamisawa Koki Mfg., Ltd. which are entered, or withdrawn from warehouse, for consumption, on or after April 5, 1984. The Customs Service shall continue to require a cash deposit or the posting of a bond equal to the estimated weighted-average amount by which the foreign market value of the merchandise subject to this investigation exceeds the United States price for entries of merchandise from Kitz Corporation and Hitachi Metals, Ltd. Where sales by trading companies cannot be identified by manufacturer, the Customs Service shall require a cash deposit or the posting of a bond equal to the highest estimated weighted-average margin of 13.09 percent. This suspension of liquidation will remain in effect until further notice. The weighted-average margins as of the publication of this notice in the Federal Register are as follows:

Manufacturer	Weighted-average margin percentage
Kitz Corporation	13.09
Hitachi Metals, Ltd.	1.07
Takamisawa Koki Mfg., Ltd.	0.16
All other companies	2.50

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

Dated: June 13, 1984.

William T. Archey,
Acting Assistant Secretary for Trade Administration.

[FR Doc. 84-16473 Filed 6-19-84; 8:45 am]

BILLING CODE 3510-25-M

APPENDIX D

**LIST OF WITNESSES APPEARING AT
THE PUBLIC HEARING**

CALENDAR OF PUBLIC HEARING

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

Subject: Certain steel valves and certain parts thereof from Japan

Inv. No.: 731-TA-145 (Final)

Date and time: June 19, 1984 - 10:00 a.m.

The hearing was held in the Hearing Room of the United States International Trade Commission, 701 E Street, N.W., Washington, D.C.

In support of the imposition of antidumping duties:

Collier, Shannon, Rill & Scott--Counsel
Washington, D.C.
on behalf of

Condec Flow Control Group, Cooper Valve Company, Crane Company, Mark Controls Corporation, The William Powell Company, Flow Control Division of Rockwell International Corporation, Smith Valve Corporation, Stockham Valves & Fittings, Inc., Velan Valve Corporation, Henry Vogt Machine Company, and Walworth Company

Bill T. Jordan, William Powell Company

John McDonald, Stockham Valves & Fittings, Inc.

Bruce P. Malashevich, Vice President, Economic Consulting Services, Inc.

Clarisse Morgan, Economic Consulting Services, Inc.

Dr. Malcolm E. O'Hagan, President, Valve Manufacturers Association

Ronald F. Pandolfi, President, R. F. Pandolfi & Associates

David A. Hartquist)
Jeffrey S. Beckington)--OF COUNSEL

- more -

In opposition to the imposition of antidumping duties:

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

Hitachi Metals, Ltd., Tokyo, Japan, and Hitachi
Metals America, Division of Hitachi Metals
International, Ltd.

Niel Ruebens, General Manager, Piping
Components, Hitachi Metals America

Michael A. Hertzberg)
Stuart E. Benson)--OF COUNSEL

Akin, Gump, Strauss, Hauer & Feld--Counsel
Washington, D.C.
on behalf of

Kitz Corporation

Michael H. Kemper, National Project Sales Manager of the
Valve Division of Zidell Explorations, Inc.

William J. Visser, Sr., Mechanical Engineer

Shannon Stock Shuman, Consultant, Coopers & Lybrand

Edward L. Rubinoff--OF COUNSEL

