# STAINLESS CLAD STEEL PLATE FROM JAPAN

Determination of the Commission in Investigation No. 731-TA-50 (Preliminary) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigation

**USITC PUBLICATION 1196** 

NOVEMBER 1981

United States International Trade Commission / Washington, D.C. 20436

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Note.--Data which would disclose confidential operations of individual concerns may not be published and, therefore, have been deleted from this report.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-IA-50 (Preliminary) STAINLESS CLAD STEEL PLATE FROM JAPAN

#### Determination

On the basis of the record 1/ developed in investigation No. 731-1A-50 (Preliminary), the Commission determines that there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports from Japan of stainless clad steel plate, provided for in item 607.94 of the Tariff Schedules of the United States, which are alleged to be sold in the United States at less than fair value (LTFV). 2/

#### Background

On October 6, 1981, the U.S. International Trade Commission and the U.S. Department of Commerce each received a petition from Lukens Steel Co.,

Coatesville, Pa., alleging that imports of stainless clad steel plate from

Japan are being, or are likely to be, sold in the United States at LTFV.

Accordingly, the Commission instituted a preliminary antidumping investigation under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded,

<sup>1/</sup> The record is defined in sec. 207.2(j) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(j)).

<sup>2/</sup> Chairman Alberger and Commissioner Frank determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of the subject merchandise.

by reason of the imports of such merchandise into the United States. The statute directs that the Commission make its determination within 45 days of its receipt of the petition, or by November 20, 1981.

Notice of the institution of the Commission's investigation and of the public conference 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 in the <u>Federal Register</u> on October 14, 1981 (46 F.R. 50864). The conference was held in Washington, D.C. on October 29, 1981, and all persons who requested the opportunity were permitted to appear in person or by counsel.

#### VIEWS OF THE COMMISSION

#### Introduction

We find that there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of stainless clad steel plate from Japan which is allegedly sold at less than fair value. 1/ The recent rapid increase in imports has led to injury to the domestic industry, which has been manifested through price suppression, lost sales, and declining profitability. The increase in imports is almost certain to continue through the end of 1981 with additional adverse impact on the domestic industry.

#### Domestic industry

Section 771(4)(A) of the Tariff Act of 1930 defines the term "industry" as the "domestic producers as a whole of a like product or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product." 2/ The statute defines "like product" as a product which is like or in the absence of like, most similar in characteristics and uses with the article under investigation. 3/

Stainless clad steel plate, the imported article subject to this investigation, is a composite plate consisting of stainless steel integrally bonded to a carbon or alloy steel plate base. It is produced to order and

<sup>1</sup>/ Chairman Alberger and Commissioner Frank determine only that there is a reasonable indication of material injury, and therefore do not reach the issue of reasonable indication of threat of material injury.

<sup>2/ 19</sup> U.S.C. 1677(4)(A).

 $<sup>\</sup>overline{3}$ / 19 U.S.C. 1677(10).

specifications in a range of types of stainless and backing steels and in a variety of lengths, widths, and thicknesses. Stainless clad steel plate is used because it combines the corrosion-resistant properties of stainless steel with the strength of carbon or alloy steel, thus allowing less of the more expensive stainless material to be used. Stainless clad steel plate is used in petroleum vessels, petrochemical vessels, ships which carry corrosive chemicals, and in the nuclear power industry. 1/

Petitioner Lukens Steel Co. alleges four instances of less than fair value sales by Japan Steel Works through their sales representatives in the United States. Although the petition stated that clad plate is a fungible product, the Lukens' witness said at the conference held on October 29, 1981, that fungibility is only applicable to articles of the same specifications. In short, stainless steel clad plate of different specifications is not fungible. However, he explained that there is some degree of substitutability of slightly different types of stainless clad steel plate products. 2/Because an intended end use may be accomplished in a number of ways, specifications may be altered during the course of a project. 3/

Since this is a case in which the like product candidates consist of a group of products slightly distinguishable from each other, among which no clear dividing lines can be drawn based on characteristics and uses, we find the like product in this preliminary investigation is all members of the group. Unlike the situation in Certain Amplifier Assemblies and Parts

 $<sup>\</sup>frac{1}{2}$ / See Staff report, pp. A-1 and A-2.  $\frac{1}{2}$ / See pp. 44-46 of Transcript.

 $<sup>\</sup>frac{3}{}$  See Staff Report, p. A-27.

Thereof from Japan, Inv. No. 731-TA-48(P), where there was a clear dividing line between made-to-specifications products, such a clear line does not appear here. Therefore, for the purposes of this preliminary investigation, we find that the domestic industry consists of the four domestic producers of stainless clad steel plate: Lukens Steel Co., Phoenix Steel Corp., E. I. DuPont de Nemours & Co., Inc., and Explosive Fabricators, Inc.

# Material injury by reason of LTFV imports

Section 771(7) of the Act directs the Commission to consider, in making its determination, among other factors, (1) the volume of imports of the merchandise under investigation, (2) their impact on domestic prices, and (3) the consequent impact on the domestic industry. 1/

Volume of imports.--Prior to 1981, imports of stainless clad steel plate from Japan were generally very low. They declined steadily from 1978 to 1980. In the first six months of 1981, however, imports increased substantially both in absolute volume and in relation to U.S. consumption. Imports rose from less than 1 percent of consumption in 1980 to more than 10 percent of consumption in the first six months of 1981. 2/ The volume of imports in the second half of 1981 is expected to be even greater than that in the first half of 1981 according to information provided by importers on contracts which they have already been awarded.

Effect of imports on domestic prices. -- The significance of the imports becomes most apparent in their effect on the prices of the domestic product. Stainless clad steel plate is generally sold on a competitive bid basis.

<sup>1/ 19</sup> U.S.C. 1677(7).

 $<sup>\</sup>overline{2}$ / See Staff Report, p. A-22.

Domestic producers may bid against each other as well as against importers.

The stainless clad steel plate requirements for a particular bid must meet the specifications of the fabricator/purchaser. Therefore, on any given bid inquiry the product being bid on is identical regardless of whether the source is a domestic or foreign producer.

Information on bids was solicited for comparative purposes from the producers, importers, and fabricators of stainless clad steel plate on the five largest tonnage contracts on which they quoted or requested quotes in 1980 and January-June 1981. This time period includes the period when less-tnan-fair-value sales were alleged to have occurred. These data provided a sample of competitive price comparisons. In every instance in which the contract was awarded to a supplier of Japanese stainless clad steel plate, the bid price for the imported Japanese product was below the domestic producer's bid price. Margins of underselling ranged from as low as 2.7 percent to as nigh as 31.3 percent. In several instances, the underselling has resulted in contracts being lost by the domestic producers. 1/

Such underselling has also resulted in price suppression or depression which seems to have been caused by this alleged LTFV import competition. The bid process is often evolutionary in nature. During the time between the initial submission of a bid and the final award of the contract to supply the stainless clad steel plate for the project, domestic producers and importers have an opportunity to change or lower their bids. 2/ Based on information presented in the course of this investigation, it appears that domestic

<sup>1/</sup> See Staff Report, p. A-27.

 $<sup>\</sup>overline{2}/\overline{A}$  complete discussion of the bid process is provided in the report which follows this opinion.

producers have been compelled to lower their bid prices, in some instances by more than 30 percent, due to the competition from stainless clad steel plate imported from Japan.  $\underline{1}/$ 

The Commission is aware that in some of the responses by fabricator/purchasers of stainless clad steel plate, certain requirements, such as quality, adherence to specification, and customer preference, were listed as being more important than price. Notwithstanding these factors, price is always an important consideration in the final selection of the supplier.

In this investigation, there is a reasonable indication of price suppression, price depression, and lost sales as a result of the importation of stainless clad steel plate allegedly being sold at less than fair value. 2/

Impact on the domestic industry. 3/--The industry which produces stainless clad steel plate was in a serious decline from 1978 to 1980. Production, shipments, capacity utilization, profitability, and employment declined steadily throughout the period. 4/ Imports were also at a very low level from 1978 to 1980, both in absolute numbers and as a percent of total U.S. consumption.

<sup>1</sup>/ Chairman Alberger and Vice Chairman Calhoun note that this might not be a serious problem if prices in the industry were inflated. However, it appears clear from the data on profitability that such is not the case.

<sup>2</sup>/ If this case were to be returned for a final determination by the Commission, more information on the relationship of price to quality would be useful.

<sup>3</sup>/ Specific company-related data are confidential and cannot be discussed in this public document.

<sup>4/</sup> See Staff Report, pp. A-8 through A-11 and A-19.

In the first six months of 1981, however, the market for stainless clad steel plate increased dramatically. Production and shipments of the domestic producers increased, employment levels rose, and capacity utilization was at its highest level in the period for which we have data. 1/ In 1981, however, there were massive imports which caused problems for an already weakened domestic industry.

The profitability of the domestic producers declined steadily from 1978 to 1980 and dropped sharply in the first six months of 1981 despite the increase in their shipments. 2/ The ratio of cost of goods sold to net sales increased by more than 10 percentage points from 1978 to 1981, indicating firms were unable to pass their increased costs on in the price they charged for their goods, thus lowering their profitability. 3/

It appears that the principal reason producers have been unable to raise prices and in some instances have had to roll back their prices to make sales, was the strong price competition from the imported product. The result has been a decline in both gross profit and net profit before taxes in January-June 1981, a time when shipments had increased and when profits could reasonably have been expected to increase as well. Despite lowering prices to meet the Japanese price, domestic producers nonetheless lost sales to stainless clad steel plate imported from Japan on at least six contracts. 4/

 $<sup>\</sup>frac{1}{2}$ , pp. A-8 through A-11.

 $<sup>\</sup>frac{7}{1}$   $\frac{1}{1}$   $\frac{1}$ 

 $<sup>3/\</sup>overline{1d}$ , pp. A-17 through A-20.

<sup>4/</sup> Id., p. A-28.

Reasonable indication of threat of material injury. -- The report of the Committee on Ways and Means of the House of Representatives on the Trade Agreement Act of 1979 states that, with respect to threat, the Commission should focus on--

demonstrable trends—for example, the rate of increase of the . . . dumped exports to the U.S. market, capacity in the exporting country to generate exports, the likelihood that such exports will be directed to the U.S. market taking into account the availablility of other export markets, . . .

A critical factor in considering how substantial an impact imports have had is the short period of time in which the increase occurred. The significant increase of imports in 1981 constitutes a threatening situation to the domestic industry. Imports went from less than one percent of consumption in 1980 to more than 10 percent in January-June 1981. Indications are that imports will continue to increase at least at this rate through the end of 1981.

Japan Steel Works is believed to be operating below capacity at the present time. How much of this excess capacity would be available for export to the United States is unknown. 1/ Any increase in the January-June 1981 levels would have a serious detrimental impact on the domestic industry, particularly if the Japanese imports increased while total domestic consumption simultaneously decreases, as some industry sources anticipate. 2/

<sup>1/</sup> If the Commission undertakes a final investigation, it will attempt to ascertain what percentage of Japan Steel Works' exports could be directed to the U.S. market.

<sup>2/</sup> Transcript p. 29.

#### Conclusion

On the basis of the best information available, we find that there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury 1/ by reason of imports of stainless clad steel plate from Japan which is allegedly being sold at less than fair value.

<sup>1/</sup> Material retardation of the establishment of an industry is not an issue in this investigation.

#### INFORMATION OBTAINED IN THE INVESTIGATION

#### Introduction

On October 6, 1981, a petition was filed with the U.S. International Trade Commission and the U.S. Department of Commerce by Lukens Steel Co., alleging that stainless clad steel plate imported from Japan is being, or is likely to be, sold in the United States at less than fair value (LTFV). Accordingly, on October 6, 1981, the Commission instituted preliminary antidumping investigation No. 731-TA-50 (Preliminary) under section 733(a) of the Tariff Act of 1930 to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of stainless clad steel plate from Japan, as classified in item 607.94 of the Tariff Schedules of the United States (TSUS). The statute directs that the Commission make its determination within 45 days of receipt of the petition, or by November 20, 1981.

Notice of the institution of the Commission's investigation and of the public conference 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 in the Federal Register on October 14, 1981 (46 F.R. 50864). 1/ A public conference was held in Washington, D.C., on October 29, 1981, at which all interested parties were afforded the opportunity to present information for consideration by the Commission. 2/ The Commission voted on this investigation on November 13, 1981.

#### Description and Uses

Stainless clad 3/ steel plate is a finished steel product consisting of a layer of stainless steel 4/ integrally bonded to a carbon- or alloy-steel plate 5/ base. The thickness of the stainless cladding material can range

<sup>1/</sup> A copy of the Commission's notice of investigation and conference is presented in app. A. The Department of Commerce's notice of investigation is presented in app. B.

<sup>2/</sup> A list of witnesses appearing at the conference is presented in app. C.

<sup>3/</sup> As applied to metal products, "clad" refers to such products with two or more layers of metal of different colors or natures which have been associated or bonded together by forging, hammering, rolling, or other mechanical or thermic process to insure welding or molecular interpenetration of the surfaces in contact (Tariff Schedules of the United States Annotated (1981) (TSUSA), headnote 3(d) to schedule 6, part 2).

<sup>4/</sup> Stainless steel is any alloy steel which contains by weight less than 1 percent of carbon and over 11.5 percent chromium (TSUSA, headnote 2(h)(iv) to schedule 6, part 2, subpart A).

<sup>5/</sup> Plates are flat rolled products, whether or not corrugated or crimped, in coils or cut to length, 0.1875 inch (3/16 inch or 4.76 mm) or more in thickness, and, if not cold rolled, over 8 inches in width, or if cold rolled, over 12 inches in width (TSUSA, headnote 3(g) to schedule 6, part 2, subpart A).

from 5 to 25 percent of the total thickness of the plate. It is produced to order in a range of stainless types (types 304L and 410S are the most common) and in a variety of lengths, widths, and thicknesses. Both imported and domestic stainless clad steel plate must meet American Society of Testing Materials (ASTM) specifications.

In general, stainless clad steel plate is used because it combines the corrosion-resistant properties of stainless steel with the strength of carbon or alloy steel, thus allowing less of the more expensive stainless material to be used. Specific applications for the product include the fabrication of petroleum vessels, petrochemical vessels, ships which carry corrosive chemicals, and nuclear power plants.

#### The imported product

All known imports of stainless clad steel plate from Japan are produced by Japan Steel Works, Ltd. (JSW), although other Japanese firms produce such clad plate for sale in markets other than the United States.

JSW produces clad steel plate using a hot-rolling process in the following manner. The surface to be bonded of both the cladding metal and the backing steel are ground and cleaned. They are then nickel-plated to ensure metallurgical bond. Two plates of backing material (carbon or alloy steel) with two plates of cladding material between them are placed together with the two cladding metals together. The sides of the cladding metal which are placed together are coated with a parting compound so they can be separated after bonding. The four pieces of metal with the cladding material in the middle and the backing material on the outside are matched together to form an assembly or pack and are then welded along the edges to protect the cladding material from contamination during heating before rolling. The assembly is then heated to the proper temperature and mill rolled to the required thickness. The process metallurgically bonds the backing and cladding material. The assembly is then heat treated and separated into two clad plates to be cut into the appropriate dimensions. The clad plates are subjected to ultrasonic and mechanical tests, and both the clad and backing sides are surface finished to eliminate defects. The plates are then wrapped and shipped.

JSW produces stainless clad plate ranging in thickness from 5/16 of an inch to 6 inches, in widths from 78 inches to 174 inches, and in lengths from 160 inches to 510 inches, depending on the specifications set forth in the customers' orders.

The Japanese producer. -- There are three known producers of stainless clad steel plate in Japan: JSW, Nippon Steel Corp., and Kobe Steel, Ltd. As mentioned, only JSW is known to export this product to the United States.

JSW produces approximately \* \* \* metric tons of clad steel plate a year. This includes plates clad with nickel and nickel alloys and copper and copper alloys. Roughly \* \* \* of this is for use in the home market. The rest is exported around the world.

JSW has a subsidiary company in the United States (Japan Steel Works America, Inc.), which provides technical and mechanical assistance to U.S. companies, but does not import or sell the clad steel plate directly.

U.S. importers.—Stainless clad steel plate is imported into the United States by three known importers: \* \* \* \*, \* \* \*, and \* \* \*. These three importers accounted for all U.S. imports of stainless clad steel plate from Japan in January-June 1981. Although \* \* \* imports the product from Japan, it does not sell the material directly to U.S. fabricators. Instead, it distributes its imports through \* \* \*.

Tariff treatment.—Stainless clad steel plate is classified under item 607.94 in the Tariff Schedules of the United States (TSUS). 1/ This item includes clad "plates and sheets of iron or steel, not cut, not pressed, and not stamped to non-rectangular shape" (except such products electrolytically coated or plated with base metals other than tin, lead, or zinc.). The column 1 (most-favored-nation) rate of duty for stainless clad steel plate is currently 12 percent ad valorem. 2/ As a result of concessions granted in the Tokyo round of the Multilateral Trade Negotiations (MTN), this rate will undergo a series of successive annual duty reductions beginning January 1, 1982, and ending on January 1, 1987, when the final column 1 rate of 6.5 percent ad valorem will be reached.

The column 2 rate of duty for item 607.94 is 30 percent ad valorem. 3/ Imports from least developed developing countries are not granted preferential rates, 4/ and this item is not eligible for duty-free treatment under the GSP. 5/

<sup>1/</sup> Prior to Jan. 1, 1980, stainless clad steel plate was classified as the now-deleted item 608.89, which was redesignated as item 607.94 pursuant to Presidential Proclamation 4707.

<sup>2/</sup> From January 1978 through December 1979, the column 1 rate of duty for item 608.89 was 12 percent ad valorem. The column 1 rates are applicable to imported products from all countries except those Communist countries enumerated in general headnote 3(f) of the TSUSA. However, such rates would not apply to products of developing countries since they are granted preferential tariff treatment under the Generalized System of Preferences (GSP) or under the least developed developing country (LDDC) rate of duty column.

<sup>3</sup>/ The rate of duty in column 2 applies to imported products from those Communist countries and areas enumerated in general headnote 3(f) of the TSUSA.

<sup>4/</sup> The LDDC rate is a preferential rate (reflecting the full U.S. MTN concession rate for a particular item without staging) applicable to products of the LDDC's designated in general headnote 3(d) of the TSUSA which are not granted duty-free treatment under the GSP.

<sup>5/</sup> The GSP, under title V of the Trade Act of 1974, provides duty-free treatment for specified eligible articles imported directly from designated beneficiary developing countries. GSP, implemented by Executive Order No. 11888 of Nov. 24, 1975, applies to merchandise imported on or after Jan. 1, 1976, and is expected to remain in effect until January 1985.

#### The domestic product

Stainless clad steel plate is produced in the United States by use of a hot-rolling process or an explosion-bonding process. The roll-bonding process employed in the United States is basically the same as that used by JSW.

Explosion bonding is a process in which the plates to be bonded are joined by a high-pressure collision of the metals. Clad and backing plates are placed close together (but not touching) at a slight angle, and a layer of explosive is placed in contact with the outer surface of the cladding material. When the explosive is detonated, the plates collide, and a jet emanates from the collision point which moves slightly ahead of the collision point, carrying away surface films which would normally prevent bonding. With the films removed, the metals are bonded by the pressure and plastic flow attending the collision. This method is more costly when bonding thin plates, and there is a limitation to the surface area which can be bonded at once. It is more cost competitive with thicker plates, however, and can be used to clad with metals such as titanium, which are not successfully bonded using the roll-bonding method.

#### U.S. producers

There are four known U.S. producers of stainless clad steel plate. All four of these firms produce plate which is clad with stainless steel as well as plate which is clad with other materials. 1/ Two of them, Lukens Steel Co. (Lukens) of Coatesville, Pa., the petitioner in this investigation, and Phoenix Steel Corp. (Phoenix) of Claymont, Del., produce clad steel plate using the roll-bond method. The other two producers, E.I. du Pont de Nemours & Co., Inc. (Du Pont), Coatesville, Pa., and Explosive Fabricators, Inc. (EFI), Louisville, Colo., produce clad steel plate using the explosion-bond method.

Lukens is a nonintegrated producer of carbon, alloy, and clad steel plates and plate products, operating facilities in Coatesville and Conshohocken, Pa. The plant in Coatesville has two 150-ton and two 100-ton electric furnaces and an 85-inch single-strand slab caster. The majority of the slabs are produced by the continuous-cast method. Because of the limited capacity of the casting machine, however, a significant share of the firms' plate production is made from ingot. The Coatesville facility is equipped with 120-inch, 140-inch, and 206-inch rolling mills, an electro-slag remelting facility, flanging department, clad steel department, heat-treating department, sodium hydride pickling and descaling department, welding department, and flame-cutting department. The plant in Conshohocken, acquired by Lukens in 1978 from the now-defunct Alan Wood Steel Co., is equipped with a 4-high, 2-stand, 110-inch plate mill. Lukens produces carbon plate up to 30 inches thick, 195 inches wide, and 1,000 inches in length, and alloy plate up to 18 inches thick, 195 inches wide, and 1,000 inches in length.

<sup>1</sup>/ Other cladding materials include nickel and nickel alloys, titanium, and copper and copper alloys.

Phoenix is a nonintegrated producer of steel plate products and seamless steel tubing, operating facilities in Claymont, Del., and Phoenixville, Pa. The plant in Claymont produces carbon, alloy, and clad plates, flanged and dished heads, and welded pipe. It is equipped with two 150-ton electric furnaces and a 2-strand continuous-slab caster. The majority of Phoenix's slabs are produced by the continuous-casting method, although higher grade slabs are made from bottom-poured ingots. The facility has a 120-inch, 2-high roughing and descaling mill and a 160-inch, 4-high finishing mill. 1/ The plant in Phoenixville produces seamless tubing exclusively.

Although Lukens and Phoenix both produce carbon and alloy backing steel, they purchase the stainless steel used in their cladding operations.

Du Pont has been producing clad steel plate using the explosion-bonding method for more than 20 years. The prebonding operations are located in Coatesville, Pa. The explosion bonding itself is done in an underground shooting chamber. The clad steel plate is then returned to the Coatesville facility for finishing. In addition to a wide variety of clad steel plates, Du Pont produces clad heads and tube sheet. Both are products made from clad steel plate. The fourth producer of clad steel plate is EFI. This firm also uses the explosion-bond method of production and produces tube sheets as well as clad plates. Du pont and EFI purchase both their backing steel and cladding material.

#### U.S. Market and Channels of Distribution

The U.S. market for clad steel plate consists of the shipbuilding, chemical, petroleum, and nuclear power industries. Clad steel plate, and specifically stainless clad steel plate, can be used anywhere its particular qualities of strength and corrosion resistance are required.

Apparent U.S. consumption of stainless clad steel plate and all clad steel plate is shown in the following tabulation (in thousands of pounds):

|              | Stainless clad | All clad    |
|--------------|----------------|-------------|
| Period       | steel plate    | steel plate |
| 1978         | ***            | ***         |
| 1979         | ***            | ***         |
| 1980         | ***            | ***         |
| January-June |                |             |
| 1980         | ***            | ***         |
| 1981         | ***            | ***         |

<sup>1/</sup> The largest Phoenix rolling mill is 160-inches wide. Because JSW has a 208-inch mill and Lukens has a 206-inch mill, Phoenix is limited in its ability to compete for jobs requiring large-width plate.

Consumption of stainless clad steel plate decreased steadily from \* \* \* million pounds in 1978 to \* \* \* million pounds in 1980, representing a decline of \* \* \* million pounds or \* \* \* percent. Consumption increased, however, in January-June 1981, by \* \* \* million pounds, or \* \* \* percent above that in January-June 1980.

Stainless clad steel plate is generally sold on a competitive-bid basis to a fabricator who uses it in fulfilling requirements of a general contractor or engineer for a particular project. There are at least two, and often three, levels of distribution between the clad steel producer and the final user of the product. The bid process at the fabricator level and at the general contractor or engineer level is discussed in detail in the pricing section.

#### Nature and Extent of Alleged Sales at LTFV

Lukens alleges LTFV sales of stainless clad steel plate from Japan in 1981. The petition presents data comparing the constructed cost of the Japanese product with the average U.S. price for three major contracts. The resulting average LTFV margin arrived at by using this comparison was 14 percent.

#### Consideration of Material Injury

As discussed earlier, two of the four U.S. producers of stainless clad steel plate use the roll-bonding method, and two use the explosion-bonding method. The explosion-bonding process is not as economical when bonding thinner clad plates as is the roll-bonding method. Since much of the stainless clad steel plate produced is three inches or less in thickness (typically the product called for in the largest contracts), there is a sizable part of the market in which the two explosion-bond producers are not competitive with the roll-bond producers. In addition, the explosion-bond producers maintain records on their cladding operations by square feet bonded and not by pounds. Their data, therefore, had to be converted from square feet to pounds. 1/ For these reasons, much of the economic data presented in this report are shown separately for the roll-bond producers and the explosion-bond producers. When available, information is presented on total clad steel plate operations also.

<sup>1/</sup> One explosion-bond producer (EFI) was able to provide only partial data which could not be aggregated with those provided by the other producers. Therefore, EFI's data are not included in some of the following discussions. EFI accounted for roughly \* \* \* percent of domestic stainless clad steel plate production in 1980.

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

Total U.S. production of stainless clad steel plate declined steadily from 1978 through 1980. A sharp increase in production is indicated in 1981, with production \* \* \* (table 1).

Table 1.--Stainless clad steel plate: U.S. production, by firms, 1978-80, January-June 1980, and January-June 1981

| :<br>Firm      | 1978 | : | 1979         | :                     | 1980      | :        | Januar | у-   | June |
|----------------|------|---|--------------|-----------------------|-----------|----------|--------|--|------|
| :              |      | : |              | :<br>:                | 1900      | :<br>:   | 1980   | :  | 1981 |
| :<br>:         |      |   | Quant        | ity                   | (1,000 p  | ou       | nds)   |  |      |
| The section of |      | : |              | :                     |           | :        |        | :  |      |
| Phoenix:       | ***  | : | ***          | :                     | ***       | :        | ***    | :  | ***  |
| Lukens:        | ***  | : | ***          | :                     | ***       | :        | ***    | :  | ***  |
| Subtotal:      | ***  | : | ***          | :                     | ***       | :        | ***    | :  | ***  |
| Du Pont:       | ***  | : | ***          | :                     | ***       | :        | ***    | :  | ***  |
| EFI:           | ***  | : | ***          | :                     | ***       | :        | ***    | :  | ***  |
| Subtotal:      | ***  | : | ***          | :                     | ***       | :        | ***    | <u>:</u>                                     | ***  |
| Total:         | ***  | : | ***          | :                     | ***       | :        | ***    | :  | ***  |
|                |      |   | 1            | Perd                  | cent of t | ot       | al     |  | . •  |
| <b>:</b>       |      | : | <del> </del> | :                     |           | :        |        | :  |      |
| Phoenix:       | ***  | : | ***          | :                     | ***       | :        | ***    | :  | ***  |
| Lukens:        | ***  | : | ***          | :                     | ***       | :        | ***    | :  | ***  |
| Subtotal:      | ***  | : | ***          | :                     | ***       | :        | ***    | :  | ***  |
| Du Pont:       | ***  | : | ***          | :                     | ***       | :        | ***    | :  | ***  |
| EFI            | ***  | : | ***          | •                     | ***       | •        | ***    | •  | ***  |
| Subtotal:      | ***  | : | ***          | $\frac{\cdot}{\cdot}$ | ***       | <u>:</u> | ***    | <u>:                                    </u> | ***  |
| Total:         | ***  | : | ***          | :                     | ***       | :        | ***    | <u>-</u>                                     | ***  |
| :              |      | : |              | :                     |           | :        | :      | :  |      |

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

Production of stainless clad steel plate by the two firms that use the roll-bond method of cladding accounts for more than \* \* \* percent of total production, with Lukens accounting for roughly \* \* \* percent of that production, in the period under consideration.

Production of stainless clad steel plate by the roll-bond producers declined by \* \* \* percent from 1978 to 1979, then declined by an additional \* \* \* percent from 1979 to 1980. An increase of \* \* \* percent is shown in production in January-June 1981, as compared with production in January-June 1980.

Production by the explosion-bond clad producers shows a substantial decline of \* \* \* percent from 1978 to 1979, with an increase of \* \* \* percent indicated from 1979 to 1980. Production increased by \* \* \* percent in January-June 1981 compared with that in January-June 1980.

Production of all clad steel plate is shown in table 2. Production declined from 1978 to 1980 by \* \* \* million pounds, and then increased by \* \* \* million pounds in January-June 1981 compared with that in January-June 1980.

Table 2.--Clad steel plate: U.S. production, by firms, 1978-80, January-June 1980, and January-June 1981

|                 | Firm | :        | 1978       | :        | 1979       | : | 1980 | :<br>:_ | Januar | y-June       |
|-----------------|------|----------|------------|----------|------------|---|------|---------|--------|--------------|
|                 |      | <u> </u> |            | :        |            | : | 2500 | :       | 1980   | 1981         |
| Phoenix         |      |          | ***<br>*** | •        | ***<br>*** | • | ***  | :       | ***    | : *:         |
| Subtota Du Pont | 1    |          | ***        | <u>:</u> | ***        | : | ***  | :       | ***    | : *:         |
| EFI             |      | :        | ***        | :        | ***<br>*** | : | ***  | :       | ***    | : *:<br>: *: |
| Subtota         |      | :        | ***        | :        | ***        | : | ***  | :       | ***    | : *:         |
| Total           |      | :        | ***        | :        | ***        | : | ***  | :       | ***    | * **         |

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

Many of the facilities used in the production of clad steel plate are used for the production of other plate products as well. Therefore, production capacity for clad steel plate is based on the capacity of the finishing facilities for producing the clad plate. Stainless clad and other clad plate are produced on the same equipment; therefore, it is impossible to determine capacity for stainless clad only. Table 3 provides information on clad steel plate production as a share of capacity, and stainless clad steel plate production as a share of capacity for all clad steel plate.

Table 3.--Clad steel plate: Capacity and capacity utilization, by firms, 1978-80, January-June 1980, and January-June 1981

| Firm                 | :<br>: 1978 | :        | 1979     | :        | 1980        | :                  | Janua       | ry-      | June        |
|----------------------|-------------|----------|----------|----------|-------------|--------------------|-------------|----------|-------------|
|                      | :           | :        |          | :<br>:   | 1900        | :                  | 1980        | :        | 1981        |
|                      | :<br>       |          | Capac    | ity      | (1,000 ]    | ου                 | ınds)       |          |             |
| Phoenix              | :<br>·• *** | :        | ***      | :        | ***         | :                  |             | :        |             |
| Lukens               | •           | :        | ***      | :        | ***         | :                  | ***         | :        | **:         |
| Subtotal             | •           | ÷        |          | <u>:</u> | ***         | <u>:</u>           | ***         | <u>:</u> | **          |
| Du Pont              | ·           | ÷        | ***      | :        |             | <u>:</u>           | ***         | <u>:</u> | **          |
| Total                | •           | <u>:</u> | ***      | ÷        | ***         | <u>:</u>           | ***         | :        | **:         |
|                      |             |          | Capacity | 7 u      | tilizatio   | n<br>—             | (Percent    | :)       |             |
|                      |             | :        |          | :        |             | :                  |             | :        | <del></del> |
| Stainless clad plate | •           | :        |          | :        |             | :                  |             | :        |             |
| Phoenix              | -           | :        | ***      | :        | ***         | :                  | ***         | :        | **          |
| Lukens               | •           | :        | ***      | :        | ***         | :                  | ***         | :        | ***         |
| Subtotal             | : ***       | :        | ***      | :        | ***         | :                  | ***         | ÷        | ***         |
| Du Pont              | •           | :        | ***      | :        | ***         | $\overline{\cdot}$ | ***         | ÷        | ***         |
| Average              | ***         | :        | ***      | :        | ***         | :                  | ***         | ÷        | ***         |
| All clad plate:      | :           | :        |          | :        | <del></del> | :                  | <del></del> | ÷        |             |
| Phoenix              | •           | :        | ***      | :        | ***         | :                  | ***         | :        | ***         |
| Lukens               | •.          | :        | ***      | :        | ***         | :                  | ***         | :        | ***         |
| Average              | ***         | :        | ***      | :        | ***         | :                  | ***         | :        | ***         |
| Du Pont              | ***         | :        | ***      | :        | ***         | :                  | ***         | :        | ***         |
| Average              | ***         | :        | ***      | :        | ***         | :                  | ***         | :        | ***         |
|                      | :           | :        |          | •        |             |                    |             |          |             |

Capacity of the U.S. producers to produce clad steel plate remained stable from January 1978 through June 1981. Capacity utilization in the production of stainless clad steel plate for the roll-bond clad steel plate producers declined from \* \* \* percent in 1978 to \* \* \* percent in 1980. In January-June 1981, however, capacity utilization was \* \* \* percent, up from \* \* \* percent in January-June 1980.

Capacity utilization on all clad plate for roll-bond producers dropped steadily from \* \* \* percent in 1978 to \* \* \* percent in 1980, or by \* \* \* percentage points. In January-June of 1981, however, capacity utilization for these producers increased to \* \* \* percent, \* \* \* percentage points above that in January-June 1980.

Du Pont, the only explosion-clad producer for which capacity data are available, shows a slight \* \* \* in capacity utilization for stainless clad steel plate from \* \* \* percent in 1978 to \* \* \* percent in 1979, and a slight \* \* \* in 1980. In January-June 1981, DuPont's capacity utilization for stainless clad steel plate \* \* \* to \* \* \* percent.

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Du Pont's capacity utilization for all clad plate followed a different trend, \* \* \* by \* \* \* percentage points from 1978 to 1979, then \* \* \* by \* \* \* percentage points in 1980 to \* \* \* percent. In January-June 1981, the firm's capacity utilization \* \* \* by \* \* \* percentage points to \* \* \* percent.

Aggregate capacity utilization for the three producers reporting both production and capacity for stainless clad steel plate \* \* \* from \* \* \* percent in 1978 to \* \* \* percent in 1979, and to \* \* \* percent in 1980. In January-June 1981, capacity utilization for the stainless clad producers \* \* \* to \* \* \* percent, more than \* \* \* the utilization rate of January-June 1980.

### U.S. producers' domestic shipments

The quantity and value of U.S. producers' domestic shipments of stainless clad steel plate are shown in table 4.

Total domestic shipments of stainless clad steel plate declined steadily from \* \* \* million pounds in 1978 to \* \* \* million pounds in 1980. In January-June 1981, however, domestic shipments totaled more than \* \* \* million pounds, almost \* \* \* the \* \* \* million pounds shipped in January-June 1980. The quantity of domestic shipments of the explosive-bond producer followed a slightly different pattern, \* \* \* by \* \* \* pounds from 1978 to 1979, and then \* \* \* by \* \* \* pounds in 1980. A continued \* \* \* is shown in January-June 1981, with shipments \* \* \* to \* \* \* million pounds, \* \* \* pounds \* \* \* the level reported in the corresponding period of 1980.

The value of total domestic shipments of stainless clad plate \* \* \* from \* \* \* in 1978 to \* \* \* in 1980, representing a \* \* \* of \* \* \* or \* \* \* percent. In January-June 1981, the total value of domestic shipments \* \* \* to \* \* \* , almost \* \* \* the shipments of \* \* \* reported in January-June 1980.

The average unit value of domestic shipments of stainless clad steel plate varied substantially between producers. The greatest difference was between the explosive-clad producers and the roll-bond producers. This variance is due principally to the different thicknesses and types of stainless cladding used. The explosive-bond clad producers generally produce the thicker clad plates, which have a greater range of unit values. Unit values for the explosive-clad producers \* \* \* from 1978 to 1979 by \* \* \* cents, and continued to \* \* \*, by \* \* cents, in 1980. In January-June 1981, the unit value of the explosive-clad producers \* \* \*.

The average unit value for the roll-bond clad producers \* \* \* by \* \* \* cents, or \* \* \* percent, in 1979, and by an additional \* \* \* cents, or \* \* \* percent, in 1980.

Table 4.--Stainless clad steel plate: U.S. producers' domestic shipments, by firms, 1978-80, January-June 1980, and January-June 1981

| Firm     | :<br>: 1978 | :        | 1070        | :        | 1000        | :        | Janua | ry-  | -June |
|----------|-------------|----------|-------------|----------|-------------|----------|-------|--|-------|
| riim     | : 1976      | :        | 1979        | :        | 1980        | :        | 1980  | :  | 1981  |
|          | :           |          | Quant       | tit      | y (1,000    | ро       | unds) |  |       |
| Phoenix  | : ***       | :        | als als als | :        | .111        | :        |       | :  |       |
| Lukens   | •           | •        | ***<br>***  | :        | ***<br>***  | :        | ***   | •  | ***   |
| Subtotal | •           | •        | ***         | <u>:</u> |             | :        | ***   | •  | ***   |
| Du Pont  |             | •        | ***         | <u>:</u> | ***         |          | ***   | •  | ***   |
| EFI      | •           | •        | ***         | :        | ***<br>***  | •        | ***   | •  | **    |
| Subtotal | ₹           | •        | ***         | •        |             | <u>·</u> | ***   | <u>:</u>                                     | ***   |
| Total    | <u> </u>    | •        |             | <u> </u> | ***         | <u>.</u> | ***   | <u>:</u>                                     | ***   |
| 10041    |             | <u>:</u> |             | :        | (1,000 do   | :        | ***   | <u>:</u>                                     | ***   |
| Phoenix  | ·: ***      |          | ***         |          | ***         |          | ***   |  | ***   |
| Lukens   |             | •        |             |          |             | :        | ***   | •  | ***   |
| Subtotal | •           | •        |             | ÷        | ***         | <u>:</u> | ***   | <u>.</u>                                     |       |
| Du Pont  |             | •        | ***         | $\vdots$ |             | <u>:</u> | **9   | •  | ***   |
| EFI      | •           | •        | ***         | :        | ***         | :        | ***   | •  | ***   |
| Subtotal | •           | •        | ***         | ÷        | ***         | ÷        | ***   | •  | ***   |
| Total    |             | •        | ***         | ÷        | <del></del> | ÷        | ***   | <u>.                                    </u> | ***   |
|          |             | <u></u>  |             | •        | value (     | •        |       | <u>•</u>                                     |       |
| Phoenix  | : ***       | :        | ***         | :        | ***         | :        | ***   | :  | ***   |
| Lukens   | : ***       | :        | ***         | :        | ***         | :        | ***   | :  | ***   |
| Average  | : ***       | :        | ***         | :        | ***         | $\dot{}$ | ***   | :  | ***   |
| Du Pont  | : ***       | :        | ***         | :        | ***         | :        | ***   | :  | ***   |
| EFI      | : ***       | :        | ***         | :        | ***         | :        | ***   | :  | ***   |
| Average  | : ***       | :        | ***         | :        | ***         | :        | ***   | :  | ***   |
| Total    | : ***       | :        | ***         | :        | ***         | :        | ***   | :  | ***   |
|          | :           | •        |             |          |             | •        |       |  |       |

The quantity and value of U.S. shipments of all clad steel plate are shown in table 5.

The quantity of shipments of all clad plate \* \* \* steadily from \* \* \* million pounds in 1978 to \* \* \* million pounds in 1980, or by \* \* \* million pounds or \* \* \* percent. Data for January-June 1981 show shipments of all clad plate of \* \* \* million pounds--\* \* \* million pounds, or \* \* \* percent, more than shipments in January-June 1980.

| Table 5.—Clad steel | plate:  | U.S.  | produc | ers' | domestic shipments. |
|---------------------|---------|-------|--------|------|---------------------|
| by firms, 1978-80,  | January | -June | 1980,  | and  | January-June 1981   |

| Firm     | : 1978     | :      | 1979  | :<br>:       | 1980     | :                        | January-June |                |      |
|----------|------------|--------|-------|--------------|----------|--------------------------|--------------|----------------|------|
|          | :          | :<br>: | 17/7  | :<br>:       | 1900     | :                        | 1980         | :              | 1981 |
|          | <u> </u>   |        | Quant | it           | y (1,000 | рo                       | ounds)       |                |      |
| Phoenix  | :<br>: *** | :      |       | :            |          | :                        |              | :              |      |
| Lukens   | •          | :      | ***   | •            | ***      | :                        | ***          | :              | **:  |
|          | •          |        | ***   | :            | ***      | :                        | ***          | :              | **:  |
| Subtota1 | •          | :      | ***   | :            | ***      | :                        | ***          | :              | **:  |
| Du Pont  | : ***      | :      | ***   | :            | ***      | :                        | ***          | ÷              | **:  |
| EFI      | : ***      | :      | ***   | •            | ***      | :                        | ***          | :              | ***  |
| Subtotal | : ***      | :      | ***   | ÷            | ***      | ÷                        | ***          | ÷              | **:  |
| Total    | : ***      | :      | ***   | <del>:</del> | ***      | <u>:</u>                 |              | ÷              | ***  |
|          | :          |        | Valu  | ie i         | (1,000 d | 11                       | ars)         |                |      |
| Phoenix  | •          | :      | ***   | :            | ***      | :                        | ***          |                | ***  |
| Lukens   | •          | :      | ***   | :            | ***      | :                        | ***          | •              | ***  |
| Subtotal | •          | :      | ***   | :            | ***      | $\dot{\overline{\cdot}}$ | ***          | ÷              | ***  |
| Du Pont  | •          | :      | ***   | :            | ***      | ÷                        | ***          | ÷              | ***  |
| EFI      | •          | :      | ***   | :            | ***      | •                        | ***          |                | ***  |
| Subtotal | : ***      | :      | ***   | :            | ***      | ÷                        | ***          | <del>:</del> - | ***  |
| Total    | : ***      | :      | ***   | ÷            | ***      | ÷                        | ***          | <u>:</u> -     | ***  |
|          | •          | •      |       | :            |          | •                        |              | •              | ^ ** |

The value of domestic shipments of all clad steel plate \* \* \* from 1978 to 1979 by \* \* \*, or \* \* \* percent, and then \* \* \* by \* \* \*, or \* \* \* percent, in 1980. In January-June 1981, however, the value of shipments of all clad steel plate was \* \* \*--\* \* \* percent \* \* \* than it was in January-June 1980.

#### U.S. producers' exports

The quantity and value of U.S. producers' exports of stainless clad steel plate are shown in table 6.

Export shipments \* \* \* from 1978 to 1980 by \* \* \* pounds, or \* \* \* percent. There is a continued \* \* \* shown in January-June 1981 when compared with shipments in January-June 1980. Exports as a share of U.S. producers' total shipments \* \* \* from \* \* \* percent in 1978 to \* \* \* percent in 1980, and then \* \* \* to \* \* \* percent in January-June 1981. The value of exports \* \* \* as well, although, again due to differences in product mix, unit values have fluctuated throughout the period.

| Table 6Stair | less clad  | steel plat | e: U.S.  | producers'  | exports, |
|--------------|------------|------------|----------|-------------|----------|
| 1978-80,     | January-Ju | ne 1980, a | and Janu | ary-June 19 | 981      |

| Period       | Quantity        | Value                | Unit value |
|--------------|-----------------|----------------------|------------|
|              | 1,000<br>pounds | : 1,000<br>: dollars | Per pound  |
| 1978:        | ***             | ***                  | * ***      |
| 1979:        | ***             | : ***                | ***        |
| 1980:        | ***             | : ***                | ***        |
| January-June |                 | :                    | :          |
| 1980:        | ***             | : ***                | ***        |
| 1981:        | ***             | ***                  | ***        |
| :            |                 | •                    | •          |

The quantity and value of exports of all clad steel plate are shown in table 7.

Table 7.--Clad steel plate: U.S. producers' exports, 1978-80, January-June 1980, and January-June 1981

| Period :                | Quantity        | : | Value            | Unit value   |
|-------------------------|-----------------|---|------------------|--------------|
| :<br>:                  | 1,000<br>pounds | : | 1,000<br>dollars | Per pound    |
| 1978:                   | ***             | : | ***<br>***       | ***<br>***   |
| 1980: January-June 1980 | ***             | : | ***              | ***<br>: *** |
| 1981                    | ***             | : | ***              | ***          |

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

The quantity of exports of all clad steel plate \* \* \* by \* \* \* pounds from 1978 to 1979, and then \* \* \* by \* \* \* pounds in 1980. A continued \* \* \* of \* \* \* pounds is shown in January-June 1981 when compared with exports in January-June 1980. The value of these shipments \* \* \* steadily throughout the period under consideration.

The explosive-bond producers accounted for a greater share of the nonstainless clad steel plate exports. These products tend to be thicker and more expensive than the stainless clad steel plate produced by the roll-bond producers, thus accounting for the generally \* \* unit values shown in table 7 compared with those shown in table 6.

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#### U.S. producers' inventories

Stainless clad steel plate is a specialty product which is produced to specification and not generally held in inventory. Only one producer reported any inventories. These developed because clad plates are produced in a pack (i.e. two plates at a time) even if an order requires only one plate. The extra plate produced is inventoried until such time as that particular specification is required again. End-of-period inventories of stainless clad steel plate and clad steel plate other than stainless are shown in the following tabulation (in thousand of pounds):

| Stainless    | Other than stainless |
|--------------|----------------------|
| 1978 ***     | ***                  |
| 1979 ***     | ***                  |
| 1980 ***     | ***                  |
| January-June |                      |
| 1980 ***     | ***                  |
| 1981 ***     | ***                  |

### Employment, productivity, and wages

Information on employment and productivity for the U.S. industry producing clad steel plate was provided by three producers and is presented in table  $8. \,$ 

The number of production and related workers employed in the production of clad steel plate \* \* \* steadily from \* \* \* workers in 1978 to \* \* \* workers in 1980, or by \* \* \* percent. Data for January-June 1981 show an \* \* \* in the number of production and related workers to \* \* \*. Hours worked by production and related workers \* \* \* by \* \* \* percent from 1978 to 1980, and then \* \* \* by \* \* \* percent in January-June 1981 compared with hours worked in January-June 1980. Output per hour worked remained fairly stable from 1978 to 1980, at just over \* \* \* pounds. In January-June 1981, however, productivity \* \* \* to \* \* \* pounds per hour.

Only two producers (Lukens and Phoenix) were able to estimate the number of employees allocated to the production of stainless clad steel plate. This information is presented in table 9.

Table 8.—Clad steel plate: Production and related workers, hours worked by such workers, and output per hour, by firms, 1978-80, January-June 1980, and January-June 1981

| Item and firm               | 1978 | :              | 1979 | : | 1.000            | :        | Januar | ry-      | June |
|-----------------------------|------|----------------|------|---|------------------|----------|--------|----------|------|
|                             | 1976 | :              | 19/9 | : | 1980             | :        | 1980   | :        | 1981 |
| Production and related :    |      | :              |      | : |                  | :        |        | :        |      |
| workers:                    |      | •              |      | • |                  | :        |        | :        |      |
| Phoenix:                    | ***  | •              | ***  | • | ***              | •        | ***    | :        | ***  |
| Lukens:                     | ***  | •              | ***  | • | ***              | •        | ***    | •        | ***  |
| Subtotal:                   | ***  | <del>:</del>   | ***  | ÷ | ***              | ÷        | ***    | ÷        | ***  |
| Du Pont:                    | ***  | <del>:</del> - | ***  | ÷ | ***              | ÷        | ***    | ÷        | ***  |
| Total:                      | ***  | <del>:</del>   | ***  | ÷ | ***              | ÷        | ***    | ÷        | ***  |
| Hours worked by production: |      | :              |      | : |                  | :        |        | :        |      |
| and related workers: :      |      | :              |      | : |                  | •        |        | :        |      |
| Phoenix:                    | ***  | :              | ***  | • | ***              | •        | ***    | •        | ***  |
| Lukens                      | ***  | :              | ***  | • | ***              | •        | ***    | •        | ***  |
| Subtotal:                   | ***  | ÷              | ***  | ÷ | ***              | $\div$   | ***    | ÷        | ***  |
| Du Pont                     | ***  | <del>:</del> - | ***  | ÷ | ***              | ÷        | ***    | ÷        | ***  |
| Total                       | ***  | <del>:</del>   | ***  | ÷ | ***              | ÷        | ***    | ÷        | ***  |
| Output per hour: :          |      | :              |      | • |                  | •        |        | •        |      |
| Phoenix-pounds per hour:    | ***  | •              | ***  | : | ***              | :        | ***    | •        | ***  |
| Lukensdo:                   | ***  | •              | ***  | • | ***              |          | ***    | •        | ***  |
| Averagedo:                  | ***  | ÷              | ***  | ÷ | ***              | ÷        | ***    | <u>:</u> | ***  |
| Du Pontdo:                  | ***  | <del>:</del>   | ***  | ÷ | ***              | <u>.</u> | ***    | •        | ***  |
| Averagedo:                  | ***  | <del>: -</del> | ***  | ÷ | ***              | <u>.</u> | ***    | <u> </u> | ***  |
|                             |      | •              | ~~~  | • | ~ ~ <del>~</del> | :        | ***    | :        | ***  |

Table 9.--Stainless clad steel plate: Production and related workers, hours worked by such workers, and output per hour, 1978-80, January-June 1980, and January-June 1981

| Period       |   | Production and related workers |   |     |   | Output per<br>Hour |
|--------------|---|--------------------------------|---|-----|---|--------------------|
|              | : |                                | : |     | : | Pounds             |
| 1978         | : | ***                            | : | *** | : | ***                |
| 1979         | : | ***                            | : | *** | : | ***                |
| 1980         | : | ***                            | : | *** | : | ***                |
| January-June | : |                                | : |     | : |                    |
| 1980         | : | ***                            | : | *** | : | ***                |
| 1981         | : | ** *                           | : | *** | : | ***                |
|              | : |                                | : |     | : |                    |

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

The number of production and related workers involved in the production of stainless clad steel plate \* \* \* from \* \* \* in 1978 to \* \* \* in 1980, representing a \* \* \* of \* \* \* workers, or \* \* \* percent. In January-June 1981, however, the number \* \* \* to \* \* \*. Hours worked by such employees \* \* \* steadily from 1978 to 1980, and then \* \* \* sharply in January-June 1981 compared with figures for January-June 1980.

Wages paid to production and related workers engaged in the production of clad steel plate are shown in table 10. Total compensation, including fringe benefits, \* \* \* slightly from 1978 to 1979, and then \* \* \* by \* \* \* percent in 1980. In January-June 1981, total compensation \* \* \* by \* \* \* percent compared with that in January-June 1980. This \* \* \* was due mainly to the large \* \* \* in the number of hours worked, but it was also attributable, in part, to a steadily increasing hourly wage. Average hourly wages \* \* \* from \* \* \* in 1978 to \* \* \* in January-June 1981, representing an \* \* \* of \* \* \* or \* \* \* percent. Fringe benefits are significant in this industry, accounting for about \* \* \* percent of total compensation.

Table 10.--Total compensation paid to production and related workers engaged in the manufacture of clad steel plate, wages paid to such workers excluding fringe benefits, and average hourly wages, by firms, 1978-80, January-June 1980, and January-June 1981

| Item and firm                  | 1978  | 1070 | :           | : January- | June |
|--------------------------------|-------|------|-------------|------------|------|
|                                | 1970  | 1979 | : 1980<br>: | 1980       | 1981 |
| Total company to               | :     |      | :           | : :        |      |
| Total compensation: : Phoenix: |       |      | :           | : :        |      |
| •                              | ***   | ***  | : ***       | : *** :    | ***  |
| Lukens:                        | ***:  | ***  | : ***       | : *** :    | ***  |
| Subtotal:                      | ***   | ***  | : ***       | : *** :    | ***  |
| Du Pont:                       | ***   | ***  | : ***       | : *** :    | ***  |
| Total:                         | ***   | ***  | : ***       | ***        | ***  |
| Wages paid excluding :         | :     |      | :           | : :        |      |
| fringe benefits: :             | :     |      | •           | : :        |      |
| Phoenix:                       | *** : | ***  | : ***       | : *** :    | ***  |
| Lukens:                        | *** : | ***  | : ***       | ***        | ***  |
| Subtotal:                      | ***   | ***  | : ***       | ***        | ***  |
| Du Pont:                       | *** : | ***  | ***         | • *** •    | ***  |
| Total:                         | ***   | ***  | * ***       | ***        | ***  |
| Average hourly :               | :     |      | •           | •          |      |
| wages: 1/ :                    | •     |      | •           | •          |      |
| Phoenix:                       | ***   | ***  | * ***       | ·          | ***  |
| Lukens                         | *** • | ***  | . ***       | · *** ·    | ***  |
| Average                        | *** • | ***  |             | ***        | ***  |
| Du Pont                        | *** • | ***  | ***         | ***        | ***  |
| Average                        | *** • | ***  | ***         | ***        | ***  |
|                                |       | 200  | . ^**       | ***        | ***  |
| 1/ Based on wagon paid o       |       |      | :           | <u>:</u>   |      |

<sup>1/</sup> Based on wages paid excluding fringe benefits.

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

Two producers (Lukens and Phoenix) were able to allocate wages for production and related workers of stainless clad steel plate. This information is provided in table 11. The trends exhibited in this table are generally the same as those presented in table 10.

Table 11.--Total compensation paid to production and related workers engaged in the manufacture of stainless clad steel plate, wages paid to such workers excluding fringe benefits, and average hourly wages, 1978-80, January-June 1980, and January-June 1981

| Period         | Total wages<br>paid | Wages paid<br>excluding<br>fringe benefits | : Average hourly<br>: wage |
|----------------|---------------------|--|----------------------------|
| :              |                     | •  |                            |
| 1978:          | ***                 | ***  | ***                        |
| 1979:          | ***                 | ***  | ***                        |
| 1980:          | ***                 | ***  | ***                        |
| January-June : | ;                   |  |                            |
| 1980:          | ***                 | ***  | ***                        |
| 1981:          | ***                 | ***  | ***                        |
| :              |                     |  |                            |

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

#### Financial experience of the U.S. producers

<u>Profit-and-loss experience on clad steel plate.--</u>Three of the four producers were able to supply the Commission with data on their financial performance--Lukens, Phoenix, and Du Pont. These three firms account for about \* \* \* percent of total production.

Net sales of these three firms \* \* \* from 1978 through 1980, but the ratio of cost of goods sold to net sales \* \* \*. The result was a \* \* \* of gross profits from \* \* \* in 1978 to \* \* \* in 1980. The ratio of gross profits to net sales \* \* \* from \* \* \* percent in 1978 to \* \* \* percent in 1980 (table 12).

Similarly, net operating profit \* \* \* from 1978 to 1980 and the ratio of net operating profits to net sales \* \* \* from \* \* \* percent in 1978 to \* \* \* percent in 1980. The ratio \* \* \* further, to \* \* \* percent, in January-June 1981.

Profit-and-loss experience on stainless clad steel plate. -- The two roll-bond producers were able to provide some information on their profit-and-loss experience in producing stainless clad steel plate. This information is presented in table 13.

Total net sales for these producers \* \* \* from 1978 to 1979 by \* \* \* or \* \* \* percent. The cost of goods sold, however, \* \* \* by \* \* \*, or \* \*

Table 12.--Selected financial data for 3 U.S. producers on their clad steel plate operations, by firms, 1978-80 and January-June 1981

| Period and firm       | :<br>Net sales : | Cost<br>of goods | Gross  | selling,      | : Net :    | Other:<br>income:           | Net profit                            | Ratio of   | : Ratio of : net oper- :       | Ratio of<br>net profit | : Ratio of   |
|-----------------------|------------------|------------------|--------|---------------|------------|-----------------------------|---------------------------------------|------------|--------------------------------|------------------------|--------------|
|                       | ••••             | plos             | profit |               | or (loss)  | and :<br>(ex- :<br>penses): | before<br>taxes                       | profit to  | : ating pro-:<br>: fit to net: | before<br>taxes to     | : goods sold |
| •                     | ••               |                  |        | 1,000 dollars |            |                             |                                       |            | Percent-                       | incl sales             | sales        |
|                       | * * *            | ***              | ***    | * *           | ***        | **                          | *                                     | ***        | ;<br>                          |                        |              |
|                       | **               | ***              | ***    | ***           | ***        | **                          | · · · · · · · · · · · · · · · · · · · | * +<br>* + | * +                            | * .                    | ***          |
| Du Beet               | ***              | ***              | ***    | ***           | ***        | ***                         | ***                                   | 4 4        | × ×                            | **                     | ***          |
|                       | ***              | ***              | ***    | ***           | ***        | 1                           |                                       | ***        | ***                            | **                     | ***          |
| Total or average:     | ***              | ***              | ***    | ***           | *          | * * *                       | **                                    | **         | ***                            | ***                    | ***          |
|                       | ••               | •                |        |               |            | <br>*                       | ***                                   | ***        | ***                            | **                     | ***          |
| Phoenix               | ***              | ***              | ***    | ***           | ••••       | •                           | •                                     |            |                                |                        |              |
| :                     | ***              | ***              | ***    | * *           | . +        | к .<br>к .                  | **                                    | ***        | ***                            | **                     | ***          |
| Subtotal or average:  | ***              | ***              | ***    | ***           | <br>* * -  | * *                         | ***                                   | ***        | ***                            | **                     | ***          |
|                       | ***              | ***              | ***    |               | *          | ***                         | ***                                   | ***        | ***                            | ***                    | *            |
| Total or average:     | ***              | ***              | ***    | * * *         | ***        | ***                         | **                                    | ***        | ***                            | ***                    | ***          |
| ,                     | • •              | •                | •      | *<br>*<br>*   | **         | ***                         | ***                                   | ***        | ***                            | ***                    | ***          |
|                       | ***              | * *              | **     | 7             |            | ••                          | ••                                    |            | ••                             |                        |              |
| :                     | ***              | ***              | **     | <br>k +       | * *        | *<br>*<br>*                 | ***                                   | ***        | ***                            | **                     | ***          |
| Subtotal or average:  | ***              | ***              | ***    |               | ***        | ***                         | ***                                   | ***        | ***                            | **                     | **           |
|                       | ***              | ***              | ***    | . KKK         | ***        | ***                         | ***                                   | ***        | ***                            | ***                    | ***          |
| Total or average:     | ***              | ***              | ***    |               |            | **                          | ***                                   | ***        | ***                            | ***                    | ***          |
| 1981 (January-June):  | ••               | • •              | •      |               | <br>*<br>* | *<br>*<br>*                 | ***                                   | ***        | ***                            | ***                    | ***          |
|                       | ***              | **               | **     |               |            | ••                          | ••                                    | ••         | ••                             | ***                    |              |
|                       | ***              | **               | ***    | · · ·         | <br>K -    | *                           | ***                                   | ***        | ***                            | ***                    | ***          |
| Subtotal or average:  | ***              | ***              | ***    |               | * * *      | ··<br>*                     | ***                                   | ***        | ***                            | ***                    | ***          |
|                       | ***              | ***              | ***    | . x x .       | ***        | ***                         | ***                                   | ***        | ***                            | ***                    | ***          |
| Total or average:     | ***              | ***              |        | **            | ***        | ***                         | ***                                   | ***        | ***                            | ***                    | 444          |
| · ••                  | • •              |                  |        | **            | ***        | ***                         | ***                                   | ***        | ***                            | ***                    | × +          |
| Sollres Compiled from |                  |                  | ••     | ••            | •          | •                           | ٠                                     |            | •                              | •                      |              |

Table 13.--Selected financial data for 2 U.S. producers on their stainless clad steel plate operations, 1978-80 and January-June 1981

| Ratio of cost of goods sold to net         | sales          |          | ***      | ***    | * *         |           | ***       | ***        | **    |        | ***     | ***    | ***                  |                   | **                                    | **  | ***      |                            | ion.                                    |
|--|----------------|----------|----------|--------|-------------|-----------|-----------|------------|-------|--------|---------|--------|----------------------|-------------------|---------------------------------------|---|----------|----------------------------|---|
|  | net sales :    | Leicelle | **<br>** | * * *  | * ***       | ••        | ***       | ***        | * *** | ••     | **      | **     | ***                  | ••                | ***                                   | ***   | * ***    | ••                         | Trade Commission.                       |
| Net: R operating: p profit: p or (loss): ( | c              | •        | ***      | ***    | ***         | ••.       | ***       | ***        | ***   | ••     | * **    | * * *  | ***                  | ••                | ***                                   | ***   | ***      | ••                         | International                           |
| General, selling, and admini-strative      | eapenses .     | •        | ***      | ***    | **          | ••        | ***       | ***        | ***   | ••     | ***     | ***    | ***                  | ••                | *<br>*<br>*                           | ***   | ***      | ••                         | of the U.S.                             |
| Gross : profit :a                          | 1,000 dollars- |          | ***      | ***    | ***         | •         | ***       | ***        | ***   | ••     | ***     | **     | ***                  | ••                | <br>K<br>K                            | ***   | ***      | ••                         | response to questionnaire of the U.S.   |
| Cost of : goods : sold :                   |                | Ί        | ***      | * **   | **          | ••        | * * *     | <br>*<br>* | ***   | ••     | ·*<br>* | * ***  | * *                  | ** **<br>**<br>** |                                       | ***   | **<br>** | •                          | esponse to q                            |
| Net sales                                  |                | ••       | * * *    | ***    | *<br>*<br>* | **        |           | ×          | **    | ••     | **      | ***    | ***                  | **                | •                                     | * *   | **<br>** | ••                         |   |
| Period and firm :                          |                | 1978:    | Phoenix  | Lukens | 1979.       | Phoen i x | 111700011 | Hotol      | 1980: | Dhoost | ruoenix | Lukens | 1981 (Tannarw-Turo). | Phoenix           | · · · · · · · · · · · · · · · · · · · | Funding to to the state of the | IOCAI    | Source Committed from date | postect compiled Ilom data submitted in |

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percent, causing gross profit to \* \* \* by \* \* \*. General, selling, and administrative expenses \* \* \* from 1978 to 1979 by \* \* \*, but net operating profit \* \* \* by \* \* \*, or \* \* \* percent.

From 1979 to 1980, net sales of stainless clad steel plate \* \* \* by \* \* \*, or \* \* \* percent, but the cost of goods sold \* \* \* by only \* \* \*, with the result that gross profit \* \* \* by \* \* \*. General, selling, and administrative expenses \* \* \* slightly, and a net operating \* \* \* was reported in 1980. In January-June 1981, aggregate data for the two firms showed a net operating \* \* \* of \* \* \*.

The ratio of cost of goods sold to net sales \* \* \* steadily from \* \* \* percent in 1978 to \* \* \* percent in 1980 and \* \* \* percent in January-June 1981. The ratio of net operating profit or loss to net sales \* \* \* steadily from \* \* \* percent in 1978 to \* \* \* percent in 1980. In January-June 1981, the ratio of net operating profit to net sales was \* \* \* percent.

# Consideration of the Threat of Material Injury

There are several factors which may contribute to a determination of a threat of injury to the domestic industry. These include an ability of foreign producers to increase their exports to the United States, any increase in U.S. importers' inventories of the product, and increasing trends in the quantity of imports and U.S. market penetration.

The best information available at the present time is that JSW has the capacity to produce approximately \* \* \* metric tons of clad steel plate per year. Its production at the present time is approximately \* \* \* metric tons. JSW reported that \* \* \* metric tons are produced for the home market, the remainder being exported to numerous markets, particularly the \* \* \*. JSW predicts that it will produce at close to \* \* \* percent capacity in 1982 based on inquiries for large quantity orders it has received in 1981 from \* \* \*

Since stainless clad steel plate is produced to specifications for a particular order and shipped directly to the purchaser, U.S. importers do not maintain inventories.

A discussion of the rate of increase of imports and of market penetration is presented in the following section of this report.

Consideration of the Causal Relationship Between Alleged LTFV imports and Alleged Injury

#### U.S. imports

The Commission was able to identify three importers of stainless clad steel plate from Japan. Total imports reported by these importers (and, thus, total U.S. shipments, since no inventories are maintained) are shown in the following tabulation:

| Period       | $\frac{\text{Quantity}}{(1,000 \text{ pounds})}$ | <u>Value</u><br>( <u>1,000 dollars</u> ) |
|--------------|--|--|
| 1978         | ***  | ***                                      |
| 1979         | ***  | ***                                      |
| 1980         | ***  | ***                                      |
| January-June |  |  |
| 1980         | ***  | ***                                      |
| 1981         | ***  | ***                                      |

Official statistics of the U.S. Department of Commerce on imports from Japan of products classified under TSUS item 607.94 are presented in the following tabulation. Imports entered under this item include clad sheets as well as clad plate, but the data correspond closely with those reported by importers and presented above.

| Period (1    | Quantity,000 pounds) |
|--------------|----------------------|
| 1978         |                      |
| 1979         | 71                   |
| 1980         | 65                   |
| January-June |                      |
| 1980         | 64                   |
| 1981         | 1,529                |

The preceeding tabulations show that imports of stainless clad steel plate from Japan have only been a factor in the U.S. market in 1978 and January-June 1981. Imports of stainless clad steel plate from countries other than Japan are believed to have been sporadic and small since 1978. As specific data on such imports are not available at this time, only imports from Japan are used in the calculation of apparent U.S. consumption that follows.

#### Market penetration

The ratio of imports of stainless clad steel plate from Japan to apparent U.S. consumption is shown in table 14.

Imports of stainless clad steel plate from Japan \* \* \* from \* \* \* percent of consumption in 1978 to \* \* \* in 1979 and 1980, and then \* \* \* to \* \* \* percent of consumption in January-June 1981. In addition to the imports shown in January-June 1981, the importers reported information on imports which were imported or are scheduled to be imported during July-December of 1981 based on contracts which had already been awarded. These July-December 1981 imports will total approximately \* \* \* pounds.

Table 14.--Stainless clad steel plate and all clad steel plate: Apparent U.S. consumption and ratio of imports from Japan to apparent consumption, 1978-80, January-June 1980, and January-June 1981

| Period       | Apparent U.S. consumption of stainless clad steel plate | : consumption of stainless | Apparent: U.S.: a:consumption: c: cof clad: steel plate: | consumption |
|--------------|---|----------------------------|--|-------------|
|              | 1,000<br>pounds   | Percent                    | : 1,000 : pounds :                                       | Percent     |
| 1978         | ***   | : ***                      | : ***  | ***         |
| 1979         | ***   | : ***                      | ***  | ***         |
| 1980         | ***   | : ***                      | ***  | ***         |
| January-June |   | •                          |  |             |
| 1980         | ***   | : ***                      | ***  | ***         |
| 1981         | ***   | : ***                      | ***  | ***         |
|              | <u> </u>  | :                          |  |             |
|              |   |                            |  |             |

#### Bids, prices, and lost sales

Bid process. -- Bid competition characterizes the market for stainless clad steel plate. Domestic producers and importers of such clad plate bid to supply the material to fabricators for specific projects which incorporate vessels made of stainless clad steel plate. Fabricators, in turn, are competing for contract awards to fabricate and construct these vessels or structures for the ultimate user.

The stainless clad steel plate requirements for any specific project are virtually identical irrespective of the source. Specifications vary widely as to the type of clad and backing material (chemical composition) and with respect to thickness and other dimensions of the plate from project to project, depending on the intended use of the vessel or structure. The specifications for a project are provided to fabricators and in turn to stainless clad steel plate producers and importers by the firm that will be the owner operator of the project, or by that firm's design contractor.  $\frac{1}{2}$ 

Bids to fabricate and construct stainless clad steel plate vessels and to supply stainless clad steel plate to the fabricator are by invitation to approved fabricators and stainless clad steel plate suppliers. Originating firms for projects extend invitations to quote to various fabricators. These fabricators, in turn, invite selected, approved stainless clad steel plate producers and importers to bid on the clad plate material requirements.

<sup>1/</sup> Design for stainless clad steel plate vessels for a project is generally contracted out to an independent engineering firm by the project's originating A-22 firm, but, on occasion, may be done by the originating firm's own engineers.

Approved bidder lists may be established by the fabricator or the originating firms. A stainless clad steel plate producer frequently provides the same bid to several fabricators competing on a specific project.

The number of fabricators bidding on a project generally ranges from two to as many as six. In some instances a single fabricator may be the sole bidder on a project. Such projects usually involve small tonnage requirements. Domestic fabricators, however, do not want to face the problems of single sourcing for stainless clad steel plate supply. Infrequently, client firms specify a preferred stainless clad steel plate producer. Major fabricators competing for contract awards to fabricate and construct 1/ stainless clad steel plate vessels include those listed below.

| * | * | * | * | * | * |
|---|---|---|---|---|---|
| * | * | * | * | * | * |
| * | * | * | * | * | * |
| * | * | * | * | * | * |
| * | * | * | * | * | * |
| * | * | * | * | * | * |
| * | * | * | * | * | * |
| * | * | * | * | * | * |
|   |   |   | * | * | * |

Among these firms, three fabricators, \* \* \*, \* \* \*, and \* \* \*, are known to have sought stainless clad steel plate bids from, and awarded contracts to, importers of Japanese stainless clad steel plate. 2/ These three firms accounted for the purchase of approximately \* \* \* percent of the imports of stainless clad steel plate from Japan in January-June 1981.

Japanese fabricators also compete for stainless clad steel plate project contracts using Japanese clad plate. For example, \* \* \* was the successful fabricator on a bid for a project using 250 tons of stainless clad steel plate in 1981. 3/ On one occasion, JSW \* \* \*.

Preference for domestic product.—Domestic fabricators have varied policies with respect to using stainless clad steel plate sourced from Japan.

\* \* \* has a stated policy of using domestic clad plate. There are two exceptions to this policy: (1) if a customer requests foreign clad plate and (2) if \* \* \* knows that one of its competitor is bidding on the project on the basis of using Japanese or some other foreign-made steel it will consider sourcing its requirements from Japan. Under either of these two circumstances.

<sup>1/</sup> Most of the competing fabricators have a shop fabricating capability and an erecting capability. A few, e.g., \* \* \*., have only a shop capability and join with another fabricator with erection capability in order to bid a complete project.

 $<sup>\</sup>underline{2}/$  Data to supply and to verify information on bids and prices provided by domestic producers and importers were obtained by questionnaire from the above-named fabricators.

<sup>3/</sup> It is not known whether or not the stainless clad steel plate imported from Japan was sourced from JSW. \* \* \*.

the bid team asks \* \* \* management for an exception to the company's domestic preference policy. Other fabricators such as \* \* \* and \* \* \*, although not having a stated domestic preference policy, do in certain instances evidence a preference for domestic stainless clad steel plate. In cases where competing bids for supplying stainless clad steel plate were close, contract awards by these fabricators went to the domestic bidder even though the bid on Japanese clad plate was lower than that for the domestic product.

Two reasons were given by fabricators for not accepting the "apparent" low bid. In one instance, the fabricator had more confidence in the domestic producer than in JSW. Moreover, the difference in the clad plate bids was not enough to cause the fabricator to lose the project. In other cases, preference for the domestic product may be based purely on broader cost considerations. In such cases, a bid comparison is termed "unevaluated" and is not considered in isolation of other cost factors. 1/ One such factor is the relative importance of the stainless clad steel plate to the total project for which the fabricator is competing. On some projects, the stainless clad steel plate may represent only a small portion of the total amount of the fabricator's bid. Another factor is the administrative cost add-on by fabricators and/or by the engineering contractor. In part, this cost is to cover required testing and inspection of the stainless clad steel plate in the producing mill. When such testing and inspection are conducted in a Japanese mill, the cost incurred to send an engineer to Japan may wipe out a small differential in competing Japanese and domestic bids. Thus, in summary, the administrative cost of testing in the Japanese mill and an inherent preference for the domestic product are often factors that shift contract awards away from the "apparent" low bid for Japanese stainless clad steel plate to the domestic supplier.

Generally, the number of stainless clad steel plate producers bidding on large tonnage projects is limited to two--Lukens and JSW. Phoenix infrequently is listed as a bidder on projects for which \* \* \* and \* \* \* are seeking stainless clad steel plate quotes. 2/ Du Pont appears as a competing bidder on small-tonnage projects, and no other foreign mill appears as a competing materials supplier except for the \* \* \* mill, \* \* \*. Questionnaire data show that \* \* \* won \* \* \* contracts to supply stainless clad steel plate during the subject period, one for \* \* \* tons and another for \* \* \* tons.

It should be noted that fabricators have emphasized the importance of having alternative sources of supply for stainless clad steel plate. One fabricator queried on preference responded that the firm would not want to see either the major domestic firm (Lukens) or the Japanese mill (JSW) in a dominant position.

<sup>1/</sup> Facts indicate that domestic producers maintain close contact with the
end user by providing technical assistance. Fabricators have identified this
producer/end-user relationship as an effective market factor influencing
selection of a clad plate supplier.
2/ \* \* \*.

Prices.--Stainless clad steel plate quotations by Lukens and Phoenix are made from a published list of prices on an f.o.b. mill basis. Freight is paid by the purchaser. The specifications for a particular project are translated into a quote calculated from a base price plus an additional cost for "extras." Extras are added for requirements such as explosion bonding and rerolling, as well as for nonstandard widths, lengths, thicknesses, and tolerances. Testimony by Lukens at the conference revealed that list prices were used as a basis for preparing quotes until about mid-1980. At that time, discounts from list became the pattern. Such discounting has become sharper in recent bids by Lukens. JSW contends that pricing is unique to each job bid since each project has individual specifications. In its conference testimony, JSW stated that a published price has no significance except as a judgment of what the firm believes the price ought to be. Petitioners contend that price is the most important factor in winning a bid. Respondents assert that quality, delivery, and service are equally important. The three aforementioned purchasing fabricators were asked to rate such factors. of these fabricators stated that a nonprice factor was more important than price. The factors named were quality (\* \* \*), adherence to specifications (\* \* \*), and customer preference (\* \* \*). The Commission staff has confirmed instances in which domestic quality of product was preferred over Japanese quality and, conversely, where the Japanese product was favored for quality reasons.

Bid competition.—Domestic producers and importers were asked to provide data on the 5 largest tonnage requests for quotes to supply stainless clad steel plate to which they responded with bids in 1980 and January-September 1981. These data enable a comparison of the participants' competitive positions in the market for stainless clad steel plate and are presented in table 15. The aggregate data, by firms, show total tonnage of those bids made and total tonnage of contract awards. Bids lost to JSW, to other foreign firms, and to competing domestic producers are shown as a percent of total tonnage bid.

The ratio of bids won to bids lost, in terms of tonnage, has \* \* \*.

\* \* \* \* \* \* \* \*

Table 15.—Stainless clad steel plate: Total tonnage of largest projects bid on by domestic and foreign firms, tonnage of projects won and lost, and ratio of bids won and lost to total tons bid, 1979, 1980, and January-September 1981

| Porto  | E                           | N.          | er          | :<br>Number       | Number                                |        |              | Bids won                               | s won and lost as | as a<br>hid       |
|--|-----------------------------|-------------|-------------|-------------------|---------------------------------------|--------|--------------|--|-------------------|-------------------|
| and bidding firm                                 | : Total tons:<br>: bid on : | - 11        | of :        | of tons<br>won in | : of : bids :                         | Tons   | Bids         | Bids 10st                              | :Bids lost:Bids   | Bids lost         |
|  |                             | : bid on :  | . now       | bids              | : lost :                              |        | won:         | to                                     | domestic:         |                   |
| 1079. 1/   |                             | ••          | ••          |                   |                                       |        |              |  | -Percent          | Ilrms             |
| Domestic:  |                             | •••         | ••          |                   | ••                                    |        | ••           | ••                                     |                   |                   |
| * * * *  | ***                         | ***         | *           | 1                 | ••                                    | :      | ••           | ••                                     |                   |                   |
|  | •                           | • ••        | • ••        | <b>.</b>          | <br>«<br>«                            | k<br>K | *<br>*<br>*  | *<br>*<br>*                            | *<br>*<br>*       | * * *             |
| Domestic:  | •                           | •••         | •• •        |                   | ••                                    |        | ••           | •                                      |                   | -                 |
| * •  | * *                         | * **<br>**  | * *<br>*    | **                | · · · · · · · · · · · · · · · · · · · | *      | *            | **                                     | ***               |                   |
| · · · · · · · · · · · · · · · · · · ·            | * * *                       | ***         | * * *       | * *               | * * *                                 | * *    | < *< *       | ·· · · · · · · · · · · · · · · · · · · | K +               | * +               |
| •  | **                          | **          | * * *       | * *               | **                                    | * *    | * *          | **                                     | **                | ×                 |
| Foreign:   | ••                          | ••          | ••          |                   | ••                                    |        | ••           | • ••                                   |                   |                   |
| * * * *  | ****                        | ***         | **          |                   | ••                                    |        |              | ••                                     | ••                |                   |
|  |                             | · · ·       | <br>K<br>K  | *<br>*<br>*       | *<br>*<br>*                           | *      | * * *        | 2/==                                   | 2/                | 2/                |
| 1981 (January-September): :                      | •                           | • •         | ••••        |                   | ••                                    |        |              | . <b>••</b> ,                          | ••<br>!           | 1                 |
| Domestic:  | •                           | • ••        |             |                   | ••••                                  |        | ••           | ••                                     | ••                |                   |
| ** **  | **                          | **          | * * *       | * *               | * **<br>*                             | * *    | * *          | * * *                                  | ·· ·              | +<br>+<br>+       |
| *  | * * *                       | **          | **          | * * *             | **                                    | * *    | * *          | * * *                                  | **                | < *<br>* *        |
|  | * *                         | **          | *           | * * *             | * *                                   | * *    | * * *        | * * *                                  | * * *             | * *               |
|  | ×<br>×<br>×                 | *<br>*<br>* | *<br>*<br>* | ***               | **                                    | **     | **           | **                                     | * * *             | **                |
| 1.8  | •••••                       | ••          | •••         | ••                | ••                                    | ••     | ••           | ••                                     | ••                |                   |
| * * *  | ***                         | * **<br>*   | * * *<br>*  | * *               | ·· ·                                  | *      | •• •         | **                                     | •                 | ,                 |
| ·  | ***                         | * *         | **          | * * *             | * * *                                 | * *    | * * *<br>* * | · · ·                                  | <br>k *           | * *<br>* *<br>* * |
| * * * * * 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. | ••                          | •           | ••          | ••                | ••                                    | •      |              | • •                                    | • •               |                   |
| provided 19/9                                    | data.                       |             |             |                   |                                       |        |              |  | •                 |                   |

 $\frac{2}{2}$ / The remaining \* \* \* percent is unknown.  $\frac{2}{4}$ / Data were provided by \* \* \* and \* \* \* on bids won only. Data provided by fabricators show that there were additional bids made, but lost, by importers during this period.

Source:

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

Projects won by JSW.--Contract awards to importers for stainless clad steel plate sourced from JSW are summarized in table 16. These data indicate that in 1980, \* \* \*. \* \* \* contracts were awarded for JSW stainless clad steel plate in January-September 1981 for a total of \* \* \*. \* \* \*.

Bid comparisons show \* \* \*.

Contracts lost by JSW.--During 1980 and January-September 1981, JSW, through importers whose quotes were based on stainless clad steel plate to be sourced from JSW, lost a number of contracts to domestic suppliers. In each case, \* \* \*. These contracts lost by JSW (or its importing representative) are summarized in \* \* \* table 17. In 1980, JSW lost \* \* \*.

Factors other than price largely explain these lost bids. In most cases, the awarding company (either \* \* \* or \* \* \*) based its award on a domestic preference policy. In two of the instances. \* \* \*.

Price suppression/depression. -- The bid process in the market for stainless clad steel plate provides an unusual opportunity to assess the possibility of price depression that may have occured as a result of import competition. During the time between initial response to a bid inquiry and the contract award to supply stainless clad steel plate for that project, domestic producers and competing importers have an opportunity (or at times more than one) to change (i.e., lower) their respective bids. There are several factors that create this situation. First, specifications sometimes change during the course of a project's evolution, offering a chance for rebids. Second, competing bidders frequently seek an informal insight as to their relative position in the bid spectrum and alter their bids accordingly. Or, fabricators (without any change in specifications) seek lower material quotes in an effort to enhance their own overall competitive position vis-a-vis other fabricators. Where such bid reductions are made by domestic stainless clad steel plate producers in response to lower bids by competing importers or other domestic competitors, the resultant price depression can be measured.

Domestic producers were asked, via questionnaire, to provide specific instances of bid price reductions made to meet competition from stainless clad steel plate sourced from Japan. These data, based on the response of the petitioner, are summarized in table 18.  $\underline{2}/$  The data indicate that during the subject period, \* \* \*.

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 $<sup>\</sup>overline{2}/$  Data on price depression were provided only by Lukens.

Table 16.--Stainless clad steel plate: Contracts awarded to importers for Japanese clad plate, winning bid and tonnage, unit price, range of competing domestic bids, and importers' margin of underbidding, by awarding companies, 1980 and January-September 1981

Table 17.--Stainless clad steel plate: Contracts lost by importers sourcing from Japan, losing and winning bids by company, scheduled delivery date, and reason for lost contract, by awarding fabricators, 1980 and January-September 1981

Table 18.--Stainless clad steel plate: Contracts won by Lukens after reducing an initial bid to meet competition from imported JSW clad plate, by awarding firms, 1980 and January-September 1981

# APPENDIX A

U.S. INTERNATIONAL TRADE COMMISSION NOTICE OF INVESTIGATION AND CONFERENCE

U.S. International Trade Commission; telephone (202–523–0339).

# SUPPLEMENTARY INFORMATION:

Background.—This investigation is being instituted following receipt of a petition on October 6, 1981, filed in behalf of the U.S. clad plate industry by Lukens Steel Co., Coatesville, Penn., a producer of stainless clad steel plate. The Commission must make its determination in the investigation within 45 days after the date on which the petition was filed, or by November 20. 1981 (19 CFR 207.17). The investigation will be subject to the provisions of part 207 of the Commission's Rules of Practive and Procedure (19 CFR 207, 44 FR 76457), and particularly subpart B thereof.

Written submissions.—Any person may submit to the Commission on or before November 3, 1981, a written statement of information pertinent to the subject matter of this investigation. A signed original and nineteen copies of such statements must be submitted.

Any business information which a submitter desires the Commission to treat as confidential shall be submitted separately and each sheet must be clearly marked at the top "Confidential Business Data." Confidential submissions must conform with the requirements of section 201.6 of the Commission's Rules of Practice and Procedure (19 CFR 201.6). All written submissions, except for confidential business data, will be available for public inspection.

Conference.— The Director of Operations of the Commission has scheduled a conference in connection with this investigation for 10 a.m., e.s.t., on October 29, 1981, at the U.S. International Trade Commission Building, 701, E Street, NW., Washington D.C. Parties wishing to participate in the conference should contact the supervisory investigator for the investigation, Mr. Lynn Featherstone (202-523-0242). It is anticipated that parties in support of the petition for antidumping duties and parties opposed to the petition will each be collectively allocated one hour within which to make an oral presentation at the conference. Further details concerning the conduct of the conference will be provided by the supervisory investigator.

Inspection of petition.—A copy of the petition in this case is available for public inspection at the Office of the Secretary, U.S. International Trade Commission.

For further information concerning the conduct of the investigation and rules of

# INTERNATIONAL TRADE COMMISSION

[Investigation No. 731-TA-50 (Preliminary)]

# Stainless Clad Steel Plate From Japan

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

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

SUMMARY: The U.S. International Trade Commission hereby gives notice of the institution of investigation No. 731-TA-50 (Preliminary) to determine, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)), whether there is a reasonable indication that an industry in the United States is materially injured. or is threatened with material injury, or the establishment of an industry in the United States in materially retarded, by reason of imports from Japan of stainless clad steel plate, provided for in item 607.94 of the Tariff Schedules of the United States, which are alleged to be. or likely to be, sold in the United States at less than fair value.

EFFECTIVE DATE: October 6, 1981. FOR FURTHER INFORMATION CONTACT: udith C. Zeck, Office of Investigations, general application, consult the Commission's Rules of Practice and Procedure, part 207, subparts A and B (19 CFR 207), and part 201, subparts A through E (19 CFR 201).

This notice is published pursuant to 207.12 of the Commission's Rules of Practice and Procedure (19 CFR 207.12).

Issued: October 8, 1981.

By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 81-29916 Filed 10-13-81: 8:45 am] BILLING CODE 7020-02-84

<sup>&#</sup>x27;Change in agent and effective date.

# APPENDIX B

U.S. DEPARTMENT OF COMMERCE NOTICE OF INVESTIGATION

#### **DEPARTMENT OF COMMERCE**

#### International Trade Administration

Initiation of Antidumping Investigation—Stainless Clad Steel Plate From Japan

SUMMARY: We are initiating an antidumping investigation to determine whether stainless clad steel plate from Japan is being sold in the U.S. at less than fair value. We are notifying the United States International Trade Commission (ITC) of this action so that it may preliminarily determine whether these imports are materially injuring or threatening to materially injure a U.S. industry.

EFFECTIVE DATE: October 15, 1981.

FOR FURTHER INFORMATION CONTACT: Koichi Beckwith, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, D.C. 20230 (202–377–1778).

SUPPLEMENTARY INFORMATION: On October 6, 1981, we received a petition from counsel for Luken's Steel Company of Coatesville, Pennsylvania. Complying with the filing requirements of 19 CFR 353.36, the petition alleges that stainless clad steel plate is being sold in the United States at less than fair value, and that these imports are materially injuring a U.S. industry.

Sales at less than fair value generally occur when the prices of the merchandise exported to the U.S. are less than the prices of such or similar merchandise sold for consumption in the exporter's home market. Material injury can include actual or potential decline in the U.S. output, sales, market share, profits, productivity, and return on investment.

Upon examining this petition, we have found that its information reasonably supports its allegations. Therefore, in accordance with section 732(c) of the Tariff Act of 1930 as amended (the Act) (93 Stat. 163, 19 U.S.C. 1673a), we are initiating an investigation to determine whether stainless clad plate is being or is likely to be, sold at less than fair value within the meaning of section 731 of the Act. If our investigation proceeds normally, we will announce our preliminary determination by March 15, 1982.

#### Scope of the Investigation

The merchandise we will investigate is stainless clad steel plate, which is currently classified under item 607.9400 of the Tariff Schedules of the United States Annotated. The product is a rectangular finished steel mill product

consisting of a layer of stainless bonded to a substrate of less expensive carbon or low alloy steel.

Stainless clad steel plate has many applications where the corrosion resistence of stainless steel and higher design strength of carbon or alloy steel are required.

#### **Notification to ITC**

Section 732(d) of the Act (19 Stat. 163. 19 U.S.C. 1673a) also requires us to notify the ITC of this determination and to give the ITC a copy of the information we used to arrive at our determination to initiate an investigation. We will also make available to the ITC all nonprivileged and nonconfidential information. Furthermore, we will allow the ITC access to all privileged and confidential information in our files. provided it 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.

#### Preliminary Determination by ITC

The ITC will determine by November 20, 1981, whether there is a reasonable indication that imports of stainless clad steel plates from Japan are materially injuring or likely to materially injure a U.S. industry. If the ITC's determination is negative, this investigation will terminate; otherwise, it will proceed to its conclusion.

#### Gary N. Horlick,

Deputy Assistant Secretary for Import Administration.

October 9, 1981.

[FR Doc. 81-29850 Filed 10-14-81; 8:45 am]

BILLING CODE 3510-25-M

# APPENDIX C

LIST OF WITNESSES APPEARING AT THE CONFERENCE

#### CALENDAR OF PUBLIC CONFERENCE

Investigation No. 731-TA-50 (Preliminary)

# STAINLESS CLAD STEEL PLATE FROM JAPAN

Those listed below appeared as witnesses at the United States International Trade Commission conference held in connection with the subject investigation on Thursday, October 29, 1981, in the Hearing Room of the USITC Building, 701 E Street, NW., Washington, D.C.

# In support of the petition

Thorp, Reed & Armstrong--Counsel Washington, D.C. on behalf of

Lukens Steel Co.

Robert H. Sterne, Jr., Manager, Market Development, Lukens Steel Co. James L. Slattery, Assistant General Counsel, Lukens Steel Co.

Roger M. Golden--OF COUNSEL

# In opposition to the petition

Barnes, Richardson & Colburn--Counsel Washington, D.C.
on behalf of

The Japan Steel Works, Ltd.

Iichiro Tomiyasu, General Manager, Rolled Steel Products Department, The Japan Steel Works, Ltd.
Edward J. Martin, Independent Economic Consultant
Kiyohiko Fujimoto, Manager, Legal Department and General Affairs
Department, The Japan Steel Works, Ltd.
Yutaka Iijima, President, Japan Steel Works America, Inc.
Masahiko Taguchi, Sales Representive, Japan Steel Works America, Inc.

Kenneth G. Weigel)
Gunter von Conrad) -- OF COUNSEL