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UNITED STATES TARIFF COMMISSION

**BUTTWELD PIPE; WORKERS OF THE WELD MILL, AMBRIDGE, PA. PLANT
ARMCO STEEL CORPORATION**

**Report to the President on Investigation No. TEA-W-8
under Section 301(c)(2) of the Trade Expansion Act of 1962**



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UNITED STATES TARIFF COMMISSION

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Note.--The whole of the Commission's report to the President may not be made public since it contains certain information that would result in the disclosure of the operations of an individual concern. This published report is the same as the report to the President, except that the above-mentioned information has been omitted. Such omissions are indicated by asterisks.

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REPORT TO THE PRESIDENT

U.S. Tariff Commission
November 3, 1969

To the President:

In accordance with section 301(f)(1) of the Trade Expansion Act of 1962 (76 Stat. 885), the U.S. Tariff Commission herein reports the results of an investigation (TEA-W-8) made under section 301(c)(2) of that act, in response to a petition for determination of eligibility to apply for adjustment assistance submitted by the United Steelworkers of America, AFL-CIO, on behalf of the production and maintenance workers of the Armco Steel Corporation Weld Mill at Ambridge, Pennsylvania. The Commission received the petition on September 4, 1969, and instituted the investigation on September 10, 1969, to determine whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with butt-weld pipes and tubes from 1/2 inch to 4 inches in inside diameter produced by the Armco Weld Mill were being imported into the United States in such increased quantities as to cause, or threaten to cause, the unemployment or underemployment of a significant number or proportion of the workers of such Mill.

Public notice of this investigation was given in the Federal Register (34 F.R. 14449-50) on September 16, 1969. No public hearing was requested and none was held.

In the course of the investigation, the Commission obtained information from its files, from the United Steelworkers of America, AFL-CIO, and its Local Union No. 1360, the Armco Steel Corporation, importers, and from other agencies of the U.S. Government.

Finding of the Commission

On the basis of its investigation, the Commission finds (Commissioner Leonard dissenting)^{1/} that as a result in major part of concessions granted under trade agreements, articles like or directly competitive with butt-welded pipes and tubes produced by the Weld Mill of the Armco Steel Corporation located in Ambridge, Pennsylvania, are being imported into the United States in such increased quantities as to cause unemployment or underemployment of a significant number or proportion of the workers of such Mill

Considerations Supporting the Commission's Finding

Statement by Chairman Sutton and
Commissioners Thunberg and Newsom

There is no question as to the existence of unemployment or underemployment as a result of the decision of Armco Steel Corporation to shut down a relatively new, multi-million dollar production complex capable of producing as much as 200,000 tons of welded pipe per year. Regardless of the level of employment in the remaining departments of the Ambridge plant (which at the present time is comparatively high) there would be potential employment for 350 to 700 additional people had the Weld Mill, including necessary (but subordinate) threading, coupling, galvanizing, and other finishing operations as well as warehousing and shipping facilities, remained

^{1/} The views of Commissioner Leonard are set forth beginning on page 16.

in operation and had there been a market for the pipe produced therein.

We turn then to the possible causes of such unemployment or underemployment. There appears to be little reason, if any, other than increased imports that might have precipitated the Armco decision. Annual imports of all sizes and types of welded pipe increased over the previous year in twelve of the last fifteen years from about 28,000 tons, equal to about one percent of domestic production, to 1,288,000 tons, equal to about 20 percent of domestic production. Annual imports of welded pipe ranging in size from 0.375 inch to 4.5 inches in outside diameter followed a similar upward trend and increased from 497,000 tons in 1963 to 655,000 tons in 1968.^{1/} During this more recent period, annual imports of butt-weld pipe and directly competitive welded pipe produced by other than the butt-weld process, accounted for 70 to 80 percent of imports of 0.375 inch to 4.5 inch diameter welded pipe, and like total imports, increased substantially and in 1968 (490,000 tons) were equivalent to more than 25 percent of U.S. output.

As imports increased during 1958-68, the average value per ton generally declined and prevented the Armco Steel Corporation from increasing their prices sufficiently to operate on a profitable basis. (In 1969, most U.S. producers increased their prices for welded pipe by \$14 per ton; the only alternative apparently being the course followed by the Armco Steel Corporation to discontinue the production and sale of welded pipe.)

^{1/} The only years during which imports of pipe of 0.375 to 4.5 inches were reported separately.

Since World War II all administrations have adopted policies directed toward freer trade. The United States was instrumental in the establishment of the General Agreement on Tariffs and Trade (GATT) which was an indication to all industrial nations that U.S. trade policy would not be likely to change suddenly or substantially. The GATT was formed at a time when many nations were rebuilding their industries after the ravages of war. With world attitude favoring freer trade, foreign industries were encouraged to plan for widespread participation in world markets, particularly the large and diversified markets in the United States. The domestic market for pipe was among the first of the markets for steel-mill products to be penetrated significantly by imports.

Under the GATT the U.S. import duty applicable to welded pipe over 0.375 inch in diameter was reduced in 1948 from the statutory (1930) rate of 0.75 cent per pound (\$15.00 per ton) to 0.375 cent per pound (\$7.50 per ton). In 1956-58, the rate was further reduced in three stages to 0.3 cent per pound (\$6.00 per ton); total reductions in duty have thus amounted to \$9.00 per ton since 1948.

The butt weld pipe market is an extremely competitive one. Butt weld pipe is used largely for low pressure water and gas distribution within buildings. It is distributed principally to plumbing and heating contractors through plumbing jobbers and wholesalers. Consumers are satisfied with welded pipe that meets the minimum technical specifications and are not likely to pay for extra quality;

thus price is the chief competitive factor. Everything else being equal, it is well known that in order for imported products to compete successfully in the United States with products produced domestically they must be priced somewhat below the domestic product (generally considered to be about 10 percent below) in order to compensate the purchaser for the longer delivery times, limited services, larger inventories, and the advanced planning required when dealing with distant suppliers. The difference between the estimated average landed value of imports and the average value of domestic shipments was found to be in the range of 9 percent to 19 percent during 1963-68. * * * Had it not been for the \$9.00 reduction in import duties, import values would have been in the range of 4 percent to 13 percent below the average value of domestic shipments of all producers; * * *

In view of all the foregoing, we conclude that increased imports, stimulated in major part by price advantages resulting from tariff concessions granted under the GATT, caused the closure of the Ambridge Weld Mill of the Armco Steel Corporation which resulted in the subsequent unemployment or underemployment of a significant number of workers.

Statement by Commissioners Thunberg, Clubb and Moore

On September 4, 1969, the United Steelworkers of America-AFL-CIO filed a petition for adjustment assistance under Section 301(a)(2) of the Trade Expansion Act of 1962 ^{1/} on behalf of the production and maintenance workers of the Armco Steel Corporation Weld Mill at Ambridge, Pennsylvania. The Ambridge Weld Mill produced butt-weld pipes and tubes for seven years, but production was discontinued in the spring of 1969, allegedly because its products were unable to compete with less expensive imported pipe. As a result all employees of the Ambridge Weld Mill, a total of 350 workers, were laid off between November 9, 1968, and April 12, 1969. For reasons set out below, we find that the unemployed workers are entitled to apply for adjustment assistance under the Act.

Section 301 of the Trade Expansion Act provides certain benefits, including unemployment compensation, retraining allowances, and relocation allowances for workers who have been displaced by imports in situations where the requirements of the Trade Expansion Act are met.

^{1/} Sec. 301(a)(2) of the Trade Expansion Act of 1962 reads as follows:

A petition for a determination of eligibility to apply for adjustment assistance under chapter 2 may be filed with the Tariff Commission by a firm or its representative, and a petition for a determination of eligibility to apply for adjustment assistance under chapter 3 may be filed with the Tariff Commission by a group of workers or by their certified or recognized union or other duly authorized representative.

As the Tariff Commission has pointed out in previous cases, ^{2/} the Trade Expansion Act provides four requirements for workers' relief: ^{3/}

- (1) Imports must be increasing;
- (2) The imports must be a result in major part of concessions granted under trade agreements;
- (3) The workers producing the like or directly competitive article must be underemployed or unemployed, or threatened with underemployment or unemployment; and
- (4) The increased imports resulting from trade agreement concessions must be the major factor in causing or threatening to cause the unemployment or underemployment.

Each of these requirements is met in this case.

^{2/} Broomcorn, Inv. No. TEA-I-12 (March 1968) at 3; Eyeglass Frames, Inv. No. TEA-I-10 (October 1967) at 10-11; Watches, Watch Movements and Parts of Watch Movements, Inv. No. TEA-I-7 (October 1964) at 4; Umbrellas and Parts of Umbrellas (except handles), Inv. No. TEA-I-6 (Sept. 1964) at 3.

^{3/} Sec. 301(c)(2) of the Trade Expansion Act of 1962 reads as follows:

In the case of a petition by a group of workers for a determination of eligibility to apply for adjustment assistance under chapter 3, the Tariff Commission shall promptly make an investigation to determine whether, as a result in major part of concessions granted under trade agreements, an article like or directly competitive with an article produced by such workers' firm, or an appropriate subdivision thereof, is being imported into the United States in such increased quantities as to cause, or threaten to cause, unemployment or underemployment of a significant number or proportion of the workers of such firm or subdivision.

Increased Imports

The first requirement of the statute is that imports must have increased, Butt weld pipe imports are not separately reported in official statistics; instead, they are lumped together with the imports of all welded iron and steel pipe and tube measuring from 0.375 inches to 4.5 inches in outside diameter. It is generally agreed, however, that about 75 per cent of total imports in this category are composed of butt weld pipe or other competing pipe. Imports of this category have increased from 497,000 tons (\$66.7 million) in 1963 to 655,000 tons (\$82.7 million) in 1968. Accordingly, the only evidence available to the Commission shows that imports have been increasing within the meaning of the Trade Expansion Act.

In Major Part

The second requirement of the statute is that the increased imports must result in major part from concessions granted under trade agreements. At the outset it is necessary to determine what concessions are involved. It should be noted in this connection that the legislative history of the 1962 Act makes clear that the term "concessions granted under trade agreements" means the aggregate of all concessions which have been granted since 1934. ^{4/}

^{4/} This language was written into the bill in the House, and both the House and Senate Committee reports contained the identical statement explaining it as follows:

Accordingly, in determining whether imports have increased in major part as a result of concessions, we must consider the total reductions made since the beginning of the trade agreement program, not just the most recent reduction. ^{5/} Moreover, we note that "a concession" normally includes both a lowering of a duty and an implicit assurance that the duty will not be increased above the new level. The former tends to lower the price of the imported product in the United States market, and the latter encourages foreign producers to make long range plans for marketing in the United States. Both these factors must be considered in determining whether imports have increased in major part as a result of concessions. In determining whether the increased imports are a result "in major part" of the aggregate of concessions

4/ Continued:

The phrase "as a result of concessions granted under trade agreements," as applied to concessions involving reductions in duty, means the aggregate reduction which has been arrived at by means of a trade agreement or trade agreements (whether entered into under sec. 201 of this bill or under sec. 350 of the Tariff Act of 1930). H.R. Rep. No. 1818, 87th Cong., 2d Sess. 46 (1962); S. Rep. No. 2059, 87th Cong., 2d Sess. 20 (1962).

^{5/} We note that in some past cases the Commission appeared to consider the effect of only the most recent duty reductions, presuming that the effect of earlier concessions had become conditions of trade (Barber Chairs, Inv. No. TEA-F-8 (1968) at 7-9, Nat'l. Tile & Mfg. Co., Inv. No. TEA-F-5 (1964) at 16-17, 18-19). In this case all five members of the majority have considered the effect of the aggregate of duty reductions since 1934, which we believe to be more in keeping with the intent of Congress. Eyeglass Frames, Inv. No. TEA-I-10 (1967) (concurring statement of Commissioners Thunberg and Clubb, p. 12); Barber Chairs, Inv. No. TEA-F-8 (1968) at 44-45.

granted since 1934, we need ask ourselves only whether, but for the concessions, would imports be substantially at their present level. ^{6/}

The facts in this case show that the rate on butt weld pipe was reduced as follows:

| | |
|------|-----------------|
| 1930 | .75¢ per pound |
| 1948 | .375¢ per pound |
| 1956 | .35¢ per pound |
| 1957 | .33¢ per pound |
| 1958 | .30¢ per pound |

The ad valorem equivalent of the rate in 1930 was approximately 15 per cent. The ad valorem equivalent in 1968 is about 4.5 per cent. During the period since 1930, however, the price of pipe has increased slightly, thus accounting for some of the decrease in the ad valorem equivalent. Nonetheless, even if the price had not risen since 1930, duty reductions alone would have decreased the ad valorem equivalent from 15 per cent to 6 per cent.

In the highly competitive pipe market price is the single most significant factor in determining sales of butt weld pipe and directly competitive articles. Domestically produced pipe currently sells for between \$190 a ton and \$255 a ton, depending upon the size and type. Imported pipe uniformly sells for between 11 per cent and 15 per cent less than the domestically produced pipe. Since the ad valorem equivalent of the duty has been reduced

^{6/} Eyeglass Frames, Inv. No. TEA-I-10 (October 1967) at 14-16 (concurring opinion); Barber Chairs, Inv. No. TEA-I-11 and TEA-F-7 and 8 (January 1968) at 27, 32-38 (dissenting opinions).

by concessions by 9 per cent it can be seen that about two-thirds of the importers' price advantage is occasioned by the trade agreement concessions. Accordingly, it seems clear that, except for the concessions, imports could not have reached substantially the level they have and, therefore, within the meaning of the Trade Expansion Act of 1962 the increased imports are a result in major part of the tariff concessions.

Underemployment or Unemployment

The third requirement of the statute is that workers producing a like or directly competitive article must be underemployed, unemployed, or threatened with underemployment or unemployment. ^{7/} We need not dwell

^{7/} The Commission received a brief in this matter from the American Institute for Imported Steel, Inc., urging a negative decision on this petition apparently because of fear that such a decision would set a precedent for a subsequent escape clause petition by the industry which employed petitioners. We note in this connection, however, that there is a vast difference between the simple "unemployment or underemployment" test which is required in a worker's case, and the "serious injury" test required in an industry petition. It has been observed in the past that many workers and some firms within an industry may become eligible for adjustment assistance, without the entire industry's suffering serious injury. Thus in Eyeglass Frames, TEA-I-10 (1967), at 7-10, it was observed that

I/t should be noted that the Petitioner, a labor union representing less than one-third of the workers in the industry, has chosen to ask for industry-wide "tariff or other appropriate relief"--a choice which requires that injury to the industry as a whole be established. It did not choose to ask for adjustment assistance for specific groups of workers--a simpler procedure under which it would only be necessary to establish that the individual groups of workers had become unemployed as a result of concession generated imports.

at length on this aspect of the matter. Employment at the Ambridge Weld Mill dropped from a recent high of 462 in June 1968 to 282 in January 1969 and to 0 in May 1969 when the plant closed. Accordingly, it is clear that the third requirement of the statute is met.

Major Factor

The final requirement of the statute is that concession-generated, increased imports must be a major factor in causing or threatening to cause unemployment of petitioners. Here, too, the 'but for' test is applicable. Thus we need ask ourselves only whether, but for the increased imports, would the unemployment have occurred. If it would not, then the test is met.

The Ambridge Weld Mill was caught in a cost-price squeeze. Inflation and other factors caused its costs to rise in recent years, while import competition from countries with a lesser rate of inflation tended to keep the price of its products down. This Mill which was marginal even under normal circumstances became submarginal because of its inability to meet the price competition from imported pipe. Accordingly, its management elected to cease production. It was at this time that the petitioning workers became unemployed.

On the basis of the foregoing, it is clear that, but for the concession-generated increased imports this plant would probably have been

able to stay in business, and the petitioning workers would not have become unemployed.

Since all requirements of the statute have been met, we find that the petitioning workers are eligible to apply for adjustment assistance.

Supplementary Statement by Commissioner Thunberg

While I concur in the statements of all of my colleagues who have found affirmatively in this case, I would add that the workers in the Weld Mill of the Ambridge plant seem to me to exemplify the typical case for which I believe the Congress enacted section 301(c)(2) into law. The Ambridge butt-weld pipe operation was clearly marginal in the production of butt-weld pipe in the United States--marginal in the sense that it was most vulnerable to any change for the worse. The specific change which the Trade Expansion Act contemplated, of course, was an increase in competitive pressures resulting from concession-induced import increases.

The Ambridge Weld Mill, although a relatively new one (1962), never operated satisfactorily as originally designed, nor did it ever operate at or near its potential capacity; officials deemed unlikely the prospects for a larger volume of sales and, hence, greater, more efficient utilization of the capital equipment and thus lower unit costs. Further, the process used at Ambridge resulted in welded pipe, that, if appropriately tested, would have conformed to somewhat more rigid specifications than those required of pipe produced by the butt-weld process and intended for use in low-pressure applications. Since the requisite testing machinery was never acquired, the Ambridge pipe was of necessity sold in the very competitive butt-weld market where additional quality could not command any higher price.

While recent cost increases would also have threatened the continued operation of the pipe mill in the Ambridge plant, these increases to date could have been sustained by the company had competition not been intensified by concession-induced import increases. Thus, the loss of jobs at the Ambridge weld mill evidences these increased competitive pressures and their magnified impact on workers in a marginal facility.

Dissenting Opinion of Commissioner Leonard

In companion investigations (TEA-W-9 and 10) reported on by the Commission today, I set forth my reasons for finding that certain groups of workers were not eligible under section 301(c)(2) of the Trade Expansion Act of 1962 to apply for adjustment assistance. Applying the same legal analysis in this investigation instituted on behalf of certain workers of the Armco Steel Corporation Weld Mill at Ambridge, Pennsylvania, I have likewise determined that these workers are not eligible to apply for adjustment assistance. They are determined to be not eligible because I do not find that as a result in major part of concessions granted under trade agreements, articles like or directly competitive with butt-weld pipes and tubes from one-half inch to 4 inches in inside diameter produced by the Armco Weld Mill are being imported into the United States in such increased quantities as to cause, or threaten to cause, the unemployment or underemployment of a significant number or proportion of the workers of such Mill.

As with the determinations in investigations TEA-W-9 and 10, I go no further than the requirement of the statute that the increasing imports must be a result "in major part" of trade agreement concessions to find that the statute has not been satisfied, and, therefore, that an affirmative determination is not justified. Again, the requisite causation, that the trade agreement concessions "in major part" caused the imports to increase, is missing in this investigation.

The duty on welded pipes and tubes of concern in this investigation was reduced from its 1930 rate of 0.75 cent per pound in stages to 0.3 cent per pound by 1958. The 0.3 cent per pound rate has not changed since 1958 and will not be affected by any of the reductions to be made in the future as a result of the Kennedy Round of trade negotiations.

However, while the duty has remained the same since 1958, imports of the product under consideration apparently have increased (again, data on imports of pipe produced specifically by the butt weld process or competing with butt weld pipe and ranging in size from 0.375 inch to 4.5 inches in outside diameter [1/4 inch to 4 inches nominal inside diameter] are not reported separately in official statistics). Since 1963 (the first year for which import data on all welded pipe was segregated by size) U.S. imports of welded pipe and tube measuring from 0.375 inch to 4.5 inches in outside diameter (of which it is estimated that 75 percent is butt weld pipe or pipe that competes with butt weld pipe) have increased erratically. The most significant increase occurred in 1968. Yet, during most of this period, domestic production of all welded pipe from 0.375 inch to 4.5 inches in outside diameter increased also so that the ratio of imports to domestic production, after dropping in 1964 from 17 to 15 percent remained steady except for 1968 when it rose to 19 percent. Imports rose significantly in 1968, as the Commission report states, because of the imminence of a strike in the steel industry which, although it did not occur, prompted consumers to

increase their inventories as a precautionary measure. A strike in 1959 caused many consumers to satisfy their requirements by purchasing foreign steel. In view of the anticipation and duration of the 1959 strike, it is altogether likely that imports would have increased as much even if there had not been successive duty reductions in 1956, 1957, and 1958. Once started at a significant rate relative to domestic production, the flow of imports remained at a significant level.

That, Armco, the employer in the investigation before us, was not concerned about duty reductions, which last occurred in 1958, leading to an increase in imports can be deduced from the fact that the ~~weld mill~~ portion of the Ambridge facility was constructed in the early 1960's.

The above considerations militate against establishing a strong causal connection between duty reductions and increased imports. By any proper interpretation of the statute, increased imports could not be considered to have resulted "in major part" from trade agreement concessions

As explained in Transmission Towers, I cannot interpret the statute to read "but for trade agreement concessions, imports would not have increased," for to do so is to disregard any reasonable definition of "in major part." To do so is to relax the statutory requirements, as previously applied, without legislative action.

In principle, the majority in this case must apply the relaxed statutory requirements to future petitions by industries, firms, and workers because the language of the statute is the same for industries,

firms, and workers. Not only will legislative action to make it easier to obtain relief from injury then be unnecessary, but what may have been the hope of some to assuage through adjustment assistance the parochial or particular damage done by freer trade will really result in increased protectionism because of a more easily invoked escape clause and consequently higher duties or other import restrictions.

Having found in this investigation that increased imports did not result in major part from trade agreement concessions, it is unnecessary to examine the other statutory requirements. The workers in this investigation are not eligible under the statute to apply for adjustment assistance.

Information Obtained in the Investigation

Description and Uses

General

Welded steel pipe and tube ^{1/}--Welded pipe and tube are formed from plate, sheet, or strip (referred to in the industry as skelp), the edges of which are brought together mechanically and joined permanently by means of heat and pressure. Various welding processes are used, but those of concern here are butt-welding and electric-resistance-welding. In the butt-weld process, skelp of a width that will yield the required diameter of pipe is heated to 2200^o F, then passed through a forming mill where successive sets of rolls gradually shape the metal into tubular form. Welding rolls press the edges together and the hot metal fuses at the juncture resulting in a straight longitudinal weld. In the electric-resistance-weld process, skelp of the appropriate width enters the forming mill and is formed while cold; the metal is heated for welding only at the point where the cylinder edges are brought together by squeeze rolls. Heating of the zone around the edges is effected by passing an electric current from one edge, through the weld zone, to the other edge. Resistance to the flow of current creates heat; the combination of the heat and the pressure exerted by the rolls causes the metal to fuse. Low-frequency current or high radio frequencies may be used; low-frequency current is transmitted to the metal by electrode wheels, and radio frequencies are transmitted by sliding contacts or induction coils. In the

^{1/} Tube is produced to closer tolerances than pipe.

course of welding, no metal is added in either process. Following the welding process, the pipe, by whichever process made, is passed through sizing rolls that refine the outside diameter; no significant reduction of the pipe takes place.

A variation of the processes outlined above consists of butt-welding or electric-welding only one size of pipe and, after heating (or cooling) the pipe to about 1850^o F, "stretch-reducing" the pipe to the desired diameter. Stretch-reducing consists of reducing the diameter of and at the same time applying tension to the pipe. The wall thickness can be maintained or decreased depending on the degree of tension; no mandrel is required. The mill itself consists of from 8 to 24 (possibly more) circular stands of three (sometimes two) rolls placed in the stand at 2, 6, and 10 o'clock; each roll is thus in contact with one-third of the outer surface of the pipe. The stands are placed as close together as design considerations (including the diameter of the rolls) permit. The rolls in each stand are driven at a speed somewhat in excess of that required to deliver an equal volume of metal per unit of time from each stand, thus developing tension between the stands.

Pipe finishing operations include straightening, reaming, facing, chamfering, hydrostatic testing, galvanizing, threading, coating, metalizing, and bundling. Auxiliary operations include the manufacture and finishing of couplings.

Pipe is used for conveying fluids or for structural and mechanical purposes. Buttweld pipe is made in sizes from 1/8 inch to 4 inches in inside diameter; these diameters are equivalent to 0.4 inch and 4.5 inches,

respectively, in outside diameter. Such pipe is used principally for residential plumbing and heating (including some use for gas service lines). Generally 1/2 inch and 3/4 inch pipe is used for plumbing and 1 inch and 2 inch pipe for gas service lines. Buttweld pipe is also used for making rigid electrical conduit. Electric-resistance-weld pipe can usually meet higher specifications than buttweld pipe, thus is generally used where greater pressures are anticipated.

For many purposes, any type of pipe may be used, and price may govern the selection. Buttweld pipe is the least expensive type of pipe and is used wherever conditions permit. Other types of welded pipe, such as Armco's electric-resistance-weld product, are often sold at buttweld prices in a highly competitive market.

In recent years copper tubing has been used to an increasing extent for residential water distribution and has probably limited the growth or potential of buttweld pipe for this purpose.

Rigid electrical conduit.--Conduit is nothing more than welded pipe (usually galvanized), the inner walls of which have been smoothed and painted or otherwise coated or lined to facilitate passage of insulated electric wire. It is made in standard sizes from 1/2 inch to 6 inches. Conduit can be made of other metals, notably aluminum; flexible conduit is also commonplace. Rigid conduit is used largely in commercial construction to channel and protect electric wiring.

The Ambridge process

When the Armco Steel Corporation made the decision to build a pipe mill at Ambridge in the late 1950's, the idea was to install a "combination" mill capable of producing both butt-weld pipe and electric-resistance-weld pipe in order to have access to either market. The equipment as first installed consisted principally of a straight line or "tandem" arrangement of (1) a Yoder electric-resistance welding (ERW) mill, (2) a continuous butt-weld (CW) mill, (3) a barrel furnace, and (4) a stretch-reducing mill. The CW mill differed from the usual butt-weld mill in that instead of first heating the skelp to a uniform forming and welding temperature, the skelp was formed into pipe while cold, and then only the edges were heated for welding by gas-fed flame jets. When producing CW or butt-weld pipe, the company planned to remove the rolls and welding electrodes from the ERW mill, "dummy" the skelp through the ERW mill and into the CW mill, and thence into the barrel furnace and stretch-reducing mill. Similarly, when producing ERW pipe, the pipe (already formed and welded) was to "dummy" through the CW mill from which the rolls had been removed or retracted and thence to the barrel furnace and stretch-reducing mill. This combination mill was started up in March of 1962 but never performed satisfactorily due to difficulties with the CW mill. After about two years of unsuccessful attempts to correct its faults, the company removed the CW mill, sold part of it and scrapped the remainder. The present setup, which started up in August 1964, consists of the ERW mill, the barrel furnace, the stretch-reducing mill,

and accessory equipment such as cut-off saws, cooling beds, and the like. The ERW pipe produced by Armco in this mill, although probably superior to most true butt-weld pipe, has always been classified and sold as butt-weld pipe (or conduit) because, as one official stated, the equipment necessary for making all the appropriate tests required for an ERW classification was never installed.

U.S. Tariff Treatment

Welded pipe

Under the Tariff Schedules of the United States Annotated (1969), the welded pipe and tube of concern in this investigation is dutiable at 0.3 cent per pound under item 610.32, which is described as follows:

Pipes and tubes and blanks therefor, all the foregoing of iron (except cast iron) or steel (other than alloy iron or steel), welded, jointed, or seamed, with walls not thinner than 0.065 inch, and of circular cross section, 0.375 inch or more in outside diameter.

These items were dutiable under Paragraph 328 of the Tariff Act of 1930 at $3/4$ (0.75) cent per pound (this statutory rate is currently applicable to the products of Communist-dominated countries or areas as designated by the President of the United States). Concessions granted by the United States under the General Agreement on Tariffs and Trade (GATT) first reduced the statutory rate to $3/8$ (0.375) cent per pound effective January 1, 1948. In a subsequent three-step reduction, the rate became 0.35 cent per pound on June 30, 1956, 0.33 cent per pound on June 30, 1957, and 0.3 cent per pound on June 30, 1958. The rate of 0.3 cent per pound (which represents a total reduction of 60 percent since 1930)

was not affected either by the adoption of the TSUS in August 1963, or the Kennedy Round of trade negotiations.

The ad valorem equivalent of the statutory (1930) rate, the 1955 rate and the 1968 rate, each based on imports of all sizes of welded pipe during those years is as shown below:

| <u>Ad valorem equivalent of rate in--</u> | <u>Based on imports during--</u> | | |
|---|----------------------------------|-------------|-------------|
| | <u>1930</u> | <u>1955</u> | <u>1968</u> |
| 1930----- | 15.1 | 12.0 | 11.3 |
| 1955----- | 7.5 | 6.0 | 5.7 |
| 1968----- | 6.0 | 4.8 | 4.5 |

The average ad valorem equivalent of the 1968 rate based on the reported value of imports in 1968 of welded pipe ranging in outside diameter from 0.375 inch to 4.5 inches (1/4 inch to 4 inches nominal inside diameter) was 4.8 percent.

The average unit value of imports of all welded pipe and tube was only 32 percent higher in 1968 than it was in 1930 when the statutory rate of 0.75 cent per pound was established; thus the "degree of protection" afforded by the specific rate has declined, due to the increase in the average unit value of imports, by only 25 percent since 1930.

Rigid electrical conduit

Rigid electrical conduit is provided for under the provisions of item 688.30 and is currently dutiable at the rate of 10 percent ad valorem. Conduit was originally dutiable at 30 percent ad valorem under paragraph 328 of the Tariff Act of 1930. Pursuant to concessions granted by the

United States in the GATT the applicable duty was reduced as follows:

| <u>Rate</u> | <u>Effective date</u> |
|--------------------|-----------------------|
| 15% ad val.----- | June 6, 1951 |
| 14% ad val.----- | June 30, 1956 |
| 13.5% ad val.----- | June 30, 1957 |
| 12.5% ad val.----- | June 30, 1958 |
| 11% ad val.----- | July 1, 1962 |
| 10% ad val.----- | July 1, 1963 |

U.S. Consumption

Welded pipe

Apparent U.S. consumption of all welded iron or steel pipe and tube 0.375 inch and over trended upward during 1958-68; consumption increased from 4.7 million tons in 1958 to 5.6 million tons^{1/} in 1959, declined during 1960-62, and thereafter increased in each year and amounted to 7.9 million tons in 1968 (table 1). Some of the increase in 1959 and 1968 reflects additions to inventories in anticipation of a labor strike rather than actual consumption. Except for 1958, when they amounted to about 6 percent of production, exports were equivalent to not much more than one percent of production and usually much less; thus the trend in apparent consumption in recent years was almost entirely a reflection of production and imports.

U.S. consumption of all types of welded pipe 0.375 inch to 4.5 inches in outside diameter is estimated to have increased from about 3.6 million tons in 1963 to about 4.2 million tons in 1968.

^{1/} In this report quantities are expressed in terms of short tons (2,000 pounds).

Large diameter pipe (that over 4.5 inches) has been a greater factor in the composition of domestic production and imports in recent years than formerly; therefore apparent consumption of pipe and tube not over 4.5 inches, although trending upward in recent years, did not rise as much as the all-inclusive grouping of welded pipe and tube.

Rigid electrical conduit

Apparent U.S. consumption of rigid electrical conduit of steel declined from about 359,000 tons in 1956 to about 245,000 tons in 1962 but thereafter increased steadily and amounted to about 401,000 tons in 1968 (table 2).

U.S. Imports

Welded pipe

Data on imports of pipe produced by the butt weld process and ranging in size from 0.375 inch to 4.5 inches in outside diameter are not reported separately in official statistics. U.S. imports of all welded iron and steel pipe and tube measuring from 0.375 inch to 4.5 inches in outside diameter, however, increased from 497,000 tons (\$66.7 million) in 1963 (the first year for which import data were segregated by size), to 655,000 tons (\$82.7 million) in 1968, or by about 32 percent in terms of quantity and 23 percent in terms of value (table 3).^{1/} Imports during January-June 1969, were at an annual rate roughly equivalent to imports in 1968. In

^{1/} The data on imports shown in Exhibit II of the petition include all sizes of welded pipe and tube by whatever process made, and are not comparable to data shown for shipments.

1963, these imports were equivalent to about 27 percent of reported domestic butt-weld production (as described later in this report); in 1964, about 24 percent; in 1965 and 1966, about 25 percent; in 1967, about 28 percent; and in 1968, about 34 percent. It was estimated in 1963 and confirmed during the present investigation, however, that imports of butt-weld pipe (no more than 25 percent) and imports of other welded pipe for sale in the butt-weld market (about 50 percent), constitute a combined total of about 75 percent of total imports of welded pipe from 0.375 inch to 4.5 inches in diameter;^{1/} thus it may be concluded that imports of the pipe of concern here increased in recent years in about the same proportion as imports of all welded pipe from 0.375 inch to 4.5 inches in diameter, and in 1968 amounted to 490,000 tons or about 26 percent of domestic production.

The trend of imports of all welded iron or steel pipe and tube 0.375 inch or over (including pipe considerably larger than 4.5 inches) in the same period was also upward; the increase was greater, however, imports almost doubling from 1963 to 1968. Imports of this larger grouping of welded pipe and tube were in the range of 13 percent to 15 percent of the production of this category in 1963-67, and equivalent to 20 percent in 1968.

Imports of all welded pipe as well as those of welded pipe measuring 0.375 inch to 4.5 inches in outside diameter, rose significantly in 1968 for much the same reason that imports rose sharply in 1959-- the imminence of a U.S. labor stoppage which, although it did not

^{1/} Based on various estimates supplied by segments of the trade as well as by analysis of a small sample of imports.

materialize in 1968, prompted consumers to increase inventories as a precautionary measure. The lack of domestic steel in 1959 because of a 116-day labor strike introduced many consumers to foreign steel and imports increased in that year to satisfy consumer requirements. In view of the anticipation and duration of the 1959 strike, it is altogether likely that imports would have increased as much even if there had not been successive duty reductions in 1956, 1957, and 1958. Once started at a significant rate relative to domestic production, the flow of imports remained at a significant level (see table 3).

Imports of iron or steel welded pipe and tube from 0.375 inch to 4.5 inches in 1964-68 and January through June of 1969 came principally from Japan (which supplied over half of the imports), West Germany, and other western European countries (table 4).

Imports of welded pipe and tube have entered the country through Customs Districts on all coasts and borders, including those of Alaska, Hawaii, and Puerto Rico. Over half the total in 1968 arrived at the Customs Districts of Houston, Detroit, Los Angeles, and New Orleans. Of possibly greater significance is the fact that 36 percent of total imports in 1968 (239,000 tons) entered the United States through the Customs Districts of Los Angeles, San Francisco, Portland, Seattle, and San Diego and in all probability were destined for customers outside the normal market area of the Ambridge plant.

Rigid electrical conduit

Imports of electrical conduit (item 688.30) have never been particularly significant compared to domestic production. At their peak (1968) imports of conduit amounted to about 13,000 tons, valued at \$2.1 million.

It should be noted that in addition to the conduit imported under item 688.30, importers stated that conduit shells (unfinished welded conduit) are imported as welded pipe (item 610.32) for the purpose of conversion to conduit by domestic concerns. Upon importation they are not generally distinguishable from welded pipe for water or gas service.

U.S. Production

Welded pipe

Production of butt weld pipe as reported by the American Iron and Steel Institute is apparently not a true measure of production of pipe made by the butt weld process as described earlier. The Armco Steel Corporation, for example, reported its production of electric-resistance-weld pipe as butt weld pipe because it was produced for and sold in the butt-weld market. It is not known to what extent other welded pipe producers reported in a similar manner. It is likely, however, that reporting practices among the pipe producers were consistent from year to year. Thus, the data reported were probably indicative of the trend of both production of butt weld pipe and production of welded pipe (by whatever process) for the butt weld market. Quantitatively the reported data represent somewhat more than production of pipe by the butt weld process

and probably something less than production of welded pipe for the butt-weld market.

With the shortcomings noted, reported annual production of butt-weld pipe peaked in 1956 when it amounted to about 2.8 million tons (table 3). Production declined steadily during the next several years and amounted to 1.7 million tons in 1962; during 1964-68 it ranged annually between 1.9 million and 2.1 million tons. Shipments of pipe as a whole during January-June 1969, and presumably shipments of welded pipe, were about 10 percent less than such shipments in the same period of 1968. This is not necessarily indicative of shipments (or production) for the full year 1969 because production of all steel products in the latter half of 1968 was curtailed substantially following the labor settlement, whereas production in 1969 will continue at more nearly the same level throughout the year.

Rigid electrical conduit

U.S. production of conduit^{1/} declined steadily from 373,000 tons in 1956 to 253,000 tons in 1962 but thereafter increased and amounted to about 396,000 tons in 1968 (table 2). Output during the first four months of 1969 was only slightly larger than during the same period of 1968.

Comparative Values of Imports and Domestically Produced Pipe

Since 1963, there has been little change in the average unit value of foreign and domestic welded pipe in the U.S. market. The value of imported welded pipe declined slightly during the period; that of the

1/ Measured by "domestic sales billed" plus exports.

domestic product remained fairly constant during 1963-66 but increased somewhat in 1967.

The duty-paid value (including estimated average cost of insurance and freight) per ton of imported welded pipe over 0.375 inch in diameter declined from \$160.97 in 1963 to \$154.73 in 1967 and to \$151.68 in 1968, and rose slightly to \$152.27 during January-June 1969. The average unit value of domestic shipments of "standard pipe" (about 70 percent of which is butt weld) on the other hand, rose from \$180.61 in 1963 to \$181.99 in 1964, declined to \$175.04 in 1966, but increased to \$184.41 in 1967. The average value of shipments in 1968, although data are not yet available, is believed to have been about the same as that in 1967. In 1969, following the decision to close the Ambridge weld mill, domestic producers of butt weld pipe announced two price increases totaling about \$14.00 per ton.

The wholesale price index for domestic butt weld pipe published by the Bureau of Labor Statistics, with 1957-59=100.0 as its base, was 98.8 for 1963, 100.2 for 1967, 100.4 for 1968, and 104.0 for the months of March through July 1969; these 1969 monthly figures reflect the \$6.00 per ton price rise of February 1969 (the first of the two increases noted above).

Armco Steel Corporation

General

Armco was organized in 1900 as the first integrated steel company in the United States; it was incorporated as the American Rolling Mill Company on June 29, 1917. The present company was created in April 1948,

merging the properties and business of American Rolling Mill Company and Columbus Iron and Steel Company of Columbus, Ohio.

In 1968, Armco, the general offices of which are located near the site of the original plant in Middletown, Ohio, produced 7.7 million tons of raw steel (fifth in the industry), had net sales of \$1,375 million (fourth in the industry), and had a net profit of \$88 million (third in the industry). The parent company consists of the Steel Operating Company, National Supply Division, Armco International Division, Advanced Materials Division, and Metal Products Division.

The operating company is one of the largest producers of iron and steel sheets and strip, and special purpose steels. Its eight principal plants are in Maryland, Pennsylvania, Ohio, Kentucky, Missouri, Oklahoma, and Texas. Armco's Metal Products Division has 38 plants throughout the United States and Canada that manufacture products for the heavy construction and building industries. The National Supply Division has four plants that make machinery and equipment for the petroleum industry. The Armco International Division operates 24 plants in 19 countries, making a wide variety of products used in manufacturing.

Armco also has 37 wholly owned subsidiaries in the United States and abroad engaged not only in metals activities but in diverse fields such as coal, insurance, and international financing. Share interests are also held in a number of other companies throughout the world.

The Ambridge plant

General.--The Ambridge, Pennsylvania plant occupies about 105 acres near the Ohio River, 19 miles northwest of Pittsburgh's Golden Triangle. It was acquired on May 1, 1958, as part of Armco's acquisition of the National Supply Company. At the time of acquisition the Ambridge plant produced seamless pipe principally for oil country use. The acquisition of the National Supply Company also brought into Armco a somewhat antiquated weld mill located at Etna, Pennsylvania, about 10 miles north of Pittsburgh. The Etna mill was abandoned and the production of welded pipe was added to the Ambridge plant. All of the products of the Ambridge plant are made from steel produced at other Armco facilities; skelp for the weld mill came principally from Ashland, Kentucky.

The buildings, constructed about 1960, and service areas of the weld mill constitute about one-third of the total plant area at Ambridge, and are distinct from the other facilities. (The pipe mill itself is described in the sections on description and uses.) The weld unit at Ambridge was designed to operate continuously (18 to 21 eight-hour shifts per week) and was to be capable of producing about 200,000 tons of welded pipe per year. In practice, the mill never operated at or near capacity;

* * *

At the time of the staff's visit to Ambridge (September 1969) these buildings were empty save for the idle equipment which, it is understood, is up for sale.

Seamless pipe and tube continue to be produced at the Ambridge plant. Although other tubular products are produced by Armco at other locations, no production of butt weld pipe (or other welded pipe for the butt weld market) exists within the Armco organization at the present time.

Production of the weld mill.--

* * * * *

Shipments of weld mill products.--

* * * * *

Employment and manhours.--The termination of production of butt weld pipe and rigid electrical conduit at Ambridge resulted in a reduction in the total labor force at the plant * * * .

Monthly employment in the weld mill began declining consistently in mid-1968 and significantly in November 1968 although the corporate decision to terminate production in the mill was not made until January 1969. Until the decision to close was made, the decline in employment was probably due in part to a production cutback because of a declining demand for welded pipe resulting from the effort by consumers to build inventories early in 1968 in anticipation of a steel strike.^{1/} By May 1969, employment in the weld mill had been terminated; the petitioners and Armco agree that a total of about 350 jobs was affected. Since January 1, 1969, employment in other departments of the Ambridge mill increased and in July such employment was higher than in any month during 1968. In October 1969, an Armco official stated that all workers other than those who retired or elected severance, had been recalled for work in other departments of the Ambridge plant. Of those who elected severance, it appeared that few had found employment with other firms by September 1969, this, despite the fact that the Ambridge plant is located in the heart of the southwestern Pennsylvania industrial complex, which

^{1/} The petition indicated that 305 employees were laid off in November and December of 1968 as a result of poor business * * * . Data submitted by Armco * * * do not show any such massive layoffs in 1968 in the weld mill. It was determined that the data submitted by Armco reflect more accurately the final departure of employees from the weld mill.

includes a number of steel companies and other related enterprises maintaining large payrolls.

* * * * *

It is noted that both total manhours worked at the Ambridge plant and manhours devoted to buttweld pipe and conduit declined in each year since 1965.

* * * * *

Management-labor relations.--Both the management of the Ambridge plant of Armco and representatives of District 20, United Steelworkers of America, AFL-CIO, declared that management-labor relations at the Ambridge weld mill had been very good. Officials of the local union stated that Armco was "very cooperative" and provided a "very liberal" pension plan, and that labor-management relations, as a consequence, were "unusually good."

Pension plan.--The pension plan of the weld mill at Ambridge provided the worker with two options. On retirement, he could elect either: (1) to accept the monthly sum of \$6.50 times his years of service at the mill, or (2) to accept the monthly sum equivalent to one percent of his average monthly earnings during the last 120 months of work at the mill times the total number of years of work there. In addition, and because of the closure of the mill, all

pensioners receive an additional \$75 per month until age 65. The first alternative was generally elected by workers with less than 35 years of service, while the second was generally chosen by those who had worked at the mill (or for Armco) for more than 35 years. Workers receiving a pension could be employed again at the Ambridge plant or at other Armco plants, but while so reemployed could not continue on pension.

Layoff options.--Three options were available to the workers laid off by the Ambridge weld mill, as follows:

1) Retirement with pension for those of sufficient age or length of service. Such pensioners are considered to be ineligible for unemployment compensation. It was determined that 146 workers elected retirement.

2) Severance with deferred retirement until age 65, for those lacking sufficient age or length of service to be eligible for a pension. Such workers lose reemployment rights. They receive State unemployment compensation beginning a maximum of eight weeks after being laid off, i.e., after the period for which the employee was paid severance. Seventy-three (73) workers elected severance.

3) Layoff status, under which former workers could receive preference for reemployment over new applicants at the Ambridge plant. Employees with over two years service are eligible for supplemental unemployment compensation in addition to State unemployment compensation. Such workers could be rehired by the seamless-pipe mill

during busy seasons. Such employment, however, might be of temporary duration, and would generally be at lesser-paying jobs than those which they formerly held. It would also involve loss of on-the-job seniority, although there would be no loss of seniority for pension purposes. Workers finding employment with other companies would ordinarily be subject to the same loss of income, "fringe benefits", and seniority. Workers not electing retirement or severance were placed on layoff status. There were, however, 15 employees who had very short terms of service; for this reason their employment was terminated without reemployment rights.

Seniority.--The seniority system dominates the labor picture at the Ambridge plant. A considerable proportion of the workers laid off as a result of the closure of the weld mill originally were displaced workers from the Armco plant (formerly owned by the National Supply Company) at Etna, Pennsylvania, which closed down in 1961. In addition (according to union officials), many workers with seniority in the seamless pipe department at Ambridge transferred to the weld mill because of its superior working conditions and benefits, especially an incentive plan. As a result, a relatively large proportion of the workers laid off were eligible to elect retirement, as indicated previously.



TABLES

Table 1.--Welded iron or steel pipe and tube 0.375 inch O.D. and over
(TSUS item 610.32): U.S. production, imports for consumption, exports
of domestic merchandise, and apparent consumption, 1958-68 and January-
June 1969.

| | Production | Imports | | Exports ^{1/} | | Apparent consumption |
|-----------|----------------------------|----------------------------|-------------------------|----------------------------|-------------------------|----------------------------|
| | | Quantity | Value | Quantity | Value | |
| | <u>1,000</u> short tons | <u>1,000</u> short tons | <u>1,000</u> dollars | <u>1,000</u> short tons | <u>1,000</u> dollars | <u>1,000</u> short tons |
| 1958----- | 4,811 | 185 | 25,855 | 288 | 56,385 | 4,708 |
| 1959----- | 5,176 | 504 | 75,448 | 96 | 21,816 | 5,584 |
| 1960----- | 4,851 | 419 | 62,349 | 36 | 8,935 | 5,234 |
| 1961----- | 4,459 | 495 | 70,620 | 27 | 6,780 | 4,927 |
| 1962----- | 4,172 | 585 | 78,629 | 23 | 6,458 | 4,734 |
| 1963----- | 4,293 | 656 | 85,623 | 51 | 9,700 | 4,898 |
| 1964----- | 4,939 | 642 | 85,545 | 53 | 11,630 | 5,528 |
| 1965----- | 5,286 | 746 | 94,197 | 35 | 8,836 | 5,997 |
| 1966----- | 6,072 | 830 | 103,329 | 33 | 10,430 | 6,869 |
| 1967----- | 6,164 | 812 | 101,886 | 35 | 9,895 | 6,941 |
| 1968----- | 6,685 | 1,288 | 170,818 | 55 | 10,910 | 7,918 |
| 1969: | | | | | | |
| Jan.- | | | | | | |
| June-- | <u>2/</u> | 750 | 86,177 | 16 | 4,998 | <u>2/</u> |

^{1/} Exports in 1958-64 include some alloy pipe and tube.

^{2/} Not available.

Source: Production compiled from Annual Statistical Reports of the American Iron and Steel Institute; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Note.--Production and exports include pipe and tube below 0.375 inch outer diameter. These small sizes represent a very small percentage of the total.

Table 2.--Rigid electrical conduit of iron or steel: U.S. shipments, imports for consumption, and exports of domestic merchandise, 1954-68

| | Shipments <u>1/</u> | | Imports | | Exports <u>2/</u> | |
|-----------|----------------------------|-------------------------|----------------------------|-------------------------|----------------------------|-------------------------|
| | Quantity | Value | Quantity | Value | Quantity | Value |
| | <u>1,000</u> short tons | <u>1,000</u> dollars | <u>1,000</u> short tons | <u>1,000</u> dollars | <u>1,000</u> short tons | <u>1,000</u> dollars |
| 1954----- | 227 | <u>3/</u> 136 | <u>3/</u> | 12 | 2,989 | |
| 1955----- | 280 | <u>3/</u> 125 | <u>3/</u> | 13 | 3,645 | |
| 1956----- | 359 | <u>3/</u> 53 | <u>3/</u> | 14 | 4,259 | |
| 1957----- | 352 | <u>3/</u> 107 | <u>3/</u> | 17 | 5,573 | |
| 1958----- | 327 | <u>3/</u> 73 | <u>3/</u> | 12 | 4,495 | |
| 1959----- | 295 | <u>3/</u> 75 | <u>3/</u> | 9 | 3,332 | |
| 1960----- | 265 | <u>3/</u> 111 | <u>3/</u> | 10 | 3,737 | |
| 1961----- | 275 | <u>3/</u> 30 | <u>3/</u> | 9 | 3,638 | |
| 1962----- | 245 | <u>3/</u> 18 | <u>3/</u> | 8 | 3,010 | |
| 1963----- | 283 | 1 117 | | 8 | 2,821 | |
| 1964----- | 325 | 2 316 | | 9 | 2,996 | |
| 1965----- | 365 | 1 228 | | 7 | 2,710 | |
| 1966----- | 386 | 3 427 | | 9 | 3,240 | |
| 1967----- | 365 | 6 1,062 | | 7 | 4,845 | |
| 1968----- | 388 | 13 2,110 | | 8 | 2,642 | |

1/ Represents domestic sales billed.

2/ includes flexible conduit in 1954-64.

3/ Less than 500 tons.

Source: Shipment compiled from data published by BDSA in Construction Review; imports and exports compiled from official statistics of the U. S. Department of Commerce.

Table 3.--Welded iron or steel pipe and tube: Comparison of U.S. production and imports for consumption, by category, and year-end rates of duty for TSUS 610.32, 1954-68

| Year | (Quantity in 1,000 short tons) | | | | | | | | | | Rate of duty at year-end (cents per lb.) |
|------|--------------------------------|--|-----|-------------------------------------|-------|------------|---------|--|------------|---------|--|
| | Butt-weld production | All welded 0.375 inch to 4.5 inches O.D. | | All welded 0.375 inch and over O.D. | | Production | Imports | Ratio (percent) of imports to production | Production | Imports | |
| 1954 | 2,120 | 3,525 | 2/ | 5,032 | 28 | 1 | 0.375 | | | | |
| 1955 | 2,817 | 4,522 | 2/ | 6,198 | 54 | 1 | do | | | | |
| 1956 | 2,846 | 4,727 | 2/ | 6,652 | 92 | 1 | 0.35 | | | | |
| 1957 | 2,328 | 4,160 | 2/ | 7,006 | 135 | 2 | 0.33 | | | | |
| 1958 | 1,966 | 2,118 | 2/ | 4,811 | 185 | 4 | 0.30 | | | | |
| 1959 | 1,965 | 3,315 | 2/ | 5,176 | 504 | 10 | do | | | | |
| 1960 | 1,917 | 2,872 | 2/ | 4,851 | 419 | 9 | do | | | | |
| 1961 | 1,782 | 2,677 | 2/ | 4,459 | 495 | 11 | do | | | | |
| 1962 | 1,678 | 2,672 | 2/ | 4,172 | 585 | 14 | do | | | | |
| 1963 | 1,770 | 2,921 | 2/ | 4,293 | 656 | 15 | do | | | | |
| 1964 | 2,022 | 3,167 | 497 | 4,939 | 642 | 13 | do | | | | |
| 1965 | 2,033 | 3,351 | 482 | 5,286 | 746 | 14 | do | | | | |
| 1966 | 2,130 | 3,633 | 504 | 6,072 | 830 | 14 | do | | | | |
| 1967 | 1,886 | 3,573 | 536 | 6,164 | 812 | 13 | do | | | | |
| 1968 | 1,929 | 3,513 | 655 | 6,685 | 1,288 | 20 | do | | | | |

1/ Estimated by subtracting electric weld line pipe from total welded. Since electric weld line pipe production far exceeds the production of all types of line pipe not over 4.5 inches outer diameter, and since butt weld constitutes the major portion of such pipe, it is assumed these calculated figures may be more closely correlated with imports of welded pipe and tube from 0.375 inch to 4.5 inches outer diameter. These data, however, still include some pipe and tube of all sizes.

2/ Not available.

Source: Production compiled from Annual Statistical Reports of the American Iron and Steel Institute; imports compiled from official statistics of the U.S. Department of Commerce.

Note.--All production statistics include pipe and tube under 0.375 inch outer diameter. These small sizes are a very small percentage of total production.

Table 4.--Iron or steel pipe and tube, welded, jointed, or seamed, with walls 0.065 inch thick or more, of circular cross-section, other than alloy iron or steel, from 0.375 inch to 4.5 inches in outside diameter: U.S. imports for consumption, by source, 1964-68 and January-June 1969

| Source | 1964 | 1965 | 1966 | 1967 | 1968 | Jan.-June 1969 |
|-----------------------------|----------|----------|----------|----------|----------|----------------|
| Quantity (1,000 short tons) | | | | | | |
| Japan----- | 246 | 300 | 280 | 264 | 364 | 188 |
| West Germany---- | 50 | 42 | 62 | 55 | 77 | 30 |
| France----- | 36 | 35 | 44 | 35 | 36 | 25 |
| Mexico----- | 12 | 11 | 8 | 8 | 20 | 19 |
| Australia----- | 25 | 23 | 35 | 35 | 23 | 15 |
| Italy----- | 11 | 11 | 25 | 27 | 17 | 12 |
| Belgium----- | 33 | 22 | 35 | 36 | 29 | 9 |
| United Kingdom-- | 32 | 29 | 11 | 10 | 23 | 6 |
| Canada----- | 4 | 5 | 5 | 6 | 6 | 6 |
| Switzerland---- | 7 | 6 | 7 | 7 | 9 | 4 |
| Netherlands---- | 14 | 12 | 7 | 6 | 9 | 10 |
| India----- | 1 | 1 | 12 | 9 | 11 | 4 |
| Argentina----- | 7 | 1/ | 4 | 11 | 16 | 2 |
| All other----- | 5 | 7 | 3 | 21 | 15 | 4 |
| Total----- | 482 | 504 | 536 | 531 | 655 | 330 |
| Value (1,000 dollars) | | | | | | |
| Japan----- | 34,239 | 38,559 | 34,517 | 33,328 | 45,110 | 22,473 |
| West Germany---- | 7,339 | 6,063 | 8,436 | 7,645 | 10,299 | 4,087 |
| France----- | 5,222 | 5,048 | 6,044 | 5,212 | 5,103 | 3,716 |
| Mexico----- | 1,786 | 1,693 | 1,149 | 1,072 | 2,590 | 2,463 |
| Australia----- | 3,206 | 2,837 | 4,240 | 4,269 | 2,787 | 1,857 |
| Italy----- | 1,427 | 1,524 | 3,264 | 3,487 | 2,234 | 1,674 |
| Belgium----- | 4,326 | 2,838 | 4,226 | 4,300 | 3,410 | 1,115 |
| United Kingdom-- | 4,241 | 3,748 | 1,244 | 1,358 | 2,907 | 1,094 |
| Canada----- | 567 | 697 | 787 | 895 | 1,047 | 908 |
| Switzerland---- | 1,107 | 1,011 | 1,191 | 1,144 | 1,314 | 627 |
| Netherlands---- | 2,026 | 1,847 | 991 | 883 | 1,212 | 614 |
| India----- | 205 | 173 | 1,178 | 1,031 | 1,110 | 458 |
| Argentina----- | 723 | 38 | 405 | 1,221 | 1,634 | 256 |
| All other----- | 668 | 842 | 364 | 2,608 | 1,935 | 487 |
| Total----- | 67,082 | 66,918 | 68,036 | 68,453 | 82,692 | 41,829 |
| Unit value (per ton) 2/ | | | | | | |
| Average----- | \$139.04 | \$132.78 | \$126.82 | \$128.88 | \$126.24 | \$126.75 |

1/ Less than 500 tons.

2/ Based on unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce for imports entered under TSUSA items 610.3210 and 610.3230.

Note.--It is estimated that pipe destined for the butt weld market represents about 75 percent of the total annual imports indicated on this table.

Because of rounding, columns may not add to totals.

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**STATEMENTS AND SUBMISSIONS OF
ARMCO STEEL CORPORATION**

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ARMCO STEEL CORPORATION

GENERAL OFFICES · MIDDLETOWN, OHIO 45042

J. O. MILLER
MANAGER AMBRIDGE WORKS



ADDRESS REPLY TO
P. O. BOX 209
AMBRIDGE, PA. 18003

January 30, 1969

TO AMBRIDGE MEN AND WOMEN:

I am genuinely sorry to announce that we will discontinue our welded pipe and electrical conduit operation by April 1, 1969. After a thorough analysis of our many years of effort, your management has decided that there is no basis on which Armco can realistically continue to operate these facilities.

This decision does not affect our production of seamless standard pipe and oil country tubular products.

Foreign steel is a major factor in this situation. The average selling price of imported welded pipe is considerably below our own prices. Competitive pressures from both foreign and domestic pipe producers prevent us from increasing prices sufficiently to compensate for our cost disadvantages.

As many of you know, we had a special management team last year studying our weld mill operations to see whether we could make further operating economies that could offset this cost-price squeeze. We also hired an outside consultant who recently gave us his recommendations. But even with these latest efforts, we can see no prospect that the situation can be improved enough to justify continued operation of these facilities.

During the time I have been Works Manager, I have learned to appreciate the very real spirit of cooperation we have at Ambridge, often in the face of discouraging conditions.

I recognize that there is very little that can be said in this type of announcement to the individuals who will be directly affected. But I want to assure you that we will be in personal contact with each one as soon as possible to discuss what options are available.

Sincerely,

Manager, Ambridge Works





