

**UNITED STATES TARIFF COMMISSION**

**CARBON STEEL WIRE ROD AND ROUND WIRE:  
WORKERS OF THE MONESSEN, PENNSYLVANIA  
PLANT OF WHEELING-PITTSBURGH STEEL CORPORATION**

**Report to the President  
on Investigation No. TEA-W-181  
Under Section 301(c)(2) of the Trade Expansion Act of 1962**



**TC Publication 566  
Washington, D. C.  
April 1973**

UNITED STATES TARIFF COMMISSION

Catherine Bedell, *Chairman*

Joseph O. Parker, *Vice Chairman*

Will E. Leonard, Jr.

George M. Moore

J. Banks Young

Italo H. Ablondi

Kenneth R. Mason, *Secretary*

-----

Address all communications to  
United States Tariff Commission  
Washington, D. C. 20436

-----

# C O N T E N T S

	<u>Page</u>
Report to the President-----	1
Findings of the Commission-----	2
Views of Chairman Bedell, Vice Chairman Parker, and Commissioners Leonard and Young-----	3
Dissenting views of Commissioners Moore and Ablondi-----	7
Information obtained in the investigation:	
Description and uses:	
Wire rod-----	A-1
Wire-----	A-2
U.S. tariff treatment:	
Wire rod-----	A-4
Wire-----	A-7
U.S. producers-----	A-9
U.S. consumption:	
Wire rod-----	A-11
Wire-----	A-11
U.S. production, shipments, and exports:	
Wire rod-----	A-12
Wire-----	A-13
U.S. imports:	
Wire rod-----	A-14
Wire-----	A-16
Voluntary restraint agreements with the EEC and Japan-----	A-17
Foreign labor costs related to U.S. imports-----	A-18
Wheeling-Pittsburgh Steel Corp.:	
The corporation-----	A-19
The Monessen Plant-----	A-20
Production-----	* * *
Shipments-----	* * *
Employment-----	* * *
Prices-----	* * *
Johnson Steel & Wire Co.-----	* * *
Monessen/Johnson Steel & Wire Co. Comparison-----	* * *
Appendix A. Statistical appendix-----	A-35
Appendix B. Texts of voluntary restraint agreements with the European Economic Community and Japan--	A-46
Appendix C. Relative labor costs in the iron and steel industries of five countries, 1964-71-----	A-49
Appendix D. Statements made by representatives of the steel industry before the House Committee on Education and Labor in connection with bill H.R. 478 to amend the Fair Labor Standards act of 1938 (Sept. 13, 1967)-----	A-52

## CONTENTS

## Appendix Tables

	<u>Page</u>
1. Carbon-steel wire rod: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1965-72-----	A-36
1-A Carbon-steel wire rod: Shipments by U.S. producers and apparent open-market U.S. consumption, 1965-72-----	A-36
2. Carbon-steel round wire: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1965-72-----	A-37
2-A Carbon-steel round wire: Shipments by U.S. producers and apparent open-market U.S. consumption, 1965-72-----	A-37
3. Carbon-steel wire rod: U.S. exports of domestic merchandise, by principal markets, 1966-72-----	A-38
4. Carbon-steel wire rod: U.S. imports for consumption and ad valorem equivalents for years following reductions in rate of duty, 1930-72-----	A-39
5. Carbon-steel wire rod: U.S. imports for consumption, by principal sources, 1966-72-----	A-40
6. Carbon-steel round wire: U.S. imports for consumption, by principal sources, 1966-72-----	A-41
7. Carbon-steel round wire: U.S. imports for consumption and ad valorem equivalents for years following reductions in rate of duty, 1931-72-----	A-42
8. Monessen plant, Wheeling-Pittsburgh Steel Corporation: Shipments of all steel products, of carbon-steel wire rod and wire, 1968-72-----	* * *
9. Monessen plant, Wheeling-Pittsburgh Steel Corporation: Average number of employees and of production and related workers, and total man-hours worked by the latter, 1968-72-----	* * *
10. Comparison of average unit values of wire rod purchased and round wire shipped, and man-hours per ton of round wire produced by the Monessen plant and Johnson Steel and Wire Company, 1968-72-----	* * *

## Report to the President

U.S. Tariff Commission,  
April 6, 1973

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 findings of an investigation, made under section 301 (c)(2) of the Act, in response to a petition filed on behalf of a group of workers.

On February 5, 1973, the Tariff Commission received a petition from the United Steelworkers of America on behalf of the workers and former workers of the Monessen, Pennsylvania, plant of the Wheeling-Pittsburgh Steel Corporation, Pittsburgh, Pennsylvania, filed for a determination of their eligibility to apply for adjustment assistance. The Commission instituted an investigation (TEA-W-181) on February 14, 1973, to determine whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with the carbon-steel wire rod and round wire (of the types provided for in items 608.70 to 608.75, inclusive, and 609.40 to 609.43, inclusive, of the Tariff Schedules of the United States) that are produced by the Wheeling-Pittsburgh Steel Corporation at Monessen, Pennsylvania, 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 firm, or an appropriate subdivision thereof.

Public notice of the investigation was given by posting copies of the notice at the office of the Commission in Washington, D.C., at the New York office, and by publication in the Federal Register of February 20, 1973 (38 F.R. 4695). No public hearing was requested and none was held.

The information in this report was obtained from the United Steelworkers of America and its District No. 15; from the Wheeling-Pittsburgh Steel Corporation, and other producers of wire rod and wire; from trade associations; and from the Commission's files.

#### Finding of the Commission

On the basis of its investigation, the Commission finds (Commissioners Moore and Ablondi dissenting) that articles like or directly competitive with wire rods and round wire produced by the Wheeling-Pittsburgh Steel Corp., are not, as a result in major part of concessions granted under trade agreements, being imported in 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 the firm, or an appropriate subdivision thereof.

Views of Chairman Bedell, Vice Chairman Parker, and  
Commissioners Leonard and Young

On February 5, 1973, the United Steelworkers of America filed a petition for adjustment assistance under section 301(a)(2) of the Trade Expansion Act of 1962 on behalf of workers and former workers who had produced or are producing carbon-steel wire rod and round wire at the Monessen, Pa., plant of Wheeling-Pittsburgh Steel Corp., Pittsburgh, Pa. In December 1972 the wire rod operation was terminated; the production of round wire is scheduled to be terminated in June 1973. A subsidiary of Wheeling-Pittsburgh (Johnson Steel and Wire Co.) has been producing and will continue to produce carbon-steel round wire in its three plants in Worcester, Mass., Akron, Ohio, and Los Angeles, Calif.

The Tariff Commission has frequently stated that the Trade Expansion Act of 1962 establishes four criteria to be met in order for an affirmative determination to be made. Those criteria are as follows:

- (1) An article like or directly competitive with an article produced by the workers concerned must be imported in increased quantities;
- (2) The increased imports must be a result in major part of concessions granted under trade agreements;
- (3) A significant number or proportion of the workers concerned must be unemployed or underemployed, or threatened with unemployment or underemployment; and
- (4) The increased imports resulting in major part from trade-agreement concessions must be the major factor in causing or threatening to cause the unemployment or underemployment.

If any one of the above criteria is not satisfied in a given case, the Commission must make a negative determination. It is our judgment that the fourth criterion has not been met in the case at hand, and, therefore, we have made a negative determination. Under the circumstances, the Commission has not been required to reach a conclusion respecting the first three criteria, and it has not done so.

The Wheeling Steel Corp. merged with the Pittsburgh Steel Co. in 1968 forming the present corporation. It is the ninth largest integrated steel producer in the United States. Its output consists primarily of flat-rolled products; during 1968-71, its shipments of wire rod and wire accounted for \* \* \* to \* \* \* percent of its total shipments.

Prior to the merger, the Monessen plant was part of the Pittsburgh Steel Co. It is now a major steel-producing unit of the new corporation; the rod and wire divisions of the plant have accounted for less than \* \* \* percent of the plant's total employment. The decision and announcement to eventually close the rod- and wire-producing divisions was made by Pittsburgh Steel in 1966, prior to the merger with Wheeling Steel Corp.

#### Wire rod

Prior to 1966, wire rod production at the Monessen plant utilized two steam-powered rod mills--one built in 1909 and the other in 1919. The mills processed raw steel (made at the plant) for intracompany and customer consumption. By the late 1950's, the rod mills had become obsolete largely because their output was limited to a maximum coil

size of 300 pounds which also limits the length of a continuous coil. This limitation effectively restricted their competitiveness with new large domestic--as well as foreign--rod mills which can produce rod coils of 3,000 pounds or more. The rod mill built in 1909 was closed in 1966 after the firm's low-carbon-steel merchant wire production was discontinued. After 1966, the remaining rod mill produced \* \* \* wire rod for use by the firm's wire-producing subsidiary and for sale to Page Wire Division of the American Chain and Cable Co., the plant of which was adjacent to Wheeling-Pittsburgh's Monessen plant. \* \* \*

In late 1971, Page closed down its wire-making operations, and Wheeling-Pittsburgh, confronted with the loss of its principal rod customer, closed its second obsolete rod mill (built in 1919) in December 1972. \* \* \*

#### Round wire

Since 1966, the round-wire-drawing operations at the Monessen plant--as well as at the three plants of the Johnson Steel Wire Co.--were confined to \* \* \* steel wire for specialty products. \* \* \*

\* \* \*.

The Monessen wire operation is scheduled to terminate in June 1973. \* \* \*

the Johnson Steel and Wire Co. subsidiary of Wheeling-Pittsburgh, which, with its two other wire plants, will remain in operation \* \* \*.

\* \* \*.

Five of the largest customers have indicated that they intend to purchase virtually all of their wire requirements from other domestic producers after the Monessen plant has closed.

#### Conclusion

Based on the foregoing, it is our view that increased imports resulting from trade-agreement concessions were not the major factor in causing, or threatening to cause, the unemployment or underemployment of workers of the Wheeling-Pittsburgh Corp. producing carbon-steel wire rod and round wire.

## Dissenting Views of Commissioners Moore and Ablondi

We have made an affirmative determination with respect to the workers of Wheeling-Pittsburgh Steel Corporation producing carbon steel round wire, because the four criteria imposed by the Trade Expansion Act of 1962 are clearly met:

- (1) U.S. imports of carbon-steel round wire have increased from 133,000 short tons in 1958 to 481,000 short tons in 1972.
- (2) Such increased imports resulted in major part from reductions in the rates of duty from an average of 23.5 percent ad valorem equivalent in 1930 to an average of 6.2 percent ad valorem equivalent in 1972.
- (3) Although no regular full-time employees at the Monessen, Pa., plant of Wheeling-Pittsburgh Steel Corporation have yet been terminated, officials of the firm have indicated that the wire-producing facilities will be permanently shut down in June 1973 \* \* \*.  
Therefore there is threatened unemployment.
- (4) Such threatened unemployment is directly attributable to the inability of Wheeling-Pittsburgh Corporation to meet the competition of concession-generated increased imports of round wire which have captured a substantial portion of the U.S. market. Thus, Wheeling-Pittsburgh Corporation decided to close its Monessen, Pa., plant in June 1973.



## INFORMATION OBTAINED IN THE INVESTIGATION

## Description of Products and Uses

The Monessen plant of the Wheeling-Pittsburgh Steel Corporation is an integrated plant that produces pig iron, coke, and steel ingots. The plant also makes steel billets, bars, and wire, and produced wire rods until December 1972. This investigation pertains to the now discontinued production of wire rods and the production of wire which will be discontinued after June 1973.

Wire rod

For tariff purposes, wire rod is a "coiled, semifinished, hot-rolled product of solid cross section, approximately round in cross section, not under 0.20 inch nor over 0.74 inch in diameter." Wire rod is produced from billets that have been heated to the appropriate rolling temperature and then passed through a series of reducing and forming rolls until the desired diameter is reached--usually from about 0.2187 inch to about 0.734 inch. The rod is laid in coils as it leaves the last stand of rolls. Substantial tonnages are shipped in the "as rolled" condition; some are pickled and lime coated, or oiled, to prevent or retard corrosion in transit and/or to facilitate drawing. Some wire rod is subjected to metallurgical treatments to improve the properties or appearance of the metal or to protect it against rusting, corrosion, or other deterioration. These treatments include annealing, tempering, rough coating, polishing, and burnishing.

Wire rod is used primarily for the drawing of wire; it has a few other uses, the most significant of which is for reinforcing concrete.

The bulk of the steel rods used in the United States is of carbon steel (i.e., other than alloy steel) with a low or medium-low carbon content. The low-carbon rod (by weight up to 0.25 percent carbon)--the more important in terms of volume--is used in the production of wire for nails, barbed wire, various types of fencing and netting, and building mesh for reinforcing concrete. The low- and medium-low-carbon grades of rod, as well as the higher carbon and alloy grades are used to make fine and specialty wire for springs, strand, rope and cable, and other wire products requiring special properties. Since 1966, the Monessen plant of Wheeling-Pittsburgh Steel Corporation has produced \* \* \* rod.

#### Wire

The term "wire," as it applies to steel, is defined in headnote 3(i) to part 2B of schedule 6 of the Tariff Schedules of the United States (TSUS) as "a finished, drawn, non-tubular product, of any cross-sectional configuration, in coils or cut to length, and not over 0.703 inch in maximum cross-sectional dimension." The term "wire" also includes a product of "solid rectangular cross section, in coils or cut to length, with a cold-rolled finish, and not over 0.25 inch thick and not over 0.50 inch wide." Round wire, that with a circular cross section, is by far the principal type of wire produced and the only type produced at the establishment involved in this investigation.

The wire here considered is produced by cold-drawing carbon-steel wire rod which was previously cleaned with acid, rinsed, and coated with lime, borax, or other suitable material. The coating material neutralizes

any remaining acid and aids in the lubrication of the wire rod as it is drawn through one die, or continuously through a series of dies, each designed to further reduce the cross-sectional dimension of the wire. The cold reduction of steel by drawing increases its hardness and tensile strength but reduces its ductility. Accordingly, most wire cannot be drawn through a long series of dies without intermediate heat treatment to relieve the stresses induced by the cold working and to restore ductility. By altering the drawing and heat-treating operations, wire of various mechanical properties can be made from wire rod of the same chemical composition. The most widely used heat-treating process used in wiredrawing is annealing, which renders the metal less brittle. Hardening and tempering treatments are widely used to obtain the characteristics necessary to avoid permanent deformations in wire used in springs and other products where it is subjected to great stress.

The applications of carbon-steel wire are many. Low-carbon steel wire may be used for the manufacture of such articles as welded wire mesh, nails, welding rods, garment hangers and wire fencing. Medium-carbon steel wire is, among other uses, utilized in the manufacture of auto seat and furniture-spring structures.

Medium- to high-carbon steel wire is often used in certain types of high voltage electrical transmission lines and steel cables. High-carbon steel wire is used for piano wire, spring wire, and in beading for pneumatic tires. Since 1966, the Monessen plant of Wheeling-Pittsburgh has produced mainly \* \* \* wire.

## U.S. Tariff Treatment

Wire rod

The provisions in the Tariff Act of 1930 for carbon-steel wire rod, originally classified under paragraph 315 of that act, were not significantly changed with the adoption of the Tariff Schedules of the United States in 1963. The separate tariff classifications are based on whether or not the rod has been tempered, treated, or partly manufactured and on unit values. The current rates provided for carbon-steel wire rod in schedule 6 of the TSUS reflect concessions granted by the United States under the General Agreement on Tariffs and Trade (GATT); the rates in items 608.70 and 608.73--0.1 cent and 0.2 cent per pound, respectively--have been in effect since July 1, 1963, and those in items 608.71 and 608.75--0.25 cent and 0.375 cent per pound, respectively--since June 30, 1958, as shown in the table on the following page.

The ad valorem equivalents of the specific rates of duty applicable to carbon-steel wire rod in 1931 and 1972, computed on the basis of imports in those years are shown in the table on the page following the table showing rates of duty.

U.S. rates of duty applicable to carbon-steel wire rod dutiable under TSUS items 608.70, 608.71, 608.73, and 608.75, June 18, 1930-March 15, 1973 1/

(Rates in cents per pound)

Effective date	Authority	Rate of duty on carbon-steel wire rod--					
		Not tempered, not treated, and not partly manufactured, valued per pound--			Tempered, treated, or partly manufactured, valued per pound--		
		Not over 4¢ (TSUS item 608.70)	Over 4¢ (TSUS item 608.71)	Over 2-1/2¢, not over 4¢	Not over 4¢ (TSUS item 608.73)	Over 4¢ (TSUS item 608.75)	Over 2-1/2¢, not over 4¢
June 18, 1930	Tariff Act of 1930.	0.3¢	0.3¢	0.6¢	0.55¢	0.55¢	0.85¢
May 1, 1935	Trade agreement, Belgium.	0.2¢	-	-	0.5¢	-	-
Aug. 5, 1935	Trade agreement, Sweden.	-	0.3¢ (bound against increase)	0.6¢ (bound against increase)	-	0.55¢ <u>2/</u>	0.85¢ <u>3/</u>
Jan. 1, 1948	GATT	0.125¢	-	-	0.375¢	0.55¢ <u>2/</u>	0.85¢ <u>3/</u>
Apr. 30, 1950	GATT	-	0.15¢	0.3¢	0.25¢	0.275¢	0.425¢
June 30, 1956	GATT	-	0.14¢	0.28¢	-	0.265¢	0.405¢
June 30, 1957	GATT	-	0.13¢	0.27¢	-	0.255¢	0.395¢
June 30, 1958	GATT	-	0.125¢	0.25¢	-	0.25¢	0.375¢
July 1, 1962	GATT	0.11¢			0.225¢		
July 1, 1963	GATT	0.1¢			0.2¢		
Aug. 31, 1963	Tariff Classification Act of 1962.	0.1¢			0.2¢		

1/ Pursuant to Presidential Proclamation No. 4074, effective August 16, 1971, trade agreement rates were modified by the temporary imposition of an additional cumulative duty of 10 percent ad valorem, or less. The additional duty was removed, effective December 20, 1971, pursuant to Presidential Proclamation No. 4098.

2/ Of which, 0.3¢ was bound against increase.

3/ Of which, 0.6¢ was bound against increase.

Carbon-steel wire rod: Ad valorem equivalents of 1930 and 1972 rates of duty, based on imports in 1931 and 1972

TSUS item	Ad valorem equivalent of--			
	1930 rate, based on		1972 rate, based on	
	imports in--		imports in--	
	1931	1972	1931	1972
	Percent	Percent	Percent	Percent
608.70 not over 4¢/lb.---	10.8	17.6	3.6	5.9
608.71 over 4¢/lb.-----	12.1	10.0	5.0	4.2
608.73 not over 4¢/lb.---	38.2	3.2	15.0	1.3
608.75 over 4¢/lb.-----	14.8	10.9	7.7	4.8

In addition to reductions in the specific rates of duty through trade-agreement negotiations, the "incidence of protection" of the rates has declined because of the increase in unit value of most imported rods between 1931 and 1972. For item 608.71, which accounted for 96 percent of the imported rod in 1972, the rate of duty has decreased by 58 percent, while the ad valorem equivalent (or the incidence of protection) has declined by 65 percent. For item 608.75, which accounted for most of the remaining imported rod in 1972, the rate of duty has decreased by 56 percent, while the ad valorem equivalent has declined by 68 percent. Thus about 20 percent of the total decrease in the ad valorem equivalent was attributable to the effects of price changes on the protective incidence of the specific duty.

The increase in unit value of imported wire rod in recent years is graphically illustrated by the 30-percent increase in the unit value of wire rods, not tempered, treated, or partly manufactured, during 1968-72. In this period the unit value of these rods, which account for more than 95 percent of the rods under consideration, increased from

4.2 to 6.0 cents per pound. In 1968, 71.5 percent of imported rods, not tempered, treated, or partly manufactured, were those valued not over 4 cents per pound (TSUS item 608.70); in 1972, 99.4 percent of imported rods, not tempered, treated, or partly manufactured, were those valued over 4 cents per pound (TSUS item 608.71).

### Wire

Carbon-steel round wire was originally classified under paragraphs 316(a) and 317 of the Tariff Act of 1930 and was dutiable at various rates, depending on wire diameter, value per pound, finish, and end use. Additional duties were also provided for wire of the type classified under paragraph 316(a) which had been galvanized or coated with metal. When the TSUS was implemented on August 31, 1963, the many competing tariff provisions were consolidated into two provisions (items 609.40 and 609.42), based solely on wire diameter and with rates developed from estimated weighted averages of the existing trade-agreement rates. The adoption of the TSUS eliminated the additional duty for round wire that was coated and also eliminated all considerations of end use. For round wire 0.060 inches or more in diameter and containing over 0.25 percent by weight of carbon (in 609.42), the estimated weighted average of the pre-TSUS rates resulted unintentionally in a substantial rate reduction. Accordingly, effective December 7, 1965, the TSUS was amended by the Tariff Schedules Technical Amendments Act of 1965 (Public Law 89-241), which established items 609.41 and 609.43 to replace item 609.42; item 609.40 was not changed. No changes in rates of duty resulted from the Kennedy Round of trade-agreement concessions. The history of rates applicable to round wire of carbon steel are shown in the following table.

U.S. rates of duty applicable to carbon-steel round wire dutiable under TSUS items 609.40, 609.41, and 609.43, June 18, 1930-March 15, 1973 <sup>1/</sup>

(Rates in percent ad valorem or cents per pound)

Effective date	Authority	Rate of duty on carbon-steel round wire in diameter--			
		Under 0.060 inch (TSUS item 609.40)	0.060 inch or more and containing, by weight--		Over 0.25% carbon (TSUS item 609.43)
			Not over 0.25% carbon (TSUS item 609.41)	Baling and fencing wire	
June 18, 1930	Tariff Act of 1930.	25% <sup>2/</sup>	0.5¢ <sup>3/</sup>	0.75¢, 1.25¢, or 1.50¢ <sup>4/</sup>	25% <sup>2/</sup>
Aug. 5, 1935	Trade agreement, Sweden.	20% <sup>2/</sup>	-	-	20% <sup>2/</sup>
Jan. 1, 1948	GATT	-	0.25¢ <sup>3/</sup>	0.375¢, 0.625¢, or 0.75¢ <sup>4/</sup>	-
Apr. 30, 1950	GATT	10% <sup>2/</sup>	-	-	10% <sup>2/</sup>
June 30, 1956	GATT	9% <sup>2/</sup>	-	0.35¢, 0.59¢, or 0.70¢ <sup>4/</sup>	9% <sup>2/</sup>
June 30, 1957	GATT	-	-	0.33¢, 0.56¢, or 0.67¢ <sup>4/</sup>	-
June 30, 1958	GATT	8.5% <sup>2/</sup>	-	0.30¢, 0.53¢, or 0.625¢ <sup>4/</sup>	8.5% <sup>2/</sup>
Aug. 31, 1963	Tariff Classifica- tion Act of 1962.	8.5%	0.3¢		
Dec. 7, 1965	Tariff Schedules Technical Amend- ments Act of 1965.	-	0.3¢		8.5%

A-8

<sup>1/</sup> Pursuant to Presidential Proclamation No. 4074, effective August 16, 1971, trade agreement rates were modified by the temporary imposition of an additional cumulative duty of 10 percent ad valorem, or less. The additional duty was removed, effective December 20, 1971, pursuant to Presidential Proclamation No. 4098.

<sup>2/</sup> Rate applicable to wire (except baling and fencing wire), valued over 6¢ per pound. See also footnote 4.

<sup>3/</sup> Rate applicable to all baling and fencing wire regardless of unit value or composition.

<sup>4/</sup> Rates applicable to wire, valued not over 6¢ per pound (except baling and fencing wire), depending on diameter--the smaller the diameter, the higher the rate. The highest rate was also applicable to round wire

The ad valorem equivalent of the various 1930 rates applicable to carbon-steel round wire based on imports in 1931 ranged from about 15 to 57 percent and averaged 23.5 percent (weighted by imports at each rate). The ad valorem equivalent of the specific rate (0.3 cent per pound) in effect in 1972, based on imports in 1972, was 3.3 percent; the weighted ad valorem equivalent of the various rates of duty of carbon-steel round wire in 1972 was 6.2 percent ad valorem. While trade agreement concessions undoubtedly accounted for the greater part of the difference between the average 1930 rate (23.5 percent) and the average 1972 rate (6.2 percent), other factors that influenced the difference (either negatively or positively) were (1) elimination of additional duty for coating, (2) consolidation of the applicable provisions, (3) increased unit value of imports, and (4) changes in product mix.

#### U.S. Producers

Two general types of U.S. producers are operating in the steel-wire based industrial segment covered in this investigation: (1) Integrated and semi-integrated steel concerns that produce wire rod and wire, from steel produced within their own firm; and (2) the so-called independent wire drawing firms that produce wire from rod (or, less frequently, billets) purchased from other firms--either domestic or foreign.

Roughly 30 concerns operate facilities for rolling wire rod; three integrated steel producers probably account for more than half of the domestic capacity.

According to the U.S. Department of Commerce, there were 240 carbon-steel-wire-drawing establishments in the United States in 1967, up from 200 firms in 1963. Approximately 50 of the 240 were operated by either integrated or semi-integrated steel producers. Industry spokesmen indicate that the total number of carbon-steel wire-drawing firms probably has not changed significantly since 1967.

## U.S. Consumption

Wire rod

Apparent consumption of wire rod in the United States declined from 6.5 million tons in 1968 to 6.0 million tons in 1970, then increased to 7.0 million tons in 1972 (table 1). Over the eight year period from 1965 to 1972, apparent consumption has shown a general, though small, increase and averages 6.1 million tons per year in 1965-68 and 6.5 million tons in 1969-72. Consumption data for 1968 are somewhat inflated because of an inventory buildup by consumers in anticipation of a strike in the basic steel industry. For the same reason, consumption for 1969 may be somewhat understated owing to consumers' return to normal inventories. Decreased supply, and, hence apparent consumption in 1969-70, largely as the result of smaller imports, was probably caused by an unusually high demand for steel in other free world nations, particularly those of Europe.

Wire

Apparent annual U.S. consumption of carbon-steel round wire, like wire rod, has shown a general, though small, increase during 1965-72 (table 2); the greatest annual consumption--5.6 million tons--occurred in 1972. Average annual usage during 1969-72 was 5.3 million tons compared with about 5.0 million tons during 1965-68.

## U.S. Production, Shipments, and Exports

Wire rod

Average annual production of carbon-steel wire rod in the United States from 1965 to 1972 ranged between 4.7 million tons in 1967 and 5.8 million tons in 1972 (table 1). Annual production was somewhat higher in the second half (1969-72) of the period than in the first half (1965-68). The largest production during the second half of the period coincides with the beginning of "voluntary restraints" adopted by Japan and the European Economic Community (EEC) on exports of steel products to the United States; moreover, the years 1969 and 1970 were years of unusually high demand for steel in other free world nations.

Because of the integrated nature of all (or virtually all) of the producers of wire rod, normally less than one-third of annual domestic production is sold to others (table 1-A); the remainder is consumed by the producer in the production of wire and wire products. Table 1-A reveals a significant increase in producers' shipments in 1969-72, both in terms of quantity and in relation to total output. It also indicates that beginning in 1969 the domestic industry regained a substantial part of the open market consumption of rods. The decline in shipments in 1971 was due, in part, to a strike threat which induced buyers to import increased quantities. To buy foreign steel as protection against a strike, domestic buyers are usually required to place continuing orders for a year or longer.

Exports have been a minor factor in the wire rod market (tables 1 and 3). Due to the same conditions affecting production, exports increased from 9,000 tons in 1968 to 92,000 tons in 1969, to a high of 137,000 tons in 1970, then dropped to 61,000 tons in 1971, before increasing to 121,000 tons in 1972.

### Wire

Annual estimated production of carbon-steel round wire has increased from 4.6 million tons in 1965 to 5.1 million tons in 1972 (table 2), with year-to-year fluctuations in evidence.

U.S. producers' shipments of wire, like those of wire rod, are substantially less than output because of "in-house" consumption for the production of such articles as nails; welded wire mesh; barbed wire; all types of wire fencing, netting, and screening; garment hangers; bale ties; and welding wire. Table 2-A shows a generally declining level in annual open market shipments of round wire, both in terms of quantity and in relation to total output. The data also indicate a generally increasing penetration of the open market by imports.

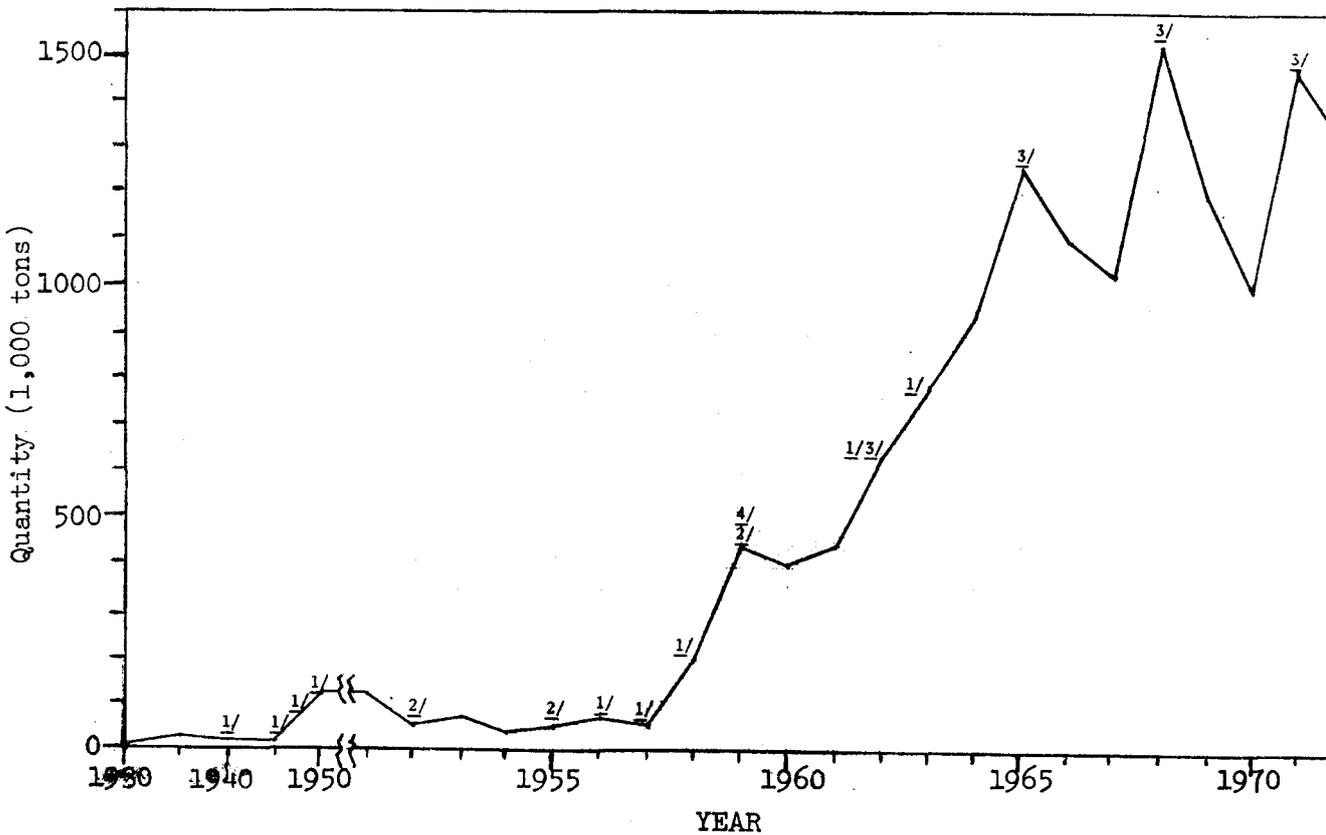
Exports fluctuated markedly from 1965 to 1972 (table 2) and ranged from three-to six-tenths of a percent of domestic production, averaging 20,000 tons per year for the period. The major export markets for domestic carbon-steel wire have been Canada and South Vietnam.

U.S. Imports

Wire rod

Annual U.S. imports of carbon-steel wire rod have increased many fold since the 1950's and in 1965 exceeded 1 million tons for the first time (table 4). During these years, sizable increases in annual imports reflected in part heavy purchases by U.S. consumers from foreign sources because of extended or anticipated strikes in the basic steel industry; this is particularly evident in 1959, 1962, 1965, 1968, and 1971, as shown below.

Carbon-steel wire rod: Imports into the United States, 1930-72



- 1/ Indicates year in which one or more of the applicable tariff rates were reduce
- 2/ Year in which steel strike occurred (data available for 1949-72 only).
- 3/ Year of labor negotiations; anticipated strike avoided (data available for 196 only).
- 4/ St. Lawrence Seaway opened.

Imports declined from 1.3 million tons in 1965 to 1.1 million in 1966 and 1.0 million in 1967. In anticipation of an almost certain steel strike, imports of wire rod increased by almost 50 percent in 1968, when they amounted to 1.5 million tons. As a consequence of the combined effect of the adoption by producers in Japan and the EEC of voluntary restraints on steel exports to the United States and the almost unprecedented demand for steel in other world markets, the volume of imports of wire rods into the United States declined to 1.2 million tons in 1969, 975,000 tons in 1970, then increased to 1.5 million tons in 1971 due, in part, to a U.S. strike threat and to increased availability of steel as a result of slackening world demand. Due in part to the extension for 3 years of the voluntary restraints, imports declined slightly in 1972 to 1.3 million tons.

Prior to 1959, the consensus was that most U.S. consumers of steel were hesitant to take a chance on, or go to the trouble of using, foreign steel. During the 116 day steel strike in 1959 many of these consumers had to use foreign steel or cease production temporarily. Apparently, many found foreign steel to be acceptable in terms of quality and price despite the inconvenience of importing.

Imports supplied 23.6 percent of total U.S. consumption of wire rod in 1968, the year of greatest imports in recent years (table 1), and 54.4 percent of the open market consumption (i.e., consumption of purchased rod) during the same year. For the years 1965-68, imports accounted for 18-24 percent of apparent consumption, and 46-54 percent of open market consumption. For the years 1969-72, imports accounted for 16-22 percent of total consumption and 39-50 percent of open market consumption.

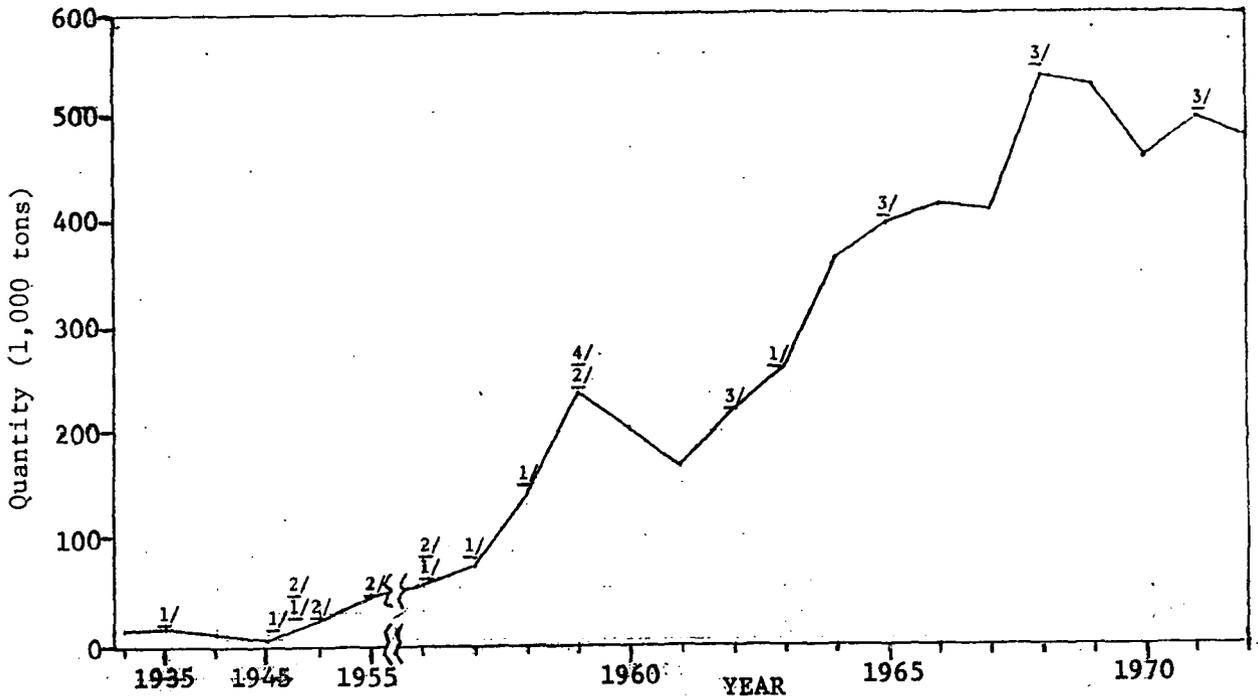
Japan has been the principal foreign source of imports of wire rod for many years. However, in 1972, shipments from France exceeded those from Japan. West Germany, Belgium, and the United Kingdom are also significant suppliers (table 5).

### Wire

U.S. imports for consumption of carbon-steel round wire increased from 398,000 tons in 1965 to 538,000 tons in 1968; declined to 461,000 tons in 1970; increased to 497,000 tons in 1971; and declined again to 481,000 tons in 1972 (table 2). The ratio of annual imports to consumption averaged 9.4 percent during the 8 year period and was 8.6 percent in 1972. Like imports of wire rod, imports of wire supplied a somewhat larger share of open market consumption in the United States; this ratio increased from 13.6 percent in 1965 to 20.6 percent in 1971, and was 19.3 percent in 1972. Japan is the major supplier of imports of carbon-steel wire to the United States, with Belgium the second largest supplier (table 6).

The long-term trend of imports, as shown in the following chart, of carbon-steel wire since 1954 has been generally upward (table 7). In 1958, annual imports first exceeded 100,000 tons; in 1959, 200,000 tons; in 1964, 300,000 tons; and in 1966, 400,000 tons. In 1968, imports reached the record high of 538,000 tons. Like imports of carbon-steel wire rod, imports of wire increased by over 75 percent in the strike year of 1959.

Carbon-steel round wire: Imports into the United States, 1931-72



- 1/ Indicates year in which one or more of the applicable tariff rates were reduced.  
 2/ Year in which steel strike occurred (data available for 1949-72 only).  
 3/ Year of labor negotiations; anticipated strike avoided (data available for 1962-72 only).  
 4/ St. Lawrence Seaway opened.

#### Voluntary restraint agreements with the EEC and Japan

In 1969, the European Community and Japan, the largest exporters of wire and wire rods, signed voluntary restraint agreements with the United States in exchange for assurances that the United States would take no formal action to further discourage imports of steel from these areas. The agreements stated that exports to the United States from these countries would not exceed by greater than 5 percent those of the previous year after the base period, 1969, and that essentially the same product mix would be maintained. The texts of the agreements with the steel industries of the EEC and Japan are shown in Appendix B.

This agreement was effective, in that the quantity of exports to the United States from these countries generally decreased in 1969 and 1970. The decrease, however, in value was not as great. In 1971, in anticipation of

a possible steel strike, these countries began exporting steel to the United States in increased quantities. Sources in the trade indicate that the intention was to decrease these exports drastically in the latter part of 1971 to remain in compliance with the agreements. However, the 10 percent surcharge was added at about this time, and was interpreted by forcing parties to the agreement to nullify the 1969 agreements; therefore, imports were generally above the limitations for that year.

In early 1972, substantially the same agreement was again reached with the EEC and Japan, and imports of wire rod and wire again decreased. This decrease in wire rod was greater for Japan than for France; hence, France became the leading exporter of steel rods to the United States.

#### Foreign labor costs related to U.S. imports

The factor that allows foreign competitors the ability to compete in U.S. steel markets, even though freight and insurances costs are additional, appears to be the disparity in labor costs of production.

As shown by the table in Appendix C, output per man-hour in Japanese steel mills has reached, and possibly exceeded, that of the United States steel mills. Labor costs, on the other hand, appear to be only a third or less.

Unit labor costs of France, Germany, and the United Kingdom are only 60 to 70 percent of comparable costs in the United States.

Hourly labor costs have increased at a higher rate in the four countries covered than those of the United States, since 1964; however, productivity per man-hour has also increased so that unit labor costs have increased little since 1964 and, in Japan and France have actually declined, relative to the United States.

It should be noted that the 1964 data found in Appendix C were based on estimates obtained from each country. 1965-71 data are estimated obtained by applying trend indexes for each country.

## Wheeling-Pittsburgh Steel Corporation

The corporation

Wheeling Steel Corporation was incorporated in Delaware on June 21, 1920, when it acquired control of Wheeling Steel and Iron Company (incorporated in 1892) as well as other companies. The name was changed to that of the present corporation on December 5, 1968, when it merged with the Pittsburgh Steel Company. The corporation, with headquarters at Pittsburgh, Pa., is the ninth largest integrated steel producer in the United States. Its output consists primarily of flat rolled products, including hot and cold rolled sheet and strip, galvanized sheet and roofing, and coated and lithographed black and tin plate. Among other products produced are butt-weld and seamless pipe, rods and wire, and semifinished steel.

The corporation operates two basic iron and steel producing plants, several finishing and product manufacturing plants, and other subsidiaries, including iron and coal mining companies and a railway system in the vicinity of their Monessen plant. Pig iron and steel ingots are produced both at the Steubenville, Ohio, plant, with a capacity of 2.6 million tons of raw steel annually and at the Monessen, Pa., plant, with a capacity of 1.7 million tons of raw steel annually. Finishing plants are situated at Allenport, Pa.; Warren and Yorkville, Ohio; and Benwood, W. Va. The principal manufacturing plants are situated at Beech Bottom, W. Va., and Martins Ferry, Ohio.

In 1971, the corporation employed more than 17,000 persons. Net sales for the corporation amounted to \$528 million in 1971, an increase

of 4 percent over 1969, the first year after merger. Income during this period, however, decreased from \$63 million to \$45 million.

Wire-making operations of the corporation are carried on at the Monessen plant and at three plants of Wheeling-Pittsburgh's subsidiary, Johnson Steel and Wire Company. Wire rods were produced only at the Monessen plant until December 1972, when production was discontinued. During 1969-70, shipments of rod and wire accounted for 2 percent of total shipments by the corporation; in 1971, they accounted for only 1 percent.

#### The Monessen plant

The Monessen plant of Wheeling-Pittsburgh Steel Corporation is an integrated steel mill occupying 155 acres of land on the Monongahela River about 30 miles south of Pittsburgh, Pa., the location of the corporation's headquarters. The Monessen plant began initial operations in the early 1900's as a wire and fence producer. Subsequently, steel-making facilities, including blast furnaces, a coke plant, and open hearth steelmaking furnaces, were added and the Monessen plant served as the steel-producing unit for the Pittsburgh Steel Company. In 1964, the open-hearth furnaces were replaced by a basic oxygen furnace (B.O.F.) installation and the plant eventually became a major steel producing unit of the Wheeling-Pittsburgh Steel Corporation. In 1972, the plant produced over 1.4 million tons of raw steel, primarily for the Allenport plant, a steel sheet- and tube-producing facility. The Monessen plant at this time had a net book value of nearly \$50 million and employed over 2,800 people.

The rod and wire divisions of the Monessen plant accounted for less than \* \* \* percent of the plant's total employment. Two steam-powered rod

mills--one built in 1909 and the other in 1919--processed raw steel made on the premises for intracompany and customer consumption. By the late 1950's, the rod mills had become obsolescent largely because their output was limited to a maximum bundle size of 300 pounds. This limitation effectively restricted their competitiveness with new large rod mills \* \* \* which can produce rod bundles of 3,000 pounds or more. \* \* \*

A-22 through A-34

\*

\*

\*

\*

\*

\*

\*

APPENDIX A  
Statistical Appendix

Table 1.--Carbon-steel wire rod: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1965-72

Year	U.S. production	Imports	Exports	Apparent consumption <sup>1/</sup>	Ratio of imports to consumption
	Short tons	Short tons	Short tons	Short tons	Percent
1965-----	4,957,373	1,253,795	16,762	6,194,406	20.2
1966-----	5,146,000	1,107,107	11,278	6,241,829	17.7
1967-----	4,653,000	1,027,046	5,613	5,674,433	18.1
1968-----	4,951,000	1,522,880	9,109	6,464,771	23.6
1969-----	5,294,906	1,184,454	91,888	6,387,472	18.5
1970-----	5,114,698	975,435	136,736	5,953,397	16.4
1971-----	5,130,000	1,467,002	60,881	6,536,121	22.4
1972-----	5,790,000	1,313,178	120,741	6,982,437	18.8

<sup>1/</sup> Includes production and imports less exports.

Source: Shipments and inventory, American Iron and Steel Institute; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 1A.--Carbon-steel wire rod: Shipments by U.S. producers and apparent open-market U.S. consumption, 1965-72

Year	U.S. Producers Shipments	Ratio to production	Apparent open-market consumption <sup>1/</sup>	Ratio of imports to open-market consumption
	Quantity	Percent	Short tons	Percent
1965-----	1,279,270	25.8	2,516,303	49.8
1966-----	1,308,560	25.4	2,404,389	46.0
1967-----	1,221,603	26.3	2,243,036	45.8
1968-----	1,284,177	25.9	2,797,948	54.4
1969-----	1,565,454	29.6	2,658,020	44.6
1970-----	1,639,154	32.0	2,477,853	39.4
1971-----	1,539,230	30.0	2,945,351	49.8
1972-----	1,854,587	32.0	3,047,024	43.1

<sup>1/</sup> Includes quantity shipped and imports, less exports.

Source: Shipments, American Iron and Steel Institute; consumption derived from import and export data shown in table 1.

Table 2.--Carbon-steel round wire: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1965-72

Year	U.S. production	Imports	Exports	Apparent con- sumption <sup>1/</sup>	Ratio of imports to con- sumption
	<u>Short tons</u>	<u>Short tons</u>	<u>Short tons</u>	<u>Short tons</u>	<u>Percent</u>
1965-----	4,616,071	397,988	14,866	4,999,193	8.0
1966-----	4,651,411	416,864	23,274	5,045,001	8.3
1967-----	4,228,586	409,722	14,770	4,623,538	8.9
1968-----	4,817,545	537,964	15,287	5,340,222	10.1
1969-----	4,759,944	530,247	29,955	5,260,236	10.1
1970-----	4,436,470	461,074	23,272	4,874,272	9.5
1971-----	4,810,587	497,212	15,752	5,292,047	9.4
1972-----	5,139,074	481,019	19,046	5,601,047	8.6

<sup>1/</sup> Apparent consumption equals production plus imports minus exports.

Source: Production data calculated from consumption of carbon-steel wire rod, less allowance for scrap loss during processing, and consumption other than for drawing wire; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 2A.--Carbon-steel round wire: Shipments by U.S. producers and apparent open-market U.S. consumption, 1965-72

Year	U.S. Producers Shipment	Ratio to	Apparent open-market consumption	Ratio of imports to open-market consumption
	<u>Quantity</u>	<u>production</u>	<u>Short tons</u>	<u>Percent</u>
	<u>Short tons</u>	<u>Percent</u>	<u>Short tons</u>	<u>Percent</u>
1965-----	2,554,145	55.3	2,937,267	13.6
1966-----	2,505,813	53.9	2,899,403	14.4
1967-----	2,252,713	53.3	2,647,665	15.5
1968-----	2,430,016	50.4	2,952,693	18.2
1969-----	2,393,855	50.3	2,894,147	18.3
1970-----	2,141,811	48.3	2,579,613	17.9
1971-----	1,926,972	40.1	2,408,432	20.6
1972-----	2,034,149	39.6	2,496,122	19.3

Source: Shipments, American Iron and Steel Institute, adjusted to exclude flat and shape wire; apparent open-market consumption is shipments adjusted by imports and exports as shown in table 2.

Table 3.--Carbon-steel wire rod: U.S. exports of domestic merchandise,  
by principal markets, 1966-72

Market	1966	1967	1968	1969	1970	1971	1972
Quantity (short tons)							
South Vietman-----	3,474	3,336	8,475	51,803	47,156	48,651	38,583
Venezuela-----	-	-	-	-	-	-	33,251
West Germany-----	-	-	-	10,764	39,810	1,676	17,488
Belgium-----	-	-	-	1,628	1,824	2,424	15,539
Nigeria-----	-	-	-	3,535	11,513	-	4,520
All other-----	7,804	2,277	634	24,158	36,433	8,130	11,360
Total-----	11,278	5,613	9,109	91,888	136,736	60,881	120,741
Value (1,000 dollars)							
South Vietnam-----	276	271	1,452	6,279	5,774	6,075	5,188
Venezuela-----	-	-	-	-	-	-	3,404
West Germany-----	-	-	-	1,113	4,825	194	2,001
Belgium-----	-	-	-	198	214	357	2,812
Nigeria-----	-	-	-	4,212	1,271	-	588
All other-----	1,611	791	141	3,414	4,333	1,205	1,620
Total-----	1,887	1,062	1,593	15,216	16,417	7,831	15,613

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

Table 4.--Carbon-steel wire rod: U.S. imports for consumption and ad valorem equivalents 1/ for years following reduction in rate of duty, 1930-72.

Year	Imports (short tons)	Ad valorem equivalents		Year	Imports (short tons)	Ad valorem equivalents	
		TSUS 608.70 (percent)	TSUS 608.71 (percent)			TSUS 608.70 (percent)	TSUS 608.71 (percent)
1930	3,385			1951	119,445	4.8	5.0
1931	7,331	10.8	12.1	1952 <u>3/</u>	44,013		
1932	8,533			1953	63,557		
1933	14,351			1954	38,964		
1934	10,983			1955 <u>3/</u>	46,191		
1935 <u>2/</u>	17,421			1956 <u>2/</u>	62,657		
1936	19,133			1957 <u>2/</u>	53,064	4.3	4.7
1937	15,468			1958 <u>2/</u>	180,348	3.4	5.3
1938	5,371			1959 <u>3/</u>	445,586	3.2	5.0
1939	11,071			1960	404,376		
1940	3,947			1961	445,629		
1941	58			1962 <u>2/</u> <u>4/</u>	634,921		
1942	53			1963 <u>2/</u>	783,789	2.9	
1943	12			1964	933,129	2.7	
1944	2			1965 <u>4/</u>	1,253,795		
1945	2,197			1966	1,107,107		
1946	6,018			1967	1,027,046		
1947	5,922			1968 <u>4/</u>	1,522,880		
1948 <u>2/</u>	6,475			1969	1,184,454		
1949 <u>2/</u>	5,630			1970	975,435		
1950 <u>2/</u>	101,315			1971 <u>4/</u>	1,467,002		
				1972	1,313,178		

1/ Ad valorem equivalents (or ranges thereof) are average ad valorem equivalents of the prevailing specific rates of duty based on import data published by the U.S. Department of Commerce for the first full year following the effective date of the reduced rate of duty. The ad valorem equivalents shown are for the TSUS items, or their predecessors, under which most imports have generally entered.

2/ Indicates year in which 1 or more of the applicable tariff rates were reduced.

3/ Year in which steel strike occurred (data available for 1949-72 only).

4/ Year of labor negotiations; anticipated strike avoided (data available for 1962-72 only).

Source: Imports compiled from official statistics of the U.S. Department of Commerce; strike data from the National Office, United Steelworkers of America.

Table 5.--Carbon-steel wire rod: 1/ U.S. imports for consumption, by principal sources, 1966-72

	1966	1967	1968	1969	1970	1971	1972
Quantity (short tons)							
France-----	203,820	191,470	306,929	259,156	223,021	388,250	362,041
Japan-----	587,419	423,766	496,014	411,975	357,961	388,832	346,885
West Germany-----	117,133	202,124	275,745	187,801	161,440	237,089	206,812
United Kingdom---	30,038	37,629	152,471	109,586	72,189	170,168	162,017
Belgium-----	90,468	114,490	121,749	85,292	28,086	73,446	56,931
All other-----	78,229	57,567	169,972	130,644	132,738	209,217	178,492
Total-----	1,107,107	1,027,046	1,522,880	1,184,454	975,435	1,467,002	1,313,178
Value (1,000 dollars)							
France-----	14,636	13,640	21,969	20,897	22,008	39,174	40,042
Japan-----	50,426	37,491	45,763	40,290	40,936	46,460	46,478
West Germany-----	9,392	15,556	22,007	16,467	17,627	26,300	23,643
United Kingdom---	3,638	4,132	12,692	9,455	6,844	17,400	18,844
Belgium-----	6,896	8,682	9,187	6,887	2,966	7,488	6,225
All other-----	9,140	6,526	17,441	14,075	16,237	26,052	23,093
Total-----	94,128	86,027	129,059	108,071	106,618	162,874	158,325

1/ TSUS numbers 608.70-608.75.

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

Table 6.--Carbon-steel round wire 1/: U.S. imports for consumption by principal sources, 1966-72

Source	1966	1967	1968	1969	1970	1971	1972
Quantity (short tons)							
Japan-----	218,851	207,808	250,982	285,299	266,923	311,240	272,446
Belgium-----	114,082	109,271	122,725	120,357	95,106	80,661	90,887
United Kingdom-----	19,650	23,594	41,482	38,389	25,538	20,151	22,805
West Germany-----	23,667	24,678	38,349	21,774	23,092	25,085	20,312
Canada-----	4,348	4,712	12,024	11,758	15,968	26,375	34,866
All other-----	36,266	39,659	72,402	52,670	34,447	33,700	39,703
Total-----	416,864	409,722	537,964	530,247	461,074	497,212	481,019
Value (1,000 dollars)							
Japan-----	32,171	31,029	36,527	43,706	46,383	55,298	53,003
Belgium-----	19,447	18,456	21,145	21,105	22,519	20,803	26,019
United Kingdom-----	5,042	5,465	8,365	8,318	6,627	5,268	7,090
West Germany-----	5,010	4,715	7,174	4,770	5,381	5,821	5,352
Canada-----	884	943	2,507	2,441	3,423	5,708	8,207
All other-----	6,635	7,207	12,886	8,966	7,450	7,502	3,683
Total-----	69,189	67,815	88,604	89,306	91,783	100,400	103,354

1/ TSUS numbers 609.40-609.43.

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

Table 7.--Carbon-steel round wire: U.S. imports for consumption and ad valorem equivalents 1/ for years following reduction in rate of duty, 1931-72.

Year	Imports (short tons)	Ad valorem equivalents TSUS 609.41 (percent)	Year	Imports (short tons)	Ad valorem equivalents TSUS 609.41 (percent)
1931----	2,611	15.0-31.2	1952 <u>3/</u> ----	9,107	
1932----	2,058		1953-----	17,464	
1933----	3,348		1954-----	40,580	
1934----	2,738		1955 <u>3/</u> ----	40,151	
1935 <u>2/</u> -	4,241		1956 <u>2/</u> <u>3/</u> -	49,580	
1936----	5,347		1957 <u>2/</u> ----	70,049	3.2-12.5
1937----	5,031		1958 <u>2/</u> ----	133,017	3.2-11.8
1938----	1,834		1959 <u>3/</u> ----	233,625	3.4-11.1
1939----	2,678		1960-----	204,018	
1940----	888		1961-----	169,062	
1941----	37		1962 <u>4/</u> ----	216,913	
1942----	13		1963 <u>2/</u> ----	258,627	
1943----	51		1964-----	366,010	5.2
1944----	2		1965 <u>4/</u> ----	397,988	
1945----	21		1966-----	416,864	4.8
1946----	207		1967-----	409,722	
1947----	37		1968 <u>4/</u> ----	537,964	
1948 <u>2/</u> -	10	16.7-32.6	1969-----	530,247	
1949 <u>3/</u> -	2,305		1970-----	461,074	
1950 <u>2/</u> -	17,814		1971 <u>4/</u> ----	497,212	
1951----	26,870		1972-----	481,019	

1/ Ad valorem equivalents (or ranges thereof) are average ad valorem equivalents of the prevailing specific rates of duty based on import data published by the U.S. Department of Commerce for the first full year following the effective date of the reduced rate of duty. The ad valorem equivalents shown are for the TSUS items, or their predecessors, under which most imports have generally entered.

2/ Indicates year in which one or more of the applicable tariff rates were reduced.

3/ Year in which steel strike occurred (data available for 1949-72 only).

4/ Year of labor negotiations; anticipated strike avoided (data available for 1962-72 only).

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

A-43 through A-45

\*

\*

\*

\*

\*

\*

\*



APPENDIX B  
TEXTS OF VOLUNTARY RESTRAINT AGREEMENTS  
WITH THE EEC AND JAPAN

December 18, 1968

The Honorable  
Secretary of State  
New State Building  
Washington 25, D. C.  
U.S.A.

Sir,

The associations of the steel producers of the ECSC united in the 'Club des Siderurgistes', to wit:

- Associazione Industrie Siderurgiche Italiane ASSIDER, Milan  
represented by Prof. Dr. Ernesto Manuelli
- Chambre Syndicale de la Siderurgie Francaise, Paris  
represented by the President, Mr. Jacques Ferry
- Groupement des Hauts Fourneaux et Acieries Belges, Brussels  
represented by the President, Mr. Pierre van der Rest
- Groupement des Industries Siderurgiques Luxembourgeoises,  
represented by the President, Mr. Rene Schmit / Luxembourg
- Vereniging de Nederlands Ijzer- en Staalproducerende Industrie,  
represented by Mr. Evert van Veelen / IJmuiden
- Wirtschaftsvereinigung Eisen- und Stahlindustrie, Dusseldorf  
represented by the President, Bergassessor Dr. Hans-Gunther Sohl

referring to the repeated talks they have had in this matter with representatives of the Government of the United States in behalf of the sustenance of liberal international trade in steel and to assist in the maintenance of an orderly market for steel in the United States declare the following:

1.) It is their intention to limit the total ECSC deliveries of steel mill products, i.e. finished rolled steel products, semis, hot rolled strip, tubes, and drawn wire products, to the United States to 5.750.000 net tons during the calendar year 1969.

2.) It is also their intention in the calendar years 1970 and 1971 to confine their deliveries within limits which would at the utmost represent for the year 1970 a five percent increase over 5.750.000 net tons and for the year 1971 a five percent increase over 6.037.500 net tons.

During the named periods the ECSC producers will try to maintain approximately the same product mix and pattern of distribution as at present.

This statement is based on the assumption

A) that the total shipments of steel mill products (finished rolled steel products, semis, hot rolled strip, tubes, and drawn wire products) from all the steel exporting nations to the USA will not exceed approximately 14 million net tons during 1969, and five percent over 14 million net tons in 1970, and five percent over 14.7 million net tons in 1971, and

B) that the United States will take no action to restrict ECSC steel mill product exports to the USA like

- a) quota systems
- b) increase of import duties
- c) other restrictions on the import of steel mill products to the USA.

This proposal of the ECSC steel producers is made provided that it does not infringe on any laws of the United States and that it conforms to international laws.

/s/ - Ernesto Manuelli -  
/s/ - Pierre van der Rest -  
/s/ - Evert van Veelen -

/s/ - Jacques Ferry -  
/s/ - Rene Schmit -  
/s/ - Hans-Gunther Sohl -

TO: The Honorable Secretary of State,  
Washington 25, D. C., U. S. A.

FROM: Yoshihiro Inayama, Chairman,  
Japan Iron & Steel Exporters' Association

SUBJECT: Statement of the Intention of the Japanese Steel Industry

Statement of the Intention of  
the Japanese Steel Industry

1. With the desire to assist in the maintenance of an orderly market for steel in the United States, the nine leading steel companies of Japan, namely, Yawata Iron & Steel Co., Ltd., Fuji Iron & Steel Co., Ltd., Nippon Kokan Kabushiki Kaisha, Kawasaki Steel Corporation, Sumitomo Metal Industries, Ltd., Kobe Steel Works, Ltd., Nisshin Steel Co., Ltd., Osaka Iron & Steel Co., Ltd., and Nakayama Steel Works, Ltd. gave assurances in their statement of July 5, 1968 that their steel mill product shipments from Japan to the United States would not exceed 5.5 million metric tons during Japanese fiscal year 1968. These nine companies account for approximately 85 percent of all Japanese steel mill products shipped to the United States. In the light of subsequent events and as a result of discussions concerning this matter with the representatives of the Government of the United States of America, they now want to make a new statement to the following effect.
2. With greater understanding of market conditions for steel in the United States, and with the cooperation of the medium and small steelmakers of Japan which account for the remaining 15 percent of shipments to the United States, the same nine leading steel companies wish to state their intention, subject to measures permitted by the laws and regulations of Japan, to limit the Japanese shipments of steel mill products to the United States to a total of 5,750,000 net tons during calendar year 1969.
3. During the subsequent two calendar years (through 1971), it is also their intention to confine the Japanese shipments within limits which would represent, at most, a 5 percent increase over 5,750,000 net tons in 1970 and over 6,037,500 net tons in 1971, depending upon demand in the United States market and the necessity to maintain orderly marketing therein. During this period the Japanese steel companies will try not to change greatly the product mix and pattern of distribution of trade as compared with the present.
4. This statement is made upon the assumptions: i) that the total shipments of steel mill products from all the steel exporting nations to the United States will not exceed approximately 14,000,000 net tons during 1969, 105 percent of 14,000,000 net tons in 1970, and 105 percent of 14,700,000 net tons in 1971, ii) that the United States will take no action, including increase of import duties, to restrict Japanese steel mill product exports to the United States, and iii) that the above action by the Japanese steel companies does not infringe upon any laws of the United States of America and that it conforms to international laws.

s/ Yoshihiro Inayama  
Chairman  
Japan Iron & Steel Exporters' Association

APPENDIX C  
RELATIVE LABOR COSTS IN THE IRON AND  
STEEL INDUSTRIES OF FIVE COUNTRIES

Relative Output per Man-Hour, Hourly Labor Costs,  
and Unit Labor Costs in the Iron and Steel  
Industries of Five Countries, 1964-1971 <sup>1/</sup>

(U.S. = 100)

Item and Year	United States	Japan		France		Germany		United Kingdom	
		Mini- mum	Maxi- mum	Mini- mum	Maxi- mum	Mini- mum	Maxi- mum	Mini- mum	Maxi- mum
<b>Output per man-hour</b>									
1964.....	100.0	43	54	48	51	54	63	46	50
1965.....	100.0	43	54	48	52	52	61	47	51
1966.....	100.0	51	63	51	54	52	61	45	48
1967.....	100.0	63	78	55	59	59	69	46	50
1968.....	100.0	68	84	59	63	65	76	48	52
1969.....	100.0	82	102	65	69	71	83	49	53
1970.....	100.0	96	119	68	73	72	85	51	55
1971 <sup>2/</sup> .....	100.0	93	116	66	70	69	80	47	51
<b>Hourly labor cost (in U.S. dollars at constant 1964 ex- change rates)</b>									
1964.....	100.0	17	17	34	35	37	39	29	30
1965.....	100.0	18	18	35	36	39	42	31	32
1966.....	100.0	20	20	36	37	40	43	33	34
1967.....	100.0	21	22	37	38	40	43	31	32
1968.....	100.0	23	24	39	40	40	43	32	33
1969.....	100.0	26	26	41	41	42	45	32	33
1970.....	100.0	30	30	44	45	48	51	35	37
1971 <sup>2/</sup> .....	100.0	31	32	46	47	49	52	35	36
<b>Hourly labor cost (in U.S. dollars at current exchange rate <sup>3/</sup>)</b>									
1964.....	100.0	17	17	34	35	37	39	29	30
1965.....	100.0	18	19	35	36	39	42	31	32
1966.....	100.0	20	20	36	37	40	43	32	33
1967.....	100.0	21	22	37	38	40	43	30	31
1968.....	100.0	23	24	39	39	40	43	27	28
1969.....	100.0	26	26	38	39	43	45	28	29
1970.....	100.0	30	31	39	40	53	56	30	31
1971 <sup>2/</sup> .....	100.0	32	33	41	42	56	59	31	32
<b>Unit labor cost (in U.S. Dollars at constant 1964 exchange rates)</b>									
1964.....	100.0	31	40	66	72	58	72	57	64
1965.....	100.0	34	43	69	75	65	81	61	68
1966.....	100.0	31	39	67	73	66	82	67	75
1967.....	100.0	27	35	63	68	58	72	61	68
1968.....	100.0	27	35	62	67	53	66	61	69
1969.....	100.0	25	32	59	64	51	63	61	68
1970.....	100.0	25	32	61	66	57	71	64	72
1971 <sup>2/</sup> .....	100.0	27	34	66	72	61	75	69	77
<b>Unit labor cost (in U.S. dollars at current exchange rates <sup>3/</sup>)</b>									
1964.....	100.0	31	40	66	72	58	72	57	64
1965.....	100.0	34	43	69	75	65	80	61	68
1966.....	100.0	31	39	67	73	66	82	67	75
1967.....	100.0	27	35	63	68	58	72	60	67
1968.....	100.0	28	35	61	67	53	66	53	59
1969.....	100.0	25	32	56	60	51	64	52	58
1970.....	100.0	25	32	54	59	62	77	55	62
1971 <sup>2/</sup> .....	100.0	28	35	59	64	69	86	61	68

Relative Output per Man-Hour, Hourly Labor Costs,  
and Unit Labor Costs in the Iron and Steel  
Industries of five Countries, 1964-1971 1/  
(Continued)

Footnotes:

- 1/ Excluding wire and wire products in the United Kingdom and wheels and axles in West Germany. The ranges in estimates do not allow for differences between the countries in the degree of vertical integration or the quality of steel produced.
- 2/ Preliminary
- 3/ Indexes in national currencies adjusted for changes in prevailing exchange rates. The British pound was devalued by 14 percent in November 1967, the French franc was devalued by 11 percent in August 1969, and the German mark was revalued upward by 9 percent in August 1969. In May, 1971 the German mark was floated and in August 1971 the U.S. dollar convertibility to gold was suspended and the currencies of other nations were allowed to float relative to the dollar. In December 1971, there was a realignment of currencies. The effect of the realignment relative to the U.S. dollar was to increase the values of the French franc and British pound by 8.6 percent, the German mark by 13.6 percent, and the Japanese yen by 16.9 percent.

Note: With the exception of a few items, the estimates for 1964 are based on the U.S. definition of the iron and steel industry. These estimates were adjusted for intercountry differences in product mix. Comparative 1964 data for the United States, the United Kingdom, and West Germany are from "An International Comparison of Unit Labor Cost in the Iron and Steel Industry, 1964: United States, France, Germany, United Kingdom" (BLS Bulletin 1580, 1968), while comparative 1964 data for Japan are preliminary unpublished estimates.

Estimates for 1965 to 1971 were obtained by applying trend indexes for each country--unadjusted for comparability among the countries--to the 1964 relatives. The estimates for these years, therefore, are less reliable than the 1964 comparison.

Prepared by:  
Bureau of Labor Statistics  
Office of Productivity and Technology  
Division of Foreign Labor Statistics and Trade  
August 1972

APPENDIX D

Statements Made by Representatives of the Steel Industry

Before the House Committee on Education and Labor in Connection with  
Bill H.R. 478 to Amend the Fair Labor Standards Act of 1938 (Sept. 13, 1967)

Statement of Mr. Kenneth F. Maxcy before the House  
Committee on Education and Labor testifying on bill H.R. 478  
to amend the Fair Labor Standards Act of 1938 (Sept. 13, 1967):

**KENNETH F. MAXCY, DIRECTOR OF MARKET DEVELOPMENT,  
PITTSBURGH STEEL CO.**

\* \* \*

Currently we employ about 6,500 people, and have about 1,500 on layoff. We would now be employing most of these 1,500 if unfair competition from imports had not forced us to close down some of our mills, and curtail production in others.

\* \* \*

During the past 2 years, rod imports have increased to alltime record levels in the range of 1.2 million tons a year. Imports have now captured one-half of the total market for rods in the United States. This means that 1 out of every 2 tons of rods purchased in this country comes in from abroad.

To translate these imports into terms of jobs, you can use a simple formula. Production of 1 ton of rods requires about 10 man-hours of work. The work required to actually roll the rods on a rod mill is only a small fraction of the 10 man-hours. Most of the work is required to prepare raw materials, refine them into iron, make the iron into steel, form the steel into ingots, roll the ingots into blooms, and roll them further into billets and bars which are then supplied to the rod mill. But long experience, and engineering calculations, tell us a finished ton of rods requires about 10 man-hours of work in total.

Next, in our industry the average employee works about 2,000 hours a year. So we can term 2,000 man-hours of work the equivalent of one job position for 1 year. As production of 1 ton of rods requires 10 man-hours of work, one job position at 2,000 man-hours a year, can produce 200 tons a year. The import volume of 1.2 million tons a year, therefore, reflects the work of about 6,000 job positions.

\* \* \*

Use of the 10 man-hours per ton rule of thumb for production of rods, comes in handy for another estimate. It will give you a quick comparison of costs for producing a ton of rods in this country with costs for producing them abroad.

Our average employment cost in the steel industry here in the United States is now about \$4.63 an hour. So our labor cost to produce a ton of rods is in the range of \$46.30. The average employment cost for steel workers in Japan is estimated at \$0.96 an hour. Japanese equipment is fully competitive with ours. So their labor cost to produce a ton of rods is in the range of \$9.60. They can produce a ton for \$36.70 less than we can produce it, on the basis of labor costs alone.

\* \* \*

Statement of Mr. J.R. McAlpin before the House  
Committee on Education and Labor testifying on bill H.R. 478  
to amend the Fair Labor Standards Act of 1938 (Sept. 13, 1967):

**J. R. McALPIN, ASSISTANT TO THE VICE PRESIDENT, COMMERCIAL  
ARMCO STEEL CORP.**

\* \* \*

Wire and wire products offer a particularly good illustration of the damaging effects of foreign competition on employment at our Houston Works. At the peak in 1955, this mill produced 99,000 tons of basic wire, field fence, barbed wire, nails, staples, galvanized wire, baling wire, and mesh. By 1966, output of these products had dwindled to only 25,000 tons. The basic cause of this drastic decline is quite obvious when we see that imports of these same products through gulf coast ports rose from a little over 51,000 tons in 1955 to 180,000 in 1966.

As a result of this takeover of the wire and wire products market in the Southwest by foreign steel producers, Armco reluctantly decided in 1963 to discontinue barbed wire and fence production at Houston. Some of the barbed wire equipment has been removed from the plant and the rest deactivated, and our fence machines and some galvanizing equipment are virtually "mothballed." A corollary development was that employment in the wire and wire products department fell from 250 in 1955 to 37 last year.

Nor does this tell the whole story. If the 129,000-ton increase in imports between 1955 and 1966 had been supplied from domestic production, employment in our wire operations at Houston would not only have been maintained at the 250 level, but would have expanded considerably beyond that. Thus, the loss of job opportunities due to imports is even greater than indicated by the reduction from 250 to 37 employees. It is significant to note that the products we were forced to abandon at Houston take over three times as many man-hours per ton to fabricate as does the plain wire which we still make there.

Moreover, foreign competition has siphoned off much of the employment growth potential inherent in other products made at our Houston plant. In the last 5 years, imports of such products through the gulf coast have grown 157 percent to 1.2 million tons, or an average rate of 20.8 percent annually. By product categories, the gains were as follows: 125 percent for wire rods to 237,000 tons; 181 percent in structurals to 227,000 tons; 2,726 percent in plates to 297,000 tons; 62 percent in bars and bar shapes to 435,000 tons. In just these products alone, imports have risen by nearly three-quarter million tons in the past 5 years. In terms of employment, these additional tons of foreign steel represent an estimated loss of 6 million man-hours of work to American steelworkers in 1966, or the equivalent of 3,000 full-time jobs.

\* \* \*