UNITED STATES TARIFF COMMISSION

CARBON STEEL ROUND, FLAT, AND SHAPED WIRE WORKERS OF THE PAGE STEEL AND WIRE DIVISION MONESSEN, PENNSYLVANIA, PLANT OF AMERICAN CHAIN AND CABLE COMPANY

Report to the President
on Investigation No. TEA-W-182
Under Section 301(c)(2) of the Trade Expansion Act of 1962

TC Publication 569
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UNITED STATES TARIFF COMMISSION

Address all communications to

United States Tariff Commission

Washington, D. C. 20436

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REPORT TO THE PRESIDENT

U.S. Tariff Commission,
April 13, 1973.

To the President:

In accordance with section 301(f)(1) of the Trade Expansion Act of 1962 (TEA) (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 12, 1972, the Tariff Commission received a petition from the United Steelworkers of America for a determination of eligibility to apply for adjustment assistance on behalf of the former workers of the Monessen, Pa., Page Steel & Wire Company Division plant of American Chain and Cable Company. The Commission instituted an investigation (TEA-W-182) 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 flat, round and shaped wire (of the types provided for in items 609.20 to 609.27, inclusive, 609.40 to 609.43, inclusive, and 609.70 to 609.72 inclusive, of the Tariff Schedules of the United States) produced by said firm 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. 4694). 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 15 headquarters in Donora, Pa.; from Page Steel & Wire Co., American Chain and Cable Co., and other producers of wire; from trade associations; and from the Commission's files.

Finding of the Commission

On the basis of its investigation, the Commission finds unanimously that articles like or directly competitive with flat, round, and shaped wire produced by the American Chain and Cable Co. are not, as a result in major part of concessions granted under trade agreements, 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 the firm, or an appropriate subdivision thereof.

Views of Chairman Bedell, Vice Chairman Parker, and Commissioner Moore 1/

On February 12, 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 former workers of the Monessen, Pa., Page Steel & Wire Co. Division plant of the American Chain & Cable Co. Until the closing of the wire-producing division of the plant in February 1972 the workers concerned had been engaged in the production of carbon-steel flat, round, and shaped wire. The fence division at the plant has continued to operate producing fencing and the wire required for it; a plant in Bowling Green, Ky. (built in 1968 for the production of welding wire in addition to that produced at Monessen), assumed the production of welding wire formerly produced at Monessen. Most of the wire produced at the Monessen plant was utilized by other plants of American Chain & Cable Co. in the manufacture of wire products.

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

1/ Commissioner Ablondi concurs in the result.

(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, we have not been required to reach a conclusion respecting the first three criteria, and we have not done so.

Specifically we could not find that imports of the types of wire in question were the major factor causing the closing of the wire division at the Monessen, Pa., plant. Several other factors had a bearing on the decision of American Chain & Cable Co. to close the wire division in February 1972. The most immediate of these factors was the strike at the plant which began in January of that year. The strike was the culmination of longstanding labor problems. * * *

Another factor that influenced the decision to close the wire division derived from technological changes in the wire-producing industry. Prior to 1970, Page obtained * * * its requirements for wire rod (used in the drawing of wire) from an adjacent plant of the Wheeling-Pittsburgh Steel Corp. Such rod was only available in bundles no larger than 300 pounds, whereas 3,000-pound bundles were obtainable from other domestic steel producers. The latter size is

considerably more economical to use. In 1966 a decision was made and announced that Wheeling-Pittsburgh's adjacent wire rod plant would eventually be closed. In 1970 Page began to purchase an increasing proportion of its rod requirements from another integrated steel producer in 3,000-pound bundles. The economies achieved by the use of the larger bundles were not sufficient, however, to reduce costs to the desired levels. An analysis in late 1971 and early 1972 revealed that American Chain & Cable Co. could purchase wire more advantageously than it could produce it at the Monessen plant.

The company analysis referred to above also resulted in the decision to close the Wilkes-Barre, Pa., plant of American Chain & Cable Co. This plant utilized significant quantities of wire produced at the Monessen plant. However, the Wilkes-Barre plant was obsolete and the investment that would have been required to modernize it was considered not be in the economic interest of the parent company since the plant supplied only a minor portion of the wire rope market and had to compete with the modern wire rope plants of large vertically integrated domestic steel companies. * * *

Finally, an analysis of the sourcing of wire by former users of the Monessen plant's output indicates that even after the closing of the wire division, shifts to foreign sources of wire were minor.

Based on the foregoing, we have made a negative determination.

Views of Commissioners Leonard and Young

We agree with our colleagues that a negative determination is required in this case because imports have not been the major factor causing the closing of the wire division of the Monessen, Pa., plant of American Chain & Cable Co. While we agree with many of the views of our colleagues as to the reasons for this determination, we do not concur fully in their statement.

The wire division of the Monessen plant, now closed, had some competitive advantages. First, the plant was located adjacent to its major supplier of wire rods--a plant of the Wheeling-Pittsburgh Steel Corp. A * * * part of Monessen's supply of wire rods came from that plant, although in recent years an increasing share of the supply had been obtained from another domestic producer. Because of the nearness of the two plants and the long-term relationship between them, Monessen generally was assured a regular supply of wire rods. Second, the wire division of the Monessen plant had a captive market for the bulk of its output. * * *

These advantages, however, have been offset in recent years by a number of factors that have handicapped the efficient operation of the plant--labor problems, obsolescence of plant and equipment, need

for pollution control, and limited growth potential for its products. We agree with our colleagues that labor problems had a bearing on the decision of American Chain & Cable Co. to close the wire division of the Monessen plant. The strike in January 1972, the month before the company decided to close the plant, reflected problems concerning working conditions and numbers of workers.

In part, because of the age and obsolescence of much of its machinery and equipment, the Monessen plant, according to the company, had been a high-cost producer of wire for some years. The company had attempted to improve the efficiency of the plant's wire-drawing operations. In recent years, for example, it had shifted its purchases of wire rods from coils of 300 pounds to coils of 3,000 pounds--a move that afforded it certain production efficiencies. Nevertheless, the company found that in recent years it could purchase wire more cheaply than it could produce it at Monessen. It found, moreover, that the capital outlay required to make the plant competitive would have been substantial. The high cost of modernizing the plant also reflected the need to install pollution control equipment; some pollution control had been achieved at the plant, but more remained to be done.

Finally, the company deemed that there was little growth potential in the markets available to it in most of its product lines. In the absence of expanding markets, the competition of the integrated domestic producers of wire and wire products and, to some degree, the imports of such articles placed severe limitations on the prospective market opportunities.

With the termination of wire production at the Monessen plant, the users of the Monessen output--both within the company and outside of the company--turned predominantly to domestic sources for their wire supplies. * * *

Companies buying merchant wire from the Monessen plant turned mostly to foreign sources, but these companies had taken only * * * percent of the plant's wire output.

Under the circumstances described above, we have concluded that increased imports have not been the major factor in causing, or threatening to cause, unemployment or underemployment of a significant number or proportion of the petitioning workers.

INFORMATION OBTAINED IN THE INVESTIGATION

Description of Products Under Investigation

The Page Steel & Wire Co., a division of American Chain & Cable Co., operates a single plant at Monessen, Pa. Prior to December 1972, the plant housed the Wire Division and the Fence Division. The Wire Division, where the petitioning workers were employed, ceased operations in 1972. It produced wire of the three basic types--round, flat, and shaped 1/--for intracompany and open-market consumption in the production of various wire products. The fencing division is still in operation. The American Chain & Cable Co. operates another plant in Bowling Green, Ky., where welding wire is being produced.

Wire of 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," including "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 in the industry and the principal type produced at the establishment involved in this investigation; however, flat and shaped wire were also produced at the Monessen plant.

1/ The term "shaped wire" is used by the trade to designate wire of a cross-sectional configuration other than round or rectangular.

The wire here considered is produced by cold-drawing carbon-steel wire rod which has been 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 wire-drawing 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 may be used in the manufacture of such articles as welded wire mesh, nails, welding rods, garment hangers, and wire fencing. Medium-carbon-steel wire is utilized in the manufacture of auto seats and furniture-spring structures, as well as in other uses.

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 tire beading.

U.S. Tariff Treatment

All carbon-steel 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 tariff provisions for round wire 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 coated round wire 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 for round wire resulted from the Kennedy Round of trade-agreement concessions under the General Agreement on Tariff and Trade (GATT).

Flat wire was specifically provided for in paragraph 316(a) of the Tariff Act of 1930, dutiable at 25 percent ad valorem and subject to an additional rate of 0.2 cent per pound if coated or plated with metal. Reductions in duty on flat wire occurred through several bilateral and GATT trade-agreement concessions which

differentiated between wire on the basis of thickness and whether it was coated or plated with metal. The duty on flat wire not over 0.01 inch in thickness and not coated or plated with metal was not reduced in the Kennedy Round; however, other kinds of flat wire underwent reductions of varying degrees in the Kennedy Round.

Shaped wire, provided for in paragraph 316(a) of the Tariff Act of 1930 as wire composed of iron or steel, not specially provided for, was subject to the same statutory rates as flat wire. The duty on shaped wire was reduced in several stages as the result of concessions under the GATT without regard to wire diameter. The current rates of duty on shaped wire became effective January 1, 1972, as the result of concessions granted in the Kennedy Round. The history of rates applicable to round, flat, and shaped wire of carbon-steel are shown in the following tables.

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-Mar. 15, 1973 1/

(Percent ad valorem; cents per pound)

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

1/ Pursuant to Presidential Proclamation No. 4074, effective Aug. 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 Dec. 20, 1971, pursuant to Presidential proclamation No. 4098.

2/ Rate applicable to wire (except baling and fencing wire) valued over 6¢ per pound.

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

4/ 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 under 0.060 inch in diameter regardless of unit value.

U.S. rates of duty applicable to carbon-steel flat and shaped wire dutiable under TSUS items 609.20 to 609.27, 609.70, and 609.72, June 18, 1930-Mar. 15, 1973 1/

(Percent ad valorem; cents per pound)

Effective date	Authority	Flat wire						Shaped wire	
		Not coated or plated			Coated or plated			Not coated or plated (TSUS item 609.70)	Coated or plated (TSUS item 609.72)
		Not over 0.01 inch (TSUS item 609.20)	Over 0.01 inch, not over 0.05 inch (TSUS item 609.21)	Over 0.05 inch (TSUS item 609.22)	Not over 0.01 inch (TSUS item 609.25)	Over 0.01 inch, not over 0.05 inch (TSUS item 609.26)	Over 0.05 inch (TSUS item 609.27)		
June 18, 1930--	Tariff Act of 1930	25%	25%	25%	0.2¢ + 25%	0.2¢ + 25%	0.2¢ + 25%	25%	0.2¢ +25%
Aug. 5, 1935--	Trade agreement, Sweden	15%	20%	-	0.2¢ + 15%	0.2¢ + 20%	-	-	-
Jan. 1, 1948--	GATT	-	-	-	-	-	-	15%	0.2¢ + 15%
Apr. 30, 1950--	GATT	7.5%	10%	12.5%	0.1¢ + 7.5%	0.1¢ + 10%	0.1¢ + 12.5%	-	0.1¢ + 15%
June 6, 1951--	GATT	-	-	-	-	-	-	12.5%	0.1¢ + 12.5%
June 30, 1956--	GATT	7%	9.5%	-	0.1¢ + 7%	0.1¢ + 9.5%	-	-	-
June 30, 1957--	GATT	6.5%	9.0%	-	0.1¢ + 6.5%	0.1¢ + 9.0%	-	-	-
June 30, 1958--	GATT	6.0%	8.5%	-	0.1¢ + 6%	0.1¢ + 8.5%	-	-	-
July 1, 1961--	GATT	-	-	11%	-	-	0.1¢ + 11%	-	-
July 1, 1962--	GATT	-	-	10%	-	-	0.1¢ + 10%	-	-
Jan. 1, 1968--	GATT	-	8%	9.5%	0.05¢ + 6%	0.09¢ + 8%	0.05¢ + 9.5%	11.5%	0.05¢ + 11.5%
Jan. 1, 1969--	GATT	-	-	9%	-	0.08¢ + 8%	0.05¢ + 9%	11%	0.05¢ + 11%
Jan. 1, 1970--	GATT	-	-	8.5%	-	0.05¢ + 8%	0.05¢ + 8.5%	10%	0.05¢ + 10%
Jan. 1, 1971--	GATT	-	-	8%	-	-	0.05¢ + 8%	9.5%	0.05¢ + 9.5%
Jan. 1, 1972--	GATT	-	-	-	-	-	-	9%	0.05¢ + 9%

1/ Pursuant to Presidential Proclamation No. 4074, effective Aug. 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 Dec. 20, 1971, pursuant to Presidential Proclamation No. 4098.

The ad valorem equivalents 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 cents per pound) in effect in 1972, based on imports dutiable at that rate in 1972, was 3.3 percent; the average rate for all imports of carbon-steel round wire in 1972 was 6.2 percent ad valorem. While trade-agreement concessions on round wire undoubtedly accounted for the bulk 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.

The ad valorem equivalents of the 1930 rates applicable to carbon-steel flat wire, based on imports in 1931, were 25 to 26 percent and averaged 25.1 percent (weighted by imports at each rate). The ad valorem equivalents of the compound rates in effect in 1972, based on imports in 1972, were as follows:

TSUS item	1972 rate of duty	Ad valorem equivalent
609.25--------	0.05¢/lb. + 6% ad val.	6.1%
609.26--------	0.05¢/lb. + 8% ad val.	8.3%
609.27--------	0.05¢/lb. + 8% ad val.	8.3%

The average rate for all imports of carbon-steel flat wire in 1972 was 7.7 percent.

Data for calculating the ad valorem equivalent of the 1930 rate of duty applicable to shaped wire, coated or plated with metal, based on imports in 1931, are not available; however, it is estimated that such ad valorem equivalent would be close to 25 percent. The average ad valorem equivalent for all imports of shaped wire in 1931, therefore, would also be about 25 percent. The ad valorem equivalent of the compound rate (0.05 cents per pound plus 9 percent ad valorem) in effect in 1972, based on imports in 1972, was 9.4 percent; the average rate for all imports of carbon-steel shaped wire in 1972 was 9.0 percent.

U.S. Producers

There are two general types of U.S. producers of steel wire: (1) integrated and semi-integrated steel concerns that produce a more or less full range of iron and steel products, including wire; and (2) the so-called independent wiredrawing firms that produce wire from wire rod (or, less frequently, billets) purchased from other firms, either domestic or foreign.

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

U.S. Consumption

Apparent annual U.S. consumption of carbon-steel wire generally increased during the period 1965-72 (table 1). Consumption during the period ranged from 5.0 million short tons in 1967 to 6.1 million short tons in 1972. Average annual consumption during the first 3 years of the period was 5.3 million short tons. Apparent annual consumption during the last 5 years was generally higher than in the earlier years; average annual consumption during 1968-72 was 5.7 million short tons.

U.S. Production

Annual estimated production of carbon-steel wire during 1965-72 showed a general, though small, increase. Production during the period ranged from 4.6 million short tons in 1967 to 5.6 million short tons in 1972 (table 1). Average annual production during 1965-72 appears to have been somewhat higher for the last 5 years of the period (5.2 million short tons) than for the first 3 years (4.9 million short tons).

U.S. Shipments

U.S. producers' shipments of wire 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 1-A shows annual shipments of wire generally declining during 1965-72, 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; the ratio of imports to open-market consumption increased from 13.1 percent in 1965 to 19.0 percent in 1972.

U.S. Exports

During 1965-72, U.S. exports of carbon-steel wire fluctuated considerably, ranging from 17,000 short tons in 1967 to 33,000 short tons in 1969 (table 1). Annual exports for the period averaged 24,000 short tons, which would account for about four-tenths of a percent of average annual production for the period. The major export markets for domestic carbon-steel wire have been Canada and South Vietnam.

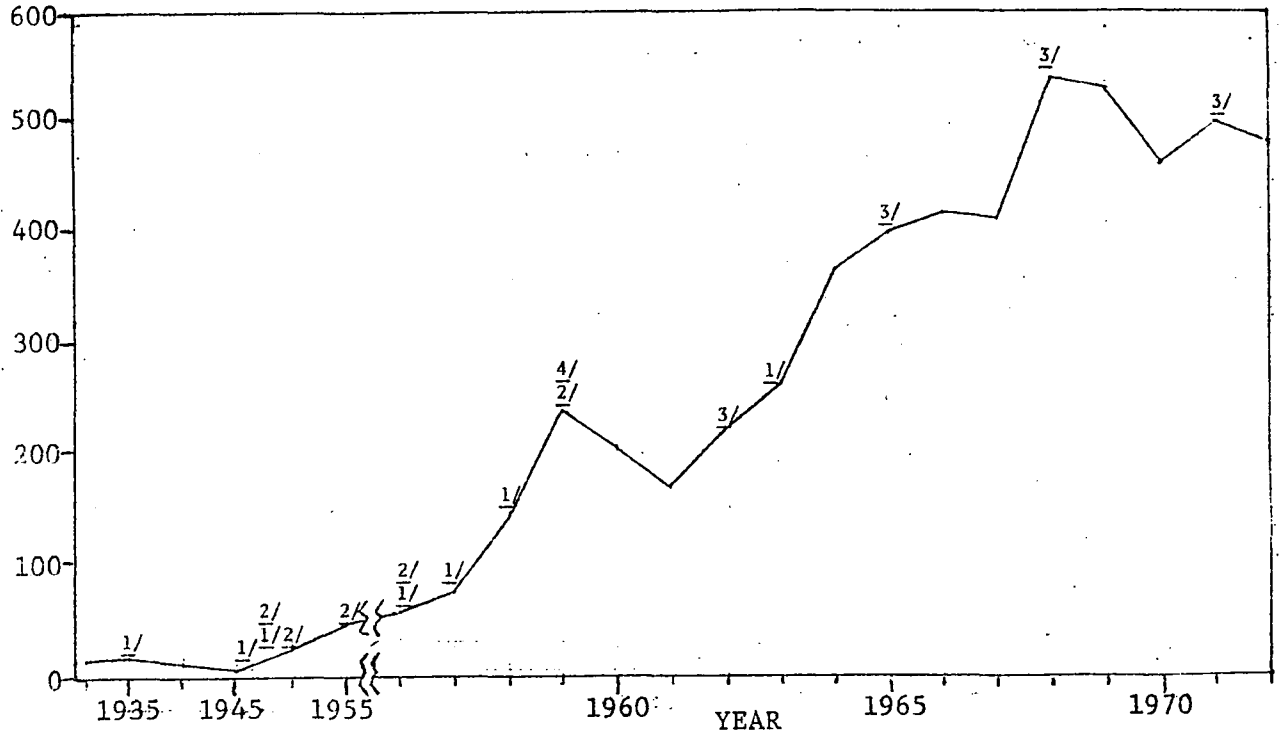
U.S. Imports

U.S. imports for consumption of carbon-steel wire increased from 416,000 tons in 1965 to 563,000 tons in 1968, but then declined to 488,000 tons in 1970. Imports in 1971 amounted to 526,000 tons, and those in 1972, to 511,000 tons (table 1). The average ratio of annual imports to consumption during the 8-year period was 8.8 percent; in 1972 it was 8.4 percent. In 1966-72, round wire accounted for 94 percent or more of wire imports in each year; imports of flat wire accounted for most of the remainder. U.S. imports of carbon-steel wire by type are shown for the years 1966-72 in table 2.

Imports of wire supplied a somewhat larger share of open-market consumption in the United States; this ratio increased from 13.1 percent in 1965 to 20.0 percent in 1971 and was 19.0 percent in 1972. Japan is the major supplier of imports of carbon-steel wire to the United States, with Belgium the second largest (tables 3, 4, and 5).

The long-term trend of imports of carbon-steel round wire since 1954 has been generally upward (table 6). Imports first exceeded 100,000 tons in 1958, 200,000 tons in 1959, the year in which a 116-day steel strike occurred, 300,000 tons in 1964, and 400,000 tons in 1966. In 1968, imports reached a record high of 538,000 tons (see chart below). Imports of flat and shaped wire have also generally increased since 1964, the first year for which separate import data is available (table 7).

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.

Wire production and trade of major steel-producing countries

The European Economic Community (EEC) is the principal world producer of steel wire, having produced 6.6 million short tons of steel wire in 1970, the most recent year for which international statistics are available. The U.S.S.R. was the second leading producer of steel wire in 1970 with an output of 5.8 million short tons, followed by the United States with 4.5 million short tons, Japan with 4.4 million short tons, and the United Kingdom with 1.9 million short tons (table 8). Japanese production of steel wire has risen at the greatest rate in recent years, increasing by about 38 percent from 1967 to 1970; United Kingdom production increased by 27 percent over the same period and EEC production, by 22 percent. Production by the U.S.S.R. and the United States in the same period increased 4 and 2 percent, respectively.

The EEC was by far the leading exporter of steel wire, with exports in 1970 amounting to 18 percent of its production. The ratio of Japan's exports to production in the same year was 12 percent and that of the United Kingdom, less than 9 percent; exports by the U.S.S.R. and the United States were negligible.

Of the four countries and the EEC, the only ones importing significant amounts of steel wire were the United States, which imported a quantity equal to 12 percent of its production in 1970, and the EEC, with a ratio of imports to production of about 5 percent.

Within the EEC, West Germany was by far the leading producer and exporter of steel wire, accounting for about half of total EEC production in 1970 and more than half of EEC exports. West Germany exported more than 20 percent of its output in 1970. France was the second most important producer of steel wire in the EEC, accounting for more than 20 percent of total EEC output in 1970. Belgium-Luxembourg was the second leading EEC exporter of steel wire, accounting for 37 percent of total EEC exports of steel wire in 1970. Belgium's ratio of exports to production in 1970 was 65 percent

Voluntary restraint agreements with the EEC and Japan

In 1969, the EEC and Japan, the largest exporters of wire, 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 more 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 in value, however, 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 the parties to the agreement as nullifying 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 again decreased.

Foreign labor costs related to U.S. imports

The factor that allows foreign countries 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 in the U.S. steel mills. Labor costs, on the other hand, appear to be only a third or less of U.S. costs.

Unit labor costs of France, West 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 in the United States since 1964; however, productivity per man-hour has also increased so that unit labor costs have increased little since 1964 and have actually declined in Japan and France compared with those in the United States.

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

American Chain & Cable Co.

The parent company

The American Chain and Cable Company (ACCO) was incorporated in New York as the American Chain Company on December 13, 1912, when it purchased the chain business of Oneida Community, Ltd., New York. The present company title was adopted December 29, 1936, following acquisition of several chain and steel products firms. Control of Page Steel & Wire Company was acquired in 1920. Between 1954 and 1971 more than a dozen other businesses were acquired by ACCO. At present, in addition to its domestic facilities, the company operates 3 subsidiary companies in Canada, 3 in Great Britain, 2 in Mexico and one each in Spain, West Germany, Argentina, and Brazil; it has minor interests in affiliated firms in Italy and France.

ACCO, with headquarters at Bridgeport, Connecticut, manufactures a wide variety of products which broadly include materials handling equipment (operating 5 divisions); instruments and electronics (operating 5 divisions); industrial supplies (operating 6 divisions); and wire products (operating 3 divisions). The company operates numerous plants in at least 8 northeastern and midwestern states and employs about 8,500 persons.

The consolidated net sales of American Chain and Cable Company's domestic, Canadian, and British operations in 1971 amounted to $178 million (excluding certain discontinued wire-rope-producing operations), down from $198 million (excluding discontinued operations) in 1970.

During 1960-70, net sales for the company increased generally from $116 million to $211 million (including discontinued operations). In 1971, industrial supplies accounted for 34.7 percent of total sales; materials handling equipment, 24.6 percent; wire products, 24.3 percent; and instruments and electronics, 16.4 percent.

Page Steel & Wire Co., Monessen, Pa.

The Page Steel & Wire Company, when acquired by American Chain and Cable Company (ACCO) in 1920, had limited basic steel-producing facilities and its main product was farm fence. It was developed into a source of wire for the Chain Division and the Cable Controls Division and later, in 1930, for the Wire Rope Division. Over the years, production and sales of various kinds of commercial round, flat, and shaped wire were expanded, mainly for use as welding wire, core wire, spring wire, and fencing. Page purchased wire rod, the raw material for the manufacture of wire, from outside sources, including the adjacent rod-producing plant of the Wheeling-Pittsburgh Steel Corporation. 1/

In 1968, a second welding wire-producing facility was established for reasons of manufacturing economy in Bowling Green, Kentucky, as an alternate source of this product. In 1970, the fence-making operation at the Monessen plant was physically separated from the other wire

1/ An investigation (TEA-W-181) was initiated by the U.S. Tariff Commission on February 14, 1973, as a result of a petition filed by the workers of the Monessen plant of the Wheeling-Pittsburgh Steel Corporation to determine if increased imports of carbon-steel wire rod and round wire due in major part to tariff concessions are causing, or threatening to cause, the umemployment or underemployment of such workers. The Commission, by majority vote, made a negative determination on April 6, 1973.

operations and designated as the Page Fence Division. This division continues to operate at the Monessen plant; it produces the wire used in its fence-making operations.

The wire-producing operations at the Monessen plant ceased in January 1972 when the steelworkers went on strike. A decision was made by ACCO in February 1972 to close down the Monessen wire operations, and at that time the welding wire-producing operation was moved to the Bowling Green, Kentucky, plant as the Page Welding Wire Division. After the strike ended in April 1972, the Fence Division resumed operation, but the remaining wire-producing operation resumed production (by special arrangement with the union) only from May to December 1972--long enough to convert the remaining inventories of wire rods into finished wire * * *.

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A-18 through A-25

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APPENDIX A

STATISTICAL APPENDIX

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

Year	U.S. production	Imports	Exports	Apparent consumption	Ratio of imports to consumption
	Short tons	Short tons	Short tons	Short tons	Percent
1965	5,017,468	415,988	24,866	5,408,590	7.7
1966	5,055,881	435,827	26,629	5,465,079	8.0
1967	4,596,289	428,241	17,336	5,007,194	8.6
1968	5,236,462	562,757	18,119	5,781,100	9.7
1969	5,173,852	556,903	33,380	5,697,375	9.8
1970	4,822,250	487,720	26,928	5,283,042	9.2
1971	5,228,899	525,582	20,562	5,733,919	9.2
1972	5,585,950	511,314	24,605	6,072,659	8.4

Source: Production data represent 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 1A.--Carbon-steel wire: Shipments by U.S. producers and apparent open-market U.S. consumption, 1965-72

Year	Shipments		Apparent open-market consumption	Ratio of imports to open-market consumption
	Quantity	Ratio to production		
	Short tons	Percent	Short tons	Percent
1965	2,776,245	55.3	3,167,367	13.1
1966	2,723,710	53.9	3,132,908	13.9
1967	2,448,601	53.3	2,859,506	15.0
1968	2,641,322	50.4	3,185,960	17.7
1969	2,602,016	50.3	3,125,539	17.8
1970	2,328,055	48.3	2,788,847	17.5
1971	2,094,535	40.1	2,599,555	20.2
1972	2,211,031	39.6	2,697,740	19.0

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

Table 2.--Carbon-steel wire: U.S. imports for consumption, by types, 1966-72

Type	1966	1967	1968	1969	1970	1971	1972
	Quantity (short tons)						
Flat wire 1/	14,266	15,623	19,430	19,608	20,065	22,604	22,606
Round wire 2/	416,864	409,722	537,964	530,247	461,074	497,212	481,019
Shaped wire 3/	4,697	2,896	5,363	7,048	6,581	5,766	7,689
Total	435,827	428,241	562,757	556,903	487,720	525,582	511,314
	Value (1,000 dollars)						
Flat wire 1/	5,512	5,899	6,715	7,055	8,030	7,816	11,231
Round wire 2/	69,189	67,815	88,604	89,306	91,783	100,400	103,354
Shaped wire 3/	769	609	1,115	1,219	1,374	1,363	1,976
Total	75,470	74,323	96,434	97,580	101,187	109,579	116,561

1/ TSUS items 609.20 to 609.27
2/ TSUS items 609.40 to 609.43
3/ TSUS items 609.70 to 609.72

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

Table 3.--Carbon-steel flat wire 1/: U.S. imports for consumption by principal sources, 1966-72

Source	1966	1967	1968	1969	1970	1971	1972
	Quantity (short tons)						
Japan	6,149	7,122	7,497	7,338	8,621	7,778	9,889
Belgium	1,354	1,292	1,373	1,170	993	3,493	2,680
United Kingdom	549	552	718	484	497	413	700
West Germany	4,248	4,777	7,116	7,363	6,368	7,687	8,938
Canada	269	307	501	465	492	396	270
All other	1,697	1,573	2,225	2,788	3,094	2,837	4,129
Total	14,266	15,623	19,430	19,608	20,065	22,604	26,606
	Value (1,000 dollars)						
Japan	1,241	1,526	1,650	1,609	2,093	2,088	2,861
Belgium	372	344	393	364	337	942	1,054
United Kingdom	191	210	254	175	209	278	444
West Germany	1,752	1,770	2,305	2,164	2,228	2,416	3,299
Canada	56	72	121	121	138	109	111
All other	1,900	1,977	1,992	2,622	3,025	1,983	3,462
Total	5,512	5,899	6,715	7,055	8,030	7,816	11,231

1/ TSUS numbers 609.20-609.27.

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

Table 4.--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 5.--Carbon-steel shaped wire 1/: U.S. import for consumption by principal sources, 1966-72

Source	1966	1967	1968	1969	1970	1971	1972
	Quantity (short tons)						
Japan	3,489	962	2,670	3,721	4,735	3,619	4,375
Belgium	265	344	315	1,577	409	115	352
United Kingdom	738	763	1,806	1,484	1,251	1,793	2,370
West Germany	87	179	250	118	85	36	67
Canada	111	84	38	36	99	83	131
All other	7	564	284	112	2	120	394
Total	4,697	2,896	5,363	7,048	6,581	5,766	7,689
	Value (1,000 dollars)						
Japan	324	163	415	560	863	665	959
Belgium	81	109	119	197	137	70	133
United Kingdom	307	215	450	347	306	508	713
West Germany	34	63	93	81	31	39	49
Canada	19	19	12	14	35	32	39
All other	4	40	26	20	2	49	83
Total	769	609	1,115	1,219	1,374	1,363	1,976

1/ TSUS numbers 609.70-609.72

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

Table 6.--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 3/	9,107	
1932	2,058		1953	17,464	
1933	3,348		1954	40,580	
1934	2,738		1955 3/	40,151	
1935 2/	4,241		1956 2/ 3/	49,580	
1936	5,347		1957 2/	70,049	3.2-12.5
1937	5,031		1958 2/	133,017	3.2-11.8
1938	1,834		1959 3/	233,625	3.4-11.1
1939	2,678		1960	204,018	
1940	888		1961	169,062	
1941	37		1962 4/	216,913	
1942	13		1963 2/	258,627	
1943	51		1964	366,010	5.2
1944	2		1965 4/	397,988	
1945	21		1966	416,864	4.8
1946	207		1967	409,722	
1947	37		1968 4/	537,964	
1948 2/	10	16.7-32.6	1969	530,247	
1949 3/	2,305		1970	461,074	
1950 2/	17,814		1971 4/	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.

Table 7.--Carbon-steel flat and shaped wire: U.S. imports for consumption and rates of duty or ad valorem equivalents 1/ for years following rate reductions, 1964-72

Year	Flat wire			Shaped wire		
	Imports (Quantity)	Ad valorem rate of duty 2/	Ad valorem equivalent 3/	Imports (Quantity)	Ad valorem rate of duty 4/	Ad valorem equivalent 5/
	Short tons	Percent	Percent	Short tons	Percent	Percent
1964	13,012			1,884		
1965	15,144			3,494		
1966	14,266			4,697		
1967	15,623			2,896		
1968	19,430	6.0-9.5	6.3-9.9	5,363	11.5	11.9
1969	19,608	6.0-9.0	8.7-9.3	7,048	11.0	11.4
1970	20,065	6.0-8.5	8.4-8.9	6,581	10.0	10.3
1971	22,604	6.0.-8.0	8.4	5,766	9.5	9.8
1972	22,606			7,689	9.0	9.4

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 TSUS items or their predecessors.

2/ TSUS items 609.20, -.21, and -.22.

3/ TSUS items 609.25, -.26, and -.27.

4/ TSUS item 609.70.

5/ TSUS item 609.72.

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

Table 8.--Iron and steel wire: Production, imports, exports, ratio of imports to production and ratio of exports to production, by principal producing countries, 1967 and 1970

Country	Production 1/		Imports		Exports		Ratio of--			
							Imports to production		Exports to production	
	1970	1967	1970	1967	1970	1967	1970	1967	1970	1967
	1,000 short tons	1,000 short tons	1,000 short tons	1,000 short tons	1,000 short tons	1,000 short tons	Percent	Percent	Percent	Percent
United States	4,514	4,432	526	454	31	20	11.7	10.2	0.7	0.5
U.S.S.R.	5,771	5,591	-	1/	85	1/	-	-	1.5	-
European Economic Community, total	6,580	5,410	311	276	1,177	779	4.7	5.1	17.9	14.4
West Germany	3,288	2,542	133	77	681	261	4.0	3.0	20.7	10.3
France	1,436	1,147	Neg.	85	Neg.	112	-	7.4	-	9.8
Belgium-Luxembourg	2/ 680	785	19	20	439	358	2.8	2.5	64.6	45.6
Italy	941	752	62	25	21	18	6.6	3.3	2.2	2.4
Netherlands	235	184	97	69	36	30	41.3	37.5	15.3	16.3
Japan	4,380	3,148	2	2	524	377	3/	3/	12.0	12.0
United Kingdom	1,891	1,497	13	8	160	110	0.7	0.5	8.5	7.3

1/ Estimated; equivalent to apparent consumption of wire rods, which was computed from United Nations' data on production, imports, and exports.

2/ No import/export data available to derive wire rod consumption completely.

3/ Less than 0.05 percent.

Source: United Nations' Economic Commission for Europe publication, "Steel Statistics for Europe."

Note.--United States production data may not compare to data in table 1-A due to method of data gathering used by the Economic Commission for Europe.

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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 Nederlandse 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 -

MEMORANDUM December 23, 1968

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 1/

(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
Output per man-hour									
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 2/	100.0	93	116	66	70	69	80	47	51
Hourly labor cost (in U.S. dollars at constant 1964 exchange rates)									
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 2/	100.0	31	32	46	47	49	52	35	36
Hourly labor cost (in U.S. dollars at current exchange rate 3/)									
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 2/	100.0	32	33	41	42	56	59	31	32
Unit labor cost (in U.S. Dollars at constant 1964 exchange rates)									
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 2/	100.0	27	34	66	72	61	75	69	77
Unit labor cost (in U.S. dollars at current exchange rates 3/)									
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 2/	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

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