

UNITED STATES TARIFF COMMISSION

GLASS-LINED STEEL PROCESS EQUIPMENT: FORMER WORKERS OF
GLASCOTE PRODUCTS DIVISION, HAVEG INDUSTRIES, INC.,
CLEVELAND, OHIO

Report to the President on Investigation No. TEA-W-56 Under
Section 301(c)(2) of the Trade Expansion Act of 1962



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

REPORT TO THE PRESIDENT

U.S. Tariff Commission
March 12, 1971

To the President:

In accordance with section 301(f)(1) of the Trade Expansion Act of 1962 (76 Stat. 885), the U.S. Tariff Commission herein reports the results of an investigation made under section 301(c)(2) of the Act in response to a petition filed by a group of workers.

On December 7, 1970, the President of Local 7-87, Oil, Chemical and Atomic Workers, AFL-CIO, and an International Representative of this same Union, filed a petition for a determination of eligibility to apply for adjustment assistance on behalf of the workers of the Cleveland, Ohio plant of Glascote Products Division, Haveg Industries, Inc. On December 18, 1970, the petitioners were notified that the petition did not comply with the requirements for data that are set forth in the Commission's Rules of Practice and Procedure. Additional information was provided by the petitioners on January 13, 1971, and the Commission instituted the investigation (TEA-W-56) on January 21, 1971, to determine whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with the glass-lined steel process equipment produced by Glascote Products Division, at Cleveland, Ohio, 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 the Cleveland plant.

Public notice of this investigation was given in the Federal Register (36 F.R. 1293) on January 27, 1971. No public hearing was requested by any party showing a proper interest in the subject matter of the investigation, and none was held.

The information herein was obtained from Local 7-87, Oil, Chemical and Atomic Workers, AFL-CIO; Glascote Products Division, Haveg Industries, Inc.; Pfaudler Co., a Division of Sybron Corp. (the principal U.S. producer of glass-lined steel equipment); R. Gelb & Sons, Inc. (the principal importer of glass-lined steel equipment); and from the Commission's files.

Finding of the Commission

On the basis of its investigation, the Commission finds that articles like or directly competitive with the glass-lined steel process equipment produced by the Glascote Products Division, Haveg Industries, Incorporated, Cleveland, Ohio, 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 at the plant concerned.

CONSIDERATIONS SUPPORTING THE COMMISSION'S FINDING

This investigation relates to a petition for adjustment assistance filed on behalf of the workers of the Cleveland, Ohio, plant of Glascote Products Division of Haveg Industries, Inc., which was closed in January 1971. The petitioning workers had produced glass-lined steel equipment, primarily process vessels for use in the chemical and pharmaceutical industries.

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

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

If any of the above criteria is not satisfied in a given case, the Commission must make a negative determination. In the Commission's judgment, the fourth criterion has not been met in the case at hand. It has, therefore, made a negative determination.

Glascote was one of two major domestic suppliers of glass-lined steel equipment--albeit much the smaller. The Glascote plant supplied, on the average, about a * * * of the domestic shipments of such equipment in recent years.

Glascote's recent annual shipments of glass-lined steel equipment fluctuated considerably, closely following changes in U.S. demand for this type of equipment. Apparent U.S. consumption of glass-lined steel equipment dropped sharply in 1968 to * * * compared with * * * in 1967, and then rose slowly to * * * in 1970. Glascote's shipments followed the same general pattern--declining from * * * in 1967 to * * * in 1968, and then rising in the first half of 1970 to an annual rate of * * *. The decline in 1968 and the recovery in 1969 and the first half of 1970 in Glascote's shipments were both relatively more than the comparable changes in U.S. demand. Meanwhile, imports of glass-lined steel equipment, which had begun on a regular basis in 1967, were stable both in dollar volume * * * and share of the U.S. market * * * in 1968-70. Thus, Glascote's business was influenced more by shifts in U.S. demand than by the volume of imports.

According to officials of Glascote's parent, Haveg Industries, the Glascote Products Division was not earning an adequate return on the capital invested. In 1968-69, nearly \$2 million had been invested to expand the capacity of the plant and to add facilities that would permit the manufacture of larger glass-lined equipment than formerly. The Division's fixed assets rose sharply from * * * in 1967 to * * * in 1969. However, an adequate return on the investment did not result and the Division sustained substantial losses in 1968-70. * * * As a result of these factors, Glascote was unable to compete profitably with its principal domestic rival. A sampling survey reveals that

Glascote lost bids for business primarily to the dominant domestic producer, rather than to importers.

Since the criteria established by the Trade Expansion Act of 1962 have not fully been satisfied, the Commission has made a negative determination.

INFORMATION OBTAINED IN THE INVESTIGATION

Description and uses of articles under investigation

Glascote Products produced glass-lined steel equipment, primarily process vessels (reactors) and storage tanks, at its Cleveland, Ohio plant. These articles were made from high quality, carbon steel following conventional fabricating procedures, modified as necessary to accommodate the subsequent glass-lining process. The glass-lining or enameling process involves repeated spray applications of an enamel consisting of a suspension in water of fine glass particles. After each application of enamel, the vessel is air dried until the enamel has a low water content, then rapidly heated in a furnace to a temperature at which the enamel flows and fuses into a film covering the vessel surface. After firing, the surface is inspected and imperfections are removed by grinding. The sequence of enamel applications, firing, surface inspection, and repair are repeated until imperfections and discontinuities are reduced to an acceptable level and the glass-lining is essentially continuous. This sequence is generally repeated four to six times in order to produce an acceptable glass lining.

The glass-lined steel vessels produced by Glascote ranged in size from 5 gallon reactors for use in laboratories to 15,000 gallon storage tanks for use in industrial plants. Glass-lined reactors are made with an outer jacket in order that a heating or cooling medium can be circulated between the inner and outer walls of the vessel.

These vessels are also equipped with an agitation system consisting of an external motor and drive connected to an internal glass-lined steel impeller. Most reactors are built in conformity with the pressure vessel design standards established by the American Society for Testing Materials (ASTM). Glass-lined vessels and tanks are used for applications where their corrosion resistance, anti-stick properties, and ease of cleaning are sufficiently important to offset their high cost. The principal uses for these vessels are in chemical and pharmaceutical manufacturing operations.

In addition to reactors and storage tanks, Glascote produced glass-lined parts and accessories for this equipment such as agitators, baffles, manway access covers, nozzles, and thermometer wells. Other articles produced by Glascote, none of which was a significant item of trade, included glass-lined steel pipe, valves, distillation columns, and blender-driers. Reglassing of steel equipment also represented a small share of Glascote's total business.

U.S. tariff treatment

The bulk of Glascote's output during 1967-70 consisted of glass-lined steel equipment and parts of a type which, if imported, would have been dutiable under item 661.70 of the Tariff Schedules of the United States (TSUS) as "industrial machinery, plant, and similar laboratory equipment, whether or not electrically heated, for the treatment of materials by a process involving a change of temperature * * * and parts thereof." Prior to the adoption of the TSUS in August 1963 the tariff treatment applicable to the process equipment, like

that produced by Glascote, depended upon whether it had as an essential feature an electrical element or device. If so, it was dutiable under Par. 353 of the Tariff Act of 1930; whereas articles which were classified as machines and did not have an essential electrical feature were dutiable under Par. 372. Certain articles of process equipment may also have been dutiable as manufactured articles, not specially provided for, wholly or in chief value of iron or steel, under Par. 397. Thus, the 1930-72 rate history applicable to this equipment is as follows:

<u>Rate (percent ad valorem)</u>			<u>Effective date</u>	<u>Basis for rate</u>
<u>Par. 353</u>	<u>Par. 397</u>	<u>Par. 372</u>		
35	45	27.5	1930	Tariff Act of 1930
15	22.5	15	1948	Concession under the GATT ^{1/}
13.75	"	13.75	1951	" " " "
"	21	13	1956	" " " "
"	20	12	1957	" " " "
"	19	11.5	1958	" " " "
12.5	"	10.5	1962	" " " "
11.5	"	9	1963 (June)	" " " "
<u>Item 661.70</u>				
	12.5		1963 (Aug.)	Adoption of the TSUS
	11		1968	Concession under the GATT
	10		1969	" " " "
	8.5		1970	" " " "
	7		1971	" " " "
	6		1972	" " " "

^{1/} General Agreement on Tariffs and Trade.

Most of the remainder of Glascote's output during 1967-70 consisted of glass-lined steel storage tanks of a type, which, if imported, would have been dutiable under item 640.35 as reservoirs, tanks, * * *, of metal, having a capacity over 75 gallons and ordinarily installed as fixtures in industrial plants or elsewhere for

storage or manufacturing use. Prior to the adoption of the TSUS these tanks would have been dutiable under Par. 328 of the Tariff Act of 1930 if they were cylindrical or tubular vessels, or under Par. 397 if they were held to be manufactured articles, not specially provided for, wholly or in chief value of iron or steel. The 1930-72 rate history applicable to such tanks is as follows:

<u>Rate (percent ad valorem)</u>		<u>Effective date</u>	<u>Basis for rate</u>			
<u>Par. 328</u>	<u>Par. 397</u>					
25	45	1930	Tariff Act of 1930			
"	22.5	1948	Concession under the GATT			
12.5	"	1950	"	"	"	"
"	21	1956	"	"	"	"
"	20	1957	"	"	"	"
"	19	1958	"	"	"	"
11	"	1962	"	"	"	"
10	"	1963 (June)	"	"	"	"
<u>Item 640.35</u>						
	13.5	1963 (Aug.)	Adoption of the TSUS			
	12	1968	Concession under the GATT			
	10.5	1969	"	"	"	"
	9	1970	"	"	"	"
	8	1971	"	"	"	"
	6.5	1972	"	"	"	"

The changes in the rates applicable to items 661.70 and 640.35 that occurred in August 1963 resulted from the adoption of the Tariff Schedules of the United States. The TSUS rates represented a weighted average of various rates that had been applicable under the old tariff schedules to the many different articles that were included in the new tariff items.

U.S. producers' shipments and consumption

U.S. producers' shipments of glass-lined steel equipment declined in value from about * * * in 1966 and 1967 to * * * in 1968 and then increased to * * * in 1970. Apparent consumption of this equipment followed the same general trend as that reported for shipments; * * *

Approximately * * * percent of U.S. producers' shipments of glass-lined steel equipment during 1966-70 consisted of reactors and parts thereof and storage tanks of over 75 gallons capacity. Only two U.S. firms--Glascote Products and the Pfaudler Co. of Rochester, New York--produced reactors and storage tanks. Another firm, Ceramic Coatings Co. of Newport, Kentucky, * * * produced glass-lined steel pipe and parts of reactors. Data on U.S. producers' shipments, by firms, during 1966-70 are reported in table 2.

* * * * *

U.S. imports

Data on U.S. imports of glass-lined steel process equipment are not separately reported in the official statistics. However, the domestic producers of glass-lined equipment stated that they knew of only one firm, R. Gelb & Sons, Inc., of Union, New Jersey that has imported this equipment on a continuing basis. This statement was confirmed by R. Gelb Co., * * *

* * * * *

U.S. imports of glass-lined steel equipment were valued at * * * in 1967, the first year in which there were significant imports; they increased in value to * * * in 1968 and to * * * in 1969 and 1970. In each of the latter three years imports accounted for * * * percent of the value of apparent U.S. consumption of glass-lined steel equipment. These data somewhat understate the economic impact of imports in the U.S. market because they represent the foreign value of the articles in question and do not include transportation costs and duty. Furthermore, the U.S. importer purchases such components as electric motors and gears from domestic producers for use with the imported glass vessels. Thus, the value of the importers' shipments, which include components of domestic origin, is significantly greater than the value of the imports in question.

* * * * *

Haveg Industries, Inc., and Hercules, Inc.

Haveg Industries, Inc., is a wholly owned subsidiary of Hercules, Inc.; the latter firm acquired the assets of Haveg in July 1964. The general offices of both Haveg and Hercules are located in Wilmington, Delaware.

Haveg employed about 2,200 people in 1969 when its sales were in the \$50 to \$55 million range. The company's principal products are engineered plastics, rocket and missile parts, wire, cable, and filament wound structures.

Hercules, Inc. (formerly Hercules Powder Co.) was formed in 1912 pursuant to a court decree following divestiture from E. I. DuPont de Nemours. Hercules is a multinational company with plants in 28 States and 18 foreign countries. Hercules employed about 31,000 people in 1969 when its net sales and operating revenues totaled \$746 million. The company produces, in eight major departments, a diversified line of industrial chemicals and related products which are derived mainly from cellulose, rosin and terpenes, nitrogen, and petroleum.

Glascote Products Division, Haveg Industries, Inc.

Glascote Products was acquired by Haveg in November 1966 from the A. O. Smith Corp. Prior to its acquisition by Haveg, Glascote had operated for about 45 years under various ownerships. Throughout its history Glascote's principal products have been glass-lined steel process vessels and storage tanks. * * *

The Cleveland plant was the only manufacturing facility operated by Glascote. This plant contained 130,000 square feet of space including 110,000 square feet of manufacturing space. The plant was a well maintained metal and masonry structure that was equipped with modern handling and fabricating equipment. All operations at the plant were terminated on January 28, 1971. The plant machinery and inventory have been sold and the real property has been turned over to a broker for sale.

Sales.--Net orders received by Glascote declined irregularly from * * * in 1966 to * * * in 1970. Data on orders received, by type of product, are shown in table 4. Process reactors including parts and

storage vessels accounted for about * * * and * * * percent, respectively, of the total value of orders received during 1966-70.

* * * * *

Financial data regarding Glascote's operations during most of the period it was operated by Haveg Industries is as follows (in thousands of dollars):

	<u>1966</u> (2 months)	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u> (6 months) ^{1/}
Net shipments	***	***	***	***	***
Net profit before taxes	***	***	***	***	***
Depreciation	***	***	***	***	***
Net profit after taxes	***	***	***	***	***
Cash flow	***	***	***	***	***
Fixed assets	***	***	***	***	***

^{1/} The most recent period for which data are available.

The marked difference in the value of orders received and net shipments is due to the long lead time involved in producing glass-lined process reactors and storage tanks. * * *

The large increase in the value of fixed assets that occurred in 1968 and 1969 resulted from an expansion of the Cleveland plant and the addition of a new furnace that permitted Glascote to produce larger capacity reactors and storage tanks.

Employment.--The number of hourly and salaried workers employed at the Cleveland plant during 1966-70, by months is shown in table 5; monthly employment of hourly workers during this period ranged from a high of 227 in December 1969 to a low of 95 in December 1970. The number of manhours worked per year during 1967-70, by specified types of employment, is reported in table 6.

Workers at the Cleveland plant were informed in July 1970, when a new labor contract was being negotiated that the Glascote operation was not profitable and that Haveg was considering selling or closing the Glascote Division. The workers were notified in September 1970 that the plant would be closed after all outstanding orders were shipped.

Layoffs of hourly and salaried workers reported during the January 1966-January 1971 period were as follows:

	<u>Hourly</u>	<u>Salaried</u>		<u>Hourly</u>	<u>Salaried</u>
Jan. 1968	24	-	Sept. 1970	29	16
Feb. 1968	3	-	Oct. 1970	18	11
Apr. 1970	7	-	Nov. 1970	6	6
June 1970	1	4	Dec. 1970	34	6
July 1970	3	7	Jan. 1971	94	22
Aug. 1970	16	4			
	*	*	*	*	*

The Ohio Employment Security Division reported that the average unemployment rate in the Cleveland metropolitan area during December 1970 (the last month for which data are available) was 4.3 percent. In December 1969 the rate was 2.6 percent.

Haveg's rationale for closing the Glascote Products Division.--The Commission received a statement from Haveg Industries advising that the Glascote Division was closed because it failed to earn a fair return on the company's capital investment. ^{1/} The financial data reported on page 9 indicates that Haveg sustained a * * * before taxes on Glascote's operations during the period from January 1968 through June 1970.

^{1/} Mr. R. G. Sailer, Vice President of Haveg Industries, Inc., advised the Commission by letter of Feb. 3, 1971, as follows: "Please be advised that we have no specific knowledge as to the extent to which the importation of glass-lined vessels similar to those produced by our Glascote Products Division has been a factor in the impending closing of that Division. Our decision resulted from the failure to earn what we consider to be a fair value return upon our capital investment at Glascote. It is reasonable to believe that our profits would have been increased by a greater sales volume and that foreign imports of similar products affected our volume but we have no hard facts to support this conclusion."

Appendix

Statistical Tables

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