UNITED STATES INTERNATIONAL TRADE COMMISSION

WATER-CIRCULATING PUMPS, WET-MOTOR TYPE, FROM THE UNITED KINGDOM

Determination of Injury in Investigation No. AA1921-152
Under the Antidumping Act, 1921, as Amended,
Together With the Information Obtained
in the Investigation

USITC Publication 777
Washington, D. C.
May 1976

UNITED STATES INTERNATIONAL TRADE COMMISSION

COMMISSIONERS

Will E. Leonard, Chairman
Daniel Minchew, Vice Chairman
George M. Moore
Catherine Bedell
Joseph O. Parker
Italo H. Ablondi

Kenneth R. Mason, Secretary to the Commission

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

CONTENTS

i

Tables

Tables--Continued

Figures

Figures--Continued

Note.--Information which would disclose confidential operations of individual concerns may not be published and therefore has been deleted from this report. Deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.

May 27, 1976

[AA1921-152]

WATER CIRCULATING PUMPS FROM THE UNITED KINGDOM

Determination of Injury

On February 27, 1976, the United States International Trade Commission received advice from the Department of the Treasury that water circulating pumps, wet motor type, suitable for use in residential and commercial hydronic heating systems from the United Kingdom are being, or are likely to be, sold in the United States at less than fair value within the meaning of the Antidumping Act, 1921, as amended (19 U.S.C. 160(a)). Accordingly, on March 8, 1976, the Commission instituted investigation No. AA1921-152 under section 201(a) of said act to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such water circulating pumps into the United States.

Notice of the institution of the investigation and of a public hearing to be held in connection therewith was published in the Federal Register on March 15, 1976 (41 F.R. 10965). The hearing was held on April 20, 1976.

In arriving at its determination, the Commission gave due consideration to written submissions from interested parties, evidence adduced at the hearing, and all factual information obtained by the Commission's staff from questionnaires, personal interviews, and other sources.

On the basis of the investigation, the Commission has determined by a vote of 4 to 2 (Commissioners Minchew and Ablondi dissenting) that an

industry in the United States is being injured 1/ by reason of the importation of water circulating pumps, wet motor type, suitable for use in residential and commercial hydronic heating systems from the United Kingdom that are being, or are likely to be, sold at less than fair value within the meaning of the Antidumping Act, 1921, as amended.

1/ Commissioner Moore has also determined that an industry is likely to be injured.

Statement of Reasons for Affirmative Determination of Commissioners George M. Moore, Catherine Bedell, and Joseph O. Parker

On the basis of the reasons cited below we have determined that an industry in the United States is being injured by reason of the importation of water-circulating pumps from the United Kingdom which the Department of the Treasury found are being, or are likely to be, sold at less than fair value (LTFV).

The LTFV determination by the Department of the Treasury is based upon an examination of 100 percent of exports of such pumps from the United Kingdom to the United States during the period from February 1, 1975, to July 22, 1975. Dumping margins were found in 99.87 percent of the sales. The margins were substantial, ranging from 3 to 42 percent.

U.S. industry

Water-circulating pumps are devices which employ the centrifugal principle to accelerate the circulation of water in hydronic systems. The pump uses a motor to rotate an impeller which deflects water through apertures between the blades; this deflection is the centrifugal process which accelerates the water. There are three types of water-circulating pumps: mechanical-seal pumps, magnetically coupled pumps, and wet-motor pumps. A major feature which distinguishes the wet-motor pump from the other two types of pumps is that it is self-lubricating--water is used as a substitute for oil in lubricating the motor bearings. This feature enables the motor to be made an integral part of the

pump housing and results in a compact unit. It also permits a less powerful motor, 1/15 horsepower or less when used for residential heating purposes, to be employed in the wet-motor pump than in the other two types. All of the imported water-circulating pumps within the scope of this investigation are wet-motor pumps.

The U.S. industry most adversely affected by imports of these pumps sold at LTFV consists of the facilities in the United States devoted to the production of wet-motor water-circulating pumps of 1/15 horsepower or less. At present, the complainant is the only domestic producer of such pumps.

Indicia of injury

Imports of wet-motor water-circulating pumps rose during the period 1971-75. In 1975, U.S. sales of imported wet-motor pumps from the United Kingdom represented a substantial penetration of the domestic market for such pumps.

During the period from the fourth quarter of 1973 through 1975 the imported wet-motor pumps sold to stocking representatives undersold comparable models of domestically produced wet-motor pumps. With regard to sales to original-equipment manufacturers, imported wet-motor pumps consistently undersold domestically produced wet-motor pumps during the years 1974-75 with the exception of one model during the fourth quarter of 1975.

Price depression occurred in the wet-motor pump industry, as shown by the fact that prices of wet-motor pumps with shutoff flanges to stocking representatives decreased from the second quarter of 1974 to the

fourth quarter of 1975. Evidence of price suppression is shown by the fact that prices of other models of wet-motor water-circulating pumps did not rise as rapidly as the general price increases in the economy, as measured by the wholesale price indexes for industrial commodities, for pumps, compressors, and equipment, and for fractional horsepower AC electric motors rated at 1/20 to 1/5 horsepower. Prices of U.S.-produced wet-motor pumps to original-equipment manufacturers increased by about 20 percent from 1973 to 1975, while the three wholesale price indexes increased by 45, 53, and 32 percent, respectively, during the same period.

Domestic shipments of wet-motor water-circulating pumps decreased between 1974 and 1975 in terms of both quantity and value. The domestic industry was unprofitable in 1975, as it had been for the previous 4 years. Production and related workers engaged in the manufacture of wet-motor pumps decreased sharply between 1974 and 1975.

In contrast with the decline in domestic shipments, imports of wet-motor pumps from the United Kingdom increased in 1975 as did total consumption of wet-motor pumps. Thus, in 1975 the domestic shipments of wet-motor water-circulating pumps decreased both in actual terms and relative to total consumption of such pumps. On the basis of evidence received during the course of the Commission's investigation, it is known that the choice between imported and domestic wet-motor pumps may be determined by price. Since the imported product undersold most of the domestic products during 1975, it can be seen that a portion

of the decline in domestic shipments of wet-motor water-circulating pumps in that year can be attributed to the importation of such pumps at LTFV.

Conclusion

We conclude that an industry in the United States is being injured by reason of the importation of water-circulating pumps from the United Kingdom that are being, or are likely to be, sold at LTFV within the meaning of the Antidumping Act, 1921, as amended. 1/

1/ Commissioner Moore also believes that the above-described industry is likely to be injured by reason of the domestic sales at LTFV of water-circulating pumps imported from the United Kingdom.

STATEMENT OF REASONS OF CHAIRMAN WILL E. LEONARD

On March 8, 1976, the U.S. International Trade Commission (Commission) instituted investigation No. AA1921-152 under section 201(a) of the Antidumping Act, 1921, as amended. Section 201(a) requires that the Commission determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation into the United States of a class or kind of foreign merchandise that the Department of the Treasury (Treasury) has determined is being, or is likely to be, sold at less than fair value (LTFV) within the meaning of the Antidumping Act. In other words, in terms of this investigation, the Commission, in order to find affirmatively, must determine that two conditions exist: an industry in the United States is being or is likely to be injured, or is prevented from being established; and the requisite injury described is by reason of the importation into the United States of the water-circulating pumps of the wet-motor variety from the United Kingdom which the Treasury has determined are being, or are likely to be, sold at LTFV.

Determination

On the basis of the evidence obtained in the present investigation, I determine that an industry in the United States is being injured 1/ by reason of the importation into the United States of water-circulating

---

1/ This determination regarding injury makes it unnecessary to discuss in this statement the question of whether an industry in the United States is likely to be injured. Further, the question of prevention of establishment of an industry in the United States was not in issue in this investigation.

pumps of the wet-motor variety from the United Kingdom which Treasury has determined are being, or are likely to be, sold at LTFV within the meaning of the Antidumping Act, 1921, as amended.

U.S. industry

The U.S. industry most likely to be adversely affected by the LTFV imports with which this investigation is concerned consists of the facilities in the United States devoted to the production of water-circulating pumps whi have a rating of 1/2 horsepower or less and are used primarily in residential and small commercial hydronic heating systems. Such pumps include those of the wet-motor, mechanical-seal, and magnetically coupled types, all of which perform the same function, are directly competitive, are physically interchangeable ,and are sold through the same channels of distribution. In the case of the only producer of both mechanical-seal and wet-motor pumps, the production facilities are similar and the majority of the production workers can be used in the manufacture of either type of pump. The water-circulating-pump industry here identified currently comprises five manufacturers. They sell primarily to stocking representatives, which service the replacement market, and to original-equipment manufacturer

Injury

The first question that the Commission addressed is whether the industry identified above is being or is likely to be injured. The Commission has in past investigations looked at various indexes of injury. The evidence with respect to these indexes in this investigation leads to a finding that the industry being considered is being injured.

Import penetration and lost sales.--During the period of Treasury's investigation in 1975 (February- July) in which it examined entries to determine whether LTFV sales were occurring, U.S. sales of the pumps imported from the United Kingdom which Treasury found are being, or are likely to be, sold at LTFV accounted for a significant proportion of the domestic market for water-circulating pumps. 1/ During the remainder of 1975, sales of such imported pumps accounted for an even more significant share of this market. The evidence demonstrates that these imported pumps successfully displaced sales by U.S. producers in the industry under consideration, particularly sales to stocking representatives which service the replacement market.

Prices.--Treasury found that 99.87 percent of water-circulating pumps from the United Kingdom which it considered during the above-described period of investigation were sold at LTFV. The margins of the LTFV sales were substantial, ranging, according to Treasury's calculations, from 3 to 42 percent. The subject imported pumps undersold most U.S.-produced water-circulating pumps not only during this period and all of 1975, but in 1973 and 1974. Their low price prevented the prices of domestic water-circulating pumps from rising as rapidly as many industrial prices. Thus, prices of U.S.-produced pumps increased by roughly 20 percent from 1973 through 1975, while the wholesale price indexes for industrial commodities, for pumps, compressors and equipment, and for fractional horsepower AC electric motors rated at 1/20 to 1/5 horsepower increased by 45, 53, and 32 percent, respectively, during

1/ Specific data in this instance, and in other instances, are not included in this statement because their inclusion would lead to the revelation of confidential business information.

the same period. Similarly, from the first quarter to the fourth quarter of 1975, prices of these three groups of products, as reflected by these wholesale price indexes, also rose at a faster rate than prices of the water-circulating pumps.

Profitability and employment.--During the period of LTFV sales, the financial operating results of the domestic industry were considerably poorer than in the corresponding period in 1974. From 1973 through 1975, the industry suffered a substantial deterioration annually in its profit-and-loss experience. The trend in the number of production and related workers was similar to that of the financial operating results of the industry, declining sharply during 1973-75. Employment was sharply lower during the first half of 1975 than in the corresponding period of 1974. Despite an improvement in the second half of 1975, employment for the whole year of 1975 was lower than in 1974.

Injury "by reason of" less-than-fair-value sales

The second question which the Commission addressed is whether the injury described above is by reason of the importation into the United States of the water-circulating pumps of the wet-motor variety which Treasury has determined to be, or likely to be, sold at LTFV. The causation linkage expressed by the phrase "by reason of" does not require that the LTFV imports be the principal cause, the major cause, or even a substantial cause of injury to the domestic industry under consideration. However, LTFV imports must in effect be an identifiable cause of the injury 1/ being experienced by the domestic industry under consideration.

1/ See Elemental Sulfur From Mexico: Determination of Injury in Investigation No. AA1921-92. . ., TC Publication 484 1972 , at p. 9; and Birch Three-Ply Door Skins From Japan: Determination of Injury in Investigation No. AA1921-150. . ., USITC Publication 754, 1976, pp. 9-10.

In the present investigation, I believe that such imports are in fact an identifiable cause of injury to the domestic industry. There is no question that the recession in the economy of 1974 and early 1975 contributed significantly to the injury being experienced by the domestic industry under consideration. However, the effects of the recession were not so great as to render unidentifiable the contribution of the LTFV imports under consideration to the injury being suffered by the domestic industry.

The ratio of the quantity of imported LTFV pumps to the U.S. consumption of all types of pumps of the sort produced by the industry under consideration was significant and increased from the first half of 1975 to the last half of 1975. There is evidence before the Commission which indicates that sales of the imported pumps were made on the basis of price, particularly the sales to stocking representatives for the replacement market. Further, the evidence before the Commission indicates that there was a margin of underselling by the imported product which in some cases was very significant. This margin of underselling was made possible apparently by the margins of dumping, as such margins of dumping greatly exceeded the margins of underselling which are present in this investigation.

Conclusion

On the basis of the evidence before me, I determine that an industry in the United States is being injured by reason of the sales of water-circulating pumps of the wet-motor type imported from the United Kingdom which Treasury determined to be sold, or likely to be sold, at LTFV.

Statement of Reasons of Vice Chairman Daniel Minchew
and Commissioner Italo H. Ablondi

On February 27, 1976, the United States International Trade Commission (Commission) received advice from the Treasury Department that water circulating pumps, wet motor type, suitable for use in residential and commercial hydronic heating systems, from the United Kingdom are being, or are likely to be, sold at less than fair value (LTFV) within the meaning of the Antidumping Act, 1921, as amended. Accordingly, the Commission on March 8, 1976, instituted investigation No. AA1921-152 under section 201(a) of the act, to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such merchandise into the United States.

Before the Commission shall find in the affirmative, it is necessary that each of the following two conditions be met:

(1) An industry in the United States is being or is likely to be injured, or is prevented from being established, and

(2) The requisite injury must be by reason of the importation into the United States of the merchandise which the Department of the Treasury has determined is being, or is likely to be, sold at less than fair value within the meaning of the Antidumping Act, 1921, as amended.

Determination

On the basis of information obtained in the present investigation, we have determined that an industry in the United States is not being injured and is not likely to be injured, and is not prevented from being established, by reason of the importation of water-circulating pumps, wet-motor type, suitable for use in residential hydronic heating systems, from the United Kingdom being sold or likely to be sold at LTFV.[1/]

1/ Prevention of the establishment of an industry is not an issue in the present investigation, and will not be discussed further.

U. S. industry

The U. S. industry most likely to be adversely affected by imports sold at LTFV consists of the facilities in the United States devoted to the production of water-circulating pumps with rating of 1/12 horsepower or less, used primarily in residential and small commercial hydronic heating systems. Such pumps include those of the wet-motor, mechanical-seal, and magnetically coupled types, all of which perform the same function, are interchangeable, are directly competitive, are sold through the same channels of distribution, and use similar production facilities. There are currently five manufacturers of these pumps in the United States, and a sixth firm has announced its intention of beginning production. The five manufacturers sell primarily to stocking representatives that service the replacement market and to original-equipment manufacturers.

No injury by reason of LTFV imports

Import penetration and lost sales.--Imports of water-circulating pumps from the United Kingdom did not occur until 1975, but despite a sizable increase in imports in that year, the import penetration in relation to domestic consumption continued at a low level. Total shipments of water-circulating pumps--in the industry as we have defined it--show that there was a substantial increase from 1971 to 1973, then a pronounced decline in 1974, followed by an increase in 1975. This shows that the decline in shipments occurred prior to the entry of imports at LTFV.

Prices.--Wet-motor pumps have traditionally undersold the mechanical-seal and magnetically coupled pumps in the U. S. market. Therefore, it is not surprising that imported pumps sold for less than the majority of U.S.-produced pumps. The price of the U.S.-produced wet-motor pump and that of the imported pump were generally similar. The fact that prices of water-circulating pumps increased at a slower pace than the wholesale price index for industrial commodities, was due to lack of demand for these pumps rather than import competition. Some sectors of the economy, such as the construction industry--on which pump sales to original-equipment manufacturers depend--were hit harder and longer than others. New housing starts of privately owned units decreased continuously from 2.4 million in 1972 to 1.2 million in 1975.

Profitability and employment.--While both profitability of and employment in the domestic industry decreased from 1974 to 1975, the strong recovery of the industry during the second half of 1975 (net operating profits increased by 50 percent and employment increased by 30 percent from the first half to the second half of 1975) would tend to indicate that causes of reduced profitability and unemployment were recession-related. The result of financial operations on wet-motor water-circulating pumps, produced solely by the complainant, actually improved during the period of the alleged dumping.

Likelihood of injury

Myson Group, Ltd., since August 1975 the sole United Kingdom exporter of water-circulating pumps to the United States, has given written assurances to the U.S. Customs Service that it would make no further sales at less than fair value. Anticipated use of solar energy in residential heating indicates potential for a new market for water-circulating pumps in the future. Grundfos has begun the first phase of a multimillion-dollar development project in California, part of which will be devoted to the manufacture and sale of wet-motor water-circulating pumps in the United States. The entry of a new firm into the market and the willingness of the industry to operate at what would be considered less than a good return on investment over the last several years indicate that the industry should be viable in the future.

Conclusion

We have determined that an industry in the United States is not being and is not likely to be injured by reason of the importation of water-circulating pumps, wet-motor type, suitable for use in residential and commercial hydronic heating systems, from the United Kingdom, that are being, or are likely to be, sold at LTFV within the meaning of the Antidumping Act, 1921, as amended.

INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On February 27, 1976, the United States International Trade Commission received advice from the Department of the Treasury that water circulating pumps, wet motor type, suitable for use in residential and commercial hydronic heating systems, from the United Kingdom are being, or are likely to be, sold at less than fair value (LTFV) within the meaning of the Antidumping Act, 1921, as amended (19 U.S.C. 160(a)). Accordingly, the Commission on March 8, 1976, instituted investigation No. AA1921-152 under section 201(a) of the act, to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such merchandise into the United States. The statute directs the Commission to make its determination by May 27, 1976.

Public notice of the institution of the investigation and hearing, which was held on April 20, 1976, was duly given by posting copies of the notice at the Secretary's office in the Commission in Washington, D.C., and at the Commission's office in New York City, and by publishing the original notice in the Federal Register on March 15, 1976 (41 F.R. 10965).

The Department of the Treasury instituted its investigation after receiving a complaint on April 25, 1975, from Taco, Inc., of

Cranston, R.I. Treasury's notice of the antidumping proceedings was published in the Federal Register on May 21, 1975 (40 F.R. 22150).

A "Withholding of Appraisement Notice" issued by Treasury was published in the Federal Register on November 26, 1975 (40 F.R. 54843). The Treasury's determination of sales at less than fair value was made on February 26, 1976.

The Product

Water-circulating pumps

A water-circulating pump is a device or machine which employs the centrifugal principle to accelerate or boost the circulation of water in hydronic (water and steam) systems. The pump uses a motor to rotate an impeller--a shaft fitted with vanes or blades. The impeller deflects water through apertures between the blades; this deflection is essentially the centrifugal process that accelerates (pumps) the water.

There are many varieties and sizes of water-circulating pumps. The largest pumps have motors of power ratings in the hundreds or thousands of horsepower, and the smallest rely on motors of fractional horsepower ratings. Water-circulating pumps are designed for (1) hot-water boiler systems (for heating buildings), (2) hot-water storage systems (for providing hot water to kitchens, bathrooms, laundries, and other faucet-controlled outlets), (3) industrial applications such as circulating chilled water to clean textile fibers, and (4) other hydronic systems. In a residential heating system, the water-circulating pump is positioned near the hot-water boiler, either in the outgoing pipeline to the radiators or in the return line from the radiators. A pair of flanges is used to attach the pump to the pipelines. The thermostat controlling the heat in the home automatically starts the pump to circulate the hot water from the boiler to the radiators and back to the boiler.

Water-circulating pumps with residential applications

The smallest water-circulating pumps--with motors of 1/12 horsepower or less--are almost exclusively used in homes. These pumps are designed for the small residential hydronic system for which power needs are nominal and performance standards are not very exacting in comparison with those of commercial or industrial systems.

The smaller pumps may be made of cast iron or of bronze, depending on their applications. One pump which is largely made of bronze is intended for use in an open hydronic system, that is, a hot-water storage system. The "bronze pump" is necessary to withstand the corrosive effects of air (oxygen) that enters a system when a faucet is turned on. The other or cast-iron pump (the impeller and other parts may be made of bronze or other metals) is intended for use in a closed system (one that essentially excludes air), that is, a hot-water boiler system for central heating. Although the two pumps can be used in either system, the higher cost of bronze prohibits its use in a closed system, and the higher susceptibility of cast iron to corrosive action inhibits its use in an open system.

A water-circulating pump is added to a residential heating (closed) system for two important reasons. 1/ First, the pipes can be considerably smaller in diameter than those in a pumpless or gravity system, with obvious cost and space savings. Second, the pump provides

1/ Water-circulating pumps with a horsepower rating of 1/12 or less for use in residential and commercial hydronic heating systems will be referred to as water-circulating pumps for residential heating because of their limited commercial applications.

almost instant "heat" to a distant radiator (or baseboard unit), compared with a delay of several minutes in a gravity system--an important feature to the comfort-oriented homeowner of today.

The water-circulating pumps for residential heating come in three types--wet-motor, mechanical-seal, and magnetically coupled. They differ essentially in the method of connecting the motor to the impeller in the pump-housing section.

The distinguishing feature of the wet-motor type is the use of water as a substitute for oil in lubricating the motor bearings. Water is diverted from the pipeline to only that part of the motor that houses the bearings. Consequently, a wet-motor pump is called a self-lubricating pump. This feature enables the motor to be made an integral part of the pump housing and results in a compact unit that, as one producer advertises, "fits in the hand." To keep the water from other parts of the motor, a static seal is used. Because it is stationary, the static seal is less likely to leak and has a longer life, on the average, than a dynamic (or moving) seal. Paradoxically, a pump with a static seal is classified as a sealless pump. Some wet-motor pumps are especially subject to "motor freeze" whereby sediment in the water causes the rotor to stick. Thus, some producers build their pumps with a manual device for starting a frozen motor. Some wet-motor pumps contain a throttle feature that adjusts the pump to variations in the water flow.

In a mechanical-seal pump, the motor is completely isolated from the water by a mechanical seal. This is a dynamic seal in which one

(carbon) part rotates against a stationary (ceramic) part. This type of seal is subject to considerable wear and consequently is one of the first parts to fail. To overcome the higher frictional forces of the mechanical seal, a somewhat more powerful motor is needed than that employed in a wet-motor pump. In part to reduce noise and vibrations, a rather sizable coupling bracket connects the impeller-housing section and the motor. The large motor and the connecting bracket make the mechanical-seal pump much greater in size than the wet-motor pump with a comparable performance curve (table 1 on p. A-10).

The magnetically coupled pump, as its name implies, basically relies on magnets to connect the impeller section and the motor. The operation of the magnets also requires additional power. This pump, like the wet-motor pump, employs a static seal. The total power required for this pump is less than that required for a mechanical-seal pump and more than that required for many wet-motor pumps.

The product and the industry

The LTFV pump imported by Sundstrand Corp. 1/ is a wet-motor type of water-circulating pump for residential heating. Its electric motor with a rating of 1/30 horsepower and its cast-iron housing limits its use primarily to residential heating systems. The Sundstrand pump is sold with two flanges that contain isolating valves (also referred to as shutoff flanges or shutoff valves) for stopping the flow of water. Although not essential, shutoff flanges are a

1/ Sundstrand Corp. of Rockford, Ill.--a multinational company--imports but does not produce water-circulating pumps domestically.

convenient feature that permits easy removal of the malfunctioning wet-motor pump which must be removed from the pipeline whenever being replaced or repaired. Without shutoff flanges, the heating system must be drained--a time-consuming and costly process.

Other wet-motor pumps currently for sale in the domestic market are like the Sundstrand pump. A wet-motor water-circulating pump produced in Denmark uses a 1/20-horsepower motor and is supplied with shutoff flanges. Wet-motor pumps domestically manufactured also have small motors. A model in current production employs a 1/25-horsepower motor; the model that it replaced used a 1/15-horsepower motor. Shutoff flanges are available for the pumps currently being produced or imported, although some are sold with the standard flanges, that is, without shutoff valves. The imported and domestically produced wet-motor pumps are suitable for heating systems and are used mainly in residences.

No other wet-motor pumps which are suitable for use in any residential or commercial hydronic heating systems are manufactured in or imported into the United States. All wet-motor pumps consumed in the domestic market are equipped with motors of less than 1/12 horsepower and designed for use primarily in residential and some small commercial hydronic heating systems.

Several small mechanical-seal pumps and a magnetically coupled water-circulating pump that are produced domestically are in many ways competitive or interchangeable with the above-mentioned wet-motor pumps. The mechanical-seal pumps have electric motors of 1/12 horsepower, whereas the magnetically coupled pump has an electric

motor of 1/20 horsepower. These motors are more powerful than those employed on wet-motor pumps in large part because additional power is needed to drive the magnets or mechanical seals. These pumps are mainly designed for the closed heating systems, but a few are designed in "all bronze" for the open, hot-water-storage systems. The pumps are mainly used in the small hydronic systems found in homes.

The mechanical-seal and magnetically coupled pumps are not sold with flanges incorporating shutoff valves; however, they are often sold with the standard flanges. These pumps have less need for shut-off flanges because the mechanical seal isolates the motor part of the pump from the water so that repairs and replacement can be made without draining the system.

The wide variation in the dimensions of pumps and flanges requires different-sized openings in the pipeline. This complicates the substitution of one pump model for another model and has encouraged the practice of using the same model as a replacement. To offset this, Sundstrand sells fittings which fill in the gap that may remain after replacing a larger pump with its own pump. Taco, Inc., also has started to offer these fittings.

Several domestic producers, as well as the importer, Sundstrand, have expressed their opinion that water-circulating pumps with motors of 1/12 horsepower or less--whether of the wet-motor, mechanical-seal, or magnetically coupled types--are like or competitive. Obviously larger pumps--in particular those with a 1/8- or 1/6-horsepower motor--have the capability to circulate water in those residential heating

systems that normally use the smaller pumps described above. However, these domestic producers and the importer believe these pumps are probably not fully competitive or interchangeable for several reasons. First, these larger pumps represent overkill--a fact pointed out by Sundstrand and many domestic producers. Second, the price of a large pump may be nearly twice that of the smaller pump. Third, operating costs also tend to be higher because the larger pump draws more current. Fourth, whereas the smaller pumps are primarily used in residences, the larger pumps have primarily commercial applications. Fifth, whereas the larger pumps can be substituted for the smaller pumps, the reverse is not feasible, since, for example, a 1/12-horsepower pump doing the job of a 1/8-horsepower pump would quickly "burn out" because of continuous operation at maximum capability.

Some of the important features of selected wet-motor and mechanical-seal water-circulating pumps for residential heating, currently in production, are presented in table 1. These pumps are depicted in figures 1-4.

Table 1.--Water-circulating pumps for residential heating systems: Features of selected models

Feature	Sundstrand model L 1/	Taco 007	Bell & Gossett Series 100	Taco UN 110
Dimensions, in inches: 2/				
Without flanges	4-3/4 x 5-1/4	5 x 7-5/16	6-3/8 x 15	6-5/8 x 14-5/8
With flanges	8-5/8 x 5-1/4	9-5/8 x 7-5/16	7½-8¼ x 15	8-1/2 x 14-5/8
Weight to nearest whole pound	9	10	21	21
Motor size (HP)	1/30	1/25	1/12	1/12
Pump type	Wet-motor (sealless)	Wet-motor (sealless)	Mechanical-seal	Mechanical-seal

1/ Model imported by Sundstrand from the United Kingdom.
2/ Longest and shortest outside dimensions. Shutoff flanges used with the wet-motor pumps.

Source: Sales literature for 1975 supplied by the producers and the importer.

A-10

Figure 1.--The Sundstrand model L water-circulating pump--a wet-motor type.

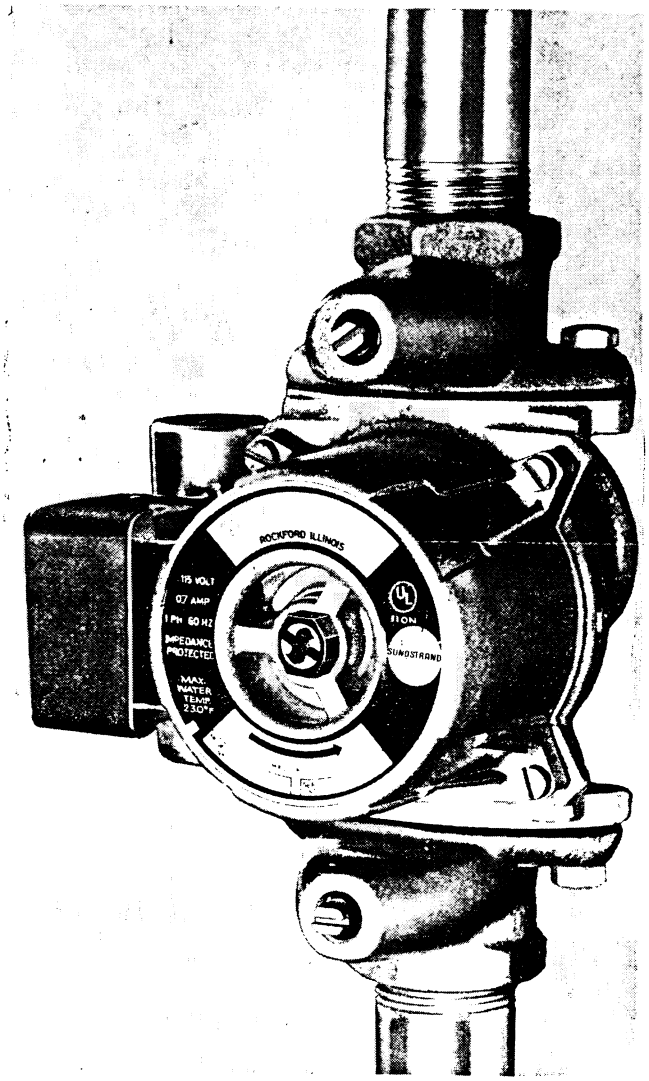


Figure 2.--The Taco model 007 water-circulating pump--a wet-motor type.

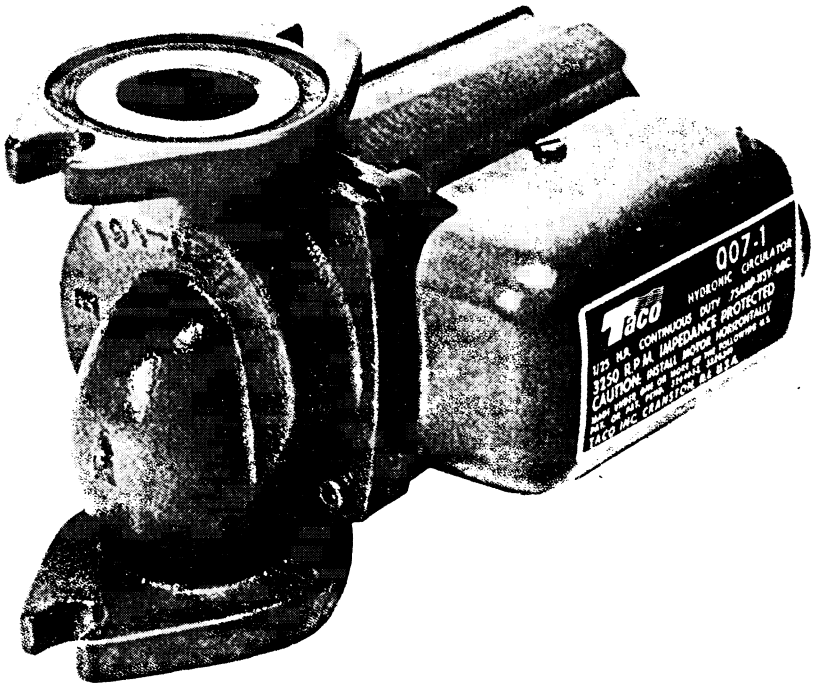


Figure 3.--The Taco model UN 110 water-circulating pump--a mechanical-seal type.

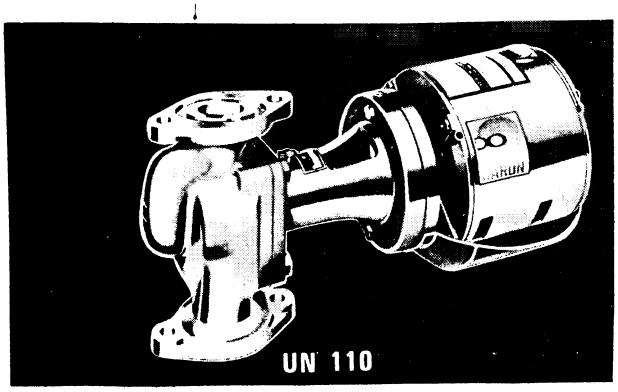
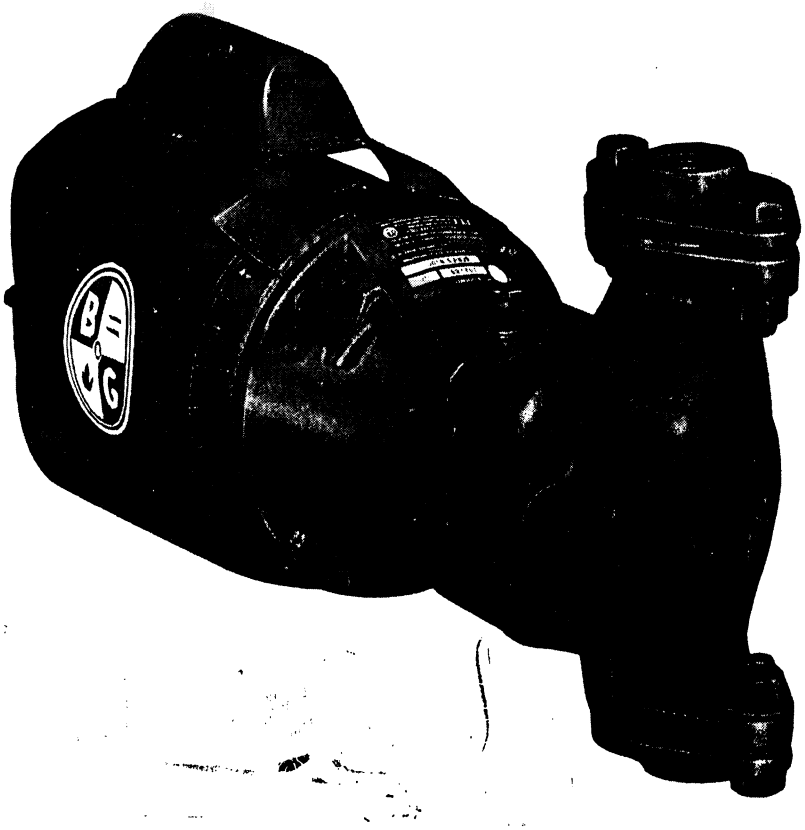


Figure 4.--The Bell & Gossett model Series 100 water-circulating pump--a mechanical-seal type.



U.S. Tariff Treatment

Water-circulating pumps covered by this investigation are classified in the Tariff Schedules of the United States (TSUS) under item 660.94; the current rate of duty is 5 percent ad valorem.

The various rates of duty applicable to water-circulating pumps under the TSUS and under Public Law 89-241, as modified by trade-agreement concessions, are shown in table 2.

Table 2.--Water-circulating pumps: U.S. rates of duty and effective dates of rate changes, Aug. 31, 1963, to Jan. 1, 1972

	Rate of duty	
	Percent ad valorem	
Aug. 31, 1963	12	Adoption of TSUS (item 660.90).
Dec. 7, 1965	10	Enactment of Public Law 89-241 1/ (item 660.94).
Jan. 1, 1968	9	GATT concession.
Jan. 1, 1969	8	Do.
Jan. 1, 1970	7	Do.
Jan. 1, 1971	6	Do.
Jan. 1, 1972	5	Do.

1/ Tariff Schedules Technical Amendments Act of 1965.

Treasury Finding of Sales at Less Than Fair Value

Summary

During the period of the Department of the Treasury's investigation from February 1, 1975, to July 22, 1975, Sundstrand United Kingdom, Ltd., accounted for all U.S. imports from the United Kingdom of water-circulating pumps of the type included in this investigation. Price comparisons were made on 100 percent of such sales, valued at approximately * * *. Dumping margins were found on 99.87 percent of the sales. The margins ranged from 3 to 42 percent (based on the exporter's sales price), 1/

* * * * * * * *

Fair-value comparisons were made on the basis of an adjusted home market price and the derived exporter's sales price. Sales in the home market during the period of the investigation amounted to more than * * * times the volume of sales to the United States, thus establishing home market sales as a reasonable basis for fair-value calculations.

The exporter, Sundstrand United Kingdom, is a subsidiary of Sundstrand International S.A. of Switzerland, which is in turn a

---

* * * * * * *

subsidiary of the importer, Sundstrand Corp. of Rockford, Ill. Since these two companies are related, the actual purchase price would not necessarily correspond to an open market price. For this reason the exporter's sales price is derived by starting with the price received by the importer from his customers in the United States and working back by subtracting from this the various selling and importation costs incurred by the importer.

Home market price

* * * * * * *

* * * * * * *

Exporter's sales price

* * * * * * *

* * * * * * *

Sample calculation of LTFV margin

* * * * * * *

Change in status of the exporter

Prior to 1975, Sundstrand Corp. of Rockford, Ill., imported water-circulating pumps from Sundstrand Hydraulic, A.B., of Sweden. However, Swedish pump production operations were closed down, and in early 1975 Sundstrand Corp. began importing from the United Kingdom. * * *

On August 1, 1975, the Sundstrand United Kingdom facility for productio of water-circulating pumps was sold to the Myson Group located in the United Kingdom. Sundstrand Corp. remains the exclusive distributor of Myson's pumps in the United States. Since the Myson Group and Sundstrand Corp. are unrelated companies, the LTFV comparison becomes the difference between the importer's purchase price and the home market price. A sample calculation of LTFV margins under these changed conditions is shown below:

* * * * * * *

The Domestic Industry

Introduction

Five firms are known to be currently manufacturing water-circulating pumps for residential heating. Only the complainant manufactures wet-motor pumps, although a foreign firm is constructing a plant in the United States to manufacture them. Four firms, including the producer of the wet-motor type, manufacture mechanical-seal pumps. The fifth firm is the sole producer of magnetically coupled pumps.

In the past there were more firms that manufactured water-circulating pumps for residential heating. In the late 1960's and the early 1970's, three known companies discontinued production of residential heating pumps. None of these companies reported competition from the Sundstrand-imported pump as a factor in their decision to discontinue. One company reported that its "quality pump" was too expensive to compete in the market. Another company reported that engineering problems with the design of the pump together with cost factors compelled it to stop production.

Water-circulating pumps for residential heating have been produced in the United States since the 1920's. Although the wet-motor pump was introduced about 15 years ago, U.S. users have preferred the mechanical-seal pump.

Producers

Bell & Gossett (B & G) is the major domestic producer of residential water-circulating pumps. From 1971 to 1975, B & G accounted

for approximately * * * of total sales of the five domestic producers. Bell & Gossett is a subsidiary of ITT, which owns several European companies that make wet-motor pumps, but B & G produces only a mechanical-seal pump for residential use. B & G makes many larger water-circulating pumps and related products and carries on extensive research and development activities.

Taco, Inc., the complainant, ranks as the second largest U.S. producer of residential water-circulating pumps, accounting for approximately * * * of total sales of the five domestic producers. Taco produces both the mechanical-seal pump (for the past 20 to 25 years) and a wet-motor pump (for about 15 years) in addition to related hydronic products. Its first wet-motor pump, built under a Swiss license, was soon replaced by an improved (No. 195) pump, which in turn was replaced by the current (No. 007) model. The current pump was introduced about 5 years ago, shortly after Sundstrand began to import its wet-motor water-circulating pump.

The other three producers are relatively small, accounting together for less than * * * percent of total sales by all producers. Both Thrush Products and Armstrong Products make a mechanical-seal pump for residential heating. Armstrong Products is a subsidiary of Armstrong, S.A. Ltd., of Toronto, Canada; and the Canadian parent is a supplier of selected parts. The March Manufacturing Co., the third producer, limits production to magnetically coupled pumps; unlike the other producers, March does not make related hydronic products.

Grundfos Pumps Corp.--a subsidiary of Grundfos A/S Denmark, a Danish manufacturer of hydronic equipment--is building a plant in California to produce wet-motor pumps and other hydronic equipment for sale in the United States. Completion of the plant is scheduled for * * * . Until then, Grundfos will export pumps to the United States. Grundfos believes that its quality pumps can effectively compete with the U.S.-produced and Sundstrand-imported pumps.

Table 3, below, lists the domestic producers currently manufacturing water-circulating pumps for residential heating, including the foreign subsidiary planning to commence production shortly.

Table 3.--Water-circulating pumps for residential heating: U.S. producers as of May 1976

Producer	Location of production facilities	Type of pump
Bell & Gossett	Morton Grove, Ill	Mechanical-seal.
Taco, Inc	Cranston, R.I	Mechanical-seal and wet-motor.
Thrush Products	Peru, Ind	Mechanical-seal.
Armstrong Products	North Tonawanda, N.Y	Mechanical-seal.
March Manufacturing Co	Glenview, Ill	Magnetically coupled.
Grundfos Pumps Corp	Clovis, Calif. (under construction--not yet in production).	Wet-motor.

The market

The U.S. market for water-circulating pumps for residential heating is relatively small compared with the number of houses using

nonhydronic heating systems. Six to seven percent of all homes in the United States are estimated to have hot-water heating, and some of these homes still rely on the gravity system to circulate the hot water. Few would disagree with the claim that hot-water heating is the quality heating system. However, warm-air heating has been by far the preferred method of heating because it is less expensive to install and operate and can be easily adapted to central air-conditioning, which is impractical with the hot-water heating system. Furthermore, hot-water heating in some instances is at a disadvantage in comparison with the recently developed heat pumps which combine heating and air-conditioning.

The market for pumps and hot-water heating is mainly located in the northeast and Middle Atlantic States.

Pumps are principally sold either as original equipment or as replacements for pumps in existing hot-water heating systems. As would be expected, the demand for pumps as original equipment depends largely upon new housing starts. The life of an original-equipment pump varies widely but, according to the trade, averages roughly 10 to 15 years. A malfunctioning wet-motor pump is generally replaced, while a mechanical-seal pump can sometimes be repaired before requiring replacement. Price is not an unimportant factor in the demand for replacement, but plumbers tend to replace a pump with the same type, reflecting in part installation problems arising from the use of pumps of different dimensions.

Channels of distribution

Domestic manufacturers of water-circulating pumps sell primarily to two types of customers--stocking representatives and original-equipment manufacturers. Stocking representatives perform the function of warehousing an inventory of pumps and selling to their customers, the wholesalers. The wholesaler warehouses to a lesser extent, and in turn sells to the plumber, heating contractor, and fuel oil dealer. There is a large replacement market. The OEM is generally a boiler manufacturer that incorporates the water-circulating pump in a hot-water boiler system and sells the package to a builder for use in new homes.

The importer, Sundstrand Corp., sells primarily to exchange stations and OEM's. Exchange stations maintain a stock of pumps and parts which can be used for warranty repair or replacement. They sell directly to customers such as the plumber. Sundstrand Corp. has sold a fuel oil pump for many years and was able to rely on the existing distribution system in selling the water-circulating pumps.

Sales to residential markets and for small commercial applications are spread throughout the United States. However, sales are stronger in the colder north and in certain areas which have traditionally used hot water rather than other methods of heating.

Consideration of Injury

U.S. consumption

* * * * * * *

Table 4.--Water-circulating pumps: 1/ U.S. producers' shipments, U.S. sales of imported articles, exports of domestic merchandise, and consumption, by types, 1971-75, January-June 1974, and January-June 1975

* * * * * * *

Table 4.--Water-circulating pumps: 1/ U.S. producers' shipments, U.S. sales of imported articles, exports of domestic merchandise, and consumption, by types, 1971-75, January-June 1974, and January-June 1975--Continued

* * * * * * *

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

* * * * * * *

Because the replacement market has been relatively stable in recent years, the fluctuations in domestic consumption of water-circulating pumps for residential heating have mainly reflected changes in the housing-construction industry. Thus, the depression in housing construction that began in 1973 weakened the demand for boilers and, in turn, the demand for water-circulating pumps in 1974 and 1975. Table 5 and figure 5 on the following pages show how consumption of water-circulating pumps roughly paralleled the changes in new housing starts and in boiler shipments. 1/

To a lesser extent, other factors have affected the consumption of these pumps. One of the more important factors has been a gradual shift in demand from hot-water heating systems to warm-air and all-electric (nonhydronic) heating systems and to heat pumps. Solar heating has been a negligible factor to date, but in the future it may substantially increase the use of water-circulating pumps.

U.S. production and inventories

Wet-motor pumps account for a small percentage of the total production of all types of water-circulating pumps for residential heating. * * *

1/ A closer correlation should not be expected because (1) new housing starts include all houses regardless of the heating system, and (2) boiler shipments include "commercial" boilers as well as residential replacement boilers.

* * * * * * *

Table 5.--U.S. consumption of water-circulating pumps, new privately owned housing units started, and boiler shipments, 1971-75

(In thousands of units)

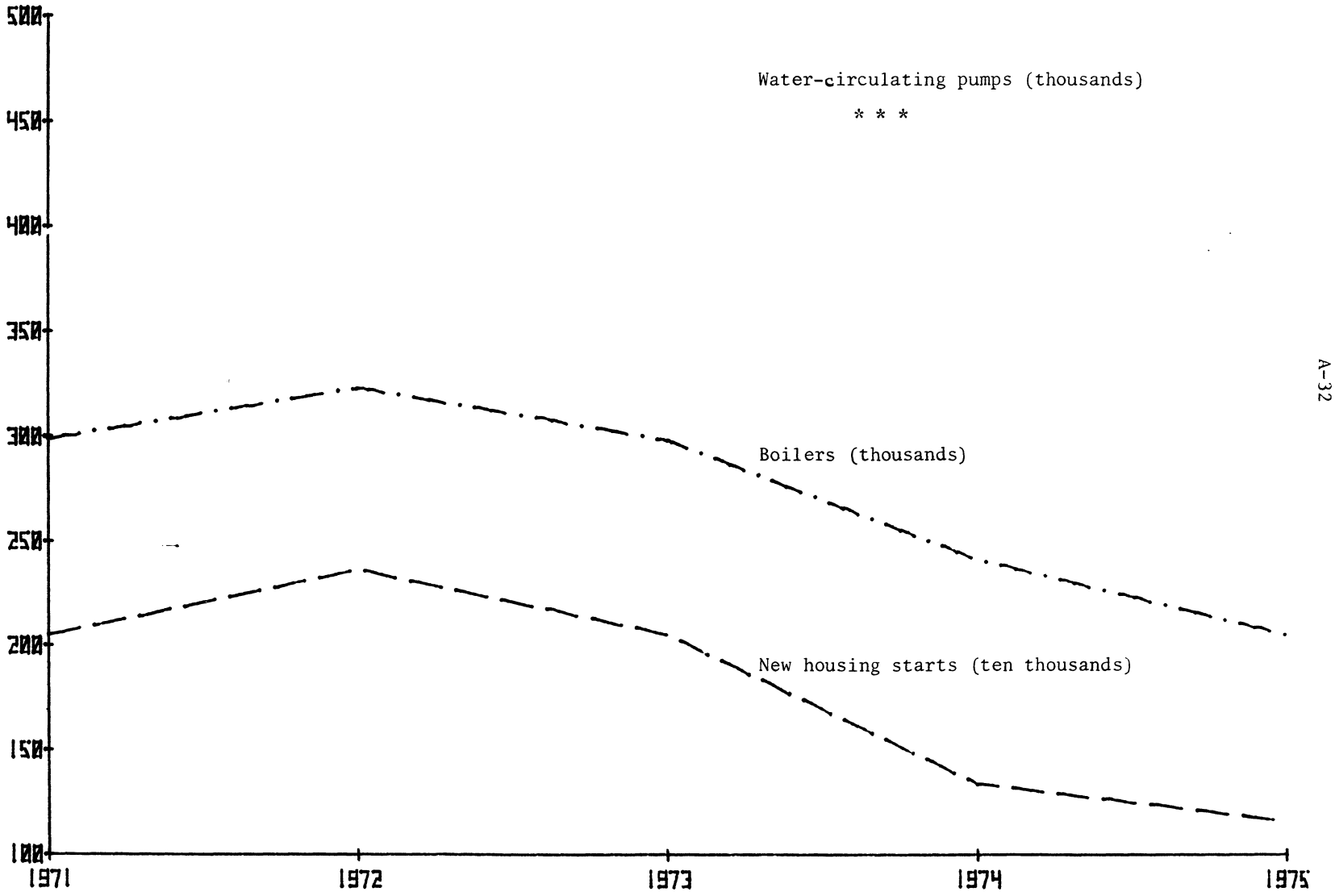
Year	Consumption of water circulating pumps 1/	New privately owned housing units started	Boiler shipments 2/
1971	***	2,052	299
1972	***	2,357	323
1973	***	2,045	298
1974	***	1,338	241
1975	***	1,163	205

1/ Includes water-circulating pumps with a horsepower rating of 1/12 or less.

2/ Includes cast-iron heating boilers and an estimate of steel heating boilers.

Source: Consumption data, from table 4, pp. 27-28; housing units started, from U.S. Department of Commerce, Statistical Abstract of the United States, 1975, and U.S. Department of Commerce, Business Conditions Digest, March 1976; boiler shipments, from the Hydronics Institute, Berkeley Heights, N.J.

Figure 5.--U.S. consumption of water-circulating pumps, new privately owned housing units started, and boiler shipments, 1971



A-32

* * * * * * *

U.S. shipments and exports

* * * * * * *

Table 6.--Water-circulating pumps: 1/ U.S. production, by types, 1971-75, January-June 1974, and January-June 1975

* * * * * * *

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

Table 7.--Water-circulating pumps: 1/ Inventories of U.S.-made water-circulating pumps, by types, on Dec. 31 of 1970-75, and June 30 of 1974 and 1975

* * * * * * *

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

* * * * * * *

Table 8.--Water-circulating pumps: 1/ U.S. producers' shipments, by type of pump and type of customer, 1973-75

* * * * * * *

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

Table 9.--Water-circulating pumps: 1/ Shipments by Taco, Inc., by types, 1971-75, January-June 1974, and January-June 1975

* * * * * * *

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

* * * * * * *

U.S. imports

Imports of water-circulating pumps for residential heating during 1971-75 consisted exclusively of the wet-motor type (table 4). This reflects Europe's traditional role as a producer of wet-motor pumps almost exclusively.

* * * * * * *

Table 10.--Water-circulating pumps, wet-motor type: U.S. imports for consumption, by principal sources, 1971-75, January-June 1974, and January-June 1975

* * * * * * *

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

* * * * * *

Table 11.--Water-circulating pumps, wet-motor type: U.S. sales of imported articles, by principal sources, 1971-75, January-June 197[illegible] and January-June 1975

* * * * * * *

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

Table 12.--Water-circulating pumps, wet-motor type: U.S. importers' inventories of the foreign-made articles, on Dec. 31 of 1970-75, and June 30 of 1974 and 1975

* * * * * * *

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

Table 13.--Water-circulating pumps, wet-motor type: U.S. importers' sales, by type of customer, 1973-75

* * * * * * *

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

* * * * * * *

The foreign industry

Whereas the mechanical-seal pump dominates the U.S. market for water-circulating pumps, the wet-motor pump is predominant in Europe. Furthermore, the European market is considerably larger than the U.S. market because Europeans overwhelmingly prefer the hot-water heating system. The largest manufacturer of water-circulating pumps for residential heating is Grundfos A/S Denmark. This company has manufacturing facilities throughout Europe and is constructing a plant in the United States. The numerous large and small European manufacturers of wet-motor pumps are estimated to produce several million pumps annually.

Loss of sales

In some markets and especially in certain geographical areas, price appears to have been an important criterion in the purchase of water-circulating pumps for residential heating. Pumps sold to plumbers for replacement or for installation on "nonpackaged boilers"

may be selected on the basis of the lowest price. 1/ Long Island, N.Y., is considered an especially price-conscious market area. * * *

With regard to OEM sales, most manufacturers and their customers, who usually tell the manufacturer which pump to install on the boiler, do not consider price as an important factor in selecting water-circulating pumps, mainly because the pump accounts for such a small part (possibly no more than 5 to 10 percent) of the total price of the packaged boiler. * * *

1/ Heating boilers that are sold with the water-circulating pump and other equipment installed by the boiler manufacturers are called "packaged boilers." When sold without this equipment, the boiler may be referred to as a nonpackaged boiler.

Prices

U.S. producers of water-circulating pumps sell primarily to stocking representatives and original-equipment manufacturers, while imports are sold primarily to exchange stations and OEM's. Prices to OEM's are generally lower in both cases. Stocking representatives and exchange stations are at similar, although not identical, levels in the chain of distribution. Stocking representatives maintain a large inventory and a sales force which sells to the wholesaler, which in turn sells to the plumber and heating contractor. Exchange stations sell direct to customers, such as the plumber. They also perform warranty repair and replacement of faulty pumps.

The imported Sundstrand pump has been sold with shutoff flanges since its introduction to the United States. In response to this feature, which allows removing the pump without draining the water from the system, Taco, the complainant, developed and introduced a shutoff flange in 1973 and has sold some of its wet-motor model 007 with shutoff flanges to stocking representatives. Almost all other pumps in the U.S. market are sold with standard flanges or in a few cases with no flange.

Sundstrand Corp. imported the shutoff flanges from Sweden until 1976. At the time of the Treasury investigation period, February-July 1975, the shutoff flanges were valued at * * *, f.o.b. Sweden. Beginning in March 1976, Sundstrand Corp. purchased the shutoff flanges from the United Kingdom at about * * * f.o.b. port of exportation,

which, at an exchange rate of £1 = $1.85, translates to * * *. 1/ In comparsion, shutoff flanges sold with U.S.-produced pumps were priced from * * * to * * *, and standard flanges, from $0.70 to $1.40.

Price data on water-circulating pumps were elicited in terms of lowest net selling prices to the two types of customers for U.S. producers and importers. The range and weighted average prices of U.S.-produced water-circulating pumps to stocking representatives and original-equipment manufacturers are shown in table 14. * * *

Other than wet-motor types, composed of

1/ The other importer, Grundfos, which has yet to become a factor in the market, offers its pump, a wet-motor type, with either standard flanges at $1 or shutoff flanges at $5.

Table 14.--Lowest net selling prices of U.S.-produced water-circulating pumps, 1/ to specified types of customers, by type of pump and flange and by quarters, 1973-75

* * * * * * *

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

mechanical-seal and magnetically coupled types, generally command a higher price than the wet-motor pumps, although the two price ranges overlap.

* * * * * * *

The range and weighted average prices of imported wet-motor pumps with shutoff flanges to exchange stations and OEM's are shown in table 15. * * *

Weighted average prices of imported wet-motor pumps with shutoff flanges to exchange stations were lower than weighted average prices to stocking representatives of either U.S.-produced wet-motor or other than wet-motor pumps with standard flanges. However, the price ranges overlapped. With respect to OEM's, weighted average prices of imports with shutoff flanges were lower than those of U.S.-produced other than wet-motor pumps and generally lower than those of U.S.-produced wet-motor pumps with standard flanges.

Table 15.--Lowest net selling prices of imported wet-motor water-circulating pumps with shutoff flanges to specified types of customers, by quarters, 1973-75

* * * * * * *

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

Price trends in the form of price indexes, uninfluenced by changing weights, are shown in table 16 and figures 6, 7, and 8. * * *

During 1973-75, prices to OEM's of U.S.-produced and imported pumps increased by * * *. In comparison the wholesale price index for industrial commodities rose by 44.5 percent, and the wholesale price index for pumps, compressors, and equipment rose 52.5 percent. The wholesale price index for fractional horsepower AC electric motors rated at 1/20 to 1/5 horsepower, an important component of water-circulating pumps, increased 31.6 percent.

The fact that prices of U.S.-produced wet-motor pumps with shutoff flanges to stocking representatives decreased from the second quarter of 1974 to the fourth quarter of 1975 could be taken as evidence of price depression, while the fact that prices of all types of U.S.-produced water-circulating pumps did not keep pace with the general

Table 16.--Price indexes for water-circulating pumps; 1/ industrial commodities; pumps, compressors, and equipment; and electric motors, by quarters, 1973-75

(January-March 1973=100)

Period	U.S.-produced water-circulating pumps					Industrial commodities at wholesale	Pumps, compressors, and equipment at wholesale	Fractional horsepower electric motors, AC, 1/20-1/5 hp at wholesale	Imported wet-motor water-circulating pumps with shutoff flanges	
	To stocking representatives			To original-equipment manufacturers					To exchange stations	To OEM's
	Wet-motor		Other than wet-motor, 3/	Wet-motor,	Other than wet-motor, 3/					
	Standard flanges	Shutoff flanges 2/	standard flanges	standard flanges	standard flanges					
1973:										
Jan.-March	***	***	100.0	***	100.0	100.0	100.0	100.0	***	***
April-June	***	***	100.1	***	100.5	103.1	101.2	102.6	***	***
July-Sept	***	***	100.9	***	101.2	104.4	102.0	103.8	***	***
Oct.-Dec	***	***	101.1	***	101.2	107.3	104.4	106.7	***	***
1974:										
Jan.-March	***	***	103.3	***	102.7	114.3	106.8	109.0	***	***
April-June	***	***	105.4	***	106.3	123.7	114.3	113.4	***	***
July-Sept	***	***	113.6	***	112.9	132.5	128.0	124.4	***	***
Oct.-Dec	***	***	113.9	***	113.9	136.5	139.9	128.4	***	***
1975:										
Jan.-March	***	***	114.7	***	116.2	138.6	146.3	127.5	***	***
April-June	***	***	119.4	***	116.6	140.2	149.4	127.0	***	***
July-Sept	***	***	119.4	***	116.6	141.9	150.8	126.4	***	***
Oct.-Dec	***	***	119.3	***	120.6	144.5	152.5	131.6	***	***

1/ Includes water-circulating pumps with horsepower rating of 1/12 or less.
2/ October-December 1973 set equal to 100.0.
3/ Includes mechanical-seal and magnetically coupled water-circulating pumps.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission and from data supplied by the U.S. Bureau of Labor Statistics.

A-52

Figure 6.--Price indexes for water-circulating pumps sold to stocking representatives and exchange stations and for industrial commodities, by quarters, 1973-75.

* * * * * * *

Source: Table 16.

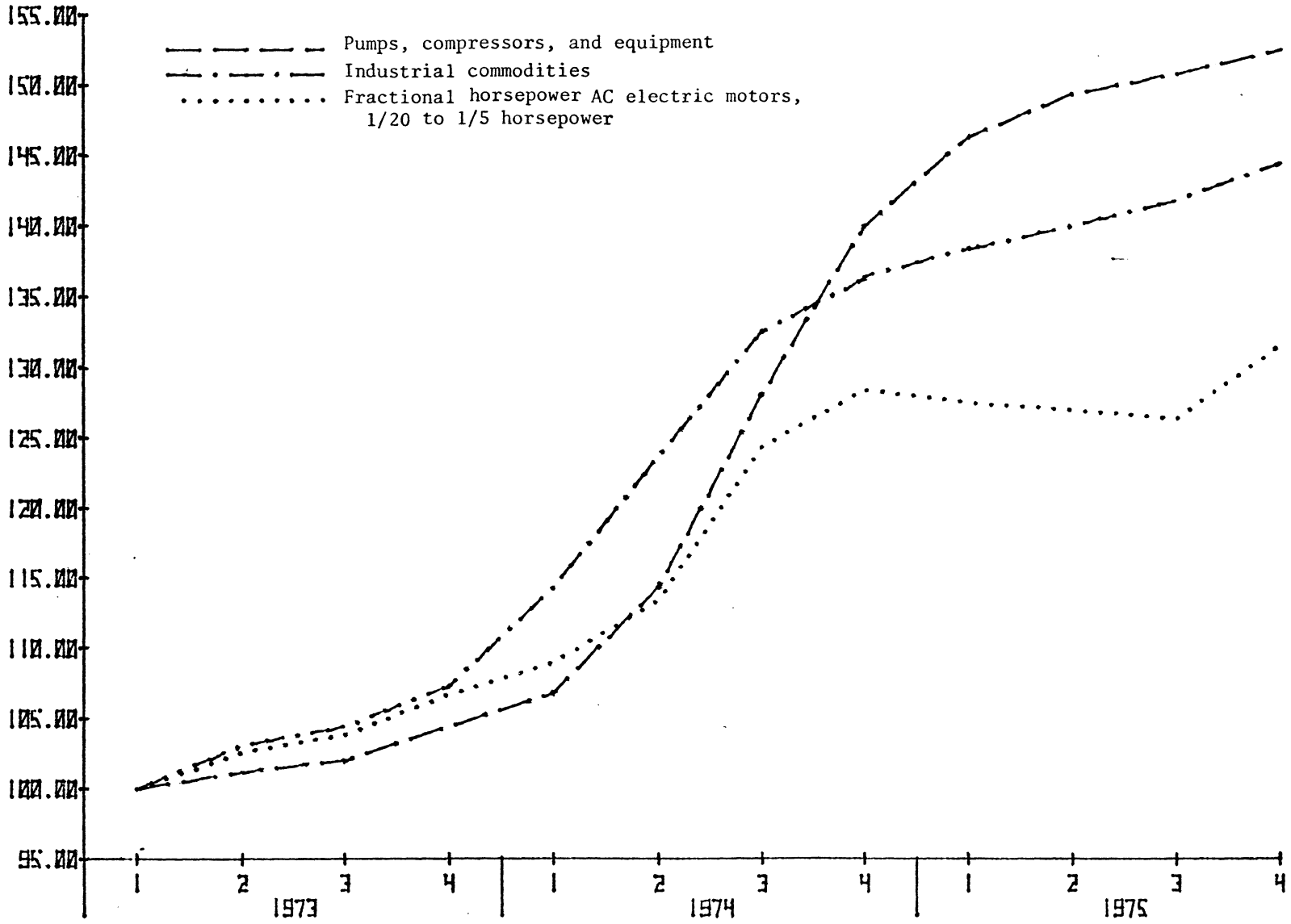
Figure 7.--Price indexes for water-circulating pumps sold to original-equipment manufacturers and for industrial commodities, by quarters, 1973-75.

* * * * * * *

Source: Table 16.

Figure A-55.—Wholesale price indexes for industrial commodities; pumps, compressors, and equipment; and electric motors, by quarters, 1973-75.

(January-March 1973=100)



A-55

price increases in the economy as measured by the three wholesale price indexes presented could indicate that there has been price suppression.

In order to get a better idea of price differences between U.S.-produced and imported pumps, prices of selected models are shown in tables 17 and 18 and figures 9 and 10.

* * * * * * *

Table 17.--Selected water-circulating pump models: Lowest net selling prices to exchange stations and stocking representatives with percentage amount imported models sold above or below (-) U.S.-produced models, by quarters, 1973-75

* * * * * * *

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

Table 18.--Selected water-circulating pump models: Lowest net selling prices to original-equipment manufacturers with percentage amount imported models sold above or below (-) U.S.-produced models, by quarters, 1973-75

* * * * * * *

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

Figure 9.--Selected water-circulating pump models: Lowest net selling prices to exchange stations and stocking representatives, by quarters, 1973-75

* * * * * * *

Source: Table 17.

Figure 10.--Selected water-circulating pump models: Lowest net selling prices to OEM's, by quarters, 1973-75

* * * * * * *

Source: Table 17.

* * * * * * *

Employment

* * * * * * *

Table 19. Average number of persons employed in U.S. establishments in which water-circulating pumps were produced, 1971-75, January-June 1974, and January-June 1975

* * * * * * *

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

* * * * * * *

Table 20.--Man-hours expended by production and related workers in U.S. establishments in which water-circulating pumps were produced, 1971-75, January-June 1974, and January-June 1975

* * * * * * *

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

Table 21.--Production (output) per man-hour and index of production (output) per man-hour of production and related workers engaged in making water-circulating pumps 1/ in U.S. establishments, by types of pumps, 1971-75, January-June 1974, and January-June 1975

* * * * * * *

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

Profit-and-loss experience

Four of the five domestic producers of water-circulating pumps submitted profit-and-loss data on their water-circulating-pump operations for the periods 1972-75 and January-June of 1974 and 1975. Only three producers were able to submit data for 1971.

* * * * * * *

Table 22.--Profit-and-loss experience of the only U.S. producer (Taco, Inc.) on its wet-motor-pump operations, of 4 domestic producers 1/ on their mechanical-seal-pump operations, and combined operations of producers of wet-motor pumps and mechanical-seal pumps, 1971-75, January-June 1974, and January-June 1975

* * * * * * *

Source: Compiled from data submitted to the U.S. International Trade Commission by the domestic producers.

* * * * * * *

* * * * * * *

Table 23.--Profit-and-loss experience of 4 U.S. producers of mechanical-seal pumps, 1971-75, January-June 1974, and January-June 1975

* * * * * * *

Source: Compiled from data submitted to the U.S. International Trade Commission by the domestic producers.

Consideration of Likelihood of Injury

Sales at less than fair value (LTFV)

During the period of the Treasury investigation, 99.87 percent of all sales, which amounted to * * *, were found to be at LTFV margins ranging from 3 to 42 percent (based on exporter's sales price) with a total estimated weighted average of * * * percent. * * *

Import penetration

* * * * * * *

Consideration of Industry Prevented From Being Established

Grundfos A/S Denmark, the world's largest manufacturer of water-circulating pumps, is investing in manufacturing facilities in Clovis, Calif., in expectation of marketing in the United States in * * * a wet-motor pump for residential heating. * * *

APPENDIX A

LETTER OF FEBRUARY 26, 1976, FROM DAVID R. MACDONALD, ASSISTANT SECRETARY, DEPARTMENT OF THE TREASURY, TO WILL E. LEONARD, JR., CHAIRMAN, U.S. INTERNATIONAL TRADE COMMISSION.

A-74

DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20220

ASSISTANT SECRETARY

'76 FEB 27 P3:09

FEB 26 1976

DOCKET NUMBER
#334
Secretary
Intl. Trade Commission

U.S. INTL. ... SSN

Dear Mr. Chairman:

In accordance with section 201(a) of the Antidumping Act, 1921, as amended, you are hereby advised that water circulating pumps, wet motor type, suitable for use in residential and commercial hydronic heating systems, from the United Kingdom, are being, or are likely to be sold at less than fair value within the meaning of the Act.

The United States Customs Service will make available to the U.S. International Trade Commission as promptly as possible the files on sales or likelihood of sales at less than fair value of the water circulating pumps subject to this determination for the Commission's use in connection with its investigation as to whether an industry in the United States is being, or likely to be, injured, or is prevented from being established, by reason of the importation of this merchandise into the United States.

Since some of the data in this file is regarded by the U.S. Customs Service to be of a confidential nature, it is requested that the U.S. International Trade Commission consider all information therein contained for the official use of the U.S. International Trade Commission only, and not to be disclosed to others without prior clearance with the U.S. Customs Service.

Sincerely yours,

David R. Macdonald
Assistant Secretary
(Enforcement, Operations
and Tariff Affairs)

The Honorable
Will E. Leonard, Jr., Chairman
U.S. International Trade Commission
Washington, D.C. 20436

APPENDIX B

NOTICE REGARDING WATER CIRCULATING PUMPS, WET MOTOR TYPE FROM THE UNITED KINGDOM, PUBLISHED IN THE FEDERAL REGISTER, VOL. 41, NO. 43, OF MARCH 3, 1976.

FEDERAL REGISTER, VOL. 41, NO. 43--WEDNESDAY, MARCH 3, 1976

NOTICES

Office of the Secretary

[APP-2-04-O:D:T DC]

WATER CIRCULATING PUMPS, WET MOTOR TYPE FROM THE UNITED KINGDOM

Antidumping: Determination of Sales at Less Than Fair Value

Information was received on April 25, 1975, that water circulating pumps, wet motor type, suitable for use in residential and commercial hydronic heating systems from the United Kingdom, were being sold at less than fair value within the meaning of the Antidumping Act, 1921, as amended (19 U.S.C. 160 *et seq.*) (referred to in this notice as "the Act").

A "Withholding of Appraisement Notice" issued by the Secretary of the Treasury was published in the FEDERAL REGISTER of November 26, 1975 (40 FR 54843).

Determination of Sales at Less Than Fair Value: I hereby determine that, for the reasons stated below, water circulating pumps, wet motor type, suitable for use in residential and commercial hydronic heating systems, from the United Kingdom are being, or are likely to be, sold at less than fair value within the meaning of section 201(a) of the Act (19 U.S.C. 160(a)).

Statement of Reasons on Which This Determination is Based: The reasons and bases for the above determination are as follows:

a. *Scope of the Investigation*

It appears that all imports of the subject merchandise from the United Kingdom were manufactured by Sundstrand United Kingdom. Ltd., King's Lynn, England. Subsequent to initiation of this investigation. Sundstrand United Kingdom, Ltd., sold its manufacturing facility in the United Kingdom to the Myson Group, Ltd. As there were no sales of the subject merchandise to the United States by the Myson Group, Ltd., during the investigatory period, the investigation was limited to Sundstrand United Kingdom, Ltd.

b. *Basis of Comparison*

For the purpose of considering whether the merchandise in question is being, or is likely to be, sold at less than fair value within the meaning of the Act, the proper basis of comparison is between exporter's sales price and the home market price of similar merchandise. Exporter's sales price, as defined in section 204 of the Act (19 U.S.C. 163), was used since all export sales appear to be made to a related United States purchaser. Home market price, as defined in section 153.3, Customs Regulations (19 CFR 153.3), was used since similar merchandise appears to be sold in the home market in sufficient quantities to provide a basis of comparison for fair value purposes.

c. *Exporter's Sales Price*

For purposes of this determination of sales at less than fair value, adjustments have been made on the following bases. In accordance with section 153.31(b), Customs Regulations (19 CFR 153.31(b)) pricing information was obtained concerning imports of water circulating pumps, wet motor type, suitable for use in residential and commercial hydronic heating systems, from the United Kingdom during the period February 1, 1975, through July 22, 1975.

In the import transaction, all of the merchandise was sold or agreed to be sold in the United States, before or after the time of importation, by or for the account of the exporter, within the meaning of section 204 of the Act. The exporter's sales price has been calculated on the basis of the price to manufacturers, f.o.b. plant, in the United States. Deductions have been made for differences in merchandise, transportation and other charges from the United Kingdom to the United States delivery point, additional labor and packing charges, inland freight and insurance in the United Kingdom, and selling expenses incurred in the United States.

The differences in the merchandise include a pair of valves sold with the pumps in the United States but separately imported from Sweden, and the ocean freight, insurance and United States duties incurred on the valves. Adjustments also have been made for differences between the model sold in the United States and the most similar model sold in the United Kingdom. Transportation and other charges which have been deducted are ocean freight, marine insurance, brokerage fees, inland freight in the United States, and United States duties. Adjustments have been made for repacking costs in the United States and for the labor involved in the repacking.

d. *Home Market Price*

For the purpose of this determination of sales at less than fair value, adjustments have been made on the following bases. The home market price has been calculated on the basis of the price to original equipment manufacturers, f.o.b. manufacturer's plant. Adjustments have been made for transportation, warranty, insurance and packing costs, as appropriate, in accordance with section 153.8, Customs Regulations (19 CFR 153.8). Adjustments for transportation and packing expenses relate to differences in packing costs between home market sales and export sales, and to inland freight and insurance involved in home market sales. Adjustments for warranty are for costs incurred on home market sales.

Adjustments for differences in circumstances of sale in accordance with section 153.8, Customs Regulations (19 CFR 153.8), for interest costs and administrative expenses were not shown to bear a direct relationship to the sales under

consideration and no adjustment has been allowed for these expenses.

Counsel for Myson Group, Ltd., requested that the investigation be discontinued pursuant to section 153.15, Customs Regulations (19 CFR 153.15), on the ground that Sundstrand United Kingdom, Ltd., is no longer manufacturing the subject merchandise in the United Kingdom for export to the United States. The question whether a change in the ownership of a manufacturing facility constitutes circumstances in which discontinuance is appropriate has been considered. The Secretary has concluded that the factual situation presented is not an appropriate case for discontinuance.

e *Result of Fair Value Comparison*

Using the above criteria, exporter's sales price was found to be lower than the home market price of similar merchandise. Comparisons were made on all pumps sold in the United States during the period of the investigation. Margins were found, ranging from 3 to 42 percent on 99.87 percent of the sales compared.

The United States International Trade Commission is being advised of this determination.

This determination is being published pursuant to section 201(c) of the Act (19 U.S.C. 160(c)).

DAVID R. MACDONALD,
Assistant Secretary of the Treasury.

February 26, 1976.

[FR Doc.76-6100 Filed 3-2-76,8:45 am]