

# **TRENDS IN INTERNATIONAL TRADE IN NONPOWERED HANDTOOLS**

**Report to the Committee on Ways  
and Means, U.S. House of  
Representatives on Investigation  
No. 332-163 Under Section 332  
of the Tariff Act of 1930**

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## PREFACE

On June 1, 1983, at the request of the House Committee on Ways and Means (app. A) and in accordance with section 332(g) of the Tariff Act of 1930 (19 U.S.C 1332(g)), the United States International Trade Commission instituted investigation No. 332-163 for the purpose of assessing trends in international trade in nonpowered handtools and conditions of competition between domestic and foreign handtool producers. This study assesses the factors affecting the present international competitive position of U.S. nonpowered handtool producers, 1/ compares structural characteristics of the U.S. industry and foreign industries (by major world suppliers), evaluates product characteristics of foreign-made and domestically produced handtools both in the U.S. market (by major world suppliers) and in foreign markets, examines the impact on domestic producers of growing competition from imports, and identifies the steps that have been and may be taken to counteract these competitive developments.

Notice of this investigation was given by posting copies of the notice of investigation at the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and by publication of the notice in the Federal Register (48 F.R. 26543, June 8, 1983) (app. B).

A public hearing in connection with this investigation was held in the Commission's hearing room on November 9, 1983, and testimony was received from U.S. producers, foreign producers, and importers of nonpowered handtools (app. I).

In the course of this investigation, the Commission collected data and information from questionnaires sent to producers, importers, and purchasers of nonpowered handtools. In addition, information was gathered from various public and private sources, from the public hearing, from questionnaire responses prepared by overseas posts of the U.S. Department of State, from interviews with industry executives representing producers, importers, and purchasers of nonpowered handtools, as well as from public data gathered in other Commission studies.

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1/ This study covers producers of all nonpowered handtools, including wrenches, pliers, screwdrivers, striking and struck tools (e.g., hammers, sledges, punches, and chisels), clamps, vises, hand-held automotive tools (e.g., body and fender tools, wheel and gear pullers, and valve tools), and metal-cutting snips and shears (including bolt cutters). This study does not cover producers of interchangeable tools (e.g., dies and drilling bits) or powered handtools.



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## EXECUTIVE SUMMARY

The U.S. nonpowered handtool industry is concerned that its competitive position in domestic and foreign markets has been eroding in recent years. During 1978-82, the reduced industrial output and building activity prevalent in most countries had an adverse effect on world production of nonpowered handtools. Major foreign producers intensified their efforts during this period to compete in the large U.S. handtool market. As the impact of the global recession on the world handtool industry intensified during late 1981 and 1982, the effect on the U.S. nonpowered handtool industry tended to be greater than on producers in other countries. Nonpowered handtool production and capacity utilization in the United States declined in 1981-82 whereas production of handtools by major foreign competitors increased. Although exports of most major supplying countries peaked in 1980, U.S. exports continued to increase through 1981 and dropped significantly in quantity during 1982.

The major findings of the study are summarized below.

1. Structure of the domestic and foreign industry

- o The United States is a world leader in the production and consumption of handtools.

World production of nonpowered handtools is estimated to have exceeded \$5 billion in 1982 and the United States is the world's largest producer. In 1982, U.S. production totaled \$2.9 billion, which was about 15 percent less than production in 1981. Nevertheless, U.S. production in 1982 was about four times greater than production of \$684 million in West Germany, the world's second largest producer of nonpowered handtools. During 1978-81, apparent U.S. consumption of nonpowered handtools increased from \$2.7 billion to \$3.5 billion, before decreasing to \$3 billion in 1982.

- o The U.S. nonpowered handtool industry registered a trade deficit for the first time in 1982, whereas major foreign competitors showed a considerably large trade surplus in 1982.

U.S. handtool trade in 1982 with the top ten foreign supplying countries has largely been on an import basis in the U.S. market, with the exception of Canada and the United Kingdom. In 1982, U.S.-produced handtools registered a trade deficit of about \$59 million compared with a trade surplus of \$38 million and \$17 million, respectively, in 1980 and 1981. The U.S. nonpowered handtool industry generated a favorable trade balance of \$76 million in 1978. West Germany showed a \$332 million trade surplus in 1982, along with Japan (\$229 million) and Taiwan (\$187 million).

- o Although the U.S. is the second largest exporter of nonpowered handtools, U.S. nonpowered handtool manufacturers export a lower proportion of their total production than manufacturers in other major producing countries.

The United States exported 12 percent of its domestic production in 1981 (\$436 million) and 1982 (\$344 million), making its ratio of exports-to-

production the lowest among major handtool exporting countries. The United States is the largest market for handtools in the world and foreign producers cannot rely on their relatively limited domestic market to maintain or increase their production levels. West Germany exported an estimated 92 percent (\$627 million) and 83 percent (\$570 million) of its production in 1981 and 1982, respectively. Japan's ratio of exports-to-production is estimated to have remained at about 92 percent in 1981 (\$359 million) and 1982 (\$283 million). Taiwan exported 74 percent (\$205 million) of its production in 1982, and the United Kingdom and France exported 76 percent (\$191 million) and 46 percent (\$173 million) respectively, of domestic production--each representing a decline from its ratio of 1981.

- o U.S. exports of nonpowered handtools posted an increase during 1978-81, but fell during 1981-82.

The quantity of reported U.S. producers' aggregate export shipments rose 13 percent during 1978-81 to peak at 36.4 million pieces in 1981. Exports declined 40 percent to 21.7 million pieces in 1982, representing an overall decrease of 33 percent during the 5-year period. The ratio of exports to producers' shipments, in terms of quantity, remained fairly stable during 1978-82, and averaged about 5 percent annually during the period. Exports of vises marked an overall increase of 31 percent in terms of quantity, during 1978-82, whereas export shipments of the remaining product categories covered in the study declined by 10 to 47 percent.

- o The United States is more advanced in production technology than handtool producers in Taiwan and Korea and equal in technology to producers in the EC and Japan.

During 1978-82, domestic producers made capital investments designed to improve manufacturing capabilities and lower costs to provide or maintain a competitive advantage over many of its foreign counterparts. The use of robots was incorporated into the forging process and other finishing operations. Also, an increasing use of computers in the manufacturing process has resulted in the production of higher quality products and contributed to growth in productivity, which increased 13 percent from 23,130 pieces per employee in 1978 to 26,819 pieces per employee in 1982. Reported capital expenditures of handtool producers declined 16 percent during 1978-81 to \$56 million in the latter year. Capital expenditures rose 13 percent to \$63 million in 1982. The industry appears to have concentrated its capital improvements in the replacement of multimachine operations with equipment capable of several operations, with the intended goal of lowering manufacturing costs to help compete with certain cost advantages held by handtool manufacturers in the Far East.

- o U.S. producers' reported domestic shipments of nonpowered handtools rose during 1978-79, but declined during 1979-82 as demand fell.

U.S. demand for handtools is dependent on the level of activity in the construction, automotive and industrial industry sectors, and personal consumption expenditures in durable goods. Curtailed demand for handtools from the major markets contributed to declining domestic shipments,

particularly in 1982. The quantity of reported U.S. producers' domestic shipments fell 23 percent from a peak of 716 million pieces in 1979 to 553 million pieces in 1982. This represented an overall decrease of 16 percent in domestic shipments during 1978-82. On a product category basis, the change in the quantity of shipments during the 5 years ranged from a decline of 33 percent in vises to an increase of less than 1 percent in hand saws and parts.

- o U.S. producers' inventories increased during 1978-82, in spite of the economic uncertainty.

The end-of-year inventories of U.S. producers increased 26 percent to 118.6 million pieces during 1978-82, in anticipation of renewed demand for handtools. Throughout the 5-year period, inventories increased in all product categories with the largest increase (71 percent) occurring in socket wrenches and accessories. Importers' end-of-year inventories of handtools declined 15 percent to 11.8 million pieces during 1978-80, before increasing 50 percent to 17.8 million pieces by 1982. The largest increase in importers' inventories occurred in socket wrench sets which were 120 percent larger in 1982 than in 1978. U.S. producers generally maintain higher levels of inventory than importers and are able to respond much faster to orders from purchasers.

## 2. The current U.S. market

- o U.S. production of handtools increased from 1978 to 1979, but declined during 1979-82. U.S. producers' practical capacity rose steadily during the 5-year period.

Depressed demand contributed to a decline in reported U.S. production in 1982. Production peaked at 551.5 million pieces in 1979 before falling in an irregular pattern by 24 percent to 418.8 million pieces in 1982. Practical capacity to produce handtools rose steadily during 1978-82, increasing 19 percent and peaking at 1.0 billion pieces in 1982, largely due to productivity improvements of 13 percent made possible by capital expenditures for improved production capabilities.

- o U.S. imports of handtools increased during 1978-82.

The quantity of reported U.S. imports doubled during 1978-82 and reached 130.8 million pieces in 1982. Official statistics (on the basis of value only) show that total U.S. imports increased 42 percent during 1978-81 and peaked at \$419.2 million in 1981, then decreased 4 percent to \$403.8 million in 1982. The import value share of the U.S. market rose 2 percentage points during 1978-82, reaching 13 percent in 1982. The estimated import value share of apparent U.S. consumption for wrenches, pliers, and screwdrivers reflects increases during 1978-82. The major suppliers of imports were Taiwan and Japan, which together accounted for 60 percent (\$242.6 million) of total U.S. imports of handtools in 1982.

- o Taiwan replaced Japan as the leading foreign supplier of handtools in the U.S. market during 1978-82.

Taiwan became the largest supplier of U.S. handtool imports in 1980 and accounted for 36 percent (\$144.7 million) of total U.S. handtool imports in 1982. In the major handtool category of wrenches, Taiwan accounted for an increasing share of U.S. imports--from 28 percent (\$27.5 million) in 1978 to 58 percent (\$76.4 million) in 1982. Japan's share of U.S. wrench imports decreased from 54 percent (\$52.5 million) in 1978 to 29 percent (\$37.9 million) in 1982.

- o U.S. nonpowered handtool producers accounted for a growing share of U.S. imports during 1978-82.

U.S. producers imported a reported 30.5 million dollars' worth (63.7 million pieces) of nonpowered handtools in 1981, representing a fourfold increase from that of 1978. But such imports declined to \$17.7 million (41.6 million pieces) in 1982. Producer imports as a share of total U.S. handtool imports increased from 2 percent in 1978 to 4 percent in 1982. The primary reasons for importing nonpowered handtools are to broaden the product lines offered by domestic producers and to meet various retailer price points which cannot be achieved with domestically produced handtools.

- o As a share of sales revenue, U.S. nonpowered handtool industry profit outperformed the average for U.S. durable manufacturing corporations during 1978-82.

The ratio of profit per dollar of sales before taxes for the U.S. handtool industry fluctuated downward between 1978 and 1982, yet outperformed the average for U.S. durable manufacturing during the period. The ratio declined by almost 2 percentage points in the period to 9.5 percent, whereas the ratio for U.S. durable manufacturing decreased by more than 5 percentage points to 3.8 percent.

- o The distribution of domestically produced nonpowered handtools tends to be concentrated in the higher quality industrial and automotive markets, whereas imported handtools are typically concentrated in the lower quality consumer market.

The principal markets for domestic handtool products, in which nearly 75 percent of domestic shipments were distributed during 1980-83, are industrial and commercial distributors, hardware wholesalers and cooperatives, the automotive aftermarket, and original-equipment manufacturers which typically require a high-quality product. U.S. importers reported that 56 percent of their total shipments in 1980-83 were marketed through retail outlets such as department stores, discount stores and other retail stores which typically purchase lower quality handtools. However, imports of nonpowered handtools are a factor in all U.S. market segments and these markets may not necessarily be restricted by quality requirements of end users.

### 3. Conditions of competition

- o Handtool-producing countries in the Far East enjoy a competitive advantage in the cost of raw material, and the cost and availability of labor and capital, whereas U.S. producers have an edge in fuel cost and marketing techniques.

Industry evaluation of these structural characteristics indicates that foreign producers of handtools in the Far East (specifically Japan, Taiwan, and Korea) have an advantage over domestic producers in raw material cost, but U.S. producers compete on an equal basis in this area with the EC countries. In addition, producers in Far Eastern countries are perceived by U.S. producers to have the competitive advantage in the availability and cost of labor and in most areas of capital formation. However, the competitive status of the U.S. and EC handtool industries was relatively equal in these structural factors. U.S. producers were rated to have the competitive advantage in all facets of marketing and in the cost of energy.

- o A major competitive strength of domestic manufacturers in U.S. and foreign markets is their reputation for producing reliable and high-quality products, although certain foreign suppliers are improving the quality of their handtool products.

Quality is an important competitive factor in the handtool industry since many markets require tools which must meet stringent requirements in tensile strength, design, and finish. Although U.S. manufacturers have been known for producing high-quality products, and rank quality as the most significant factor contributing to their level of handtool exports, certain foreign producers (such as those in Japan, Taiwan, and Korea) are making investments to improve the quality of their handtools.

- o Increased competition in U.S. and foreign markets draws similar responses by U.S. nonpowered handtool producers.

U.S. handtool producers most commonly responded to greater competition in their home market and in foreign markets by implementing cost reduction efforts or cutting back production of nonpowered handtools. Action to upgrade plant and equipment was frequently taken by domestic manufacturers in responding to import competition, and efforts to improve the quality of the product were made to strengthen their competitive position in foreign markets.

- o U.S. nonpowered handtool manufacturers typically provide quicker market response and shorter leadtimes for delivery than major foreign competitors.

U.S. purchasers of both domestic-made and foreign-made nonpowered handtools indicate that shorter delivery time and overall product availability were the most important factors in their decision to purchase U.S.-made products. Nonpowered handtool purchasers and U.S. importers indicate that the principal advantages of foreign-made handtools is their lower price and flexibility to enable marketing at diverse price points required by retail competition and customer demand. Despite the product attributes which

constitute important competitive strengths of U.S.-made handtools, importers and producers both cite price advantage as sufficient to provide an overall competitive advantage in the U.S. market for handtools made in Japan and Taiwan.

- o Foreign producers of nonpowered handtools maintain a price advantage in the U.S. market due to exchange rate and other cost advantages.

An exchange rate advantage and foreign cost advantages in raw materials, labor, and capital are believed to have contributed importantly to a growing import price advantage during 1980-83. The currencies of all 10 major suppliers of U.S. imports in 1982 exhibited overall declines against the U.S. dollar during 1980-83, which contributed to strengthening the competitive position of their respective handtools in the U.S. market compared to U.S.-produced handtools.

## DESCRIPTION AND USES

### Product and Manufacturing Process

Nonpowered handtools (handtools) <sup>1/</sup> include an enormous variety of products that are used by mechanics, plumbers, carpenters, masons, construction and industrial workers, householders, hobbyists, and other tradespeople to perform some type of work. They differ from powered handtools in that they are operated manually or without the use of electricity or some other power source.

The method used most frequently in the production of handtools is forging. This process involves shearing the basic raw material (steel bar or rod) to a specific size and heating it in an electric, gas, or oil-fired furnace to a malleable temperature. The heated raw material is then placed between huge forging hammers that have been fitted with impression dies and then is shaped into the desired form by intermittent blows of the hammer. After the forging operation, numerous steps are undertaken before the manufacturing process is completed. These include the trimming of excess metal, heat treating to obtain a higher degree of strength and grinding and polishing to obtain a finished appearance.

A manufacturing technique that is similar to forging is cold forming. During the cold-forming process, however, the raw material is hammered into the desired shape without having first been heated. Although this method eliminates an expensive cost of production, it does not offer the flexibility of forging and is generally limited to manufacturing handtools that are fairly simple in shape and design.

The principal handtools used in professional, industrial, and consumer markets are discussed below (app. C provides a more detailed description).

Chisels and punches are commonly referred to as struck tools by industry sources. Chisels are generally classified as being either wood chisels (used for cutting wood) or cold chisels (used for cutting metal or other hard material). Punches are used to mark, cut, or stamp metal, or to drive out pins, bolts, or rivets from their fastening positions. Punches and chisels are forged from alloy steel and hardened by special heat treatment.

Hammers and sledges are commonly referred to as striking tools. Hammers are distinguished from sledges by the weight of the head, the shape of the head, and length of the handle. Hammers are widely used by carpenters and householders, whereas sledges are used primarily by construction workers. Both hammer and sledge heads are forged from alloy steel.

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<sup>1/</sup> This study covers producers of all nonpowered handtools, including wrenches, pliers, screwdrivers, striking and struck tools (e.g., hammers, sledges, punches, and chisels), clamps, vises, hand-held automotive tools (e.g., body and fender tools, wheel and gear pullers, and valve tools), and metal-cutting snips and shears (including bolt cutters). This study does not cover producers of interchangeable tools (e.g., dies and drilling bits) or powered handtools.

Vises are used for holding articles in a fixed position to permit work such as planing, sawing, drilling, and shaping. They are made in a variety of sizes, ranging from small, hand-held vises weighing less than 1 pound to large machinist vises weighing over 200 pounds.

Clamps are holding devices used for strengthening or supporting objects. They are made in numerous shapes, sizes, and weights. The C-clamp, so-called because of its shape, is one of the most popular clamps.

Pliers are handtools used for holding, bending, shaping, and cutting materials. Most pliers consist of two similarly shaped metal parts that are overlapped and held together by a pivot or hinge. One end of the tool consists of a set of jaws and the other end forms a handle which when squeezed exerts pressure on the jaws. Pliers are made in many styles and sizes and of various qualities of steel.

Metal/bolt-cutting snips and shears are used for cutting sheet metal, bolts, and similar articles of metal. Metal-cutting snips resemble scissors in basic design except that the cutting blades of snips are short in comparison with the length of its handles. Such a design permits greater leverage which insures a powerful closing of the blades. Bolt cutters are shears with very short blades and long handles which are capable of exerting tremendous force on the article to be cut.

Wrenches are one of the most common handtools. They include open end wrenches, box end wrenches, combination wrenches, socket wrenches, adjustable open end wrenches, ratcheting box wrenches, and torque-measuring wrenches. Wrenches are adjustable or designed to fit one specific size of bolt or nut. Most wrenches produced in the United States are forged from alloy steel and hardened by heat treatment.

Screwdrivers are used for driving not only wood screws and machine screws, but also thread-forming and thread-cutting screws used in metal fabricating and related work. The most common screwdriver is the standard type consisting of a straight blade with one end formed to fit either a slotted or recessed head screw and having a wooden or plastic handle mounted on the other end.

Specialized automotive tools include various types of body and fender repair tools and valve tools used exclusively for automotive repair. The toe dolly block, the special bumping hammer, and the C-type valve lifter are examples of these special-purpose tools.

Horticultural and related tools are used in the cultivation of gardens, yards and lawns, and in the construction industry. They include shovels, hoes, rakes, forks, picks, and mattocks.

Edge tools consist of a broad selection of cutting tools such as axes, hatchets, machetes, sickles, and shears. These tools are used primarily for chopping, cutting brush and similar growth, pruning plants and trees, and shearing sheep.



Hand-operated saws consist of a metal-cutting blade having one or two handles. Some of the most popular saws of this type are designated by use, including carpenter, plumber, cabinet, compass, and pruning saws. Some saws have a metal frame to keep the saw blade under tension. These include hacksaws, butchers' saws, jewelers' saws, and coping saws.

Examples of other handtools included in this investigation are files and rasps, which are cutting tools used for smoothing and shaping metal, wood, and other materials; blowtorches, used for applying intense heat; anvils on which metal is formed by hammering; and hand drills used for drilling holes.

#### U.S. Tariff Treatment

Imported handtools are classified under items 648.51-649.39, 649.53, and 651.21-651.55 of the Tariff Schedules of the United States. Table 1 provides the staged reductions in the rates of duty as a result of the Multilateral Trade Negotiations (MTN). The current rates of duty (1984) and detailed tariff descriptions are shown in appendix D.

On July 19, 1974, the U.S. Department of the Treasury advised the Tariff Commission 1/ that wrenches, pliers, screwdrivers, and metal-cutting snips and shears from Japan were being sold in the United States at less than fair value within the meaning of the Antidumping Act of 1921. Accordingly, the Commission instituted investigation No. AA1921-141 to determine whether an industry in the United States was being or was likely to be injured or was prevented from being established, by reason of the imported handtools. On the basis of information obtained in the investigation, the Commission 2/ unanimously determined that an industry in the United States was not being injured or was not likely to be injured, or was not prevented from being established by reason of the specified handtools imported from Japan.

The U.S. International Trade Commission, on September 2, 1975, received advice from the Department of the Treasury that chisels, punches, hammers, sledges, vises, C-clamps, and battery service tools from Japan were being or were likely to be sold in the United States at less than fair value within the meaning of the Antidumping Act, 1921. Accordingly, the Commission instituted investigation No. AA1921-149. On the basis of information obtained in the investigation, the Commission unanimously determined that an industry in the United States was not being injured or was not likely to be injured, or was not prevented from being established by reason of the specified handtools imported from Japan. The Commission has not conducted an investigation of handtools subsequent to these cases.

Workers in the handtool industry have filed a number of petitions with the U.S. Department of Labor under the Trade Adjustment Assistance program for workers. The petitions alleged that the workers were being injured by increased imports. Since 1975 there have been 9 certifications, 2 partial certifications, and 24 denials of petitions requesting eligibility to apply for worker adjustment assistance.

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1/ Renamed the United States International Trade Commission by the Trade Act of 1974.

2/ Commissioner Minchew did not participate in the decision.

Table 1.--Nonpowered handtools: U.S. rates of duty, by TSUS items

TSUS item No. 1/	Description	Pre-MTN col. 1 rate of duty 2/	Staged col. 1 rate of duty effective with respect to articles entered on or after Jan. 1, 19								Col. 2 rate of duty
			1980	1981	1982	1983	1984	1985	1986	1987	
648.51A	Drainage tools, scoops, shovels and spades, and parts thereof.	7.5% ad val.	6.9% ad val.	6.4% ad val.	5.8% ad val.	5.3% ad val.	4.7% ad val.	4.1% ad val.	3.6% ad val.	3% ad val.	30% ad val.
648.53A	Picks and mattocks, and parts thereof.	3.5% ad val.	3.4% ad val.	3.3% ad val.	3.2% ad val.	3.2% ad val.	3.1% ad val.	3% ad val.	2.9% ad val.	2.8% ad val.	45% ad val.
648.55A	Hoes and rakes, and parts thereof:										
	Agricultural or horticultural tools and parts thereof.	7.5% ad val.	6.9% ad val.	6.4% ad val.	5.8% ad val.	5.3% ad val.	4.7% ad val.	4.1% ad val.	3.6% ad val.	3% ad val.	15% ad val.
648.57A	Other-----	7.5% ad val.	6.9% ad val.	6.4% ad val.	5.8% ad val.	5.3% ad val.	4.7% ad val.	4.1% ad val.	3.6% ad val.	3% ad val.	30% ad val.
648.61A	Forks, and parts thereof:										
	Agricultural or horticultural forks, and parts thereof (except hay and manure forks).	3.5% ad val.	3.4% ad val.	3.3% ad val.	3.2% ad val.	3.2% ad val.	3.1% ad val.	3% ad val.	2.9% ad val.	2.8% ad val.	15% ad val.
648.63A	Other-----	7.5% ad val.	4.5% ad val.	3% ad val.	3% ad val.	3% ad val.	3% ad val.	3% ad val.	3% ad val.	3% ad val.	30% ad val.
	Axes, adzes, hatchets, machetes, and similar hewing tools, and parts thereof:										
648.65	Machetes, and parts thereof-----	-	3/	3/	3/	3/	3/	3/	3/	3/	Free.
648.67A	Other-----	11% ad val.	10.4% ad val.	9.8% ad val.	9.2% ad val.	8.6% ad val.	8% ad val.	7.4% ad val.	6.8% ad val.	6.2% ad val.	45% ad val.
648.69A	Scythes, sickles, grass hooks, and corn knives, and parts thereof.	4% ad val. val.	3.5% ad val.	3% ad val.	2.5% ad val.	2% ad val.	1.5% ad val.	1% ad val.	0.5% ad val.	Free ad val.	30% ad val.
648.71A	Hay knives, and parts thereof-----	1¢ ea. + 6% ad val.	0.9¢ ea. + 5.7% ad val.	0.9¢ ea. + 5.5% ad val.	0.8¢ ea. + 5.2% ad val.	0.8¢ ea. + 4.9% ad val.	0.7¢ ea. + 4.6% ad val.	0.7¢ ea. + 4.4% ad val.	0.6¢ ea. + 4.1% ad val.	0.6¢ ea. + 3.8% ad val.	8¢ ea. + 45% ad val.
648.73A	Hedge and grass shears, and parts thereof.	5¢ ea. + + 11% ad val.	4.5¢ ea. + + 10.3% ad val.	4¢ ea. + + 9.5% ad val.	3.5¢ ea. + + 8.8% ad val.	3.5¢ ea. + + 8.1% ad val.	3¢ ea. + + 7.3% ad val.	2.5¢ ea. + + 6.6% ad val.	2¢ ea. + + 5.8% ad val.	2¢ ea. + + 5.1% ad val.	20¢ ea. + 45% ad val.
648.75A	Pruning shears and sheep shears, and parts thereof.	2¢ ea. + 4% ad val.	1.8¢ ea. + 3.9% ad val.	1.7¢ ea. + 3.7% ad val.	1.6¢ ea. + 3.6% ad val.	1.5¢ ea. + 3.4% ad val.	1.3¢ ea. + 3.3% ad val.	1.2¢ ea. + 3.1% ad val.	1.1¢ ea. + 3% ad val.	1¢ ea. + 2.8% ad val.	20¢ ea. + 45% ad val.
	Pliers, nippers, and pincers, and hinged tools for holding and splicing wire, and parts of the foregoing:										
	Slip-joint pliers:										
648.80A	Not forged, valued not over \$6 per dozen.	20% ad val. val.	19% ad val.	18% ad val.	17% ad val.	16% ad val.	15% ad val.	14% ad val.	13% ad val.	12% ad val.	60% ad val.
648.82A	Other-----	20% ad val. val.	19% ad val.	18% ad val.	17% ad val.	16% ad val.	15% ad val.	14% ad val.	13% ad val.	12% ad val.	60% ad val.
648.85A	Other (except parts)-----	1.6¢ ea. + + 10% ad val. ad val.	1.5¢ ea. + 9.4% ad val.	1.4¢ ea. + 8.9% ad val.	1.4¢ ea. + 8.3% ad val.	1.3¢ ea. + 7.8% ad val.	1.2¢ ea. + 7.2% ad val.	1.1¢ ea. + 6.6% ad val.	1¢ ea. + 6.1% ad val.	1¢ ea. + 5.5% ad val.	10¢ ea. + 60% ad val.
648.89A	Parts-----	9.5% ad val.	9% ad val.	8.6% ad val.	8.1% ad val.	7.6% ad val.	7.1% ad val.	6.7% ad val.	6.2% ad val.	5.7% ad val.	45% ad val.

See footnotes at end of table.

Table 1.--Nonpowered handtools: U.S. rates of duty, by TSUS items--Continued

TSUS item No. 1/	Description	Pre-MTN col. 1 rate of duty 2/	Staged col. 1 rates of duty effective with respect to articles entered on or after January 1, 19								Col. 2 rate of duty
			1980	1981	1982	1983	1984	1985	1986	1987	
648.91A	Tin snips, and parts thereof-----	5¢ ea. + 11% ad val.	4.5¢ ea. + 10.2% ad val.	4¢ ea. + 9.4% ad val.	3.5¢ ea. + 8.5% ad val.	3.5¢ ea. + 7.7% ad val.	3¢ ea. + 6.9% ad val.	2.5¢ ea. + 6.1% ad val.	2¢ ea. + 5.2% ad val.	2¢ ea. + 4.4% ad val.	20¢ ea. + 45% ad val.
	Bolt and chain clippers and other metal-cutting shears (except tin snips); pipe cutters; parts of the foregoing:										
648.93A	With cutting part containing by weight over 0.2 percent of chromium, molybdenum, or tungsten; or over 0.1 percent of vanadium.	15% ad val.	13.9% ad val.	12.8% ad val.	11.6% ad val.	10.5% ad val.	9.4% ad val.	8.3% ad val.	7.1% ad val.	6% ad val.	60% ad val.
648.95A	Other-----	10.5% ad val.	9.7% ad val.	8.9% ad val.	8.1% ad val.	7.4% ad val.	6.6% ad val.	5.8% ad val.	5% ad val.	4.2% ad val.	50% ad val.
648.97A*	Pipe tools (except cutters), wrenches, and spanners, and parts thereof.	11.0% ad val.	10.8% ad val.	10.5% ad val.	10.3% ad val.	10.0% ad val.	9.8% ad val.	9.5% ad val.	9.3% ad val.	9.0% ad val.	45% ad val.
	Files and rasps, with or without their handles:										
649.01A	Not over 2.5 inches in length-----	6¢ per doz.	5.9¢ per doz.	5.8¢ per doz.	5.6¢ per doz.	5.5¢ per doz.	5.4¢ per doz.	5.3¢ per doz.	5.1¢ per doz.	5¢ per doz.	25¢ per doz.
649.03A	Over 2.5 but not over 4.5 inches in length.	10¢ per doz.	9.9¢ per doz.	9.8¢ per doz.	9.6¢ per doz.	9.5¢ per doz.	9.4¢ per doz.	9.3¢ per doz.	9.1¢ per doz.	9¢ per doz.	47.5¢ per doz.
649.05A	Over 4.5 but not over 6.75 inches in length.	14¢ per doz.	13.5¢ per doz.	13.5¢ per doz.	13¢ per doz.	13¢ per doz.	12.5¢ per doz.	12.5¢ per doz.	12¢ per doz.	12¢ per doz.	62.5¢ per doz.
649.07A	Over 6.75 inches in length-----	8¢ per doz.	7.9¢ per doz.	7.8¢ per doz.	7.6¢ per doz.	7.5¢ per doz.	7.4¢ per doz.	7.3¢ per doz.	7.1¢ per doz.	7¢ per doz.	77.5¢ per doz.
649.11A	Nonmechanical saws-----	3.5% ad val.	3.1% ad val.	2.6% ad val.	2.2% ad val.	1.8% ad val.	1.3% ad val.	0.9% ad val.	0.4% ad val.	Free	20% ad val.
	Blades for mechanical or nonme- chanical saws:										
649.14A	Band saw blades-----	4% ad val.	3.9% ad val.	3.8% ad val.	3.7% ad val.	3.6% ad val.	3.4% ad val.	3.3% ad val.	3.2% ad val.	3.1% ad val.	20% ad val.
649.17A	Circular saw blades-----	4% ad val.	3.9% ad val.	3.8% ad val.	3.7% ad val.	3.6% ad val.	3.4% ad val.	3.3% ad val.	3.2% ad val.	3.1% ad val.	25% ad val.
649.19A	Hacksaw blades-----	5% ad val.	4.8% ad val.	4.7% ad val.	4.5% ad val.	4.4% ad val.	4.2% ad val.	4% ad val.	3.9% ad val.	3.7% ad val.	20% ad val.
649.21A	Jewelers' or piercing saw blades.	10¢ per gross.	9.5¢ per doz.	9.5¢ per doz.	9¢ per doz.	9¢ per doz.	8.5¢ per doz.	8.5¢ per doz.	8¢ per doz.	8¢ per doz.	40¢ per doz.

See footnotes at end of table.

Table 1.--Nonpowered handtools: U.S. rates of duty, by TSUS items--Continued

TSUS item No. 1/	Description	Pre-MTN col. 1 rate of duty 2/	Staged col. 1 rate of duty effective with respect to articles entered on or after Jan. 1, 19								Col. 2 rate of duty
			1980	1981	1982	1983	1984	1985	1986	1987	
649.23A	Chain-saw blades, in lengths or cut to size: With cutting part containing by weight over 0.2 percent of chromium, molybdenum, or tungsten, or over 0.1 percent of vanadium.	15% ad val.	14% ad val.	13.1% ad val.	12.1% ad val.	11.1% ad val.	10.1% ad val.	9.2% ad val.	8.2% ad val.	7.2% ad val.	60% ad val.
649.24A	Other-----	4.5% ad val.	4.4% ad val.	4.2% ad val.	4.1% ad val.	4% ad val.	3.8% ad val.	3.7% ad val.	3.5% ad val.	3.4% ad val.	27.5% ad val.
649.25A	Other blades-----	3.5% ad val.	3.1% ad val.	2.6% ad val.	2.2% ad val.	1.8% ad val.	1.3% ad val.	0.9% ad val.	0.4% ad val.	Free	20% ad val.
649.26A	Metal parts: Metal teeth and cutting segments suitable for use in cutting metal.	7.5% ad val.	7.2% ad val.	6.9% ad val.	6.5% ad val.	6.2% ad val.	5.9% ad val.	5.6% ad val.	5.2% ad val.	4.9% ad val.	30% ad val.
649.27A	Other: Frames, handles, and other parts for nonmechanical saws.	9.5% ad val.	9% ad val.	8.6% ad val.	8.1% ad val.	7.6% ad val.	7.1% ad val.	6.7% ad val.	6.2% ad val.	5.7% ad val.	45% ad val.
649.29A	Other-----	5% ad val.	4.8% ad val.	4.7% ad val.	4.5% ad val.	4.4% ad val.	4.2% ad val.	4% ad val.	3.9% ad val.	3.7% ad val.	35% ad val.
649.31A	Blow torches and similar self-contained torches, and metal parts thereof: Torches, designed to be operated by compressed air and kerosene or gasoline.	5% ad val.	4.8% ad val.	4.7% ad val.	4.5% ad val.	4.4% ad val.	4.2% ad val.	4% ad val.	3.9% ad val.	3.7% ad val.	45% ad val.
649.32A	Other-----	9.5% ad val.	9% ad val.	8.6% ad val.	8.1% ad val.	7.6% ad val.	7.1% ad val.	6.7% ad val.	6.2% ad val.	5.7% ad val.	45% ad val.
649.33A	Anvils: Of iron or steel, weighing over 5 pounds each.	0.5¢ per lb.	0.9% ad val.	0.9% ad val.	0.9% ad val.	0.9% ad val.	0.9% ad val.	0.9% ad val.	0.9% ad val.	0.9% ad val.	6% ad val.
649.35A	Other-----	9% ad val.	8.6% ad val.	8.1% ad val.	7.7% ad val.	7.3% ad val.	6.8% ad val.	6.4% ad val.	5.9% ad val.	5.5% ad val.	45% ad val.
649.37A	Vises and clamps (except parts of, or accessories for, machine tools).	3/	3/	3/	3/	3/	3/	3/	3/	3/	45% ad val.
649.39	Abrasive wheels mounted on frame-works, hand- or pedal-operated.	4.5% ad val.	1.5% ad val.	Free	Free	Free	Free	Free	Free	Free	27.5% ad val.
649.41A	Files and rasps, including rotary--	3% ad val.	2.9% ad val.	2.9% ad val.	2.8% ad val.	2.8% ad val.	2.7% ad val.	2.6% ad val.	2.6% ad val.	2.5% ad val.	15% ad val.

See footnotes at end of table.

Table 1.--Nonpowered handtools: U.S. rates of duty, by TSUS items--Continued

TSUS item No. 1/	Description	Pre-MTN col. 1 rate of duty 2/	Staged col. 1 rate of duty effective with respect to articles entered on or after Jan. 1, 19								Col. 2 rate of duty
			1980	1981	1982	1983	1984	1985	1986	1987	
649.53A	Tool tips, and plates, blanks and other forms for making tool tips; all the foregoing, unmounted, of sintered metal carbides.	15% ad val.	14% ad val.	13% ad val.	12% ad val.	11% ad val.	10% ad val.	9% ad val.	8% ad val.	7% ad val.	60% ad val.
	Hammers and sledges, with or without their handles:										
651.21A*	With heads not over 3.25 pounds each.	11% ad val.	10.4% ad val.	9.8% ad val.	9.2% ad val.	8.6% ad val.	8% ad val.	7.4% ad val.	6.8% ad val.	6.2% ad val.	45% ad val.
651.23A	With heads over 3.25 pounds each.	2.5% ad val.	2.5% ad val.	2.4% ad val.	2.4% ad val.	2.3% ad val.	2.3% ad val.	2.2% ad val.	2.2% ad val.	2.1% ad val.	20% ad val.
651.25A	Crowbars, track tools, and wedges, all the foregoing of iron or steel.	0.3¢ per lb.	0.28¢ per lb.	0.27¢ per lb.	0.26¢ per lb.	0.25¢ per lb.	0.23¢ per lb.	0.22¢ per lb.	0.21¢ per lb.	0.2¢ per lb.	1.375¢ per lb.
651.27A	Drilling, threading, and tapping tools, and parts thereof.	11% ad val.	10.4% ad val.	9.8% ad val.	9.2% ad val.	8.6% ad val.	8% ad val.	7.4% ad val.	6.8% ad val.	6.2% ad val.	45% ad val.
	Chisels, gimlets, gouges, planes, and other cutting tools, and parts thereof:										
651.29A	With cutting parts containing by weight over 0.2 percent of chromium, molybdenum, or tungsten, or over 0.1 percent of vanadium.	15% ad val.	14% ad val.	13.1% ad val.	12.1% ad val.	11.1% ad val.	10.1% ad val.	9.2% ad val.	8.2% ad val.	7.2% ad val.	60% ad val.
651.31A	Other-----	11% ad val.	10.4% ad val.	9.8% ad val.	9.2% ad val.	8.6% ad val.	8% ad val.	7.4% ad val.	6.8% ad val.	6.2% ad val.	45% ad val.
651.33A*	Pencil sharpeners and lead and crayon pointers, and parts thereof.	8.5% ad val.	8.1% ad val.	7.7% ad val.	7.3% ad val.	6.9% ad val.	6.5% ad val.	6.1% ad val.	5.7% ad val.	5.3% ad val.	40% ad val.
651.37A*	Screwdrivers-----	11% ad val.	10.4% ad val.	9.8% ad val.	9.2% ad val.	8.6% ad val.	8% ad val.	7.4% ad val.	6.8% ad val.	6.2% ad val.	45% ad val.
	Other handtools, and parts thereof:										
651.39	Agricultural or horticultural tools, and parts thereof.	Free	3/	3/	3/	3/	3/	3/	3/	3/	Free.
	Other handtools, and parts thereof:										
	Other than agriculture or horticultural tools, and parts thereof:										
	Of iron or steel:										
651.45A	Cast-iron hatters' irons, and tailors' irons.	1.5% ad val.	1.3% ad val.	1.1% ad val.	0.9% ad val.	0.8% ad val.	0.6% ad val.	0.4% ad val.	0.2% ad val.	Free	20% ad val.

See footnotes at end of table.

Table 1.--Nonpowered handtools: U.S. rates of duty, by TSUS items--Continued

TSUS item No. 1/	Description	Pre-MTN col. 1 rate of duty 2/	Staged col. 1 rate of duty effective with respect to articles entered on or after Jan. 1, 19								Col. 2 rate of duty
			1980	1981	1982	1983	1984	1985	1986	1987	
651.46A*	Caulking guns-----	8.5% ad val.	8.1% ad val.	7.7% ad val.	7.3% ad val.	6.9% ad val.	6.5% ad val.	6.1% ad val.	5.7% ad val.	5.3% ad val.	40% ad val.
651.48A	Other-----	8.5% ad val.	8.1% ad val.	7.7% ad val.	7.3% ad val.	6.9% ad val.	6.5% ad val.	6.1% ad val.	5.7% ad val.	5.3% ad val.	40% ad val.
651.49A*	Of copper: Of brass-----	5% ad val.	4.8% ad val.	4.7% ad val.	4.5% ad val.	4.4% ad val.	4.2% ad val.	4% ad val.	3.9% ad val.	3.7% ad val.	40% ad val.
651.51A	Other-----	7.5% ad val.	7.2% ad val.	6.9% ad val.	6.5% ad val.	6.2% ad val.	5.9% ad val.	5.6% ad val.	5.2% ad val.	4.9% ad val.	40% ad val.
651.53A*	Of aluminum-----	1.7¢ per lb: + 8.5% ad val.	1.6¢ per lb + 8.1% ad val.	1.5¢ per lb + + 7.6% ad val.	1.4¢ per lb + 7.2% ad val.	1.3¢ per lb + 6.8% ad val.	1.3¢ per lb + 6.3% ad val.	1.2¢ per lb + 5.9% ad val.	1.1¢ per lb + 5.4% ad val.	1¢ per lb + 5% ad val.	8.5¢ per lb + 40% ad val.
651.55A	Other-----	8.5% ad val.	8.1% ad val.	7.7% ad val.	7.3% ad val.	6.9% ad val.	6.5% ad val.	6.1% ad val.	5.7% ad val.	5.3% ad val.	40% ad val.

1/ The designation "A" or "A\*" indicates that the item is currently designated as an eligible article for duty-free treatment under the U.S. Generalized System of Preferences (GSP). "A" indicates that all beneficiary developing countries are eligible for the GSP. "A\*" indicates that certain of these countries, specified in general headnote 3(c) of the Tariff Schedules of the United States Annotated, are not eligible.

2/ Rate effective prior to Jan. 1, 1980.

3/ No concessions granted by the United States during the Tokyo round of the Multilateral Trade Negotiations.

## THE WORLD MARKET

The world demand for nonpowered handtools is largely dependent on the level of construction and industrial activity. The economic uncertainty that was prevalent in most countries during 1978-82 reduced industrial output and building activity, and this had an adverse effect on world production of handtools. As a result, it is believed that production by the world's leading handtool producers--the United States, West Germany, France, and Japan--registered no real growth in output during 1978-82.

## World Production

It is estimated that world production of nonpowered handtools exceeded \$5 billion in 1982. <sup>1/</sup> Although some countries posted gains in the value of production during the period, the global economic weakness in 1982 contributed to a 16 percent decline in U.S. handtool production to \$2.9 billion; whereas, production in West Germany increased by 1 percent to \$684 million in 1982. France showed the largest gain (10 percent) in the value of production between 1981 and 1982. The United States and West Germany were the world's two largest producers during 1981 and 1982 (table 2).

Table 2.--Nonpowered handtools: Production, by specified countries, 1981 and 1982

(In millions of dollars)		
Country	1981	1982
United States-----	<sup>1/</sup> 3,510.9	<sup>1/</sup> 2,949.2
West Germany-----	<sup>2/</sup> 678.1	<sup>2/</sup> 683.9
France-----	<sup>2/</sup> 341.0	375.0
Japan-----	<sup>3/</sup> 390.0	<sup>3/</sup> 308.1
Taiwan-----	<sup>4/</sup> 259.2	<sup>4/</sup> 278.1
United Kingdom-----	<sup>2/</sup> 274.5	<sup>2/</sup> 252.5
Netherlands-----	22.1	22.2
Denmark-----	23.1	20.5
Total-----	5,498.9	4,889.5

<sup>1/</sup> Production, as measured by shipments obtained from official statistics of the U.S. Department of Commerce. Figure for 1982 estimated.

<sup>2/</sup> Estimated, on the basis of the 1982 annual report of the French Nonpowered handtools association.

<sup>3/</sup> Estimated, on the basis of the U.S. Department of State Airgram, American Embassy, Tokyo.

<sup>4/</sup> Estimated, on the basis of information provided by the Taiwan Regional Hand Tools Association (TRHTA).

Source: Data compiled from U.S. Department of Commerce, U.S. Department of State embassy telegrams, and the 1982 annual report of the French nonpowered handtools association.

<sup>1/</sup> Developed on the basis of interviews with industry representatives and information from trade sources.

The United States, West Germany, France, and Japan are believed to have accounted for over 50 percent of total world production in 1982. Their share of world production, as well as their position among the leading producing countries, are believed to have remained about the same during 1978-82.

### World Imports

The United States was the world's largest importing country during 1978-82, followed by West Germany and France (table 3). All of the major importing countries experienced declining imports in 1982, reflecting the general downturn in the worldwide industrial cycle. The total world imports of handtools amounted to an estimated \$3 billion in 1982. <sup>1/</sup> The leading handtool importers identified in table 3 account for an estimated 60 percent of handtool imports by market economy countries. <sup>2/</sup> The U.S. share of total world handtool imports is estimated to have risen from 1978 to 1982, and the shares held by the other top three importing countries are estimated to have declined during the period, or risen at a slower rate than the U.S. share. This trend largely reflects the relative size of the U.S. handtool market enhanced by the steady growth of the "do-it-yourself" segment of this market during the period.

Table 3.--Nonpowered handtools: Imports, by specified countries, 1978-82

(In millions of dollars)						
Country	1978	1979	1980	1981	1982	
United States-----	295.6	352.9	367.1	419.2	403.8	
West Germany-----	223.2	276.0	330.9	274.9	238.0	
France-----	167.3	209.4	249.1	217.2	215.1	
United Kingdom-----	150.5	199.5	218.4	184.7	176.9	
Netherlands-----	125.4	142.9	155.1	130.3	130.1	
Canada-----	129.4	146.6	164.8	181.6	128.5	
Italy-----	100.1	137.4	187.5	151.6	124.0	
Belgium/Luxembourg-----	91.8	111.9	128.5	94.2	87.5	
Switzerland-----	81.1	92.9	112.3	93.3	75.7	
Sweden-----	66.3	82.5	101.1	90.3	74.8	
Total-----	1,430.7	1,752.0	2,014.8	1,837.3	1,654.4	

Source: Data compiled from trade publications of the various foreign governments and the European Community.

<sup>1/</sup> Developed on the basis of interviews with industry representatives and information from trade sources.

<sup>2/</sup> Peter Biryukov, "Tool Trade Strong and Expanding." International Trade Forum, July-September 1981, p. 18.



## World Exports

West Germany and the United States ranked as the two major exporting countries during 1978-82, and together with other leading exporters (table 4) are estimated to account for more than three-quarters of total world handtool exports by market economies. Exports from West Germany rose steadily during 1978-80, increasing 23 percent to \$719.9 million in 1980, and then decreasing 21 percent to \$570.1 million in 1982. U.S. exports grew 40 percent, from \$312.5 million in 1978 to \$436.3 million in 1981, before falling 21 percent to \$344.5 million in 1982. Exports from most of the other major supplying countries peaked in 1980, and then declined in 1981 and 1982, reflecting the worldwide recession. The exception to this trend occurred in the Netherlands where exports rose steadily throughout the period.

The U.S. share of total world handtool exports is estimated to have remained relatively steady during 1978-82, and the shares held by the other top three exporting countries are estimated to have trended downward. Taiwan's share of total world handtool exports is estimated to have increased during 1978-82, allegedly at the expense of shares held by other exporting countries. 1/ These occurrences appear to reflect the product mix of the major country handtool exporters. Exports from the developed countries are mainly for the professional and industrial markets, which require a higher quality (and higher priced) product. Exports from the developing countries consist largely of handtools for the consumer market, which are typically of a lower quality (and lower price). 2/ Demand for U.S.-produced handtools in international markets centers on their quality attributes for which they are generally acknowledged as the world leader by competing producers. Since there is no consumer market in a global sense which is comparable to that which exists in the United States, the relative strength of the "higher quality" markets has apparently sustained the stable U.S. share of world handtool exports.

During 1978-82, however, the U.S. trade balance in nonpowered handtools fell from a peak surplus of \$38.5 million in 1980 to a deficit of \$59.3 million in 1982. U.S. exports increased 10 percent during the period whereas imports increased 37 percent. Major trading partners of the United States, including West Germany, Japan, and Taiwan, maintained significant trade surpluses throughout most of the 5-year period, although their export growth (with the exception of Taiwan) did not match that of the United States during 1978-82.

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1/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

2/ Biryukor, op. cit.

Table 4.--Nonpowered handtools: Exports, by specified countries, 1978-82

(In millions of dollars)						
Country	1978	1979	1980	1981	1982	
West Germany-----	585.3	652.4	719.9	627.0	570.1	
United States-----	312.5	348.8	405.6	436.3	344.5	
Japan-----	295.0	300.5	369.6	358.9	283.3	
Sweden-----	246.9	301.1	338.2	283.9	229.8	
Taiwan-----	86.8	138.9	167.5	201.3	205.6	
United Kingdom-----	181.7	196.6	237.1	210.7	191.1	
France-----	150.7	185.8	229.5	191.3	173.5	
Switzerland-----	128.5	145.8	159.8	139.3	119.8	
Italy-----	78.1	104.3	124.1	120.2	93.9	
Netherlands-----	1/ 45.4	1/ 47.2	1/ 50.6	1/ 53.7	1/ 55.5	
Total-----	2,110.9	2,421.4	2,801.9	2,622.6	2,267.1	

1/ Data provided by the U.S. Embassy, The Hague. The Embassy notes that many handtool exports from the Netherlands are believed to consist of reexports after assembling or repacking.

Source: Data compiled from trade publications of the various foreign governments and the European Community.

## THE U.S. INDUSTRY AND MAJOR FOREIGN COMPETITORS

### Industry Profiles

#### United States

There are currently an estimated 753 companies in the nonpowered handtool industry, representing few significant changes in the number of manufacturing establishments since 1977 when there was a combined total of 767 companies and 839 manufacturing establishments (Standard Industrial Classification Nos. 3423 and 3425). Information from respondents to the Commission's questionnaire 1/ shows that the number of new manufacturing plants has slightly exceeded the number of plant closings since 1978. Data obtained from the Federal Trade Commission show that there were 14 mergers, acquisitions, 2/ and purchases of

1/ There were 52 producers that responded to the Commission's questionnaire, accounting for approximately 50 percent of the total value of U.S. nonpowered handtool shipments during 1978-82.

2/ Includes partial acquisitions and acquisitions of nonpowered handtool producers by corporations and investors not in the industry.

assets in the nonpowered handtool industry during 1978-82, reflecting a generally increasing trend during the period: 1/

Number of mergers, acquisitions,  
and purchases of assets

1978-----	2
1979-----	2
1980-----	1
1981-----	3
1982-----	6

One U.S. firm is 25 percent or more beneficially owned by foreign entities and fewer than 10 U.S. producers have direct investments abroad in foreign affiliates or subsidiaries, or participate in joint ventures. 2/

Many firms began as family-owned facilities; some have expanded beyond this type of operation and others remain small, closely held businesses. Production facilities are dispersed throughout the United States, but are generally concentrated in the East North Central and Middle Atlantic regions. The major producing States for handtools are New York, Ohio, California. The industry is specialized with more than 90 percent of establishments principally engaged in producing handtool products.

The major distribution outlets for the handtool industry include original-equipment manufacturers which often provide tools with new equipment, industrial and commercial distributors, hardware wholesalers and cooperatives, and retail outlets. The principal retail outlets for handtools are traditional hardware stores, "do-it-yourself" home centers, discount department stores, drug stores, and supermarkets. The broad coverage at the retail level is chiefly the result of significant growth in demand for these items which have become increasingly accepted as standard household maintenance equipment. 3/

There have been few changes in basic handtool design over the years, and changes in production technology have paralleled developments in metalworking industries such as improvements in forging operations. Handtool production has traditionally been a labor-intensive and material-intensive process. Industry sources estimated that the combined costs of labor (both production and nonproduction) and materials (including packaging materials) accounted for more than 50 percent of the value of net sales of handtools in 1982.

Certain phases of handtool production, such as the forging and plating operations, require a significant amount of capital investment. Industry

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1/ Yearbook on Corporate Mergers, Joint Ventures, and Corporate Policy, various editions, and other literature.

2/ Information submitted in response to questionnaires of the U.S. International Trade Commission.

3/ International Trade Centre UNCTAD/GATT, Monograph on Trade Channels: Hand-tools and Their Components in the United States, August 1977.

representatives stated that the capital investment in a forge shop is believed to exceed 50 percent of the capital required in the tool-manufacturing business. <sup>1/</sup>

U.S. production, capacity, and capacity utilization.--The reduced level of U.S. economic activity (particularly in 1982) and the decline in personal consumption expenditures in durable goods resulted in curtailed demand for handtools from the construction, automotive, industrial, and consumer markets and contributed to a decline in U.S. production in 1982. U.S. production, as reported by questionnaire respondents, peaked at 551.5 million pieces in 1979 before falling irregularly by 24 percent to 418.8 million pieces in 1982 (table 5). Practical capacity to produce nonpowered handtools rose steadily during 1978-82, increasing 19 percent and peaking at 1.0 billion pieces in 1982. <sup>2/</sup> As producers added capacity and benefited from productivity improvements, their production levels fluctuated downward during 1979-82, and their ratio of capacity utilization declined. The ratio of capacity utilization fell to 40 percent in 1982, representing a decline of almost 21 percentage points from the ratio of capacity utilization in 1979.

Table 5.--Nonpowered handtools: U.S. production, capacity, and capacity utilization, 1978-82

Item	: 1978	: 1979	: 1980	: 1981	: 1982
Production---million pieces--:	499.3	551.5	484.4	511.0	418.8
Capacity-----do-----:	871.2	901.0	904.0	952.6	1,037.3
Capacity utilization	:	:	:	:	:
percent--:	57.3	61.2	53.6	53.6	40.4

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

Employment, hours worked, and wages.--The average U.S. nonpowered handtool establishment employs an estimated 55 to 60 persons. The majority of U.S. establishments employ fewer than 20 persons and less than 1 percent of the establishments employ 1,000 or more workers.

<sup>1/</sup> Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

<sup>2/</sup> Derived from information submitted in response to questionnaires of the U.S. International Trade Commission.

Depressed demand contributed to declining employment in the handtool industry in 1982. In 1978, there were approximately 58,800 employees in the industry, 46,700 of whom were production workers. Total employment peaked the following year at 60,200 and in 1982 dropped to an estimated 47,100 (34,200 production workers), as shipments fell to almost their 1978 level. <sup>1/</sup> The average employment reported by questionnaire respondents followed a similar pattern, increasing from 28,971 in 1978 to 29,913 in 1979, then falling to 23,241 by 1982 (table 6).

Employment declines in the handtool industry are also attributable to improvements in manufacturing efficiency. <sup>2/</sup> Recent technological improvements in the handtool production process, such as increased equipment speed and automated controls, have contributed to growth in productivity. Productivity (measured in terms of output in pieces per production employee) increased 13 percent, from 23,130 pieces per employee in 1978 to 26,819 pieces per employee in 1982. Productivity will continue to be affected by the application of new technology in the manufacturing process, including robotics, greater adoption of cold-forming techniques and the expanded use of computer technology. <sup>3/</sup>

Table 6.--Average number of employees and production and related workers in U.S. establishments producing nonpowered handtools, 1978-82

Item	1978	1979	1980	1981	1982
Average number of employees:					
All persons-----	28,971	29,913	27,878	28,101	23,241
Production and related workers-----	21,588	22,190	20,201	19,676	15,616

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

Wages paid to nonpowered handtool industry production workers on the basis of official statistics, increased from approximately \$5.81 per hour in 1978 to an estimated \$8.01 per hour in 1982. <sup>4/</sup> Hourly wages paid to

<sup>1/</sup> Employment and shipment figures from U.S. Department of Commerce, Bureau of the Census, Annual Survey of Manufactures.

<sup>2/</sup> Hearing held before the U.S. International Trade Commission, Nov. 9, 1983, and staff conversations with industry officials.

<sup>3/</sup> U.S. Department of Labor, Bureau of Labor Statistics, "Hand and edge tools industry experiences slow rise in productivity," Monthly Labor Review, October 1982.

<sup>4/</sup> U.S. Department of Commerce, Bureau of the Census, Annual Survey of Manufactures.

production workers in the U.S. handtool industry have generally been below the average wages paid in all operating U.S. manufacturing establishments. A comparison of wages paid to production workers in the U.S. handtool industry (from questionnaire responses) and wages paid in all operating U.S. manufacturing establishments (from official statistics of Commerce) indicates that production workers in the U.S. handtool industry are receiving wages below the average for all U.S. manufacturing establishments, as shown in the following tabulation (per hour):

	<u>Handtool producers 1/</u>	<u>All operating U.S. manufacturing establishments 2/</u>
1978-----	\$5.96	\$6.37
1979-----	6.37	6.81
1980-----	6.82	7.41
1981-----	7.31	8.09
1982-----	8.03	3/

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

2/ Compiled from official statistics of the U.S. Department of Commerce.

3/ Not available.

Respondents to the Commission's survey reported man-hours worked followed a declining trend during 1978-82, falling from 37.3 million hours in 1978 to 25.8 million in 1982. Total wages paid were reported to have peaked in 1981, as illustrated in table 7.

Table 7.--Man-hours worked by and wages paid to U.S. production and related workers producing nonpowered handtools, 1978-82

Item	1978	1979	1980	1981	1982
Man-hours worked					
1,000 hours--	37,265	37,146	33,682	33,464	25,789
Wages paid----1,000 dollars--	222,128	236,590	229,880	244,646	206,960

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

U.S. producers' shipments and exports.--Official statistics (reported only on the basis of value) show that total U.S. producers' shipments 1/ grew steadily during 1978-81, increasing 27 percent and peaking at \$3.5 billion in 1981. 2/ This increase was largely the result of inflation and continued modest demand for handtools in the construction, automotive, and consumer markets prior to the effects of the recession in late 1981. Shipments fell to

1/ Includes both domestic and export shipments.

2/ Compiled from official statistics of the U.S. Department of Commerce.

an estimated \$2.9 billion in 1982, reflecting lower demand in the handtool market as the economic recession continued.

The quantity (not compiled in official statistics) of domestic shipments, as reported by U.S. producers in response to the Commission's questionnaire, increased from 660 billion pieces in 1978 to a peak of 716 billion pieces in 1979, before declining 23 percent to 553 billion pieces in 1982. The comparable shipment value peaked in 1981 at \$1.7 billion, and then fell to \$1.5 billion in 1982 (table 8). Wrenches <sup>1/</sup> represent the largest category of domestic shipments, and accounted for approximately 27 percent of the quantity and 36 percent of the value of U.S. shipments throughout 1978-82. Shipments of screwdrivers and pliers represented two other major product categories and accounted for an additional 11 percent and 3 percent, respectively, of the quantity of shipments in 1982. The remaining categories of handtools covered in this investigation, for which quantity of shipment data were reported by U.S. producers, cannot be identified separately since their publication could disclose confidential operations of individual concerns.

Table 8.--Nonpowered handtools: U.S. producers' domestic shipments, by specified types, 1978-82

Item	1978	1979	1980	1981	1982
Quantity (1,000 pieces)					
All wrenches <sup>1/</sup> ----	185,575	196,243	176,453	175,670	151,558
Screwdrivers-----	78,526	81,066	70,844	68,457	62,379
Pliers-----	19,350	23,408	20,990	21,254	16,843
All other tools <sup>2/</sup> ----	376,570	415,272	366,838	402,691	322,451
Total <sup>3/</sup> -----	660,021	715,989	635,125	668,072	553,231
Value (1,000 dollars)					
All wrenches <sup>1/</sup> ----	547,371	595,964	589,785	639,842	527,967
Screwdrivers-----	69,089	77,581	75,352	80,544	71,182
Pliers-----	74,501	85,043	82,274	93,775	81,802
All other tools <sup>2/</sup> ----	765,831	853,194	846,506	925,180	782,891
Total <sup>3/</sup> -----	1,456,792	1,611,782	1,593,917	1,739,341	1,463,842

<sup>1/</sup> Includes ratchets, sockets and accessories, socket sets, flat wrenches, and all other wrenches.

<sup>2/</sup> Includes chisels and punches, hand saws and blades, hammers and sledges, vises, clamps, metal-cutting snips and shears, horticultural tools, edge tools, specialized automotive tools, and others. Such data are confidential and may not be published on a product category basis.

<sup>3/</sup> Shipment data in quantity were provided by a greater number of respondents to the Commission's questionnaire than production data.

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

<sup>1/</sup> Includes ratchets, sockets and accessories, socket sets, flat wrenches, and all other wrenches.

Domestic shipment trends on the basis of quantity reveal that only one product category, hand saws and parts, posted an overall increase in shipments during 1978-82. The net increase was less than 1 percent, and the quantity of shipments in 1982 represented a decline of 27 percent from that of 1981. For the remaining product categories covered by the investigation, which represent over 70 percent of reported domestic production in the period, U.S. handtool producers experienced decreases in the quantity of shipments ranging from 15 to 33 percent during 1978-82, as illustrated in the following tabulation of data submitted in response to the Commission's questionnaires:

<u>Item 1/</u>	<u>Overall change in the quantity of U.S. producers' domestic shipments during 1978-82 (percent)</u>	<u>Overall change in the quantity of U.S. producers' domestic shipments during 1981-82 (percent)</u>
Chisels and punches-----	-32	-21
Hammers and sledges-----	-15	-18
Vises-----	-33	-37
Pliers-----	-13	-21
Clamps-----	-19	-8
Metal/bolt-cutting snips and shears-----	-20	-10
Wrenches-----	-18	-14
Screwdrivers-----	-21	-9
Specialized automotive tools-----	-19	-7
Horticultural and re- lated tools-----	-18	-6
Edge tools-----	-15	-4
Handsaws and parts-----	0.4	-27

1/ For each product listed, percentage changes are based on a range of 6 to 26 responses from U.S. producer's questionnaire respondents, with the exception of horticultural tools for which there were 2 responses.

Official statistics (reported only on the basis of value) show that the value of U.S. exports of nonpowered handtools rose 40 percent, from \$312.5 million in 1978 to \$436.3 million in 1981. 1/ Most of this growth was accounted for by increased exports to Canada, Mexico, Belgium and Luxembourg, and Australia (table 9). Canada and the United Kingdom were the two largest export markets, accounting for an annual average of about 27 percent during 1978-82. Exports fell to \$344.5 million in 1982, principally due to the generally soft economic conditions worldwide and the associated reduced demand for handtools. The value share of shipments represented by exports varied only slightly in 1978-82 and averaged 11 percent annually during the period. U.S. exports are particularly successful in foreign markets for specialized tools (e.g., specialized crimping tools and screwdrivers) which require exacting engineering; such tools are generally ordered in relatively small quantities. 2/

1/ Compiled from official statistics of the U.S. Department of Commerce.

2/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.



Table 9.--Nonpowered handtools: U.S. exports of domestic merchandise, by principal markets,  
1978-82

(In thousands of dollars)

Market	1978	1979	1980	1981	1982
Canada-----	73,031	76,590	83,462	92,830	60,135
U King-----	19,693	24,189	23,356	22,921	26,488
Belgium/Lux--	16,060	17,441	25,071	27,472	18,542
Austral-----	11,569	14,810	16,975	20,749	18,123
S Arab-----	18,224	14,103	15,875	23,752	17,023
Venez-----	17,319	16,785	15,318	20,363	17,207
Japan-----	10,886	14,429	15,481	16,619	16,272
Mexico-----	8,789	14,308	19,120	31,191	15,545
All other----	136,973	156,185	190,982	180,404	155,214
Total----	312,544	348,840	405,640	436,301	344,549

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

Table 10.--Nonpowered handtools: U.S. exports of domestic merchandise,  
by major product categories, 1978-82

(In thousands of dollars)					
Product category	1978	1979	1980	1981	1982
Pliers-----	33,854	43,503	49,286	49,027	43,279
Wrenches-----	27,704	36,159	41,601	47,477	33,909
Saws and parts-----	42,992	31,406	45,456	47,036	32,637
Vises and C-clamps-----	16,947	11,499	14,299	15,599	11,706
Screwdrivers-----	10,814	10,667	10,291	11,020	8,711
Hammers and sledges-----	8,030	6,488	6,468	8,472	4,485
Other handtools-----	172,203	209,118	238,239	257,670	209,822
Total-----	312,544	348,840	405,640	436,301	344,549

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

Throughout 1978-82, official data show that approximately 40 percent of U.S. exports consisted of pliers, wrenches, saws and parts, vises and clamps, screwdrivers, and hammers and sledges (table 10). Data on exports of domestic merchandise, by type of handtool and major markets, are shown in appendix E.

The quantity (not compiled in official statistics) of U.S. producers' reported export shipments increased 13 percent during 1978-81 then declined 40 percent in 1982, as shown in the following tabulation of data submitted in response to the Commission's questionnaire:

	<u>Quantity</u> (1,000 pieces)	<u>Value</u> (1,000 dollars)
1978-----	32,307	46,833
1979-----	30,537	50,306
1980-----	34,858	53,561
1981-----	36,358	62,793
1982-----	21,723	46,847

The quantity of exports of the individual handtool products <sup>1/</sup> reported by U.S. producers reveals that only one product category, vises, posted an overall increase in export shipments during 1978-82; the net increase was 31 percent. U.S. handtool producers experienced decreases in the quantity of export shipments for the remaining product categories covered by the investigation, ranging from 10 to 47 percent during the 5-year period, as shown in the following tabulation of data provided by questionnaire respondents:

<sup>1/</sup> Such data are confidential and may not be published on an individual product category basis.

<u>Item 1/</u>	<u>Overall change in the quantity of U.S. producers' export shipments during 1978-82 (percent)</u>	<u>Overall change in the quantity of U.S. producers' export shipments during 1981-82 (percent)</u>
Chisels and punches-----	-47	-40
Hammers and sledges-----	-14	-37
Vises-----	31	12
Clamps-----	-28	-15
Pliers-----	-35	-40
Metal/bolt-cutting snips and shears-----	-35	-26
Wrenches 2/-----	-34	-35
Screwdrivers-----	-45	-30
Specialized automotive tools-----	-20	-19
Handsaws and parts-----	-10	-35

1/ For each product listed, percentage changes are based on a range of 5 to 11 responses from U.S. producer's questionnaire respondents. Data on horticulture and edge tools are withheld to avoid disclosure of individual company operations.

2/ Includes ratchets, sockets and accessories, socket sets, flat wrenches, and all other wrenches.

Capital expenditures.--U.S. producers' capital expenditures for domestic facilities primarily used in the production of nonpowered handtools, as reported in response to the Commission's questionnaire, and capital expenditures per production worker for nonpowered handtools and for all operating U.S. manufacturing establishments are shown in the following tabulation (in thousands of dollars):

	<u>U.S. handtool producers' capital expenditures 1/</u>	<u>All operating U.S. manufacturing establishments' capital expenditures 2/</u>
	<u>Total</u>	<u>Per production workers</u>
1978-----	66,800	3.1
1979-----	61,400	2.8
1980-----	60,500	3.0
1981-----	55,900	2.8
1982-----	63,000	4.0
		3.9
		4.2
		5.0
		5.8
		3/

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

2/ Compiled from official statistics of the U.S. Department of Commerce.

3/ Not available.

After declining during 1978-81, reported capital expenditures increased in 1982, growing 13 percent and reaching \$63.0 million that year. The reported capital expenditures per production worker in the nonpowered handtool industry were lower than those in all manufacturing establishments each year during 1978-81. The increase in capital expenditures in 1982 appears to be evidence of the handtool industry's efforts to move towards more capital-intensive production operations as a way of competing against the advantages in labor costs held by handtool manufacturers in the Far East. <sup>1/</sup> A major thrust of capital expenditures in the industry seems to be the replacement of multimachine operations with a machine capable of many operations, with the goal of improving productivity and lowering manufacturing costs. <sup>2/</sup> Recent productivity improvements reflect this effort.

Research and development expenditures.--Respondents to the Commission's questionnaire reported yearly increases in research and development expenditures from 1978-82, as shown in the following tabulation of data provided by questionnaire respondents:

	<u>Value</u> <u>(1,000 dollars)</u>
1978-----	7,898
1979-----	10,187
1980-----	11,781
1981-----	12,994
1982-----	14,279

The \$14.3 million level reached in 1982 represented an 81-percent increase over the amount of expenditures in 1978. Producer respondents appeared to increase their research and development expenditures during 1978-82 despite a downward trend in domestic shipments of handtools in this period.

Advertising and other promotional expenditures.--U.S. producers' expenditures on advertising and other promotional activities concerning nonpowered handtools, as reported in response to the Commission's questionnaire, are shown in the following tabulation:

	<u>Value</u> <u>(1,000 dollars)</u>
1978-----	23,185
1979-----	29,665
1980-----	32,659
1981-----	40,239
1982-----	38,820

The \$38.8 million level reached in 1982 represented a 4-percent decline from the amount of expenditures in 1981, but a 74-percent increase over that of 1978. As in the case of research and development expenditures, producer

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<sup>1/</sup> Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

<sup>2/</sup> Ibid., and information from industry sources.

respondents generally increased their expenditures on advertising during 1978-82 despite a downward trend in domestic shipments of handtools in this period.

Financial experience of U.S. producers.--Net sales, as reported by respondents to the Commission's questionnaire, increased from \$1,021 million in 1978 to \$1,215 million in 1981, and decreased to \$1,080 million in 1982 (table 11). The decline in 1982 was concurrent with the decrease in shipments by U.S. producers that year. Net profit before income taxes peaked in 1979 (as did the quantity of domestic shipments) at \$127 million and decreased (as did shipments) during 1979-82 to \$103 million in 1982. The total of \$103 million in 1982 reflects a decrease of 19 percent from that in 1979, and it also represents a decline of 6 percent from that of \$109 million in 1978. As a share of net sales, net profit before income taxes declined from 1979 to 1980, then rose steadily to 9.5 percent in 1982.

Table 11.--Nonpowered handtools: U.S. producers' net sales and net profit on their overall establishment operations, 1978-82

Item	1978	1979	1980	1981	1982
Net sales					
1,000 dollars--	1,020,773	1,151,248	1,128,248	1,214,729	1,080,498
Net profit before income taxes					
1,000 dollars--	108,990	126,715	94,404	105,495	102,705
Ratio of net profit before income taxes to net sales					
percent--	10.7	11.0	8.4	8.7	9.5

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

Imports.--Official statistics (reported only on the basis of value) show that total U.S. imports of nonpowered handtools increased 42 percent during 1978-81 and peaked at \$419.2 million in 1981. Imports then fell 4 percent to \$403.8 million in 1982, reflecting the lower demand in the handtool market. Import data, compiled from official statistics of the U.S. Department of Commerce, are shown in the following tabulation:

	<u>Value</u> (million dollars)
1978-----	295.6
1979-----	352.9
1980-----	367.1
1981-----	419.2
1982-----	403.8

The major suppliers of U.S. imports of handtools in 1982 were Taiwan, Japan, the Republic of Korea (Korea), and the European Community (EC) countries, which together accounted for 78 percent of the total value of U.S. imports in 1982 (table 12). In 1982, the United States had a deficit in handtool trade with Taiwan, Japan, and Korea, and a trade surplus with the EC countries as a group, resulting in an overall deficit in handtool trade of \$204 million with these countries. Handtool imports from Taiwan, the largest source of U.S. imports in 1981 and 1982, have increased each year during 1978-82, from \$55.2 million in 1978 to \$144.7 million in 1982. Imports from Japan fluctuated during this period, falling from a peak of \$113.1 million in 1981 to a low of \$97.9 million in 1982. As a result, Taiwan has replaced Japan as the leading foreign supplier of handtools to the U.S. market during 1978-82, believed to be largely due to the Taiwan producers' ability to manufacture a relatively cheaper handtool product. Taiwan handtools have had their greatest success in the retail sector where lower costs are a major factor and where performance demands are less stringent. Lower costs of production in Taiwan are attributable in part to the use of a low-carbon steel raw material that is very soft and easy to work, giving longer life to production tools and enabling more parts to be made from each set of dies. Taiwan producers also lower their production costs by utilizing a "parts former" which facilitates more efficient production. <sup>1/</sup> Industry sources have also alleged that Taiwan has expanded its handtool exports to the United States at the expense of the market share of Japan and other exporters. <sup>2/</sup> Additional countries supplying significant quantities of handtools to the United States include Hong Kong, Switzerland, Sweden, and Canada.

The handtools specified by type in table 13 accounted for approximately 70 percent of total U.S. imports during 1978-82. Imports of wrenches, which were consistently greater than imports of other handtools throughout the 5-year period, increased from \$98 million in 1978 to \$146 million in 1981, or by 50 percent, before decreasing to \$132 million due to the effect of the recession in 1982. Socket wrenches and accessories, including ratchets and drives, accounted for 50 percent of all imported wrenches in 1982.

Wrenches of all types were the major handtool category imported during 1978-82, accounting for an average of 33 percent of total product imports in each year. Data on U.S. imports for consumption by type of handtool and major foreign suppliers are shown in appendix F. Taiwan accounted for a consistently increasing share of U.S. imports of wrenches, from 28 percent in 1978 to 58 percent in 1982. Japan, the other major source of U.S. wrench imports, accounted for a continually decreasing share, from 54 percent in 1978 to 29 percent in 1982. These two countries accounted for 82 to 87 percent of all wrench imports during this period. Other countries shipping wrenches to the United States included India, Korea, Spain, Mexico, and West Germany. Imports of wrenches from China began in 1979 and in 1982 totaled \$2.5 million, representing 2 percent of total U.S. imports of wrenches.

Imports of pliers, screwdrivers, and hammers and sledges together accounted for 13 percent to 15 percent of total U.S. handtool imports during 1978-82. Japan was the largest source of pliers, and Taiwan was the largest

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<sup>1/</sup> Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

<sup>2/</sup> Ibid.

Table 12.--Nonpowered handtools: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)

Source	1978	1979	1980	1981	1982
Taiwan - - - -	55,192	87,048	99,920	134,442	144,735
Japan - - - -	109,088	104,641	99,420	113,147	97,885
West Germany - -	20,908	23,887	26,330	23,934	25,442
Korea - - - -	9,959	15,450	17,449	19,354	15,617
Hong Kong - - -	6,575	7,691	11,233	13,579	14,169
Switzerland - -	15,852	15,649	18,568	17,389	13,735
Sweden - - - -	15,616	20,692	18,243	19,229	12,883
Canada - - - -	7,036	9,561	8,542	10,752	11,691
United KgdM - -	8,907	11,142	10,986	10,226	10,086
Italy - - - -	6,039	7,877	8,065	9,395	10,042
Other EC <sup>1</sup> / - -	11,013	14,871	15,141	13,496	11,864
All other - - -	29,425	34,380	33,176	34,219	35,700
Total - - -	295,610	352,889	367,073	419,162	403,849

<sup>1</sup>/ Includes France, Denmark, Netherlands, Belgium and Luxembourg, Ireland, and Greece.

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

Table 13.--Nonpowered handtools: U.S. imports for consumption, by major product categories, 1978-82

(In thousands of dollars)

Product category	1978	1979	1980	1981	1982
Wrenches-----	97,795	102,904	124,605	145,791	132,469
Saws and parts-----	38,479	45,813	51,082	50,408	43,851
Vises and c-clamps-----	18,025	16,089	32,712	40,562	44,909
Pliers-----	24,505	26,821	26,117	32,488	34,669
Screwdrivers-----	6,675	8,434	9,518	12,321	13,984
Hammers and sledges-----	5,781	6,472	6,481	7,116	7,993
Other handtools-----	104,350	146,356	116,558	130,476	125,974
Total-----	295,610	352,889	367,073	419,162	403,849

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

source of screwdrivers. China was a significant import source of hammers and sledges in 1982.

Handtools are eligible for duty-free treatment under the Generalized System of Preferences (GSP). GSP imports accounted for an increasing share of total imports during 1978-82 and in 1982 totaled \$192 million, representing 48 percent of total imports of handtools. GSP eligibility was removed from certain handtool articles from Taiwan, including wrenches and certain hammers in 1980, screwdrivers in 1982, and vises and clamps in 1983. Eligibility was also removed from pencil sharpeners from Hong Kong in 1982 and caulking guns from Korea in 1982.

U.S. producers accounted for a generally increasing share of total U.S. handtool imports during 1978-82, as shown in the following tabulation of data submitted in response to the Commission's questionnaires:

	<u>Quantity</u> (1,000 pieces)	<u>Value</u> (1,000 dollars)	<u>Imports as a share of</u> <u>total U.S. imports</u> (percent)
1978----	24,668	6,530	2.2
1979----	42,323	10,638	3.0
1980----	57,969	18,259	5.0
1981----	63,692	30,478	7.3
1982----	41,603	17,721	4.4

Imports by U.S. producers more than doubled during 1978-81, peaking at 63.7 million pieces in 1981 before falling to 41.6 million pieces in 1982. The comparable value of U.S. producer respondents' imports also rose steadily during 1978-81 to \$30.5 million in 1981, before declining to \$17.7 million in 1982. Industry sources have indicated that the primary reasons for importing tools are to broaden their product lines and to meet various price points.



which cannot be achieved with domestically produced handtools. 1/ Producers also indicated in their questionnaire replies that a lower purchase price was a significant reason for importing handtools.

The quantity (not compiled in official statistics) of nonpowered handtool imports, as reported by respondents to the Commission's importer questionnaire, 2/ slightly more than doubled during 1978-82, as shown in the following tabulation:

	<u>Quantity of</u> <u>importer respondents'</u> <u>imports</u> <u>(1,000 pieces)</u>	<u>Value of</u> <u>importer respondents'</u> <u>imports</u> <u>(1,000 dollars)</u>
1978-----	64,846	52,215
1979-----	65,867	48,124
1980-----	80,811	53,122
1981-----	104,023	83,090
1982-----	130,783	76,184

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1/ Developed on the basis of interviews with industry representatives and information from trade sources.

2/ Reported imports represent an average of 17 percent of total import value during 1978-82.

The quantity of imports of the individual handtool product categories 1/ reported by U.S. importers generally followed steadily increasing trends during 1978-82, ranging from 26 percent to 289 percent during the period, as illustrated in the following tabulation:

<u>Item 1/</u>	<u>Overall change in the quantity of U.S. importer respondents' imports during 1978-82 (percent)</u>	<u>Overall change in the quantity of U.S. importer respondents' imports during 1981-82 (percent)</u>
Chisels and punches-----	26	-1
Hammers and sledges-----	53	8
Vises-----	57	-43
Clamps-----	129	8
Pliers-----	35	24
Metal/bolt-cutting snips and shears-----	53	11
Wrenches <u>2/</u> -----	122	27
Screwdrivers-----	289	89
Specialized automotive tools-----	68	-13
Horticultural and re- lated tools-----	100	11
Edge tools-----	59	27
Handsaws and parts-----	233	40

1/ For each product category listed, percentage changes are based on a range of 5 to 13 responses from U.S. importer's questionnaire respondents, with the exception of horticultural tools for which there were 3 responses.

2/ Includes ratchets, sockets and accessories, socket sets, flat wrenches, and all other wrenches.

#### Major foreign competitors

Combined U.S. imports of nonpowered handtools from the 10 leading suppliers to the United States totaled \$356 million in 1982, representing 88 percent of imports in that year. Handtool trade with these countries has largely been on an import basis in the U.S. market, with the exception of Canada and the United Kingdom. The United States had a deficit in handtool trade with each of the remaining 8 countries, and an overall trade deficit of \$217 million with all 10 countries in 1982. U.S. trade balances in 1982 with these 10 leading countries are shown in table 14.

The People's Republic of China and India also supply notable quantities of handtools to the United States, accounting for 2.3 percent (\$9.5 million) and 2.0 percent (\$8.1 million), respectively, of U.S. handtool imports in 1982. India is a low-cost producer of open end wrenches and combination

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1/ Such data are confidential and may not be published on an individual product category basis.

wrenches (spanners). Their cost position allegedly has enabled India to acquire some of Taiwan's spanner sales, thereby increasing their exports. 1/

Table 14.--Nonpowered handtools: U.S. exports to, imports from, and trade balances with the top 10 foreign supplying countries, 1982

(In thousands of dollars)			
Country	U.S. exports	U.S. imports	U.S. trade balance
Taiwan-----	2,941	144,735	-141,794
Japan-----	16,272	97,885	-81,613
West Germany-----	11,846	25,442	-13,596
Korea-----	4,338	15,617	-11,279
Hong Kong-----	1,813	14,169	-12,356
Switzerland-----	3,582	13,735	-10,153
Sweden-----	5,881	12,883	-7,002
Canada-----	60,136	11,691	48,445
United Kingdom-----	26,487	10,086	16,401
Italy-----	5,758	10,042	-4,284

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

Table 15 highlights handtool industry data on certain major foreign competitors.

1/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

Table 15.--Nonpowered handtools: Employment, production/shipments, exports, imports, and trade balances of the United States, and major foreign competitors, 1982

Country	Employment	Production/shipments	Exports	Imports	Trade balance
	Number		1,000 dollars		
United States-----	23,241	2,949,200	344,547	403,849	-59,302
Taiwan-----	1/ 4,550	2/ 278,100	3/ 205,627	18,398	187,229
Japan-----	4/ 17,076	2/ 308,100	283,253	53,811	229,442
Korea-----	2,500	5/	6/ 24,227	6/ 15,155	9,072
Hong Kong-----	5/	5/	22,900	40,400	-17,500
Switzerland-----	400	7/	119,800	75,700	44,100
West Germany-----	5/	2/ 683,900	570,100	238,000	332,100
United Kingdom-----	5/	2/ 252,500	191,100	176,900	-14,200
Italy-----	5/	5/	93,900	124,000	-30,100
France-----	7,275	375,000	173,500	215,100	-41,600

1/ Average number of production employees.

2/ Estimated.

3/ Based on official statistics of the Taiwan Government. Information from the Taiwan Regional Hand Tools Association shows an export figure of \$257.5 million in 1982.

4/ 1981 figure.

5/ Not available.

6/ Data are for January-November 1982.

7/ Although production data are not available, information from the U.S. Embassy in Switzerland indicates that there are about 7 small- to medium-sized enterprises in the Swiss handtool industry.

Source: U.S. Department of State telegrams from the various foreign embassies, official trade statistics of the various foreign governments, information from the 1982 report of SOMMEP, the French nonpowered handtools association, and from the Taiwan Regional Hand Tools Association.

Additional industry information on the major foreign competitors is provided in the following profiles.

Taiwan.--Taiwan was the largest supplier of U.S. handtool imports in 1982, in terms of value, and accounted for 36 percent of the U.S. total. Production of nonpowered handtools in Taiwan rose 7 percent from an estimated \$259.2 million in 1981 to an estimated \$278.1 million in 1982. 1/ In that year, the largest categories of production were socket wrenches and other wrenches (flat, torque, adjustable, and so forth), which accounted for an estimated 40 percent of the total value of production. The balance consisted

1/ The information concerning the nonpowered handtool industry in Taiwan is based on data provided by the Taiwan Regional Hand Tools Association (TRHTA), which has 182 members producing nonpowered handtools in 244 factories. There are additional handtool manufacturers in Taiwan that are not TRHTA members and which do not participate in TRHTA statistical programs.

of vises, C-clamps, pliers, chisels and punches, hammers and sledges, screwdrivers, edge tools, handsaws, and others. Taiwan production is primarily for order rather than inventory. Most of Taiwan's nonpowered handtools are made of low- and medium-carbon steels which are relatively soft and produce a less durable handtool than higher carbon steels. 1/ As a result, the great majority of export shipments to the United States are composed of lower end handtool products for home use. 2/

The United States was Taiwan's largest export market for handtools in 1982. The majority of Taiwan's sales to the United States, in terms of value, are in the category of socket sets, wrenches, pipe wrenches, and accessories, which tend to be concentrated in the do-it-yourself consumer market. 3/ The other major markets served by Taiwan are European countries, Canada, Australia, South Africa, and the Middle East. 4/

Taiwan's nonpowered handtool industry employs an average number of 20 to 30 production workers per firm, with aggregate employment estimated to range from 3,640 to 5,460 production employees. 5/ Hourly wages for skilled production employees are approximately US\$2.00 to US\$3.75 per hour, 8 hours per day, 6 days per week. Fringe benefits average 30 percent to 40 percent above straight wages. Given a wage rate of US\$2.00 per hour at 50 weeks per year with fringe benefits of 30 percent, the wages at the low end of the skilled labor scale are US\$6,240 per year. Calculations based on the high end of the above wage rates result in annual earnings of US\$12,600. Unskilled workers earn 30 percent to 50 percent below skilled workers. 6/

Estimated data on capital investment show that almost half of the industry's investment is in socket wrenches, with an additional 18 percent in other wrenches. Taiwan industry sources believe that a substantial part of this investment is for the purpose of upgrading tool quality. 7/ Taiwan representatives characterize their competitive success in socket wrench sets as largely attributable to a Taiwan-made parts former which provides greater speed and longer tooling life (bigger production runs) than American machines and enables lower pricing. 8/ The machine is made in Taiwan at one-third or one-fourth below the cost of American-made or German-made formers and has typically been used in making the lower end products, although recently developed know-how also makes this technique applicable to the better products. Available information indicates that the average age of Taiwan handtool plants is about 10 years. 9/

Japan.—Japan was the second largest supplier of U.S. handtool imports in 1982, accounting for 24 percent of the U.S. total. Nonpowered handtools were manufactured in about 3,525 factories in 1981, representing a decrease of 13

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1/ Developed on the basis of information from Taiwan Regional Hand Tools Association routed through the American Institute in Taiwan, October 1983, and prehearing brief filed on behalf of TRHTA, November 1983.

2/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

3/ TRHTA, op. cit.

4/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

5/ TRHTA, op. cit.

6/ Ibid.

7/ Ibid.

8/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

9/ Ibid.

percent from the 4,063 factories in 1978. Production of handtools in Japan reached an estimated \$308.1 million in 1982. Wrenches, the largest product category, accounted for approximately 33 percent of the value of nonpowered handtool production in that year. 1/

Total employment in the Japanese nonpowered handtool industry fell 11 percent during 1978-81 to 17,076 workers in 1981. Total wages paid rose steadily during 1978-81, increasing 9 percent and reaching \$135.6 million in 1981. Average annual wages per employee rose 21 percent from \$6,546 in 1978 to \$7,941 in 1981. 2/ Bonuses comprise a major part of Japanese workers' wages and salaries and generally amount to as much as 3 months' wages. 3/

The traditional handtool distribution system in Japan is complex, with a network of middlemen including primary and secondary wholesalers and wholesale buying groups. Under this system, the principal import channel for handtools is the trading company, which may act as an agent for other trading companies, wholesalers, manufacturers, or major retailers. Some of those operating as primary wholesalers have their own private brand names under which they sell imported products. A trading company may also be a branch of a manufacturing company or may itself have a manufacturing branch. 4/

In recent years, a growing trend towards direct buying has emerged. Certain "do-it-yourself" home center chain stores have begun to import directly from foreign producers. At the same time, many smaller hardware and "do-it-yourself" stores have joined wholesale buying groups in order to benefit from reduced costs of larger scale buying. Wholesale buying groups have also deviated from traditional trading practices, emphasizing direct buying from manufacturers, both foreign and domestic. 5/ This trend is expected to continue.

The Republic of Korea.—The Republic of Korea supplied the United States with \$15.6 million in handtool imports, and accounted for 4 percent of the U.S. handtool import total.

The Korean handtool industry consists of about 15 prominent manufacturers, employing approximately 2,500 workers, and numerous small-scale manufacturers. 6/ Korean production is believed to consist largely of low-quality handtools for the low- to medium-priced do-it-yourself home user. 7/ The annual production capacity of the 5 largest handtool producers in 1982 is believed to have totaled 60.6 million pieces. Total production by these 5 manufacturers fluctuated during 1978-82, reaching a peak level of 23.6 million pieces in 1982, increasing by 53 percent over that of 1978. A continued increase in production is projected for 1983. 8/

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1/ Based on U.S. Department of State Airgram, U.S. Embassy, Tokyo.

2/ Ibid.

3/ The Japan Economic Journal, March 1983.

4/ International Trade Centre UNCTAD/GATT, Monograph on Trade Channels: Hand-tools and Their Components in Japan, June 1977.

5/ Ibid.

6/ U.S. Department of State Telegram, U.S. Embassy, Seoul, Republic of Korea, Oct. 13, 1983.

7/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

8/ U.S. Department of State telegram, U.S. Embassy, Seoul, Korea, Oct. 13, 1983.

The European Community.--Combined imports from the EC countries in 1982, in terms of value, accounted for 14 percent of total U.S. imports. The United States enjoyed a surplus of \$30.5 million in handtool trade with the EC countries that year, as shown in table 16.

Table 16.--Nonpowered handtools: U.S. exports to, imports from, and trade balances with the EC countries, 1982

(In thousands of dollars)			
Country	U.S. exports	U.S. imports	U.S. trade balance
West Germany-----	11,846	25,442	-13,596
United Kingdom-----	26,487	10,086	16,401
Italy-----	5,758	10,042	-4,284
France-----	11,520	6,269	5,251
Denmark-----	980	2,172	-1,192
Netherlands-----	10,141	1,565	8,576
Belgium and Luxembourg-----	18,543	1,393	17,150
Ireland-----	2,546	444	2,102
Greece-----	159	21	138
All EC-----	87,980	57,434	30,546

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

West Germany produced an estimated 684 million dollars' worth of handtools in 1982, 1/ and was the largest EC supplier of handtools to the United States in that year. The United Kingdom, the second largest EC supplier, produced an estimated \$252 million of handtools in 1982. 2/ The five largest handtool firms in the United Kingdom represent approximately 30 percent of handtool production. 3/

Total production of handtools in France amounted to \$375.0 million in 1982. There are 160 firms producing handtools, 2 of which are believed to account for over 50 percent of the French market. 4/ Average annual employment in the French handtool industry declined 6 percent from 1981 to 1982, reaching 7,275 (5,051 production workers) in 1982. 5/

Denmark's handtool production fell steadily during 1979-82, declining by 15 percent to 20.5 million dollars' worth in 1982. Production is concentrated in the area of horticultural tools, which account for about one-half of industry output (in terms of value). Production of handsaws and saw blades accounts for about one-quarter of output, and the remainder is hammers and other tools.

1/ Based on information from the 1982 report of SOMMEP, the French Nonpowered Handtools Association.

2/ Ibid.

3/ U.S. Department of State telegram, U.S. Embassy, London, Oct. 11, 1983.

4/ U.S. Department of State telegram, U.S. Embassy, Paris, October 1983.

5/ SOMMEP, op. cit.

There are about 10 handtool manufacturers in Denmark, 4 of which account for almost 80 percent of the industry's production. Total employment in 1982 was estimated at 700 workers, of which about 550 are production workers. 1/

The Netherlands' production of handtools declined 20 percent during 1978-82 to \$22.2 million in 1982. Industry sources in the Netherlands believe that the value of handtool production represents about 60 to 70 percent of available capacity. There were approximately seven manufacturers of handtools in 1982, three of which accounted for approximately 80 percent of handtool manufacture. Production employment in the industry declined about 11 percent during 1979-82, reaching an estimated average of 1,098 workers in 1982. 2/

#### THE U.S. MARKET

The U.S. handtool market showed virtually no growth during 1978-82. The demand for handtools is directly influenced by overall economic activity. Thus, the declines in consumer spending and industrial output during this period precipitated a decline in the demand for handtools. The following figure illustrates the trends in personal consumption expenditures for durable goods, production of automobiles and manufacturing equipment, and housing starts. These declining trends slowed the purchases of handtools in key user segments, but were partially offset by the continuing growth in nonresidential construction. As a result, apparent U.S. consumption of handtools showed a slower rate of growth, rising from \$2.7 billion in 1978 to \$3.5 billion in 1981, before decreasing about 15 percent to nearly \$3 billion in 1982 (table 17). U.S. producers' shipments of all nonpowered handtools increased 6 percent, in terms of value, during 1978-82 and although comparable imports increased about 35 percent, the U.S. imports' share of the total U.S. handtool market increased by 2 percentage points during the 5-year period.

Table 17.--Nonpowered handtools: U.S. producers' shipments, exports of domestic merchandise, imports for consumption, and apparent consumption, 1978-82

Year	Producers' shipments	Exports	Imports	Apparent consumption	Ratio (percent) of imports to consumption
	<u>1,000 dollars</u>				<u>Percent</u>
1978-----	2,755,700	312,544	295,613	2,738,769	11
1979-----	3,213,400	348,840	352,891	3,217,451	11
1980-----	3,274,600	405,640	367,075	3,236,035	11
1981-----	3,510,900	436,301	419,160	3,493,759	12
1982----- <u>1/</u>	2,949,200	344,547	403,854	3,008,507	13

1/ Estimated by the staff of the U.S. International Trade Commission.

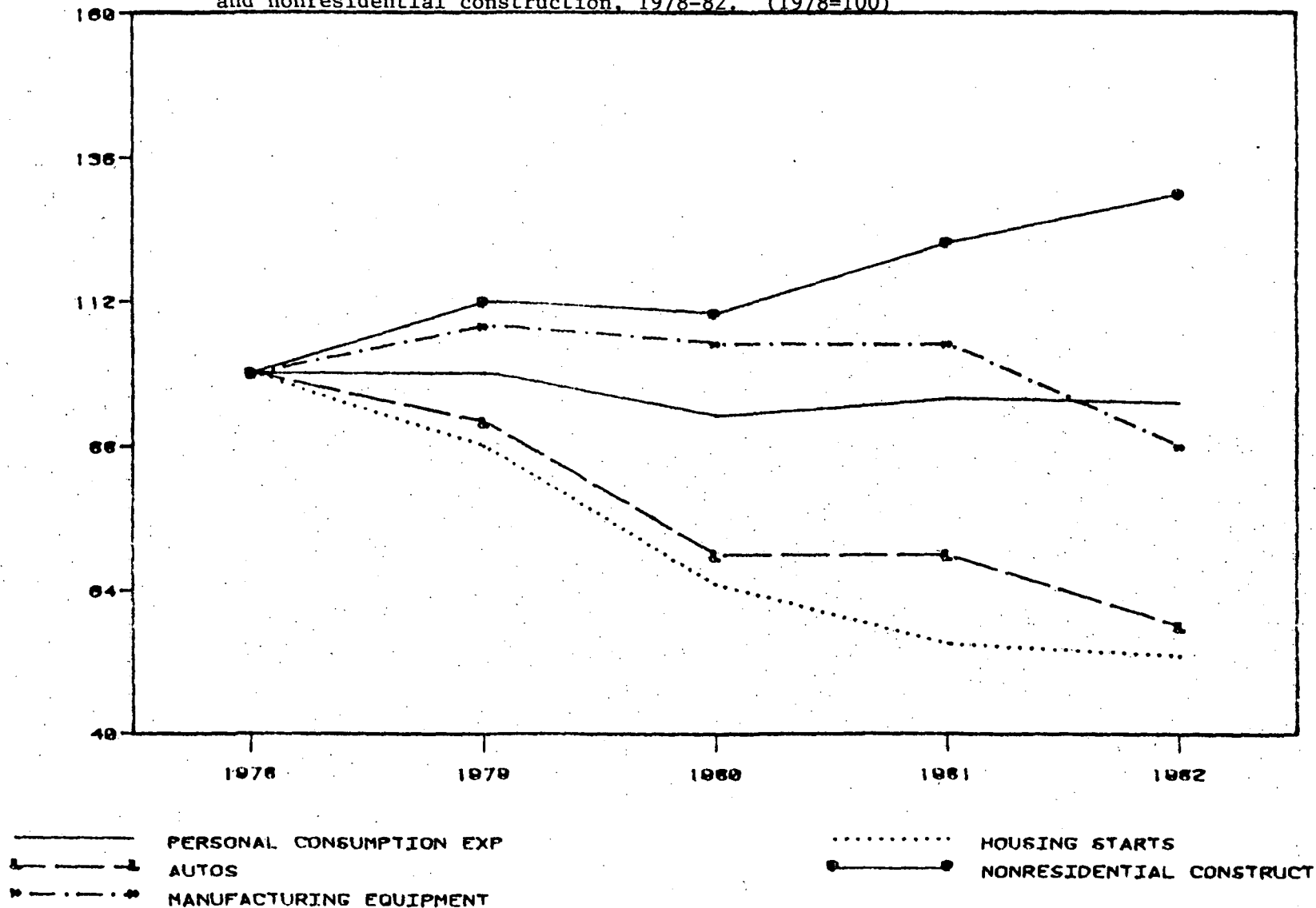
Source: Compiled from official statistics of the U.S. Department of Commerce.

1/ U.S. Department of State telegram, U.S. Embassy, Copenhagen, October 1983.

2/ U.S. Department of State telegram, U.S. Embassy, The Hague, November 1983.



Figure 1.--Inflation-adjusted indices of personal consumption expenditures in durable goods, production of autos, production of manufacturing equipment, housing starts, and nonresidential construction, 1978-82. (1978=100)



Source: Indices of autos and manufacturing equipment compiled from official statistics of the Board of Governors of the Federal Reserve System. Indices of personal consumption expenditures, housing starts, and nonresidential construction compiled from official statistics of the U.S. Department of Commerce.

The import share of apparent U.S. consumption on a product basis is difficult to determine with a degree of certainty, since nonpowered handtool industry trade data, on the basis of quantity, are not available and U.S. producers' shipments are not reported in official statistics by product category. However, a trend in the ratio of imports to consumption can be estimated for three major groups of nonpowered handtools--wrenches, pliers, and screwdrivers. By using the domestic shipment data reported in the Commission's questionnaires, and applying each year's proportion of product category shipment/total reported shipments to official industry shipment data, the ratio of imports to consumption for three tool groups tends to reflect increases, as follows (in percent): 1/

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
All wrenches <u>1/</u> ----	10	9	11	11	12
Pliers-----	16	15	15	16	19
Screwdrivers-----	6	6	7	8	10

1/ Includes ratchets, sockets and accessories, socket sets, flat wrenches, and all other wrenches.

Although there are numerous differentiated markets through which handtools are distributed to consumers, the domestic industry recognizes three broad market categories: 2/ the automotive aftermarket, which caters to handtools used by mechanics; the industrial market, through which handtools are supplied for machinery maintenance and construction and to carpenters, electricians, and other professional users; and the consumer or do-it-yourself market, in which handtools are purchased by the infrequent user or impulse buyer from outlets such as hardware or related stores, discount stores, drug stores, and supermarkets. Although the types of handtools distributed in these three markets are often the same, their composition by grade of steel, quality, and pricing differs, and those sold in the automotive aftermarket and the industrial market are typically of higher quality and higher price than handtools sold in the consumer market.

Information provided by producers and importers on their shipments by type of market tends to indicate that imports are a factor in all markets and that these markets may not necessarily be restricted as to quality requirements of end users. However, an indication of principal market focus by imported and domestic products appears to be revealed. U.S. producers reported that a large share of their shipments (34 percent) were shipped to industrial and commercial distributors. They further reported that hardware

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1/ Estimated by the staff of the U.S. International Trade Commission.

2/ Officials that presented testimony at the hearing representing a U.S. producer and on behalf of the Taiwan industry believe that three distinct market categories (based on quality and price differences) exist in the U.S. market. These include a market for low-quality/low-priced handtools of the types used principally by the occasional user; a market for mid-quality/mid-priced handtools designed for intermittent use by hobbyist and trades people; and a market for high-quality/high-priced handtools which are designed for constant use by mechanics, skilled tradesmen, and production workers.

wholesalers and cooperatives received 16 percent of their total shipments, and that the automotive aftermarket and original-equipment manufacturers received 14 percent and 9 percent, respectively. These data indicate that nearly 75 percent of domestic shipments are distributed through markets which typically require a high-quality product. Conversely, U.S. importers reported that 56 percent of their total shipments were marketed through retail outlets such as department stores, discount stores, and other retail stores which have traditionally been purchasers of low-quality handtools. <sup>1/</sup> In addition, importers reported that 19 percent of their shipments went to hardware wholesalers and cooperatives; and, the automotive aftermarket and industrial and commercial distributors received 8 percent and 6 percent, respectively (table 18).

The information provided by producers and importers tends to support the contention made by importers and certain domestic producers that shipments of domestically produced handtools are generally concentrated in the industrial and automotive markets, whereas imported handtools are typically concentrated in the consumer market.

Table 18.—Nonpowered handtools: U.S. producers' and importers' domestic shipments to specified markets, 1980-83

Type of market	Percent of total quantity	
	Producers	Importers
Original-equipment manufacturers-----	9	1
Industrial and commercial distributors <sup>1/</sup> -----	34	6
Hardware wholesalers and cooperatives-----	16	19
Automotive aftermarket wholesalers <sup>2/</sup> -----	14	8
Retail outlets:		
Department stores-----	10	6
Discount stores <sup>3/</sup> -----	2	25
Other retail stores <sup>4/</sup> -----	5	25
All other <sup>5/</sup> -----	10	10
Total-----	100	100

<sup>1/</sup> Include electrical supply houses, plumbing supply houses, contractor suppliers, and welding suppliers.

<sup>2/</sup> Include mobile distributors.

<sup>3/</sup> Include drug stores, supermarkets, and other discount outlets.

<sup>4/</sup> Include hardware stores and other retail outlets specializing in home building materials and supplies.

<sup>5/</sup> Include sales to Federal, State, and local governments.

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

<sup>1/</sup> A major U.S. importer stated at the hearing that imports of the low-quality handtools were probably stimulated by the recession.

## CONDITIONS OF COMPETITION

The competition that exists in the U.S. marketplace between domestically produced handtools and those produced in foreign countries 1/ is influenced by a variety of structural factors; the most important of which are marketing capability, facets of government involvement, and the cost of fuel, raw material, capital, and labor. Industry evaluation of these structural considerations indicates that the strength of U.S. producers largely stems from their competitive edge in all handtool product categories in the area of fuel availability and cost, and marketing techniques (table 19). The advantage of foreign handtool industries is principally attributed to lower costs for raw material, capital, and labor, along with various facets of government support. An assessment by U.S. producers of these structural factors on a bilateral basis with its major competitors also places the U.S. industry in the strongest competitive position in fuel availability and cost (with the exception of India) and in all facets of marketing (table 20). The U.S. industry maintains a competitive advantage over many of its foreign counterparts in production technology, but competes on an equal basis in this area with Japan and EC countries as a group. Although handtools produced in the EC countries were reported to have an advantage over domestic products only in the area of government involvement (with respect to subsidies, tariff and nontariff measures on imports, and favorable domestic regulation), the other major handtool competitors of the United States held advantages as well in most areas of capital formation and labor. In most areas of government involvement, the major handtool competitors of the United States are judged by U.S. producers to have a strong competitive advantage; however, the U.S. industry was cited as being in an equivalent position with its foreign competitors (except Japan) in research and development assistance.

When U.S. producers and importers examined specific product-related attributes, they agreed that U.S.-made handtools have the competitive advantage in quality, terms of sale, overall product availability, shorter delivery time, and warranties, whereas foreign-made handtools appear to have their greatest overall advantage in pricing factors (tables 21 and 22). Despite the product attributes which constitute important competitive strengths of U.S.-made handtools, importers and producers both cite the price advantage as sufficient to provide an overall competitive advantage for handtools made in Japan and Taiwan in the U.S. market. 2/ However, importers and U.S. producers both rank U.S.-made handtools as price competitive with products from EC countries, and judge U.S. products as being in a favorable or comparable competitive position with Korea, China, and India despite the recognized price advantage of products produced in these countries. U.S. producers' competitive assessments of these product-related attributes on an individual product group basis closely follow these observations, and indicate specific areas where domestically produced handtools are rated to have an

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1/ These countries include Japan, Taiwan, Korea, countries of the European Community, China, and India.

2/ The competitive assessments by U.S. producers and importers were made on the basis of a product and country comparison without regard to specific end-use markets and product quality/pricing considerations which are discussed elsewhere in this report.

Table 19.--Nonpowered handtools: U.S. producers' competitive assessment of structural factors of competition for the U.S. industry and selected foreign industries by product categories, 1980-83 1/

Competitive Advantage 2/											
Item	Chisels and punches	Hammers and sledges	Vises	C-clamps	Pliers	Metal/bolt-cutting snips and shears	Ratchets	Sockets and accessories	Socket sets		
Fuel:											
Availability-----	D	D	D	D	D	D	D	D	D		D
Cost-----	D	D	D	D	D	D	D	D	D		D
Raw materials:											
Availability-----	F	S	D	S	S	D	S	S	S		S
Cost-----	F	F	F	F	F	F	F	F	F		F
Capital:											
Availability-----	F	F	F	F	F	F	F	F	F		F
Cost-----	F	F	F	F	F	F	F	F	F		F
Ability of industry profits to attract-----	F	F	F	F	F	D	F	F	F		F
Labor:											
Availability-----	F	F	F	F	F	F	F	F	F		F
Cost-----	F	F	F	F	F	F	F	F	F		F
Production technology-----	D	D	D	D	S	D	D	D	D		D
Marketing:											
Channels of distribution-----	D	D	D	D	D	D	D	D	D		D
Responsiveness to orders-----	D	D	D	D	D	D	D	D	D		D
After-sale service capabilities-----	D	D	D	D	D	D	D	D	D		D
Government involvement:											
Subsidies-----	F	F	F	F	F	F	F	F	F		F
Research and development-----	F	F	F	F	S	F	F	F	F		F
Tariff levels on imports-----	F	S	F	F	S	D	S	S	S		S
Nontariff barriers to imports-----	F	F	F	F	F	F	F	F	F		F
Domestic regulation-----	F	F	F	F	F	F	F	F	F		F

Competitive advantage 2/									
	Flat wrenches	All other wrenches	Screw-drivers	Specialized automotive tools	Horticultural and related tools	Edge tools	Handsaws, blades, frames, and parts	Other nonpowered handtools	
Fuel:									
Availability-----	D	D	D	D	D	D	D		D
Cost-----	D	D	D	D	D	D	D		D
Raw Materials:									
Availability-----	F	S	S	S	S	S	S		S
Cost-----	F	F	F	F	F	F	F		F
Capital:									
Availability-----	F	F	F	F	S	F	F		F
Cost-----	F	F	F	F	F	F	F		F
Ability of industry profits to attract funds-----	F	F	F	F	S	S	F		F
Labor:									
Availability-----	F	F	F	F	F	F	F		F
Cost-----	F	F	F	F	F	F	F		F
Production technology-----	D	D	D	S	S	D	D		S
Marketing:									
Channels of distribution-----	D	D	D	D	D	D	D		D
Responsiveness to orders-----	D	D	D	D	D	D	D		D
After-sale service capabilities-----	D	D	D	D	D	D	D		D
Government involvement:									
Subsidies-----	F	F	F	F	F	F	F		F
Research and development-----	S	F	F	S	S	S	S		S
Tariff levels on imports-----	F	F	F	F	F	F	F		F
Nontariff barriers to imports-----	F	F	F	F	F	F	F		F
Domestic regulation-----	F	F	F	F	F	F	F		F

1/ Japan, Taiwan, Korea, and the EC countries (as a group) are the selected foreign countries.

2/ D=Domestic advantage; F=Foreign advantage; and S=Competitive position the same.

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

Table 20.--Nonpowered handtools: U.S. producers' competitive assessment of structural factors of competition for the U.S. industry and selected foreign industries, 1980-83 <sup>1/</sup>

Item	Competitive advantage <sup>2/</sup>					
	EC countries	Japan	Taiwan	Korea	China <sup>3/</sup>	India <sup>4/</sup>
Fuel:						
Availability-----	D	D	D	D	D	S
Cost-----	D	D	D	D	D	S
Raw materials:						
Availability-----	S	S	S	D	S	S
Cost-----	S	F	F	F	F	F
Capital:						
Availability-----	S	F	F	F	S	F
Cost-----	S	F	F	F	F	F
Ability of industry pro-						
fits to attract-----	S	F	F	F	S	F
Labor:						
Availability-----	S	F	F	F	S	F
Cost-----	S	F	F	F	F	F
Production technology-----	S	S	D	D	D	D
Marketing:						
Channels of distri-						
bution-----	D	D	D	D	D	D
Responsiveness to						
orders-----	D	D	D	D	D	D
After-sale service						
capabilities-----	D	D	D	D	D	D
Government involvement:						
Subsidies-----	F	F	F	F	F	F
Research and develop-						
ment-----	S	F	S	S	S	S
Tariff levels on						
imports-----	F	F	F	F	F	F
Nontariff barriers to						
imports-----	F	F	F	F	F	F
Domestic regulation-----	F	F	F	F	F	F

<sup>1/</sup> Other foreign industries cited by 2 or fewer respondents and containing insufficient data to present include Brazil, Mexico, and Spain.

<sup>2/</sup> D=Domestic advantage; F=Foreign advantage; and S=Competitive position the same.

<sup>3/</sup> Excludes the product categories of ratchets, sockets and accessories, socket sets, flat wrenches, and specialized automotive tools which were not rated by U.S. producers.

<sup>4/</sup> Competitive assessment is limited to the product categories of hammers and sledges, and flat wrenches.

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

Table 21.--Nonpowered handtools: U.S. importers' competitive assessment of product-related factors of competition for the U.S.-produced and foreign-made handtools in the U.S. market, 1980-83

Item	Competitive advantage <sup>1/</sup>					
	EC countries	Japan	Taiwan	Korea	China	India
Overall competitive advantage-----	D	F	F	S	S	D
Lower purchase price (delivered)-----	D	F	F	F	F	D
Ability to supply product at various market price levels-----	D	F	F	D	F	D
Exchange-rate advantage--	F	F	S	S	S	S
Quality-----	D	D	D	D	D	D
Terms of sale-----	D	D	D	D	D	D
Overall availability (what you want, and where you want it)-----	D	D	D	D	D	D
Shorter delivery time-----	D	D	D	D	D	D
Warranties-----	D	D	D	D	D	D
Historical supplier relationship (including service)-----	D	D	D	D	D	D

<sup>1/</sup> D=Domestic advantage; F=Foreign advantage; and S=Competitive position the same.

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

Table 22.--Nonpowered handtools: U.S. producers' competitive assessment of product-related factors of competition for the U.S.-produced and foreign-made 1/ handtools in the U.S. market, 1980-83

Item	Competitive advantage <u>2/</u>					
	EC countries	Japan	Taiwan	Korea	China <u>3/</u>	India <u>4/</u>
Overall competitive advantage-----	D	F	F	D	F	D
Lower purchase price (delivered)-----	D	F	F	F	F	F
Ability to supply product at various market price levels-----	D	F	F	F	F	S
Exchange-rate advantage--	F	F	F	F	F	F
Quality-----	S	D	D	D	D	D
Terms of sale-----	D	D	D	D	D	D
Overall availability (what you want, and where you want it)-----	D	D	D	D	S	D
Shorter delivery time----	D	D	D	D	D	D
Warranties-----	D	D	D	D	S	D
Historical supplier relationship (including service)-----	D	D	D	D	D	D

1/ Other foreign-made handtools cited by two or fewer respondents and containing insufficient data to present include Brazil, Mexico, and Spain.

2/ D=Domestic advantage; F=Foreign advantage; and S=Competitive position the same.

3/ Excludes the product categories of ratchets, sockets and accessories, socket sets, flat wrenches, specialized automotive tools, and horticultural tools which were not rated by U.S. producers.

4/ Competitive assessment is limited to the product categories of hammers and sledges, C-clamps, all wrenches (incl. ratchets and sockets), and handsaws, blades, frames, and parts.

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



overall competitive advantage in the U.S. market compared with foreign-made handtools. 1/

Although certain exceptions in these areas may be cited by producers and importers relative to a specific type of handtool or foreign competitor, these conclusions are based on the aggregate responses to the Commission's questionnaires received from U.S. producers and importers which provided competitive assessments. 2/

U.S. producers of handtools reported that the most frequent steps taken to respond to import competition in the U.S. market included implementing cost-reduction efforts, reducing production, upgrading plant and equipment, and revising the product line of handtools (table 23). In addition, the reported increasing levels of capital expenditures (in 1981-82), research and development expenditures, and advertising expenditures suggest that the U.S. industry devoted further resources to improving its competitive position relative to imports. Further, growing imports of handtools by U.S. producers suggest that the domestic handtool industry may be relying to an increasing degree on imports to remain competitive and round out its product line. The quantity of U.S. producers' imports reported by questionnaire respondents represented 8 percent of their domestic handtool shipments in 1982 compared with 4 percent in 1978. Producer respondents accounted for 4 percent of the value of total U.S. handtool imports in 1982 compared with 2 percent in 1978. Certain U.S. producers are also using foreign sources for steel and partially fabricated tools (blanks) to keep costs down.

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1/ See app. G for U.S. producers' competitive assessments of product-related factors of competition by individual product groups.

2/ There were 52 U.S. producers, which accounted for 50 percent of the total value of U.S. producers' shipments in 1982, and 18 U.S. importers, which accounted for 19 percent of the total value of U.S. handtool imports in 1982, that responded to the Commission's questionnaires.

Table 23.--Nonpowered handtools: U.S. producers' responses to import competition in the U.S. market, 1980-83 <sup>1/</sup>

Nature of response	Share of responses
	<u>Percent</u>
Took no actions or few actions because your firm--	
Did not encounter significant competition for	
nonpowered handtools produced-----	27
Lacked capital funds to counter import competition--	25
Could not devise a cost-effective plan to counter	
import competition-----	34
Other-----	-
Your firm took the following actions:	
Reduced or dropped plans to expand capacity-----	28
Cut back production of nonpowered handtools-----	47
Closed production lines or plants manufacturing	
nonpowered handtools-----	20
Sold plants manufacturing nonpowered handtools-----	1
Opened new plants manufacturing nonpowered hand-	
tools-----	8
Revised your product line of nonpowered hand-	
tools-----	38
Implemented cost-reduction efforts-----	65
Upgraded plant and equipment-----	41
Improved the quality of your nonpowered handtools--	33
Imported nonpowered handtools-----	16

<sup>1/</sup> Data supplied by 52 firms which accounted for 50 percent of U.S. producers' shipments in 1982 (on the basis of value).

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

U.S. producers that export nonpowered handtools have generally experienced consistent increases in exports during 1978-81. The quality and service associated with U.S.-made handtools have typically provided the most significant contribution to these exports (table 24). In 1982, U.S. producers faced more intense competition from other world suppliers in their largest export markets which include Canada, Belgium, Saudi Arabia, Venezuela, Australia, and Mexico. As producers experienced a 40-percent decline in the quantity of export shipments during 1981-82, they reported taking similar steps as those taken to improve their competitive status with imports (table 25). U.S. producers most commonly responded to increased competition in their foreign markets by taking efforts to become more cost efficient or reducing production of the products affected. These steps may also have been accompanied by changes in quality and revision in product line, or by delays in expanding capacity.

Table 24.--Nonpowered handtools: U.S. producers' ranking of product-related factors that typically made the most significant contribution to their level of exports to foreign markets, 1980-83 <sup>1/</sup>

Factor contributing to U.S. exports	Ranking
Quality-----	1
Historical supplier relationship (including service)-----	2
Overall availability (what you want, and where you want it)-----	3
Exchange-rate advantage-----	4
Lower purchase price (delivered)-----	5
Warranties-----	6
Terms of sale-----	7
Ability to supply product at various market price levels-----	8

<sup>1/</sup> Data supplied by 52 firms which accounted for 14 percent of U.S. exports in 1982 (on the basis of value).

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

Table 25.--Nonpowered handtools: U.S. producers' responses to increased competition in their foreign markets, 1980-83 <sup>1/</sup>

Nature of response	Share of responses Percent
Took no actions or few actions because your firm--	
Had already shifted production to other lines of handtools-----	18
Lacked capital funds to counter foreign competition-----	41
Other-----	13
Your firm took the following actions:	
Reduced or dropped plans to expand capacity-----	51
Cut back production of these handtools-----	70
Closed production lines or plants manufacturing these handtools-----	40
Revised your product line of handtools-----	52
Implemented cost-reduction efforts-----	82
Improved the quality of the product-----	55
Opened a plant to manufacture these handtools abroad-----	15
Other-----	14

<sup>1/</sup> Data supplied by 52 firms which accounted for 14 percent of U.S. exports in 1982 (on the basis of value).

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

## Inventories

U.S. producers and importers of handtools typically maintain inventories in order to provide reasonable delivery and service to customers. Producers' inventories, however, are usually larger than those of importers since producers attempt to maintain inventories of their complete product line, whereas importers tend to limit inventories to certain types of high-volume handtools. Because it is more difficult for importers to anticipate lead-times required for delivery, and the specific needs of their customers, U.S. producers normally have a shorter delivery time. Depending on the supplying country, an importer may require from 120 to 240 days to supply handtools to a customer after a normal level of inventory has been depleted by an exceptionally large order. <sup>1/</sup> Shorter delivery time is an important competitive advantage for the U.S. producer since it can offset the price advantage of a particular imported handtool product.

In the Commission's survey of U.S. purchasers of both domestic and foreign-made nonpowered handtools, respondents indicated that the ability to provide products in a responsive fashion were the most important attributes in their decisions to purchase U.S.-made handtools. Table 26 lists the factors considered in the Commission's survey and ranks them in order of their importance to domestic producers.

Table 26.--U.S.- and foreign-made nonpowered handtools: Ranking of U.S. purchasers' reasons for purchases, 1980-83

Reason for purchase	: U.S.-made : : nonpowered : : handtools :	: Foreign-made : : nonpowered : : handtools :
Shorter delivery time-----	1 :	-
Overall availability (what you want, and where you want it)-----	2 :	3
Quality-----	3 :	4
Terms of sale-----	4 :	7
Lower purchase price-----	5 :	1
Ability to supply product at various market price levels-----	6 :	2
Warranties-----	6 :	8
Historical supplier relationship (including service)-----	- :	5
Exchange-rate advantage-----	- :	6

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

Purchasers responded that the principal advantages of foreign-made handtools are their lower price and flexibility to enable marketing at various price points. A U.S. producer has indicated, for example, that the socket wrench business is essentially a gift-oriented business which requires certain

<sup>1/</sup> Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

price points to achieve coverage in promotional activities of purchasers. 1/ In this instance, domestic production is supplemented by imports to enable the producer to offer a broader price line to meet the needs of various purchasers.

As demand for handtools fluctuated during 1978-82, the end-of-year inventories of U.S. producers grew steadily, increasing 26 percent and peaking at 119 million pieces in 1982. The largest increase occurred in 1981, a period during which domestic manufacturers mistakenly anticipated a significant increase in demand. Throughout the 5-year period, inventories increased in all product categories with the greatest change occurring in socket wrenches and accessories, which was probably due to a more severe decline in demand for these products relative to other handtools. Yearend producers' inventories of socket wrenches and accessories were 71 percent larger in 1982 than they were in 1978.

In contrast, importers' inventories decreased from 14.1 million pieces in 1978 to 11.8 million pieces in both 1979 and 1980 before increasing sharply to 17.8 million pieces in 1982. The product category that registered the largest increase in the level of inventories during the 5-year period was socket wrench sets. Importers' inventories of these handtools, which were about 120 percent larger at yearend in 1982 than they were in 1978, also reflected a more pronounced decline in demand for socket wrench sets during the period. Data from questionnaire respondents on total inventories of producers and importers, as of December 31, 1978-December 31, 1982, are shown in the following tabulation (in millions of pieces):

	<u>Producers' inventories 1/</u>	<u>Importers' inventories 2/</u>
1978-----	94.4	14.1
1979-----	98.8	11.8
1980-----	107.4	11.8
1981-----	118.5	15.7
1982-----	118.6	17.8

1/ Supplied by U.S. producers that represented 50 percent of the value of shipments in 1982.

2/ Supplied by U.S. importers that represented 19 percent of the value of imports in 1982.

#### Raw Materials, Capital, and Labor Availability and Cost

Steel is the principal raw material consumed in the manufacture of handtools. It is usually purchased in the form of rod or bar stock that is worked into specific shapes, orienting the grain structure and fiber formation at the point of greatest shock and stress. The type of steel used is determined by the type and desired quality of the handtool being produced. The physical properties of alloy steel or carbon steel, which are the most popular types of steel used in handtool production, can be varied in such a manner as to impart special characteristics such as flexibility, hardness, and durability to the tool. Handtools manufactured from alloy steel or high-carbon steel are superior in quality and are generally consumed in the

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1/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

automotive aftermarket or the industrial market by those requiring continuous use of the tool. Handtools produced from low-carbon steel are of a lower quality and are generally distributed through the consumer or do-it-yourself market. Other materials used include wood and plastic, which are principally for tool handles. Steps taken by domestic producers to minimize cost increases include importing the steel raw material or importing partially formed blanks which are then finished in the domestic plants. There is a substantial difference in the cost of various types of steel used in the manufacture of handtools. For example, the cost of low-carbon steel in the United States is about \$400 per ton compared with nearly \$2,000 per ton or more for high-grade alloy steel.

Raw material used by foreign producers of handtools in most developing countries is generally of a lower carbon content than raw material used by U.S. producers, and is reflected in the overall lower quality of most handtools imported from those countries. Producer respondents indicate that foreign producers in the Far East have an advantage over U.S. producers in raw material cost but, with the exception of producers in Korea, compete on an equal basis with respect to raw material availability. Producers of handtools in the EC have an equal competitive advantage with U.S. producers in raw material cost and availability. A U.S. producer/importer familiar with the Taiwan handtool industry maintains that there are not huge differences in the cost of raw material in Taiwan compared with that in the United States, and asserts that the major cost differences are in more subtle areas such as taxes, labor costs, plant and equipment costs, and environmental impact cost. <sup>1/</sup>

The ratio of material costs to shipments in the U.S. handtool industry remained relatively stable during 1978-81, representing 40 percent of the value of shipments for the U.S. handtool industry in 1981, as shown in the following tabulation (material costs expressed as a share of the value of shipments):

<u>Year</u>	<u>U.S. handtool industry <sup>1/</sup> (Percent)</u>
1978-----	39.6
1979-----	39.9
1980-----	39.7
1981-----	40.0

<sup>1/</sup> Data represent all firms classified in the nonpowered handtool industry, SIC Nos. 3423 and 3425, compiled from official statistics of the U.S. Department of Commerce.

The cost of energy during production is a primary concern for domestic manufacturers of handtools, however, the U.S. industry held competitive advantages over its major foreign competitors in both fuel availability and cost during 1980-83. The competitive advantage probably stems from the U.S. being a larger producer of crude oil and natural gas than the major competing countries in the Far East and the EC. In addition, the proposed deregulation

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<sup>1/</sup> Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

of natural gas prices in the United States could possibly increase the availability of natural gas to U.S. handtool producers, thereby making them more competitive with Far Eastern and European producers on a fuel cost basis. However, completion of the U.S.S.R.'s natural gas pipeline from Siberia to Europe could also increase the availability of natural gas for European handtool producers and enhance their competitive position.

Information solicited from U.S. producers indicates that industries in the Far East (specifically Japan, Korea, and Taiwan) have the competitive advantage in the availability and cost of capital, and the ability of industry profit to generate capital during 1980-83. The competitive status of the U.S. and EC handtool industries was reported to be relatively equal in these capital factors. Capital availability is important to both domestic and foreign handtool producers in order for them to finance necessary changes and improvements, such as opening new production facilities, acquiring new machinery, or expanding into new product lines or market segments. It is especially important to U.S. producers whose operations are becoming more capital intensive in an effort to more effectively compete with imports.

During 1978-81, U.S. handtool producers continuously decreased capital expenditures which suggests that capital was not considered to be readily available at competitive interest rates during the period. The increase in capital expenditures in 1982 is likely attributable to a decrease in interest rates. Also, the pretax profit margins of U.S. handtool producers during 1978-82 were consistently higher than the pretax profit margins of producers of fabricated metal products and durable manufacturing corporations. This relatively favorable level of profitability indicates that capital from financial institutions was probably available to the U.S. producers during the period. A comparison of handtool producers' profit margins, on the basis of data submitted in response to the Commission's questionnaires, with those reported by producers of other product categories as reported in the Federal Trade Commission's quarterly financial report for manufacturing operations is shown in the following tabulation (in percent):

Product	1978	1978	1980	1981	1982
Nonpowered handtools-----	10.7	11.0	8.4	8.7	9.5
Fabricated metal products-----	7.4	7.2	6.1	6.8	4.2
Durable manufacturing corporations-----	9.1	8.4	6.4	6.8	3.8

The overall cost of capital appears to be higher in the United States than in the major producing nations of Japan and West Germany, as shown in the following tabulation of data of the Organization for Economic Co-operation and Development (in percent per annum):

Country	1978	1979	1980	1981	1982
United States-----	8.43	9.64	11.49	13.72	10.55
Italy-----	13.04	14.00	16.23	21.39	19.90
Japan-----	6.10	8.64	9.41	7.93	7.50
West Germany-----	6.30	7.90	8.90	9.70	7.90
Canada-----	9.68	11.32	12.67	15.27	11.69
France-----	10.04	12.14	14.71	17.00	15.71
United Kingdom-----	12.34	11.75	12.14	13.89	10.20

The cost of capital increased in the United States during 1978-81. Data compiled by the Federal Reserve Board show that the average prime interest rate charged by banks in the United States roughly doubled during 1978-81, before declining in 1982, as shown in the following tabulation (in percent):

<u>Prime interest rate</u>	
1978-----	9.06
1979-----	12.67
1980-----	15.27
1981-----	18.87
1982-----	14.86

The growth of U.S. interest rates during 1978-81 may have deterred U.S. producers' capital expenditures during the period.

Foreign producers in the Far East were reported by U.S. producers to have a competitive advantage in both labor availability and cost. Wages paid to production workers in Taiwan, for example, are alleged to be as much as 10 times less than wage rates in the United States. <sup>1/</sup> Although wage rates in Japan are believed to be increasing, owing in part to an increasing level of production workers' skill and the vigorous efforts of Japanese unions during wage bargaining time, the rates are reported to be lower than those earned in the United States. U.S. producers also reported that wages paid to production workers in the EC are about the same as those paid in the United States.

According to data provided by the U.S. Department of Labor, Bureau of Labor Statistics (DOL), wages (including supplementary benefits) paid to handtool production workers in Belgium, Denmark, West Germany, the Netherlands, and Sweden during 1978-80, were on an average about 20 percent higher than wages paid in the United States. During 1981, however, only wages paid to production workers in Sweden were estimated by DOL to have been higher than wages paid to U.S. production workers. Wages paid to production workers

<sup>1/</sup> Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.



in Taiwan were reported to have averaged about one-tenth of wages paid to U.S. workers. 1/

Workers in the United States and most developed countries tend to be more skilled than workers in developing countries and therefore more productive. Nonetheless, the higher wages paid to workers in developed countries generally contribute to higher costs of production, which may have an impact on the competitiveness of these countries in the world market.

### Technology

The United States is more advanced in production technology than handtool producers in Taiwan, Korea, and China, and equal in technology to producers in the EC and Japan, according to U.S. producers' questionnaire responses. U.S. industry sources further contend that state-of-the-art manufacturing methods are found in the United States and West Germany. 2/

Production technology in the U.S. nonpowered handtool industry has undergone gradual improvements which have been characterized by faster equipment speeds, increasing automation of certain processes, and more rapid materials flow. One of the most advanced developments in U.S. production technology has been the introduction of robots by some manufacturers. Robots are used to move workpieces during the forging process and to assist in other finishing operations. In addition, there has been an increasing use of computers in both the production line and in critical service functions such as payroll, inventory, and production planning, enabling more efficient performance of daily production operations. Advances in heating raw materials for forging operations have contributed to faster production rates and have reduced the amount of excess metal that needs to be removed from forged pieces, thus resulting in less finishing work. 3/

Horizontal impact forging equipment, which provides a high degree of automation in the metal forging process, has been adopted by some U.S. plants in recent years. The process enables the automatic control of the forging dies and the movement of the workpieces. 4/ This results in reduced labor requirements which could prove to be a significant method of competing against the advantages in labor costs enjoyed by producers in the Far East. The adoption of cold-forming techniques, which are considered to be state-of-the-art in forming processes, 5/ has also contributed to lower production costs by eliminating the usual need for heating of steel workpieces.

Most of the capital expenditures made by U.S. producers during 1978-82 are reported to have been used to improve the manufacturing capabilities of

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1/ U.S. producer/importer familiar with a Taiwanese handtool production facility indicated that labor cost is approximately 25 percent of that experienced in their U.S. plant; also see discussion on pp. 38-39.

2/ Ibid.

3/ U.S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, Hand and Edge Tool Industry Productivity, October 1983, p.13.

4/ Op. cit., Monthly Labor Review.

5/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

the industry and to lower manufacturing costs. During the 5-year period the industry upgraded old facilities. One major U.S. producer of mechanics' handtools, primarily flat wrenches, sockets, ratchets, and other accessories, is involved in a capital expenditure program which, through an automated cold-forming process, has the potential of reducing production costs for handtools by about 35 percent. This is expected to provide the company with opportunities for market share expansion. 1/

One measure of the extent to which new technology is utilized by U.S. handtool producers is by the ages of machines in use. Responses to the Commission's questionnaire revealed that of the 26,284 production machines used to manufacture handtools during 1982, 18 percent were 4 years old or less; 24 percent were 5 to 9 years old; 24 percent were 10 to 19 years old; and 34 percent were 20 years old or more. Domestic producers maintain, however, that manufacturing methods, rather than the age of manufacturing equipment, are more of a measurement of production efficiency. The number and age of production machines in use by U.S. producer respondents, as of December 31, 1982, are shown in the following table.

Table 27.--Nonpowered handtools: Machines in use by U.S. producers of handtools, by ages, as of Dec. 31, 1982

(In units)	
Age	Production machines
0 to 4 years-----	4,601
5 to 9 years-----	6,180
10 to 14 years-----	6,347
20 years and over-----	9,156
Total-----	26,284

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

Industry sources have indicated that the average age of handtool plants and equipment in Taiwan is 10 years, 2/ which suggests that many of these plants utilize current technology in their manufacturing processes. An example of this is their use of a Taiwan-made machine known as a parts former which provides greater production speed and longer tooling life than American machines. 3/ Handtool production facilities in Japan are thought to be slightly older than those in Taiwan. However, Japanese manufacturing methods are judged to be similar to those in the United States. 4/

1/ Close Up: Easco Corp., Smith Barney, Harris Upham and Co., Inc., Aug. 24, 1983.

2/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

3/ Ibid.

4/ Ibid.

### Product Quality

Handtool quality, which is principally determined by tool hardness, durability, design, and finish, is another important competitive factor in the market place, particularly in the high-end consumer market and the professional market. U.S. producers and importers indicate that domestic manufacturers have the advantage in quality over handtools produced in the Far East and other developing countries, although U.S. producers believe that producers of handtools in the EC compete on a comparable basis in quality.

Handtool quality is dependent on the type of raw material used and the method of manufacture. The resulting quality differences may account for part of the variance in price of similar types of handtools manufactured by U.S. and foreign producers. The quality offered in a specific tool reflects the type of market sought--low-end consumer, high-end consumer, or the professional market. Handtools for the professional market must typically meet stringent performance and finish requirements and are used by metalworkers, masons, electricians, carpenters, and original-equipment manufacturers. Domestic producers largely supply the high-quality products required for the professional market; the Far East and developing country producers largely supply the low-end consumer market; the high-end consumer market is supplied by both domestic and foreign producers with tools of comparable quality. 1/ The domestic industry contends that despite similar appearances, imported handtools frequently are not of the same quality as the domestic article. 2/

Handtools produced in the United States often carry lifetime warranties under the Consumer Protection Act and are manufactured to meet the American National Standards Institute's (ANSI) specifications for torque, hardness, and tolerance. A major importer of handtools contends that the huge majority of imported handtools do not meet federal quality specifications, particularly with respect to socket set imports. 3/ Although imported handtools are not guaranteed by the foreign manufacturer, many importers provide a warranty and will replace defective tools. 4/ Imported handtools purchased by the U.S. Government must also comply with federal specifications, which may differ from ANSI specifications. 5/

### Marketing

The U.S. industry had a competitive advantage over foreign handtool industries in most facets of marketing during 1980-83 with respect to channels of distribution, responsiveness to orders, and after-sale service capabilities. Although marketing efforts of domestic producers are concentrated within the United States, the U.S. industry is striving to increase its share of foreign markets. Industry representatives have

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1/ Ibid.

2/ Ibid.

3/ Ibid.

4/ Ibid.

5/ Staff conversations with officials of the General Services Administration and importers.

asserted, however, that the strength of the dollar relative to other currencies has had an adverse impact on the industry's ability to export. U.S. exports represented an average of about 11 percent of the value of producers' shipments during 1978-82.

One of the most effective means of promoting the sale of handtools, both in the United States and abroad, is through trade fairs. In addition, a growing number of specialized exhibitions are being staged by individual companies or trade promotion organizations. Other promotional techniques used in the handtool industry are trade missions, visits of buyers to the producer's premises, and advertising in trade journals. 1/ Members of the Taiwan nonpowered handtools industry typically participate in trade shows sponsored by the China External Trade Development Corporation which has organized specialty hardware shows in locations such as West Germany, France, the United Kingdom and Singapore. 2/

The distribution system in the United States has been undergoing a substantial change during the past 20 years resulting in generally fewer and larger firms involved in the distribution of handtools. These changes coincided with the development of the discount markets, and the expansion of and sophistication in the home consumer market. As an example of these changes, previously the hardware industry was serviced by many small wholesalers; now there are only a few hardware wholesale distributors - four of the largest account for more than 50 percent of this market. Most of these are dealer-owned and any profit generated is passed back to the dealer. 3/ Another innovative distribution technique used by several large U.S. producers, is marketing their products through mobile distributors who sell handtools primarily to professional automotive mechanics. In addition, certain U.S. manufacturers (usually the larger firms) own their distribution centers and completely control the marketing of their products. A few manufacturers still sell their goods to independent distributors which market the products to retailers. Distributors generally service a specific geographic market area.

The use of brand names is also an effective means of marketing handtools. Some major retail stores purchase handtools from both domestic and foreign sources and sell the product under a name that is well known to the consumer. In these instances, however, the retailer insists upon obtaining a tool that is consistent in quality and appearance.

Foreign-made handtools are often imported directly by retailers in order to limit distribution costs and to enable the retailer to sell the items at competitive prices, or hit a particular price point. Department chainstores, hardware stores, and discount houses often import direct or purchase from joint buying groups. 4/ Some firms take the place of brokers in that they handle the paperwork while the product is sent directly to the retail outlet.

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1/ Biryukov, op. cit.

2/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

3/ Ibid.

4/ International Trade Forum, July-September 1981, p. 35.

Distribution patterns vary widely among country markets. According to industry sources, producers in the Far East market their products through company agents or distributors that in turn sell to the ultimate consumer, whereas those in the EC use a system that is similar to the one used in the United States but not as complex. In any event, foreign industries, especially those in the Far East, are known to make extensive marketing efforts outside of their domestic markets; and the United States is frequently the focus of such efforts. The technical requirements of tools, such as design, materials specifications, product standards, interchangeability, and performance, vary a great deal among different countries and also different market segments in those countries. 1/

Numerous legal actions have been taken by domestic producers and purchasers of handtools regarding the lack of country-of-origin markings on imported handtools marketed in the United States. 2/ Section 304 of the Tariff Act of 1930, as amended (19 U.S.C. 1304), provides that all articles of foreign origin imported into the United States must be legibly and conspicuously marked to indicate the English name of the country of origin to an ultimate purchaser in the United States. Representatives of the Taiwan industry and U.S. importers stated that all their shipments to the U.S. market complied with U.S. marking regulations. 3/

#### Product Price

A lower purchase price was the single most important reason cited by purchasers for buying foreign-made handtools, but purchasers also pointed out that their domestic and foreign handtool purchases are usually for different markets. 4/ Domestic handtools are generally purchased for the customer who wants a high quality/brand name tool. Foreign handtools are purchased for the price-conscious customer who requires a tool for light duty and infrequent use around the home and is not interested in an expensive tool designed for heavy use. 5/

The lowest net selling prices paid by domestic purchasers for 11 representative handtool products was consistently lower for foreign-made handtools than prices paid for the same handtools produced in the United States (table 28). Prices paid for the domestic handtools increased an average of 8 percent during 1980-82, whereas prices for foreign items fluctuated during the period with a decrease in the average price of 16 percent. Factors which may contribute to price differences in U.S.-and foreign-made nonpowered handtools are discussed in connection with other factors of competition in this section of the report.

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1/ Ibid.

2/ Customs Bulletin and Decisions, Oct. 19, 1983, vol. 17, No. 42, pp. 40-45.

3/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

4/ Information obtained from interviews with major U.S. purchasers of handtools and from responses to questionnaires of the U.S. International Trade Commission.

5/ Ibid.

Table 28.--Nonpowered handtools: Average lowest net delivered price reported by purchasers, 1980-82

Type of handtool	(Per unit)					
	1980		1981		1982	
	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
Cold chisel <u>1</u> /--:	\$1.49	\$1.00	\$1.73	\$1.08	\$1.87	\$1.14
Claw hammer <u>2</u> /--:	3.84	2.01	4.23	2.22	4.86	2.19
Vise <u>3</u> /-----:	8.57	7.15	9.56	5.91	10.14	5.35
Cutting shears <u>4</u> /-----:	4.85		5.02		5.22	
Pliers <u>5</u> /-----:	3.50	1.65	3.87	1.49	3.98	1.61
Socket <u>6</u> /-----:	0.67		0.69		0.77	
Adjustable wrench <u>7</u> /-----:	3.91	1.88	4.31	1.98	4.67	2.17
Combination wrench <u>8</u> /-----:	1.38		1.62	0.57	1.71	0.60
Screw-driver <u>9</u> /-----:	0.99		1.05		1.10	
Garden shovel <u>10</u> /-----:	3.99		4.39		4.60	
Hacksaw <u>11</u> /-----:	2.08	0.90	2.19	1.25	2.27	1.30

1/ Hex forged cold chisel - 5-5/8-inch length.

2/ Drop forged with wooden handle.

3/ Home vise - 3-1/2-inch length.

4/ Right cut aviation metal cutting shears - 6-inch length.

5/ Drop forged, solid joint, diagonal pliers.

6/ Forged socket - 1/2-inch with 3/8-inch drive.

7/ Forged adjustable wrench - 8-inch length.

8/ Forged combination wrench - 1/2 inch.

9/ Plastic-handle, round-shank screwdriver - 6 inches by 5/16 inch.

10/ Garden shovel - 7-1/2-inch blade, 42-inch length.

11/ Adjustable hacksaw - 10-inch to 12-inch blade.

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

Exchange rates appeared to benefit foreign industries during 1980-83. The currencies of all 10 major suppliers of U.S. imports in 1982 exhibited overall declines against the U.S. dollar during 1980-83, which contributed to strengthening the competitive position of their respective handtools in the U.S. market compared to U.S.-produced handtools. A further discussion of the effects of exchange rate changes is presented in appendix H.

## Government Involvement

U.S. handtool producers alleged that foreign producers have a competitive advantage in government subsidies which are designed to facilitate exports to the U.S. market. The countries that were cited as benefiting from subsidies were Brazil, Japan, Taiwan, Korea, India, West Germany, France, and the United Kingdom. Representatives of the Taiwan handtool industry stated that the Taiwan Government does not target its industry for special growth incentives and that the industry receives no subsidies. 1/ According to a major U.S. producer which is familiar with handtool production facilities in Taiwan and with producers in the Far East, exports of handtools from Taiwan, Korea, and Japan are not subsidized. 2/ The product coming from the Taiwan plant is estimated by this producer to be about 50 percent of the price of the same product produced in the company's U.S. plant. Freight and duty costs to bring a product on shore in the United States are said to reduce the differential by about one-third, or perhaps one-fourth, depending on the particular product. 3/ The factors that are believed to account for the cost of production advantage of Taiwan-based producers compared with U.S.-based producers include raw material cost (steel, plating, and so forth), taxes (about 50 percent lower than in the United States), labor cost (about 25 percent of U.S. plant cost), cost of plant and equipment, environmental impact cost, and interest cost on exports (2 or 3 percent). 4/ These advantages were also noted to exist to a greater or lesser degree in countries such as Japan, Korea, China, and India. A major U.S. importer, which imports handtools from Japan, Korea, Hong Kong, China, Italy, and Germany, states that the price of the imported merchandise further increases when the markup is added to sustain additional costs borne by the importer, such as marketing and distribution costs and the freight cost of transporting products in the United States. 5/

Available information on tariffs suggests that the rates of duty on handtools in the United States vary considerably with the rates of duty in other major handtool producing nations. For example, the rates levied on pliers, bolt cutters, punches, pipe cutters, and wrenches in Japan and countries of the EC are 4.5 percent and 6 percent, respectively, whereas the rates of duty on these products entering the United States range from 6.5 percent ad valorem to 15 percent ad valorem. The tariff rates applicable to imports of these products entering Taiwan and Korea are 15 percent and 30 percent, respectively.

U.S. rates of duty are applied against the Customs value of imports, which does not include charges for freight, insurance, and other charges incurred in transporting merchandise from the port of exportation to the port of importation. Foreign tariff rates are usually applied against the c.i.f.

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1/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

2/ Commission hearing and posthearing brief filed with the Commission by Harris, Berg & Creskoff on Nov. 21, 1983.

3/ Ibid.

4/ Ibid.

5/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.

value of imports which does include such charges. 1/ Hence, numerically equivalent foreign and U.S. tariff rates are not actually equal. The foreign rate is a higher effective rate, yielding a higher level of duty collected (in absolute terms) for a given rate.

Producers also alleged that their ability to service foreign markets is hampered by numerous foreign trade barriers. Table 29 lists the nontariff barriers considered in the Commission's survey and provides an indication of those most frequently encountered by U.S. producers in foreign markets. The questionnaire responses indicate that restrictions such as licensing requirements and exchange controls, and foreign government participation in the areas of financial support, exclusive trade arrangements and import laws/deposits were the most noticeable barriers experienced in the period of the study. Countries in the Far East, South America, and Central America (including Mexico) were cited as markets where such nontariff barriers exist.

Government regulations such as environmental and worker-health-and safety regulations were also perceived by U.S. producers to be a major competitive advantage of foreign industries. Foreign industries are comparatively less encumbered by domestic regulations, and U.S. producers have voiced complaints about the increasing financial burden of meeting U.S. regulatory requirements, which industry representatives believe puts the U.S. industry at a competitive disadvantage.

U.S. Government sponsored programs exist that are designed to assist or benefit the domestic handtool industry. The Department of Commerce and the Export-Import Bank of the United States provide assistance to companies by offering export promotion planning. Public Law 98-212 of the Department of Defense Appropriations Act requires that General Service Administration (GSA) procurements of handtools be supplied by domestic sources when the Department of Defense is the predominant user of the handtools being procured. Under the Buy American Act, GSA is also required to add an additional amount equal to 75 percent of the import bid price to that price for the purpose of evaluating bids and determining contract awards. The domestic handtool industry is protected from patent infringements under the nation's patent laws and receives tax incentives (including tax credits), tax deductions, and other tax considerations such as those found in the Economic Recovery Tax Act of 1981. A U.S. producer which is familiar with handtool plants in Taiwan contends that tax and depreciation policies in foreign countries are more favorable than those which exist in the United States. 2/

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1/ In Taiwan all tariffs are assessed on 110 percent of the c.i.f. value of imports. In addition, imports entering Taiwan are assessed a 4 percent labor tax on the dutiable value. Imports entering Korea are assessed on the c.i.f. value with an added tax of 10 percent and a 2.5 percent defense tax on the dutiable value.

2/ Hearing held before the U.S. International Trade Commission, Nov. 9, 1983.



Table 29.--Nonpowered handtools: Nontariff barriers experienced by U.S. producers in foreign markets, by number of responses and share of total respondents, 1980-83

Category of barriers	Number of responses indicating barriers	Share of total respondents
Quantitative restrictions and similar specific limitations:		
Licensing requirements-----	16	30
Quotas-----	7	13
Embargoes-----	8	15
Export restraints-----	3	5
Exchange and other monetary or financial controls-----	21	40
Minimum/maximum price regulations-----	5	9
Local content and mixing requirements-----	7	13
Restrictive business practices-----	9	17
Discriminatory bilateral agreements-----	5	9
Discriminatory sourcing-----	6	12
Nontariff charges on imports:		
Border taxes-----	6	12
Port and statistical taxes-----	1	2
Nondiscriminatory use/excise taxes/ registration fees-----	1	2
Discriminatory excise taxes, government controlled insurance, film taxes, use taxes/commodity taxes-----	3	5
Nondiscriminatory sales taxes-----	2	4
Discriminatory sales taxes-----	3	5
Prior import deposits-----	13	25
Variable levies-----	1	2
Consular fees-----	11	21
Stamp taxes-----	3	5
Other taxes and fees-----	1	2

Table 29.--Nonpowered handtools: Nontariff barriers experienced by U.S. producers in foreign markets, by number of responses and share of total respondents, 1980-83--Continued

Category of barriers	Number of responses indicating barriers	Share of total respondents
Government participation in trade:		
Subsidies and other aids-----	18	35
State trading, government monopolies and exclusive franchise-----	13	25
Laws and practices which discourage imports-----	16	31
General government policy problems-----	6	12
Government procurement-----	7	13
Standards:		
Health and safety standards-----	2	4
Product content requirements-----	3	5
Industrial standards-----	6	12
Requirements on weights and measures-----	1	2
Labeling and container requirements-----	9	17
Making requirements-----	5	9
Packaging requirements-----	5	9
Trademark problems-----	10	19
Customs procedures and administrative practices:		
Antidumping practices-----	3	5
Customs valuation-----	7	13
Consular formalities-----	6	12
Documentation requirements-----	9	17
Administrative difficulties-----	3	5
Merchandise classification problems-----	4	8
Regulations on samples, returned goods, and re-exports-----	10	19
Discriminatory ocean freight rates-----	11	21

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

**APPENDIX A**

**COPY OF LETTER TO CHAIRMAN ALFRED E. ECKES FROM CHAIRMAN DAN ROSTENKOWSKI,  
COMMITTEE ON WAYS AND MEANS, REQUESTING AN INVESTIGATION**

A-2  
COMMITTEE ON WAYS AND MEANS

U.S. HOUSE OF REPRESENTATIVES

WASHINGTON, D.C. 20515

May 12, 1983

JOHN J. SALMON, CHIEF COUNSEL  
JOSEPH K. DOWLEY, ASSISTANT CHIEF COUNSEL  
ROBERT J. LEONARD, CHIEF TAX COUNSEL  
A. L. SINGLETON, MINORITY CHIEF OF STAFF

JOHN J. SALMON, CHIEF COUNSEL  
JOSEPH K. DOWLEY, ASSISTANT CHIEF COUNSEL  
ROBERT J. LEONARD, CHIEF TAX COUNSEL  
A. L. SINGLETON, MINORITY CHIEF OF STAFF

The Honorable Alfred E. Eckes  
Chairman  
United States International Trade Commission  
701 E Street, N.W.  
Washington, D.C. 20436

Dear Mr. Chairman:

I hereby request the International Trade Commission to conduct a study pursuant to Section 332 of the Tariff Act of 1930 of trends in international trade in hand tools, especially wrenches, pliers, screwdrivers, striking and struck tools (e.g., hammers, sledges, punches, chisels), C-clamps, vises, hand-held automotive tools (e.g., body and fender tools, wheel and gear pullers, valve tools) and metal cutting snips and shears including bolt cutters.

It is our understanding that while annual sales of all hand tools in the United States now exceed \$1.5 billion and have been increasing in recent years, domestic production and shipments of these important articles of commerce and other indicia of economic health in the domestic industry have been declining precipitously.

Notwithstanding the foregoing, there is insufficient reliable data regarding conditions of competition between domestic and foreign producers. Accordingly, we request that the Commission undertake a full study of such conditions of competition, and report your findings to us as expeditiously as possible.

Sincerely yours,



Dan Rostenkowski  
Chairman

DR/RYM

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**APPENDIX B**

**NOTICE OF THE COMMISSION'S INVESTIGATION**

during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 701 E Street NW., Room 156, Washington, D.C. 20436, telephone 202-523-0471.

**FOR FURTHER INFORMATION CONTACT:** Ralph Elsas-Patrick, Esq., Unfair Import Investigations Division, U.S. International Trade Commission, telephone 202-523-0440.

By order of the Commission.

Issued: June 3, 1983.

**Kenneth R. Mason,**  
Secretary.

[FR Doc. 83-15347 Filed 6-7-83; 8:45 am]

BILLING CODE 7020-02-M

[332-163]

### **Trends in International Trade in Nonpowered Handtools**

**AGENCY:** United States International Trade Commission.

**ACTION:** At the request of the Committee on Ways and Means, U.S. House of Representatives, the Commission has instituted investigation No. 332-163 under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)) for the purpose of assessing trends in international trade in nonpowered handtools and conditions of competition between domestic and foreign handtool producers.

**EFFECTIVE DATE:** June 1, 1983.

**FOR FURTHER INFORMATION CONTACT:** Mr. James Brandon, Minerals and Metals Division, U.S. International Trade Commission, Washington, D.C. 20436, telephone 202-532-5437.

### **Background**

The Committee's request was dated May 12, 1983. In accordance with the Committee's request, the Commission's study will cover all nonpowered handtools, including wrenches, pliers, screwdrivers, striking and struck tools (e.g., hammers, sledges, punches, and chisels), C-clamps, vises, hand-held automotive tools (e.g., body and fender tools, wheel and gear pullers, and valve tools), and metal cutting snips and shears (including bolt cutters). The investigation will not cover interchangeable tools (e.g., dies and drilling bits) or powered handtools.

The Commission will collect and compile data on production, imports, exports, marketing and pricing practices, and other factors affecting the U.S. industry and conditions of competition between U.S. and foreign handtools. The study will develop this information for

the handtool industry as a whole and for selected product groupings.

The Commission expects to complete its study by February 3, 1984.

### **Public Hearing**

A public hearing in connection with this investigation will be held in the Commission Hearing Room, 701 E Street, NW., Washington, D.C., 20436, beginning at 10:00 a.m. on November 9, 1983. All persons shall have the right to appear by counsel or in person, to present information, and to be heard. Requests to appear at the public hearing should be filed with the Secretary, U.S. International Trade Commission, 701 E Street, NW, Washington, D.C. 20436, no later than noon, November 2, 1983.

### **Written Submissions**

In lieu of, or in addition to, appearances at the public hearing, interested parties are invited to submit written statements concerning the investigation by November 2, 1983. Commercial or financial information which a party desires the Commission to treat as confidential must be submitted on separate sheets of paper, each clearly marked "Confidential Business Information" at the top. All submissions requesting confidential treatment must conform with the requirements of section 201.6 of the Commission's Rules of Practice and Procedure (19 CFR 201.6). All written submissions, except for confidential business information, will be made available for inspection by interested persons. All submissions should be addressed to the Secretary at the Commission's office in Washington, D.C.

By order of the Commission.

Issued: June 1, 1983.

**Kenneth R. Mason,**  
Secretary.

[FR Doc. 83-15352 Filed 6-7-83; 8:45 am]

BILLING CODE 7020-02-M

[Investigation No. 337-TA-133]

### **Vertical Milling Machines and Parts, Attachments, and Accessories Thereto; Commission Decision Not To Review Initial Determinations and Issuance of Consent Orders Terminating the Investigation With Respect to Two Respondents**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice is hereby given that the Commission has determined not to review the presiding officer's initial determinations (Order Nos. 18 and 19) granting joint motions by complainant respondents, and the Commission

investigative attorney to terminate the above-captioned investigation with respect to respondents Kanematsu-Gosho (U.S.A.) Inc. and Deka Machine Sales Corp. based on a consent order agreements. Furthermore, after considering the effect of these consent order agreements upon the public health and welfare, competitive conditions in the U.S. economy, the production of like or directly competitive articles in the United States and U.S. consumers, the Commission has determined to issue the consent orders terminating the above-referenced investigation with respect to Kanematsu-Gosho (U.S.A.) Inc., and Deka Machine Sales Corp.

**Authority:** The authority for the Commission's disposition of this matter is contained in section 337 of the Tariff Act of 1930 (19 U.S.C. 1337) and in § 210.53(c), 210.53(h), 211.20, and 211.21 of the Commission's Rules of Practice and Procedure (19 CFR 210.53 (c) and (h) and 211.20 and 211.21).

**SUPPLEMENTARY INFORMATION:** On May 3, 1983, the presiding officer issued two initial determinations granting the joint motions of complainant Textron, Inc., respondents, Kanematsu-Gosho (U.S.A.), Inc. and Deka Machine Sales Corp., and the Commission investigative attorney to terminate the investigation with respect to these two respondents on the basis of consent order agreements. Under § 210.54(b) of the Commission's rules, the deadline for filing petitions for review expired on May 13, and May 16, 1983 respectively. No petitions were filed.

The Commission has determined not to review these initial determinations and issue the consent orders which provide the basis for termination of the investigation with respect to Kanematsu-Gosho (U.S.A.), Inc., and Deka Machine Sales Corp.

Both consent orders allow the respective respondents to continue importing and selling vertical milling machines that do not infringe Textron's alleged common law trademark rights. The proposed consent orders identify machines that do not violate the order. Thus, available alternatives to the Textron machine do exist. Furthermore, the provisions regarding other alleged unfair acts will not adversely affect the public health and welfare, competitive conditions in the U.S. economy, the production of like or directly competitive articles or the U.S. consumer. Deka Machine Sales Corp. and Kanematsu-Gosho (U.S.A.) Inc. can sell and advertise their products through other permissible means.

**APPENDIX C**

**DESCRIPTION AND USES OF NONPOWERED HANDTOOLS**

Chisels are used for cutting metal, wood, stone, and other materials. They are generally classified as being either wood chisels (used for cutting wood) or cold chisels (used for cutting metal or other materials). Wood chisels consist of a steel blade which is usually 2-1/2 inches to 3 inches in length and 1/4 inch to 1-1/2 inches in width. Wood chisels can be either pushed by hand or driven by hammer, depending on the hardness of the wood and sharpness of the blade. Most blades are forged from high-carbon or alloy steel.

Cold chisels are classified according to the shape of the point on the cutting edge. The most common types are flat, cape, diamond point, and round-nose chisels. Flat chisels are used to cut rivets, screws, bolts, nuts, and other metal products. Cape chisels are used for cutting narrow grooves into metal. Round-nose chisels are used for cutting circular grooves in metal, while diamond point chisels are used for cutting sharp corners and V-shaped grooves.

Cold chisels are usually 5 inches to 8 inches in length and have a cutting blade ranging from 1/4 to 1 inch in width. They are forged from alloy steel and hardened through special heat treatment. Cold chisels are usually driven by a hammer.

Punches are used to mark, cut, or stamp metal, or to drive out pins, bolts, or rivets from their fastening positions. They are forged of alloy steel and hardened by special heat treatment. Punches consist of a knurled or octagonal body which is pointed at one end and headed at the opposite end. Punches are generally 4 inches to 6 inches in length, although some types are up to 12 inches in length.

Center and prick punches are used for marking the center of a hole to be drilled or to align parts for assembly. Drift and pin punches are used for driving out pins, bolts, and rivets. Solid punches are used for stamping sheet metal. There are several other types of punches, such as gasket punches, saddlers punches, and taper punches. All punches are driven by hammer impact.

Hammers and sledges are commonly referred to as striking tools. Hammers are distinguished from sledges by the weight of the tool head (sledges are generally 4 pounds or over), the shape of the head, and the length of the handle. Most hammers are either of the claw type (carpenters' hammers) or the ball pein type (machinists' hammers). Most sledges are of the double head type, or cross pein type. The most common weights of hammer heads are 12 ounces, 16 ounces, and 24 ounces; the heads of sledges usually weigh 6 pounds or 8 pounds. Both hammer and sledge heads are forged of alloy steel. In the United States, hickory wood is the preferred material for the handles.

Vises are used for holding articles while work is performed on the articles. Vises are made in a variety of shapes and sizes ranging from heavy-duty vises weighing as much as 250 pounds each to hand vises weighing less than a pound. Machinists' vises, which are sturdily built and have either a stationary or swivel base for mounting on a bench, are intended for use in machine shops, garages, and similar establishments. Many variations of machinists' vises are made to adapt them to a particular kind of work, for



example, the combination bench and pipe vise has pipe jaws located under the regular jaws; the filers' vise has high, arched jaws for better work clearance; the sheet-metal workers' vise has extra large, smooth jaw faces and a longer slide length to permit gripping extra wide and deep work. Many lighter vises, such as those intended for home workshops, are similar in appearance to machinists' vises. Woodworkers' vises are ordinarily lighter than machinists' vises and have broad, smooth jaws to hold a piece of wood without marring its surface. Pipe vises usually consist of either a yoke or a roller chain attached to a base which may be mounted in a number of ways.

Clamps are made in a multitude of shapes, sizes, weights, and materials. Among the most common are C-clamps, so-called because of their shape; spring clamps, which derive their clamping pressure from a spring; bar clamps, usually consisting of a bar containing a fixed jaw and a sliding jaw, one of which holds an adjusting screw; parallel clamps that are designed to protect surfaces of articles held; and compound leverage clamps that are tightened by a plierlike clamping device. Many clamps are designed for a specific job, for example, a holding device consisting of a frame, precision locating blocks, and clamping units for holding sheet-metal panels during a welding operation. Such special-purpose clamps may cost thousands of dollars each.

Pliers are tools designed for holding, bending, shaping, and cutting materials. Slip-joint pliers, made in many sizes and styles, and of various qualities, are designed so that one side of the plier can be slipped at the pivot to at least one other position, thereby adjusting the size of the jaw opening and permitting work on larger size work materials. Slip-joint pliers often have an edge which permits light cutting; such tools are called combination slip-joint pliers.

Slip-joint pliers with multiple adjustable positions, such as the "water pump" pliers, are generally of larger size than the two-position, slip-joint pliers. Water pump pliers are commonly sold in 9-1/2 inches length, although many shorter and longer sizes and variations in styles, finishes, and other modifications are in use.

The "tongue and groove" pliers generally have seven adjustable positions and are "slipped" into different positions by use of semicurved tracks (or grooves). These pliers are generally 10 inches and more in length. Water pump and tongue and groove pliers are generally manufactured from forged steel and are usually polished and plated. Some styles have handles covered with a thin vinyl coating.

Metal/bolt-cutting snips and shears are designed to cut sheet metal, bolts, and similar material. They range from 6 inches to 14 inches in overall length, and are designed to cut sheet metal up to 1/16 inch in thickness. The design is similar to that of scissors, except that the cutting blades are thick, stubby, and of hardened steel. The blades are set at angles of about 85 degrees diagonal to each other, which permits cutting without removing any of the material. Snips are classified by the shape of the cut made, such as straight snips and circle snips. They are also classified according to the types of leverage with which the tool is constructed, such as simple leverage and compound leverage. A popular model of the compound leverage snip is the aviation snip.

Bolt cutters are large shears with very short blades and long handles. The blades are hinged at the ends of extensions in such a way that the inside joint is forced outwards when the handles are closed, thus forcing the cutting edges together with considerable leverage. The cutting jaws on many models can be adjusted by means of screws located near the hinges. Bolt cutters range from 18 inches to 36 inches in overall length. The larger size bolt cutters will cut soft steel bolts and rods of up to 1/2 inch in diameter. Other types of bolt cutters apply the shearing principle when cutting, i.e., the cutting blades overlap. This type of bolt cutter, however, is the less common of the two types manufactured domestically.

Wrenches most commonly used today are the open end wrench, box end wrench, and combination wrench (having one open end and one box end each on the opposite ends of the tool), socket wrench, consisting of a socket (which fits on a bolt head or nut) and a handle for turning the socket, adjustable open end wrench, ratcheting box wrench, swivel head box end wrench, flare nut wrench, tappet wrench, torque-measuring wrench handle, nonsparking socket, adjustable pipe wrench, chain wrench, hook spanner wrench, and the (recessed head screw) hexagonal wrench.

Most wrenches, other than pipe wrenches, are intended for use on hexagonal (hex) or square bolt heads, nuts, and studs. Some of these, such as adjustable end wrenches, are designed with a movable jaw to permit adjustment to fit more than one size of nut or bolt head. Most wrenches, however, are made with a fixed wrench opening designed to fit only one specific size of bolt head or nut. The open end, box end, and combination wrenches are referred to collectively as flat wrenches, as distinguished from socket wrenches.

Flat wrenches and socket wrenches are often sold in sets of different sizes (both in standard and metric measurements). Socket wrench sets also customarily include one or more extension bars, one or more handles (often of the ratchet type which permits a return motion of the handle without removing it from the work to be turned), and one or more "flexible joints," which permit easier access to the bolt head or nut in tight work areas.

Many wrenches are designed for special purposes or are modifications of the type described above, such as torque-measuring socket wrench handles, which permit the user to apply the exact pressure on the bolt head or nut as specified by the manufacturer (to insure optimum operating efficiency of the parts held together by the bolt). Pipe wrenches are designed for gripping the outer circumferences of pipes and pipe fittings; they are adjustable to fit various pipe sizes. Pipe wrenches such as the Stillson type and the Rigid (or heavy duty) type are used in a large variety of plumbing work; these wrenches come in different sizes, the most-common ones being 14 and 16 inches in overall length.

Screwdrivers are used for driving not only wood screws and machine screws but also thread-forming and thread-cutting screws used in metal fabricating and related work. The most common screwdriver is the standard type consisting of a straight blade with one end formed to fit either a slotted or recessed head screw and having a wooden or plastic handle mounted on the other end. There are, however, many types of screwdrivers. One type, similar to the push

drill, is operated by pushing the handle along a spiral to turn the point. Another type has a torque regulating device for precision tightening of screws. Offset screwdrivers, with the blade set at a right angle to the handle, are made for use in confined areas. Flexible-shaft screwdrivers usually have shafts made of laminated steel so that the shaft can be bent to reach places inaccessible to standard screwdrivers. Some screwdrivers are made with a light in the handle. In some of these screwdrivers this light is a test light for electrical circuits; in others it is a battery-operated flashlight. Screwdrivers are often made with such special features as ratchets, fingers for holding a screw, or reversible blades each having a different type of point.

Specialized automotive tools include body and fender repair tools and valve tools used exclusively for automotive repair. Some of the common tools used in body and fender repair are various types of hammers and dolly blocks. The special bumping hammer, which has a small peen and flat polished head, is used for shaping and smoothing small dents. The dinging hammer has a long head which permits working over obstructions that the shorter hammer cannot reach. The finishing hammer is one of the most popular hammers used in body repair work because of the medium long point for working under fenders. It also has a highly polished face.

Dolly blocks are dropped forged from alloy steel having extreme strength and ductibility. They are hammered against the damaged part of the vehicle which produces a smooth surface. The toe dolly block has a large flat face which is very useful in repairing lower hood quarters and other flat panels. The fender dolly block is preferred on extra heavy gauge truck and passenger car fenders which resist the blows of lighter dollies. The heel dolly block is designed to be used in corners and other tight areas.

There are several valve tools being used today; however, the most popular one is the C-type valve lifter.

Horticultural and related tools are used in horticulture, agriculture, yard and lawn care, and construction. Shovels, scoops, and spades are made in numerous shapes and sizes. Although many of them are designed for a specific purpose, these tools are basically of the same construction--a formed or forged metal blade with a handle attached. They are intended for use in moving dirt, sand, gravel, coal, grain, and other materials. Shovels are made with a round or a square point. They have either long or short handles. In addition to standard shovels, many special-purpose shovels are produced, including telegraph spoons (for digging holes for telephone poles), snow shovels, and folding shovels of certain types. Most scoops are similar to square-pointed shovels, the principal difference being in the size of the blade. The blades of scoops are wider, longer, and deeper than those of shovels. Scoops are generally used for handling materials that are not compacted, such as sand, grain, and coal. Some special-purpose scoops have round or diamond-pointed blades. Spades are designed for work in earth. The blade of a spade is narrower and flatter than that of a shovel; the point is either square or round. The garden spade is the best known type. The blades of special-purpose spades (e.g., ditch, drain, post, and nursery spades) vary in length and width from the blade of the garden spade.

Many different types of hoes are produced. Most are simple variations of the common garden hoe, but some types--such as the weeding hoe, Warren hoe, scuffle hoe, and grubbing hoe--are quite distinct in design. Mortar hoes, for mixing cement, plaster, and similar materials, are like garden hoes with larger blades.

Only a few types of rakes are made. Bow and level-head garden rakes, two of the most common types, differ from each other in the type of tang used to attach them to a handle. The spring-steel lawn and leaf rake is also a common type. Some rakes, used for lawn grooming and seeding, are made with stamped sheet metal teeth which are designed to be self cleaning. A few rakes, such as the asphalt rake, are designed for industrial and construction uses.

Forks are used for spading, lifting, and pitching various materials. Spading forks generally have heavy tines and are used for turning earth or digging vegetables; other forks, with varying numbers of tines, are used for handling hay, straw, grain, vegetables, manure, and other materials.

Picks are produced in a number of styles which are adapted to particular user requirements and differ principally in the weight of the head, the angle and size of the prongs, and the shape of the pick points. One type, for example, has a pick on one side and a hammer-like head on the other. Mattocks are somewhat similar to picks but are used for digging in softer ground. The cutter mattock has a grubbing blade and a cutter blade, and the pick mattock has a grubbing blade and a pick prong.

Handles for almost all of the hand tools previously discussed are made of wood. Most domestically manufactured handles are made of ash because of its toughness and elasticity. The working heads of the tools are made principally of steel; some are made of aluminum.

Axes, hatchets, adzes, and bush hooks are some of the principal edge tools being used today. Axes can be grouped into three general classes: large axes, small axes, and special-purpose axes. Large and small axes are intended primarily for chopping; large axes generally have heavier heads and longer handles than small axes. Both types are made with either two cutting edges (double-bit) or a single cutting edge (single-bit) with a hammer face on the other side of the axe head. Special-purpose axes are generally designed to function as two tools. For example, the mattock axe is a single-bit axe with an adze-shaped grubbing blade on the back, and is designed for digging and prying as well as chopping; the constructor's axe is a single-bit axe with a maul type of face on the back for pounding; some firemen's axes have a pick on the back for punching holes.

A machete is a large, heavy knife with a blade ordinarily ranging between 17 inches and 24 inches in length. Generally, the blade curves slightly along the cutting edge, curving sharply to a point at the end. Machetes, which are very popular in Latin America as a general-purpose tool, are used to cut brush, vines, scrub, corn, cane and similar growth. Corn knives are ordinarily lighter than machetes and have blades generally ranging between 15 inches and 18 inches in length. The blades are usually blunt at the end and tapered so that they are much wider at the end away from the handle than at the handle.

A scythe is a handtool requiring the use of both hands. It has a handle, usually bent, about 5 feet in length and a slightly curved blade generally ranging between 18 inches and 34 inches in length. A scythe is used to cut grain, grass, and weeds.

Sickles and grass hooks are tools for use with one hand. They have a curved blades ranging between 9 inches and 15 inches in length and generally have a small wooden handle attached to a tang, although some are fitted with a handle about 40 inches long to enable the user to stand erect while using the tool. Grass whips generally have blades about 8 or 9 inches long and between 1-1/2 inches and 2-1/2 inches wide; a long handle is fastened to the blade.

Hedge shears are designed for trimming large areas of foliage with moderately heavy stems. Generally, such shears are between 18 and 27 inches long overall with blades from 6 inches to 9-1/2 inches in length, and require two hands for operation. Grass shears are smaller and lighter and are intended for one-handed operation; they are produced in several patterns which differ primarily in the mechanism for operating the blades and in the position of the handle in relation to the blade. Pruning shears are intended for cutting small branches from plants, shrubs, and trees; some are designed to be used with one hand, and others, usually called lopping shears, are made for use with two hands. Sheep shears differ considerably in design from other shears discussed here; their blades and handles form the ends of one or two spring steel bows which hold the blades open when the pressure of the hand is released.

Hand-operated saws are classified as being either large or small. Large saws consist of a metal cutting blade with one or two handles connected directly to the blade. Small saws have one handle, and the blades are attached to a metal frame to keep the saw blade under tension. Some of the most popular large saws are carpenters', plumbers', cabinet, back, crosscut, and pruning saws. Some of the most common types of small saw are the hacksaw, bow, butchers', jewelers', and coping saws. Most small saws with frames use thin, narrow blades that are discarded after becoming dull from repeated use. Hand saws are designed to cut metal, wood, plastic, tile, sheet rock, stone, and other similar materials.

Blades for power-operated saws are of many different types. The most common types are circular blades. Some of these blades come with inserted teeth, some are carbide tipped, and some use diamond dust as the cutting agent. A variation of the circular blade comes without cutting teeth; such a blade has continuous cutting rim on which diamonds are attached. These blades are used for cutting limestones, marble, and other hard material. Most circular saw blades, however, are used for cutting wood.

Band saw blades are made in continuous lengths and are cut to the required sized for use. Most other blades for power saws, however, resemble similar blades for hand-operated saws.

The blades for hand-operated saws and power-operated saws are manufactured primarily from specialty steel.

Other widely used handtools include files and rasps which are cutting tools used for smoothing and shaping metal, wood, and other materials. Most files and rasps may be broadly grouped into four classes; American pattern files (mill, saw, and machinists files), Swiss pattern files, curved-tooth files and rasps. These classes may be further subdivided into hundreds of combinations of shapes, sizes, and cutting types. Metal-cutting files made in the American or Swiss 1/ patterns constitute the bulk of hand files. American pattern files, the more common type, which require less precision in manufacturing than Swiss pattern files, are used principally when material must be removed rapidly and the finish is not of primary importance.

Rasps are designed for fast, coarse cutting of materials such as wood and leather. They are used principally by farriers, cabinetmakers, and patternmakers. Rasps are distinguished from other files by the shape of the teeth, which are raised individually by a narrow punchlike tool instead of being cut, as the teeth on regular files are, by a broad, chisel type of tool.

Blowtorches are small selfcontained devices for applying intense local heat. Those designed to be operated by ignited gasoline or kerosene propelled by compressed air consist basically of a fuel tank with an air-pressure pump mounted thereon and a burner unit. The others, designed for use with a compressed liquified petroleum gas, such as propane or butane, consist simply of a fuel cylinder containing the gas under pressure, to which a burner unit is attached. A variety of burners and tips are made for this type of torch. The gas cylinder is usually a multipurpose type which may be used alternately to operate devices such as camp stoves or gas lanterns. Blowtorches are used for soldering, melting certain metals, joining metal tubing and fittings, removing old paint, burning weeds, and other tasks.

Anvils range from jewelers' anvils, generally weighing less than 2 pounds, to blacksmiths' anvils, weighing 1,000 pounds or more. Anvils provide variously shaped hard surfaces against which metal is formed, generally by hammering. Most of them are made of iron or steel. Jewelers' anvils are made in various shapes, and the more common blacksmiths' anvils are made in a wide range of sizes and grades. The better blacksmiths' anvils are usually made with a wrought-iron body to which a hardened steel face is welded. Some anvils are made of cast iron or cast steel. Anvils intended for home workshops and similar use are generally lighter in weight and of less expensive construction than anvils of industrial grade.

Hand drills are made in a number of styles. Those operated by a hand crank and gear assembly are generally made in two size ranges--the smaller being called a hand drill and the larger a breast drill because it is equipped with a plate against which the operator may exert pressure with his chest. Another style of hand drill, designed for very light drilling is called an automatic drill or push drill; it is operated, through a spiral shaft and nut arrangement, by pressing on the handle. Generally, hand drills have chucks (cutter holding devices) designed to hold cutting tools with straight, round shanks.

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1/ These two names are not necessarily indicative of the country origin but are only descriptive to a particular pattern and preciseness of cut.

Bit braces are usually crank shaped; one end is equipped with a chuck and the other end with a handle. The center part of the brace is offset to create the crank shape used for turning the tool. Bit braces are used principally for drilling wood and are ordinarily designed to use square- or round-shank cutter bits. Augers are generally self-contained tools consisting essentially of a shaft (often spiral) having cutting bits on one end and a handle for turning on the other; they are used primarily for such purposes as drilling fishing holes in ice or drilling holes in the ground for post holes or tree feeding.





**APPENDIX D**

**EXPLANATION OF THE RATES OF DUTY APPLICABLE TO  
NONPOWERED HANDTOOLS AND SELECTED PORTIONS OF THE  
TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1984)**

Explanation of the rates of duty applicable to nonpowered handtools

The rates of duty in column 1 are most-favored-nation (MFN) rates, and are applicable to imported products from all countries except those Communist countries and areas enumerated in general headnote 3(f) of the TSUSA. <sup>1/</sup> However, such rates do not apply to products of developing countries which are granted preferential tariff treatment under the Generalized System of Preferences (GSP) or under the "LDDC" column.

The rates of duty in the "LDDC" column are preferential rates (reflecting the full U.S. MTN concession rate for a particular item without staging of duty reductions) and are applicable to products of the least developed developing countries designated in general headnote 3(d) of the TSUSA which are not granted duty-free treatment under the GSP. If no rate of duty is provided in the "LDDC" column for a particular item, the column 1 rate applies.

The rates of duty in column 2 apply to imported products from those Communist countries and areas enumerated in general headnote 3(f) of the TSUSA.

The GSP is a program of nonreciprocal tariff preferences granted by the United States to developing countries to aid their economic development by encouraging greater diversification and expansion of their production and exports. The GSP, implemented by Executive Order No. 11888, of November 24, 1975, applies to merchandise imported on or after January 1, 1976, and is scheduled to remain in effect until January 4, 1985. It provides for duty-free treatment of eligible articles imported directly from designated beneficiary developing countries. Eligible articles are identified in the column marked "GSP" with an "A" or "A\*." The designation "A" means that all beneficiary developing countries are eligible for the GSP, and "A\*" indicates that certain developing countries, specified in general headnote 3(c) of the TSUSA, are not eligible.

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<sup>1/</sup> The only Communist countries currently eligible for MFN treatment are the People's Republic of China, Hungary, Romania, and Yugoslavia.

6 - 3 - D, E  
647.03 - 647.10

G S P	Item	Stat. Suf- fix	Articles	Units of Quantity	Rates of Duty		
					1	LDDC	2
A	647.03		Hinges; and fittings and mountings not specially provided for, etc. (con.): Not coated or plated with precious metal (con.): Of iron or steel, of aluminum, or of zinc (con.): Other.....		7.1% ad val.	5.7% ad val.	45% ad val.
		10	Hinges, suitable for use with:				
		15	Interior and exterior doors....	X			
		30	Furniture and cabinets.....	X			
			Other.....	X			
		45	Other, suitable for use with:				
			Interior and exterior doors				
			(not including garage,				
			overhead or sliding doors)....	X			
		50	Furniture and cabinets.....	X			
		65	Other.....	X			
	647.04	00	If certified for use in civil aircraft (see headnote 3, part 6C, schedule 6).....	X.....	Free		45% ad val.
A	647.05		Other.....		6.2% ad val.	5.1% ad val.	45% ad val.
		15	Suitable for use with:				
			Interior and exterior doors				
			(not including garage, overhead				
			or sliding doors).....	X			
		25	Furniture and cabinets.....	X			
		35	Other.....	X			
	647.06	00	If Canadian article and original motor-vehicle equipment (see headnote 2, part 6B, schedule 6).....	X.....	Free		
	647.07	00	If certified for use in civil aircraft (see headnote 3, part 6C, schedule 6)....	X.....	Free		45% ad val.
A	647.10	00	Coated or plated with precious metal.....	X.....	12.5% ad val.	8% ad val.	65% ad val.
 <b>Subpart E. - Tools, Cutlery, Forks and Spoons</b>							
 <b>Subpart E headnotes:</b>							
1. Except for blow and other torches (items 649.31 and 649.32), abrasive wheels mounted on frame-works (item 649.39), tool tips and forms for making tool tips (item 649.53), sewing sets, pedicure or manicure sets, or combinations thereof (items 651.11 and 651.13), and except for knives, forks, spoons, and ladles, all the foregoing which are kitchen or table ware of precious metal, this subpart covers only articles with a blade, working edge, working surface or other working part of --							
Note: For explanation of the symbol "A" or "A*" in the column entitled "GSP", see general headnote 3(c).							

## TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1984)

## SCHEDULE 6. - METALS AND METAL PRODUCTS

## Part 3. - Metal Products

6 - 3 - E

C S P	Item	Stat. Suf- fix	Articles	Units of Quantity	Rates of Duty		
					1	LDBC	2
			<p>(i) base metal;  (ii) metallic carbides on a support of base metal;  (iii) natural or synthetic precious or semiprecious stones on a support of base metal; or  (iv) abrasive materials on a support of base metal, provided that the articles have other functioning or working elements such as cutting teeth, edges, grooves, or flutes.</p> <p>2. In determining the length of files and rasps (items 649.01-.07, inclusive), the tang (if any) should not be included.</p> <p>3. The provisions for "<u>interchangeable tools for hand tools or for machine tools</u>" cover interchangeable tools which are designed to be fitted to hand tools or machine tools and which cannot be used independently, and include, but are not limited to, interchangeable tools for pressing, stamping, drilling, tapping, threading, boring, broaching, milling, cutting, dressing, mortising or screw-driving, but do not include saw blades, knives, or cutting blades, and do not include holding or operating devices even if attached to such interchangeable tools.</p> <p>4. For the purposes of determining the rate of duty applicable to sets provided for in item 651.75, a specific rate of duty or a compound rate of duty for any article in the set shall be converted to its ad valorem equivalent rate, i.e., the ad valorem rate which, when applied to the full value of the article determined in accordance with section 402 of this Act, would provide the same amount of duties as the specific or compound rate.</p> <p>5. Cases, boxes, or containers of types ordinarily sold at retail with the tools or other articles provided for in this subpart are classifiable with such articles if imported therewith.</p> <p><u>Subpart E statistical headnote:</u></p> <p>1. For purposes of statistical reporting of sets under item 651.75--  (a) the number of pieces reported shall be the total number of separate pieces in the set(s) and, <u>in addition</u>,  (b) for sets containing knives, forks, or spoons described in items 650.08, 650.09, 650.10, 650.12, 650.38, 650.39, 650.40, 650.42, 650.54, and 650.55 report the quantity of such knives, forks, or spoons under the appropriate 7-digit reporting number(s) provided thereunder.</p>				

## TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1984)

## SCHEDULE 6. - METSLS AND METAL PRODUCTS

## Part 3. - Metal Products

6 - 3 - E  
648.51 - 648.91

G S P	Item	Stat. Suf- fix	Articles	Units of Quantity	Rates of Duty		
					1	LDDC	2
			Drainage tools, scoops, shovels, spades, picks, mattocks, hoes, rakes, and forks; axes, adzes, hatchets, machetes, and similar hewing tools; scythes, sickles, grass hooks, corn knives, hay knives, hedge and grass shears, pruning shears and sheep shears; all the foregoing which are hand tools, and metal parts thereof:				
A	648.51	00	Drainage tools, scoops, shovels, and spades, and parts thereof.....	X.....	4.7% ad val.	3% ad val.	30% ad val.
A	648.53	00	Picks and mattocks, and parts thereof.....	X.....	3.1% ad val.	2.8% ad val.	45% ad val.
A	648.55	00	Hoes and rakes, and parts thereof: Agricultural or horticultural tools, and parts thereof.....	X.....	4.7% ad val.	3% ad val.	15% ad val.
A	648.57	00	Other.....	X.....	4.7% ad val.	3% ad val.	30% ad val.
A	648.61	00	Forks, and parts thereof: Agricultural or horticultural forks, and parts thereof (except hay and manure forks).....	X.....	3.1% ad val.	2.8% ad val.	15% ad val.
A	648.63	00	Other.....	X.....	3% ad val.		30% ad val.
			Axes, adzes, hatchets, machetes, and similar hewing tools, and parts thereof:				
	648.65	00	Machetes, and parts thereof.....	X.....	Free		Free
A	648.67	00	Other.....	X.....	8% ad val.	6.2% ad val.	45% ad val.
A	648.69	00	Scythes, sickles, grass hooks, and corn knives, and parts thereof.....	X.....	1.5% ad val.	Free	30% ad val.
A	648.71	00	Hay knives, and parts thereof.....	No.....	0.7c each + 4.6% ad val.	0.6c each + 3.8% ad val.	8c each + 45% ad val.
A	648.73	00	Hedge and grass shears, and parts thereof.....	No.....	3c each + 7.3% ad val.	2c each + 5.1% ad val.	20c each + 45% ad val.
A	648.75	00	Pruning shears and sheep shears, and parts thereof.....	No.....	1.3c each + 3.3% ad val.	1c each + 2.8% ad val.	20c each + 45% ad val.
			Pliers, nippers, and pincers, and hinged tools for holding and splicing wire; tin snips, bolt and chain clippers, and other metal cutting shears; pipe cutters and other pipe tools; spanners and wrenches; files (except nail files), and rasps; all the foregoing which are hand tools, and metal parts thereof:				
			Pliers, nippers, and pincers, and hinged tools for holding and splicing wire, and parts of the foregoing:				
			Slip-joint pliers:				
A	648.80	00	Not forged, valued not over \$6 per dozen.....	Doz.....	15% ad val.	12% ad val.	60% ad val.
	648.82	00	Other.....	Doz.....	15% ad val.	12% ad val.	60% ad val.
A	648.85	00	Other (except parts).....	Doz.....	1.2c each + 7.2% ad val.	1c each + 5.5% ad val.	10c each + 60% ad val.
A	648.89	00	Parts.....	X.....	7.1% ad val.	5.7% ad val.	45% ad val.
A	648.91	00	Tin snips, and parts thereof.....	No.....	3c each + 6.9% ad val.	2c each + 4.4% ad val.	20c each + 45% ad val.

Note: For explanation of the symbol "A" or "A\*" in the column entitled "GSP", see general headnote 3(c).

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TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1984)

SCHEDULE 6. - METALS AND METAL PRODUCTS  
Part 3. - Metal Products

6 - 3 - E  
648.93 - 649.29

G S P	Item	Stat. Suf- fix	Articles	Units of Quantity	Rates of Duty		
					1	LDDC	2
			Pliers, nippers, and pincers, and hinged tools for holding and splicing wire, etc. (con.): Bolt and chain clippers and other metal-cutting shears (except tin snips); pipe cutters; parts of the foregoing: With cutting part containing by weight over 0.2 percent of chromium, molybdenum, or tungsten, or over 0.1 percent of vanadium.....	X.....	9.4% ad val.	6% ad val.	60% ad val.
A	648.93	00	Other.....	X.....	6.6% ad val.	4.2% ad val.	50% ad val.
A	648.95	00	Pipe tools (except cutters), wrenches, and spanners, and parts thereof.....	.....	9.8% ad val.	9% ad val.	45% ad val.
A*	648.97		Wrenches and spanners and parts thereof: Open-end, box, and combination open-end and box wrenches.....	No.			
		15					
		17	Socket wrenches, sockets, socket drives and extensions.....	X			
		19	Adjustable wrenches.....	No.			
		21	Other.....	X			
		35	Other.....	X			
			Files and rasps, with or without their handles: Not over 2.5 inches in length.....	Doz.....	5.4c per doz.	5c per doz.	25c per doz.
A	649.01	00	Over 2.5 but not over 4.5 inches in length.....	Doz.....	9.4c per doz.	9c per doz.	47.5c per doz.
A	649.03	00	Over 4.5 but not over 6.75 inches in length.....	Doz.....	12.5c per doz.	12c per doz.	62.5c per doz.
A	649.05	00	Over 6.75 inches in length.....	Doz.....	7.4c per doz.	7c per doz.	77.5c per doz.
A	649.07	00					
			Non-mechanical saws, blades for mechanical or non-mechanical saws (including blades in continuous lengths), and metal teeth or cutting segments and other metal parts of such saws and blades: Non-mechanical saws.....	No.....	1.3% ad val.	Free	20% ad val.
A	649.11	00	Blades for mechanical or non-mechanical saws: Band saw blades.....	X.....	3.4% ad val.	3.1% ad val.	20% ad val.
A	649.14	00	Circular saw blades.....	No.....	3.4% ad val.	3.1% ad val.	25% ad val.
A	649.17	00	Hacksaw blades.....	No.....	4.2% ad val.	3.7% ad val.	20% ad val.
A	649.19	00	Jewelers' or piercing saw blades.....	Gross...	8.5c per gross	8c per gross	40c per gross
A	649.21	00	Chain-saw blades, in lengths or cut to size: With cutting part containing by weight over 0.2 percent of chromium, molybdenum, or tungsten, or over 0.1 percent of vanadium.....	X.....	10.1% ad val.	7.2% ad val.	60% ad val.
A	649.23	00	Other.....	.....	3.8% ad val.	3.4% ad val.	27.5% ad val.
		20	In continuous lengths.....	Fl.			
		40	Other.....	X			
A	649.24	00	Other blades.....	No.....	1.3% ad val.	Free	20% ad val.
A	649.25	00	Metal parts: Metal teeth and cutting segments suitable for use in cutting metal.....	X.....	5.9% ad val.	4.9% ad val.	30% ad val.
A	649.26	00	Other: Frames, handles, and other parts for non-mechanical saws.....	X.....	7.1% ad val.	5.7% ad val.	45% ad val.
A	649.27	00	Other.....	X.....	4.2% ad val.	3.7% ad val.	35% ad val.
A	649.29	00					

Note: For explanation of the symbol "A" or "A\*" in the column entitled "GSP", see general headnote 3(c).

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TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1984)

SCHEDULE 6. - METALS AND METAL PRODUCTS

Part 3. - Metal Products

6-3-E  
649.31 - 649.43

G S P	Item	Stat. Suf- fix	Articles	Units of Quantity	Rates of Duty		
					1	LDDC	2
			Blow torches and similar self-contained torches, and metal parts thereof:				
A	649.31	00	Torches, designed to be operated by compressed air and kerosene or gasoline.....	No.....	4.2% ad val.	3.7% ad val.	45% ad val.
A	649.32	00	Other.....	X.....	7.1% ad val.	5.7% ad val.	45% ad val.
			Anvils:				
A	649.33	00	Of iron or steel, weighing over 5 pounds each.....	Lb.....	0.9% ad val.		6% ad val.
A	649.35	00	Other.....	No.....	6.8% ad val.	5.5% ad val.	45% ad val.
A*	649.37		Vises and clamps (except parts of, or accessories for, machine tools).....		5% ad val.		45% ad val.
			Vises:				
	12		Pipe.....	No.			
	14		Woodworking.....	No.			
	16		Other.....	No.			
	20		Other.....	No.			
	649.39	00	Abrasive wheels mounted on frameworks, hand or pedal operated.....	No.....	Free		27.5% ad val.
			Interchangeable tools for hand tools or for machine tools, including dies for wire drawing, extrusion dies for metal, and rock drilling bits:				
A	649.41	00	Files and rasps, including rotary files and rasps.....	Doz.....	2.7% ad val.	2.5% ad val.	15% ad val.
A	649.43		Cutting tools (except tools provided for in item 649.41) with cutting part containing by weight over 0.2 percent of chromium, molybdenum, or tungsten, or over 0.1 per- cent of vanadium.....		10.1% ad val.	7.2% ad val.	60% ad val.
	05		End milling cutters.....	X			
	10		Masonry drills.....	X			
	15		Milling cutters (except end milling cutters)...	X			
	20		Rock drilling bits.....	X			
	25		Single point tools.....	X			
	30		Threading taps, dies, and chasers.....	X			
	40		Twist drills.....	X			
	65		Metal-cutting dies (excluding threading dies).....	X			
			Other:				
	75		Hobs and other gear cutting tools.....	X			
	77		Broaches.....	X			
	79		Reamers, except gun reamers.....	X			
	90		Other.....	X			

Note: For explanation of the symbol "A" or "A\*" in  
the column entitled "GSP", see general headnote 3(c).

## TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1984)

SCHEDULE 6. - METALS AND METAL PRODUCTS  
Part 3. - Metal Products

6 - 3 - E

649.44 - 649.67

C S P	Item	Stat. Suf- fix	Articles	Units of Quantity	Rates of Duty		
					1	LDPC	2
			Interchangeable tools for hand tools, etc. (con.): Other:				
			Suitable for cutting metal:				
A	649.44	00	Twist drills.....	X.....	13.1% ad val.	8.4% ad val.	50% ad val.
A	649.46	00	Other.....	X.....	7.7% ad val.	6% ad val.	50% ad val.
			Not suitable for cutting metal:				
A	649.47	00	For hand tools.....	X.....	8% ad val.	6.2% ad val.	45% ad val.
A	649.48		Wire-drawing dies and extrusion dies for metal.....		5.9% ad val.	4.9% ad val.	30% ad val.
		20	Diamond dies.....	No.			
		40	Other.....	X			
A	649.49		Other.....		4.2% ad val.	3.7% ad val.	35% ad val.
		05	Stamping dies, except metal- cutting dies.....	X			
		15	Other dies, metal-forming, including thread-rolling dies.....	X			
		35	Rock drill bits, core bits and reamers.....	X			
		45	Other.....	X			
A	649.53	00	Tool tips; and plates, blanks and other forms for making tool tips; all the foregoing, unmounted, of sintered metal carbides.....	Lb.....	10% ad val.	7% ad val.	60% ad val.
A	649.57	00	Slicers, choppers, grinders, juice extractors, and other mechanical appliances, all the foregoing which are not over 25 pounds in weight, are not powered by electricity, and are of types used in the household, in restaurants, or in retail stores for preparing or serving food or drink.....	No.....	6.5% ad val.	5.3% ad val.	40% ad val.
	649.65	00	Knives and cutting blades for power or hand machines: For agricultural or horticultural machines (ex- cept lawn-mower blades) and for shoe machinery.....	No.....	Free		Free
A	649.67		Other.....		4.2% ad val.	3.7% ad val.	20% ad val.
		20	For meat-slicing, meat-cutting, or meat-chopping machines.....	No.			
		50	Over 29 inches in length, for veneer- cutting machines.....	No.			
		60	Over 6 inches in length, for wood-chipper machines.....	No.			
		75	Over 12 inches in length for metal shearing machines or over 6 inches in diameter for metal-shearing/slitting machines.....	No.			
		85	Other.....	No.			

Note: For explanation of the symbol "A" or "A\*" in  
the column entitled "CSP", see general headnote 3(c).



## TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1984)

## SCHEDULE 6. - METALS AND METAL PRODUCTS

## Part 3. - Metal Products

6 - 3 - E  
651.21 - 651.64

G S P	Item	Stat. Suf- fix	Articles	Units of Quantity	Rates of Duty		
					1	LDDC	2
			Hand tools (including table, kitchen, and household implements of the character of hand tools) not specially provided for, and metal parts thereof: Hammers and sledges, with or without their handles:				
A*	651.21	00	With heads not over 3.25 pounds each.....	Doz.....	8% ad val.	6.2% ad val.	45% ad val.
A	651.23	00	With heads over 3.25 pounds each.....	Doz.....	2.3% ad val.	2.1% ad val.	20% ad val.
A	651.25	00	Crowbars, track tools, and wedges, all the foregoing of iron or steel.....	Lb.....	0.23¢ per lb.	0.2¢ per lb.	1.375¢ per lb.
A	651.27	00	Drilling, threading, and tapping tools, and parts thereof.....	X.....	8% ad val.	6.2% ad val.	45% ad val.
			Chisels, gimlets, gouges, planes, and other cutting tools, and parts thereof:				
A	651.29	00	With cutting part containing by weight over 0.2 percent of chromium, molybdenum, or tungsten, or over 0.1 percent of vanadium.....	X.....	10.1% ad val.	7.2% ad val.	60% ad val.
A	651.31	00	Other.....	X.....	8% ad val.	6.2% ad val.	45% ad val.
A*	651.33	00	Pencil sharpeners and lead and crayon pointers, and parts thereof.....	X.....	6.5% ad val.	5.3% ad val.	40% ad val.
A*	651.37	00	Screwdrivers.....	X.....	8% ad val.	6.2% ad val.	45% ad val.
			Other hand tools, and parts thereof:				
	651.39	00	Agricultural or horticultural tools, and parts thereof.....	X.....	Free		Free
			Other:				
			Of iron or steel:				
A	651.45	00	Cast-iron hatters' irons, and tailors' irons.....	No.....	0.6% ad val.	Free	20% ad val.
A*	651.46	00	Caulking guns.....	No.....	6.5% ad val.	5.3% ad val.	40% ad val.
A	651.48		Other.....		6.5% ad val.	5.3% ad val.	40% ad val.
		20	Table, kitchen, and household implements.....	X			
		50	Other edged hand tool.....	X			
		60	Other.....	X			
			Of copper:				
A*	651.49	00	Of brass.....	X.....	4.2% ad val.	3.7% ad val.	40% ad val.
A	651.51	00	Other.....	X.....	5.9% ad val.	4.9% ad val.	40% ad val.
A*	651.53	00	Of aluminum.....	Lb.....	1.3¢ per lb. + 6.3% ad val.	1¢ per lb. + 5% ad val.	8.5¢ per lb. + 40% ad val.
A	651.55	00	Other.....	X.....	6.5% ad val.	5.3% ad val.	40% ad val.
			Handles, of metal, for knives, forks, spoons, and ladles which are kitchen or table ware:				
			Of precious metals, or coated or plated with precious metals:				
A	651.60	00	Of silver, or coated or plated with silver....	No.....	8.8% ad val.	6.6% ad val.	65% ad val.
A	651.62	00	Other.....	No.....	12.6% ad val.	8.2% ad val.	65% ad val.
	651.64	00	Other.....	No.....	5.9% ad val.	3.8% ad val.	45% ad val.

Note: For explanation of the symbol "A" or "A\*" in the column entitled "GSP", see general headnote 3(c).



APPENDIX E

U.S. EXPORTS OF NONPOWERED HANDTOOLS, BY TYPE OF  
HANDTOOL, 1978-82

Table E-1.--Chisels and punches: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)

Market	1978	1979	1980	1981	1982
Canada-----	1,883	1,948	1,417	1,980	1,547
Japan-----	387	596	247	1,006	716
S Arab-----	410	218	267	269	473
Venez-----	205	449	307	280	395
Rep Saf-----	115	225	633	750	385
Mexico-----	239	296	485	933	375
Austral-----	312	365	376	464	360
Egypt-----	42	49	58	83	329
All other----	4,912	3,473	4,217	4,356	3,362
Total----	8,505	7,618	8,006	10,120	7,942

Source: Estimated by the staff of the U.S. International Trade Commission from official statistics of the U.S. Department of Commerce.

Table E-2.--Hammers and sledges: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)

Market	1978	1979	1980	1981	1982
Canada-----	1,685	1,433	1,405	1,322	781
Austral-----	361	340	618	1,200	474
Rep Saf-----	103	180	600	1,181	407
U King-----	313	528	561	545	330
S Arab-----	334	229	229	537	253
N Zeal-----	69	239	236	236	227
Venez-----	57	192	248	378	190
Peru-----	25	39	80	64	150
All other----	5,083	3,308	2,491	3,010	1,671
Total----	8,030	6,488	6,468	8,472	4,485

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

Table E-3--Vises: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)					
Market	1978 <u>1/</u>	1979	1980	1981	1982
Canada-----	963	772	644	1,128	958
Singapr-----	79	37	68	108	303
Mexico-----	186	236	515	454	301
S Arab-----	157	120	287	524	290
Venez-----	249	198	255	437	244
Ireland-----	4	15	19	170	152
Phil R-----	117	108	62	127	112
Rep Saf-----	104	80	171	273	99
All other----	2,377	1,232	1,562	1,202	1,020
Total-----	4,237	2,798	3,583	4,423	3,480

1/ Estimated by the staff of the U.S. International Trade Commission.

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

Table E-4--Clamps: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)					
Market	1978 <u>1/</u>	1979	1980	1981	1982
Canada-----	2,888	2,379	2,669	3,048	2,586
S Arab-----	472	354	153	435	642
Mexico-----	558	296	559	861	637
Fr Germ-----	659	1,110	2,792	2,199	484
France-----	209	484	428	407	451
U King-----	448	303	180	223	297
Venez-----	747	212	197	307	274
Panama-----	49	14	59	140	240
All other----	6,680	3,549	3,679	3,548	2,615
Total-----	12,710	8,701	10,716	11,167	8,226

1/ Estimated by the staff of the U.S. International Trade Commission.

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

TableE-5--Pliers: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)					
Market	1978	1979	1980	1981	1982
Nethlds-----	3,929	5,130	5,654	5,318	4,600
Canada-----	5,983	6,122	6,765	6,602	4,001
U King-----	2,624	3,301	3,814	3,404	3,841
France-----	1,784	2,475	3,420	3,116	2,893
Austral-----	1,896	2,372	2,892	2,766	2,773
Japan-----	1,727	2,660	2,458	3,372	2,642
Fr Germ-----	2,653	3,199	2,970	2,295	2,485
Venez-----	1,152	1,675	1,636	1,822	2,295
All other----	12,105	16,568	19,678	20,332	17,748
Total-----	33,854	43,503	49,286	49,027	43,279

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

TableE-6--Metal/bolt cutting ships and shears: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)					
Market	1978	1979	1980	1981	1982
Canada-----	1,769	1,834	1,879	2,613	1,888
Mexico-----	494	594	625	1,038	952
S Arab-----	213	363	851	1,133	830
Venez-----	146	463	492	885	761
U King-----	386	350	417	304	595
Japan-----	537	454	349	573	517
Nethlds-----	341	656	535	516	441
Italy-----	204	298	556	374	438
All other----	2,362	2,882	4,126	3,839	3,799
Total-----	6,452	7,893	9,829	11,273	10,220

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

Table E-7--Wrenches: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)

Market	1978	1979	1980	1981	1982
Canada-----	7,840	8,700	11,296	11,998	7,130
Venez-----	1,409	3,311	3,228	5,061	4,111
U. King-----	2,481	3,415	3,507	3,885	4,102
S. Arab-----	2,150	3,493	3,653	3,925	2,807
Mexico-----	1,324	2,411	2,660	4,796	1,437
Singapr-----	299	503	967	1,247	1,402
Austral-----	796	1,213	1,185	1,479	1,136
Japan-----	1,288	870	735	463	648
All other----	10,118	12,244	14,370	14,623	11,136
Total----	27,704	36,159	41,601	47,477	33,909

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

Table E-8.--Socket wrenches and accessories: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)

Market	1978	1979	1980	1981	1982
Canada-----	4,085	5,072	6,401	8,120	4,705
U. King-----	1,646	1,625	2,185	3,135	3,326
Venez-----	367	937	1,042	2,167	1,650
S. Arab-----	1,227	2,261	2,322	2,107	1,344
Singapr-----	149	128	340	644	785
Austral-----	88	423	405	570	484
Mexico-----	348	442	597	1,097	405
Japan-----	234	397	288	154	306
All other----	3,100	4,180	4,864	5,150	4,029
Total----	11,246	15,465	18,443	23,143	17,035

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

Table B-9.--Flat wrenches: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)						
Market	1978	1979	1980	1981	1982	
Venez-----	389	1,178	1,218	1,636	1,058	
Canada-----	1,963	2,090	2,989	1,727	819	
S Arab-----	290	642	438	611	601	
Singapr-----	68	196	386	333	398	
Mexico-----	248	1,125	712	1,135	333	
Kor Rep-----	49	170	39	57	231	
U King-----	413	1,022	786	378	178	
Israel-----	24	18	13	20	163	
All other----	2,243	3,297	4,025	3,373	2,383	
Total-----	5,688	9,739	10,606	9,270	6,165	

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

Table B-10.--All other wrenches: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)						
Market	1978	1979	1980	1981	1982	
Canada-----	1,792	1,537	1,907	2,151	1,606	
Venez-----	653	1,196	969	1,258	1,402	
S Arab-----	634	589	893	1,207	861	
Mexico-----	727	844	1,350	2,563	699	
U King-----	421	768	536	372	598	
Austral-----	630	659	569	684	492	
Phil R-----	224	432	278	443	488	
Hg Kong-----	12	180	208	175	361	
All other----	5,678	4,749	5,841	6,210	4,202	
Total-----	10,770	10,954	12,551	15,064	10,710	

Source: Estimated by the staff of the U.S. International Trade Commission from official statistics of the U.S. Department of Commerce.



Table E-11. Screwdrivers: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)					
Market	1978	1979	1980	1981	1982
Canada-----	2,472	1,819	2,115	1,752	1,096
Venez-----	643	1,009	663	858	997
Israel-----	65	157	678	522	752
S. Arab-----	466	379	530	600	602
U. King-----	1,317	1,176	741	597	506
Italy-----	154	381	380	452	475
Austral-----	637	435	323	488	467
Nethlds-----	1,265	689	336	493	412
All other----	3,794	4,623	4,526	5,258	3,404
Total----	10,814	10,667	10,291	11,020	8,711

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

Table E-12. Horticultural and related tools: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)					
Market	1978	1979	1980	1981	1982
Canada-----	2,361	2,330	1,912	2,089	1,563
Austral-----	349	208	228	298	516
Mexico-----	110	251	284	419	233
S. Arab-----	248	439	326	214	187
N. Zeal-----	103	152	132	182	175
Egypt-----	-	5	2	98	171
Rep. Saf-----	255	222	763	551	160
Norway-----	17	31	53	24	158
All other----	2,737	4,271	5,132	3,338	2,654
Total----	6,181	7,909	8,833	7,213	5,816

Source: Estimated by the staff of the U.S. International Trade Commission from official statistics of the U.S. Department of Commerce.

Table g-13-Edge tools: U.S. exports of domestic merchandise, by principal markets, 1978-82.

(In thousands of dollars)						
Market	1978	1979	1980	1981	1982	
Canada-----	1,387	1,646	1,954	2,376	1,900	
Austral-----	215	175	198	224	414	
Fr Germ-----	190	250	143	271	249	
Egypt-----	-	2	-	8	241	
S Arab-----	330	339	108	157	182	
Kor Rep-----	-	91	23	21	179	
Mexico-----	93	171	232	344	158	
Rep Saf-----	155	217	644	773	132	
All other----	1,777	4,569	5,549	2,360	1,762	
Total-----	4,147	7,460	8,850	6,534	5,217	

Source: Estimated by the staff of the U.S. International Trade Commission from official statistics of the U.S. Department of Commerce.

Table g-14-Hand saws, blades, frames, and parts: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)						
Market	1978	1979	1980	1981	1982	
Canada-----	8,666	8,139	10,835	9,969	5,582	
Belgium-----	3,077	4,630	8,299	9,153	5,166	
U King-----	2,606	1,432	2,282	2,712	3,712	
Fr Germ-----	4,254	2,492	4,569	4,174	2,730	
Sweden-----	1,114	938	2,276	2,670	2,186	
France-----	1,935	485	987	1,384	1,811	
Austral-----	792	1,359	1,335	1,939	1,213	
Japan-----	1,730	1,472	3,009	2,185	1,159	
All other----	18,817	10,460	11,863	12,852	9,079	
Total-----	42,992	31,406	45,456	47,036	32,637	

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

Table 15.-Other nonpowered handtools: U.S. exports of domestic merchandise, by principal markets, 1978-82

(In thousands of dollars)						
Market	1978	1979	1980	1981	1982	
Canada-----	35,810	37,631	38,064	44,488	28,546	
Belgium-----	8,054	10,714	15,312	16,763	11,573	
U. King-----	8,438	9,897	8,529	8,961	10,250	
Japan-----	4,479	7,047	6,966	8,306	10,037	
Austral-----	5,505	6,879	8,371	10,650	9,828	
S Arab-----	11,760	6,635	7,073	12,642	8,853	
Mexico-----	3,914	7,441	9,635	15,934	8,053	
Venez-----	11,788	8,351	7,177	9,133	7,277	
All other----	57,170	83,644	101,595	95,662	86,210	
Total----	146,918	178,239	202,722	222,539	180,627	

Source: Estimated by the staff of the U.S. International Trade Commission from official statistics of the U.S. Department of Commerce.



**APPENDIX F**

**U.S. IMPORTS OF NONPOWERED HANDTOOLS, BY TYPE OF  
HANDTOOL, 1978-82**

Table F-1--Chisels and punches: U.S. imports for consumption, by principal sources, 1978-82 <sup>1/</sup>

(In thousands of dollars)					
Source	1978	1979	1980	1981	1982
Japan-----	2,438	2,113	1,901	2,972	2,415
Fr Germ-----	1,025	1,155	1,257	1,223	1,897
U King-----	1,149	1,545	1,472	1,512	1,825
China t-----	487	594	593	712	1,103
Israel-----	263	437	429	656	548
Switzld-----	364	324	194	307	281
Sweden-----	172	346	419	271	239
Brazil-----	11	12	46		177
All other----	1,034	1,181	1,240	1,014	892
Total----	6,944	7,707	7,549	8,667	9,376

<sup>1/</sup> The value of imported chisels accounted for an average of 88 percent of total imports during 1978-82.

Source: Estimated by the staff of the U.S. International Trade Commission from official statistics of the U.S. Department of Commerce.

Table F-2.--Hammers and sledges: U.S. imports for consumption, by principal sources, 1978-82,

(In thousands of dollars)					
Source	1978	1979	1980	1981	1982
China t-----	5,265	4,689	4,668	4,987	5,608
Japan-----	6,169	6,463	4,766	5,092	3,678
China M-----	-	-	161	690	1,522
Spain-----	564	96	152	49	239
Brazil-----	186	255	49	59	218
Hg Kong-----	20	13	46	27	101
Mexico-----	321	417	106	46	77
Fr Germ-----	91	75	62	75	48
All other----	250	235	284	192	196
Total----	10,645	12,511	10,528	11,514	12,016

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

Table F-3--Vises: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)					
Source	1978	1979	1980	1981	1982
China t----	4,831	5,407	6,712	10,018	8,039
Japan-----	6,613	2,362	2,657	5,045	3,569
China M-----	38	-	135	461	1,062
India-----	906	1,311	1,042	533	560
Switzld-----	326	340	365	359	363
France-----	177	242	143	294	219
Hg Kong-----	6	21	38	61	186
Fr Germ-----	114	82	54	78	139
All other-----	988	617	402	678	509
Total-----	13,999	10,382	11,548	17,527	14,648

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

Table F-4--Clamps: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)					
Source	1978	1979	1980	1981	1982
China t----	568	695	843	1,674	4,885
Japan-----	903	1,016	1,557	2,260	1,721
Fr Germ-----	664	884	986	845	741
Kor Rep-----	440	654	444	405	631
Canada-----	272	357	502	529	482
Mexico-----	203	372	471	395	326
U King-----	320	433	519	562	325
Hg Kong-----	41	136	200	427	303
All other-----	613	1,160	1,071	976	825
Total-----	4,026	5,707	6,595	8,074	10,240

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

Table F-5.--Pliers: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)					
Source	1978	1979	1980	1981	1982
Japan-----	11,431	10,704	11,444	13,765	13,566
China t-----	1,380	2,509	3,498	4,715	7,020
Kor Rep-----	4,327	5,343	3,916	6,057	6,077
Fr Germ-----	2,625	2,280	2,330	1,777	2,248
Switzld-----	1,942	1,866	1,684	1,862	1,582
China M-----	-	1	41	493	1,073
Sweden-----	232	1,059	1,108	1,721	951
N Zeal-----	-	-	1	78	374
All other----	2,569	3,060	2,096	2,019	1,777
Total-----	24,505	26,821	26,117	32,488	34,669

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

Table F-6.--Metal/bolt cutting ships and shears: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)					
Source	1978	1979	1980	1981	1982
Japan-----	3,030	3,000	3,184	3,575	3,020
China t-----	141	524	803	1,438	1,836
Fr Germ-----	164	231	170	360	180
Belgium-----	161	315	182	257	162
Switzld-----	58	97	38	80	147
France-----	86	253	51	112	137
Spain-----	179	265	149	155	125
China M-----	-	-	45	60	111
All other----	446	416	432	500	327
Total-----	4,265	5,100	5,055	6,537	6,047

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



Table F-7.--Wrenches: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)					
Source	1978	1979	1980	1981	1982
China t-----	27,486	47,907	57,085	76,660	76,363
Japan-----	52,489	50,348	45,971	48,377	37,877
India-----	6,574	5,460	5,714	5,697	5,145
Kor Rep-----	590	1,940	5,871	6,543	3,265
China M-----	-	2	823	1,254	2,503
Spain-----	5,238	3,698	3,404	2,495	2,218
Mexico-----	390	571	485	757	1,021
Fr Germ-----	1,607	1,056	1,124	965	804
All other----	3,420	6,518	4,127	3,044	3,273
Total----	97,795	117,500	124,605	145,791	132,469

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

Table F-8.--Socket wrenches and accessories: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)					
Source	1978 <sup>1/</sup>	1979	1980	1981	1982
China t-----	13,883	29,610	35,851	49,970	45,959
Japan-----	25,394	34,519	29,380	27,425	20,638
Kor Rep-----	302	132	1,021	1,022	499
Hg Kong-----	147	325	579	543	302
China M-----	-	-	43	7	295
Spain-----	1,650	28	98	49	193
Brazil-----	523	1	116	-	190
Fr Germ-----	665	201	155	207	179
All other----	4,067	901	423	659	479
Total----	46,631	65,718	67,666	79,884	68,733

<sup>1/</sup> Estimated by the staff of the U.S. International Trade Commission.

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

Table F-9--Flat wrenches: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)					
Source	1978 <sup>1/</sup>	1979	1980	1981	1982
China t-----	5,049	6,802	8,247	10,577	14,770
Japan-----	9,234	5,800	6,281	7,606	5,704
India-----	1,039	5,460	4,785	4,852	4,727
China M-----	-	1	1	443	899
Fr Germ-----	242	181	239	239	185
France-----	35	11	38	21	149
Kor Rep-----	110	603	2,656	3,544	141
Hg Kong-----	53	28	60	91	130
All other----	1,194	2,563	1,624	489	249
Total----	16,957	21,448	23,932	27,863	26,955

<sup>1/</sup> Estimated by the staff of the U.S. International Trade Commission.

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

Table F-10. All other wrenches: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)					
Source	1978 <sup>1/</sup>	1979	1980	1981	1982
China t-----	8,554	11,495	12,987	16,112	15,634
Japan-----	17,861	10,029	10,311	13,345	11,535
Kor Rep-----	178	1,205	2,194	1,976	2,625
Spain-----	2,988	3,670	2,893	2,247	1,991
China M-----	-	1	780	804	1,309
Mexico-----	98	571	476	757	1,021
Canada-----	170	265	525	328	456
Fr Germ-----	700	674	731	519	441
All other----	3,658	2,424	2,111	1,957	1,771
Total----	34,207	30,334	33,007	38,045	36,782

<sup>1/</sup> Estimated by the staff of the U.S. International Trade Commission.

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

Table F-11.--Screwdrivers: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)					
Source	1978	1979	1980	1981	1982
China t-----	1,960	4,000	3,615	6,196	7,330
Japan-----	2,251	1,610	2,044	2,551	2,848
Hg Kong-----	1,146	1,273	2,628	2,292	2,355
Fr Germ-----	347	311	268	335	455
Kor Rep-----	172	323	246	219	278
U King-----	181	171	140	196	246
Switzld-----	148	224	173	165	145
China M-----	-	-	3	50	107
All other-----	469	523	402	317	220
Total-----	6,675	8,434	9,518	12,321	13,984

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

Table F-12.--Horticultural and related tools: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)					
Source	1978	1979	1980	1981	1982
China t-----	639	1,244	1,689	1,368	2,419
Japan-----	2,665	2,321	2,502	2,469	1,749
Fr Germ-----	694	797	1,819	964	1,160
Kor Rep-----	626	844	653	395	721
Canada-----	161	310	110	552	709
N Zeal-----	199	354	523	705	461
Mexico-----	372	353	128	193	424
Brazil-----	52	556	263	236	369
All other-----	806	1,466	1,124	1,658	1,333
Total-----	6,214	8,244	8,811	8,540	9,345

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

Table E-13. Edge tools: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)

Source	1978	1979	1980	1981	1982
Japan-----	1,649	1,703	1,705	1,479	1,915
China t-----	384	585	771	858	1,144
China M-----	-	-	10	189	404
Fr Germ-----	256	361	364	249	346
Salvadr-----	116	144	560	177	338
Switzld-----	504	449	468	418	301
U King-----	266	176	490	604	251
Austria-----	333	409	347	191	210
All other----	1,431	1,777	1,344	1,112	1,157
Total----	4,938	5,606	6,060	5,276	6,067

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

Table F-14. Hand saws, blades, frames, and parts: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)

Source	1978	1979	1980	1981	1982
Fr Germ-----	6,345	7,417	9,038	7,971	8,154
Switzld-----	6,631	7,165	10,267	9,078	6,735
Canada-----	3,737	4,388	3,750	3,684	4,931
Sweden-----	6,804	7,047	6,510	7,141	4,076
Japan-----	3,220	3,224	3,043	3,462	3,897
Italy-----	714	1,366	688	2,441	3,258
France-----	3,877	5,439	5,144	3,931	2,610
U King-----	1,881	2,266	2,966	2,842	2,459
All other----	5,272	7,500	9,675	9,857	7,732
Total----	38,479	45,813	51,082	50,408	43,851

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

Table F-15.-Other nonpowered handtools: U.S. imports for consumption, by principal sources, 1978-82

(In thousands of dollars)						
Source	1978	1979	1980	1981	1982	
Japan-----	5,512	8,998	7,873	10,259	10,546	
China t-----	3,244	7,335	7,078	9,042	10,546	
Fr Germ-----	4,088	6,124	5,878	6,243	6,775	
Sweden-----	7,423	11,061	9,284	8,917	6,305	
Hg Kong-----	1,811	2,497	3,257	5,508	6,226	
Switzld-----	4,939	4,198	4,480	4,228	3,435	
Canada-----	1,139	2,685	2,000	3,647	2,879	
U King-----	1,895	2,576	2,085	1,835	2,431	
All other----	47,074	53,590	57,670	62,340	61,993	
Total----	77,125	99,064	99,605	112,019	111,136	

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



APPENDIX G

U.S. PRODUCERS' COMPETITIVE ASSESSMENT OF PRODUCT RELATED FACTORS OF  
COMPETITION FOR U.S. PRODUCED AND FOREIGN MADE HANDTOOLS IN THE U.S. MARKET  
BY PRODUCT CATEGORIES, 1980-83

Table G-1.-- Nonpowered handtools: U.S. producers' competitive assessment of product-related factors of competition for U.S. produced and foreign-made handtools in the U.S. market by product categories, 1980-83 <sup>1/</sup>

Competitive Advantage 2/										
Item	Chisels and punches	Hammers and sledges	Vises	C-clamps	Pliers	Metal/ bolt- cutting snips and shears	Ratchets	Sockets and accesso- ries	Socket sets	
Overall competitive advantage-----	D	F	D	D	F	D	F	F	D	
Lower purchase price (delivered)-----	F	F	F	F	F	F	F	F	F	
Ability to supply product at various market price levels----	F	F	F	S	F	D	F	F	F	
Exchange rate advantage-----	F	F	F	F	F	F	F	F	F	
Quality-----	D	D	D	D	D	D	D	D	D	
Terms of sale-----	D	D	D	D	D	D	D	D	D	
Overall availability (what you want, and where you want it)---	D	D	D	D	D	D	D	D	D	
Shorter delivery time-----	D	D	D	D	D	D	D	D	D	
Warranties-----	D	D	D	D	D	D	D	D	D	
Historical supplier relation- ship (including service)-----	D	D	D	D	D	D	D	D	D	
Competitive Advantage2/										
	Flat wrenches	All other wrenches	Screw- drivers	Special- ized automot- ive tools	Horti- cultural and related tools	Edge tools	Hand saws, blades, frames, and parts	Other nonpowered handtools		
Overall competitive advantage-----	D	S	F	D	D	F	D	D		
Lower purchase price (delivered)-----	F	F	F	F	F	F	F	F		
Ability to supply product at various market price levels----	F	F	F	F	F	F	F	F		
Exchange rate advantage-----	F	F	F	F	F	F	F	F		
Quality-----	D	D	D	D	D	D	D	D		
Terms of sale-----	D	D	D	D	D	D	D	D		
Overall availability (what you want, and where you want it)---	D	D	D	D	D	D	D	D		
Shorter delivery time-----	D	D	D	D	D	D	D	D		
Warranties-----	D	D	D	D	D	D	D	D		
Historical supplier relation- ship (including service)-----	D	D	D	D	D	D	D	D		

<sup>1/</sup> Data supplied for Japan, Taiwan, Korea, the EC countries (as a group), China, and India; excluded are Brazil, Mexico, and Spain for which insufficient data were provided by two or fewer respondents.

<sup>2/</sup> D = Domestic advantage; F = Foreign advantage; and S = Competitive position the same.

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



**APPENDIX H**

**A DISCUSSION OF THE EFFECTS OF EXCHANGE RATE CHANGES AMONG MAJOR U.S.  
TRADING PARTNERS ON THE COMPETITIVENESS OF U.S. PRODUCTS**

EXCHANGE RATES

## General

Unless offset by differences in relative inflation rates, changes in the value of the U.S. dollar vis-a-vis foreign currency can alter the competitiveness of imports in the United States. For example, a strong dollar and a relatively high rate of U.S. inflation can cause the dollar to become overvalued, increasing the competitiveness of imports in the United States.

To determine if changes in exchange rates have offset changes in inflation rates, real exchange rate indexes are often used. These indexes deflate changes in nominal exchange rates by changes in relative price levels. They show the change in competitiveness between the products of two countries since a base period. Real exchange rates for the U.S. dollar are determined by the following formula:

$$\text{Real exchange rate index} = \frac{\text{Nominal exchange rate index} \times \text{U.S. price index}}{\text{Foreign price index}}$$

If the real exchange rate index equals 100, the real value of the U.S. dollar has not changed since the base year. If the real exchange rate index is less than 100, the dollar is undervalued compared with the base year, and U.S. goods in general have become more competitive with foreign goods. The index would be less than 100 if either the U.S. price level has fallen relative to the foreign price level with no change in nominal exchange rates or the value of the dollar has risen in foreign exchange markets with no offsetting movement in relative price levels. If the real exchange rate index is greater than 100, the dollar is overvalued compared with the base year, and U.S. goods in general have become less competitive with foreign goods.

The following tabulation shows the real exchange rate indexes for the U.S. dollar against the currencies of several countries for the base year 1976:

Country	Producer price index (1976=100)	Nominal exchange rate index (1976=100)	Real exchange rate index (1976=100)
United States-----	163.6	-	-
Canada-----	178.6	125.1	114.6
Italy-----	232.6	162.5	114.3
Japan-----	129.5	84.0	106.1
Korea-----	253.1	151.1	97.7
Spain-----	257.6	164.2	104.3
Sweden-----	189.4	144.2	124.6
Switzerland-----	114.7	81.2	115.8
Taiwan-----	157.4	103.9	108.2
United Kingdom-----	204.8	103.2	82.4
West Germany-----	133.4	96.4	118.2

Source: Compiled from statistics of the International Monetary Fund.

As shown by the real exchange rate indexes in the tabulation, U.S. goods have become less competitive with goods from most foreign countries since 1976. The average real exchange rate index for the U.S. dollar against the foreign currencies is 108.6. This means that the price of imports has gone up by about 8.6 percent less since 1976 than the price of U.S. goods. Goods from Sweden, West Germany, and Switzerland have enjoyed an especially sharp increase in competitiveness since 1976. Only goods from Korea and the United Kingdom have lost competitiveness to U.S. goods since 1976. 1/

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1/ A recent study done by the U.S. International Trade Commission (The Effect of Changes in the Value of the U.S. Dollar on Trade in Selected Commodities, Investigation No. 332-150, USITC Pub. No. 1423 (August 1983)) found that although changes in exchange rates influence trade, other factors such as competitors' prices, product demand, and manufacturing costs are often equally important.



APPENDIX I

CALENDAR OF PUBLIC HEARING

## TENTATIVE CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject : Trends in International Trade in  
Nonpowered Handtools

Inv. No. : 332-163

Date and time: November 9, 1983 - 10:00 a.m.

Sessions were held in the Hearing Room of the United States International Trade Commission, 701 E Street, N.W., in Washington. -

### Domestic:

Frederick L. Ikenson, P.C.--Counsel  
Washington, D.C.  
on behalf of

Hand Tools Institute ("HTI")

H. Arthur Bellows, Jr., President of HTI and also  
Chairman of Triangle Corporation

R. William Metzger, President, The Tool Group,  
Triangle Corporation

William J. Ferrick, Executive Vice President,  
Wilton Tool Division of Wilton Corporation

Thomas F. Burnes, Ingersoll-Rand Company

Allen Petersen, Chairman, Petersen Manufacturing  
Company, Inc.

Raymond Silverstein, President, Vaco Products Co.

Frederick L. Ikenson--OF COUNSEL

- more -

Importers:

Harris, Berg & Creskoff--Counsel  
Washington, D.C.  
on behalf of

National Hand Tool Corporation, Dallas, Texas

Jack Evans, President

Stephen M. Creskoff--OF COUNSEL

Bregman, Abell & Kay--Counsel  
Washington, D.C.  
on behalf of

The Taiwan Regional Hand Tools Association

Melvin Merians, Chairman, Oxwall Tool Co., Inc.

PANEL:

Dominic Yin, Working Committee Chairman

H. Pan

R. Chang

David Simon--OF COUNSEL







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