The Ohio Machinery Industry

Ohio's Standing

- Ohio's machinery industry (NAICS 333) produced $9.4 billion worth of goods in 1999—about 7 percent of the U.S. total.
- Ohio ranked third among the 50 states in total production in 1999, but ranked second behind Illinois in total industry employment.

Leading Sectors

- Within the machinery industry, there are seven industry groups. Ohio leads the nation in the production of general purpose machinery, a group that includes pumps, compressors, industrial trucks, power handtools, welding equipment, and scales.
- Ohio is second, behind Michigan, in the production of metalworking machinery. Within this group, there are seven sectors, and Ohio is the leader in two of these sectors—metal cutting machine tools and metal forming machine tools.
- Ohio ranks second in the remaining five sectors—industrial molds; dies, tools, jigs & fixtures; machine tool accessories; rolling mill machinery; and other metal working machinery.
- Overall, there are 43 sectors within these seven groups. Ohio ranks first in 11 sectors (see chart to the right); second in nine; and third in five.

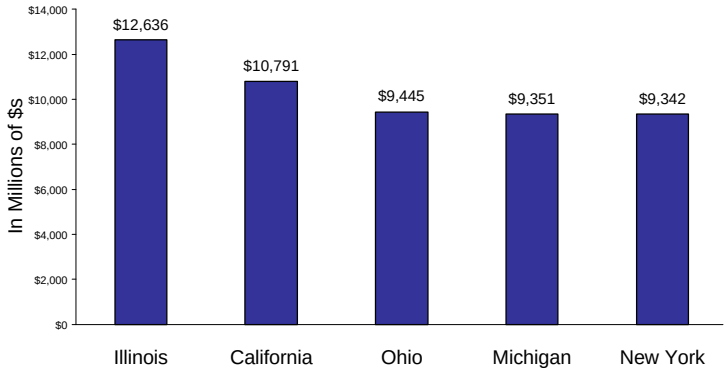
Share of the State's Economy

- About 2.2 percent of Ohio's private-sector employees work in the machinery industry.
- Machinery is the third largest manufacturing industry, employing 108 thousand workers in 1999—one out of every nine manufacturing workers.

Leading Companies

- Emerson Electric is the largest employer in Ohio's machinery industry with 5,100 workers. Two of Emerson's divisions, Copeland and Liebert, produce compressors and environmental control equipment.
- Delphi Thermal makes compressors for motor vehicles. Crown Equipment is a leading manufacturer of industrial trucks. Illinois Tool Works operates Hobart, a company that supplies food processing machinery to grocery chains and restaurants.
- Mannesmann and Milacron, along with HPM, make plastic and rubber making machinery. Within this sector, Ohio companies account for one out of every three machines produced in the U.S.

Machinery Production, 1999



Source: U.S. Bureau of the Census

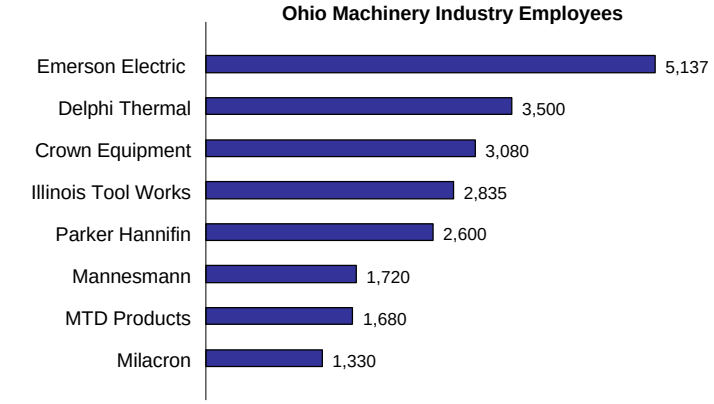
Number 1 Ranked Sectors, 1997

(Sorted by Market Share; In Millions of $s)

	Value Added	Percent of U.S.
Plastics & Rubber Industry Machinery	654	34%
Welding & Soldering Equipment	570	29%
Machine Tools, Metal Forming	319	25%
Machine Tools, Metal Cutting	500	19%
Scales & Balances	60	18%
Industrial Trucks & Tractors	280	15%
Measuring & Dispensing Pumps	76	13%
Industrial & Commercial Fans & Blowers	120	12%
Fluid Power Pumps & Motors	171	12%
Pumps & Pumping Equipment	383	11%
Power-Driven Handtools	180	9%

Source: U.S. Bureau of the Census

Leading Employers



Source: Harris InfoSource International

Key Trends

Jobs & Production

- The transition to the new NAICS industry classification system from the old SIC classification system limits efforts to compare recent economic activity with earlier years. Under NAICS (North American Industrial Classification System), the machinery industry is a smaller industry. On a net basis, there are approximately 1,800 fewer establishments and 37,000 fewer workers.
  - Machine shops, a sector which employs 25,000 Ohio workers, is now part of the fabricated metal products industry (NAICS 332).
  - Computer and office equipment, ball & roller bearings, motor vehicle A/C units, and carburetors & pistons also were removed from machinery.
  - A few sectors, e.g., optical instruments and lenses, were added to machinery.
  - Finally, within machinery (NAICS 333), a number of sectors were rearranged. Industrial machinery is similar to the old special industry category, but metalworking machinery "lost" power handtools and welding equipment to general purpose machinery, a category which also gained industrial trucks and cranes and lost ball & roller bearings.
- NAICS-based data are first available for 1997. The three years of data on jobs and value added in the chart in the upper right indicate that the Ohio machinery industry currently is downsizing. At the national level, machinery jobs also declined from 1997 to 1999—1.4 percent, compared to 6.1 percent for Ohio.

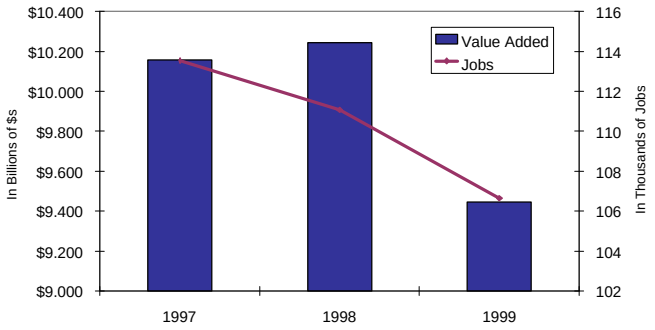
Employment Projections

- The latest employment projections from the state's Bureau of Labor Market Information cover the period from 1998 to 2008 and are based on the SIC system.
- Keeping in mind the definitional issues mentioned above, these projections indicate a general decline in employment, with growth opportunities in special industry machinery (now called industrial machinery).

Exports

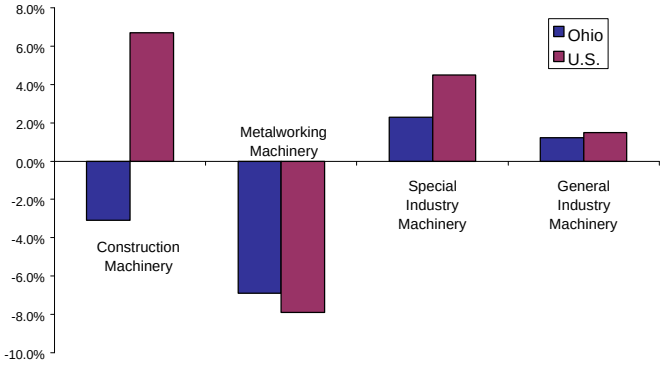
- Machinery is a trade-sensitive industry. The chart to right, which uses NAICS industry data, offers one explanation for the recent decline in machinery industry employment—a decline in exports. The chart also indicates the possibility that machinery production rebounded in 2000.

Ohio Jobs & Production, 97 - 99



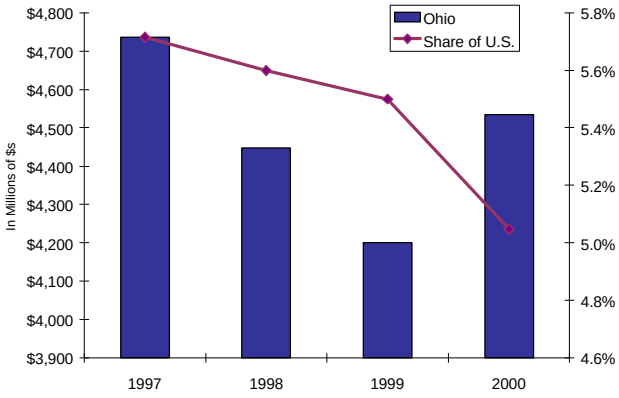
Source: U.S. Bureau of the Census

Projected Employment Change, 98 - 08



Note: Industry definitions are based on SIC codes. Source: Ohio Bureau of Labor Market Information

Machinery Export Shipments



Source: U.S. Bureau of the Census

Investment Trends

Capital Expenditures

- Total capital expenditures for machinery industry establishments in Ohio averaged $640.8 million per year for the 1997-1999 period.
- The $640.8 million average is 6.9 percent of all machinery industry capital expenditures in America during this three-year period. This percentage is comparable with the industry's average portion of jobs and value-added in Ohio.
- This consistency in jobs, production, and investment shows the machinery industry's continuing commitment to manufacturing in Ohio.

Announced Projects

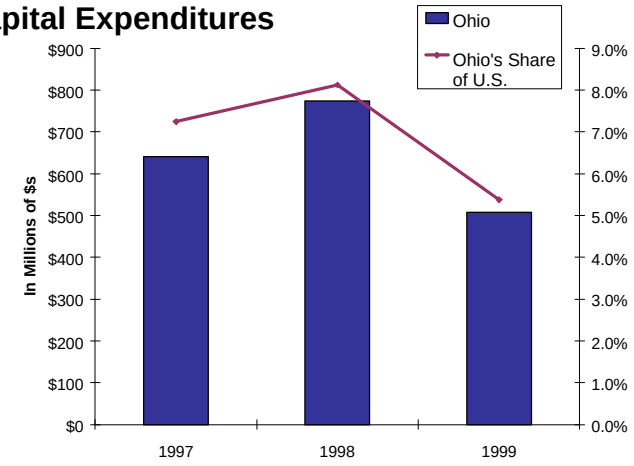
- Since government investment data are several years behind the current year and lack specific details on location and company name, the Ohio Department of Development tracks major investment announcements in the manufacturing sector. "Major" is defined as a project involving at least $1 million, 50 new jobs, or 20,000 square feet. Major investments often are phased in over a multi-year cycle.
- From 1998 through 2000, the Ohio Department of Development recorded 170 major investments by 158 companies in the state's machinery industry totaling almost $1.1 billion.
- Annual results are somewhat exaggerated by the 1998 General Motors-Isuzu partnership investment of $300 million for revamping the Moraine diesel engine plant.
- Excluding the GM-Isuzu investment and the 300 new jobs, the totals for 1998 still would be the largest—$344.7 million and 2,102 new jobs.

Recent Projects

- The largest announced machinery investment in 2000 would have been classified as an instrument investment under the old SIC system. **Corning** makes lenses for projection TVs in Clermont County near Cincinnati.

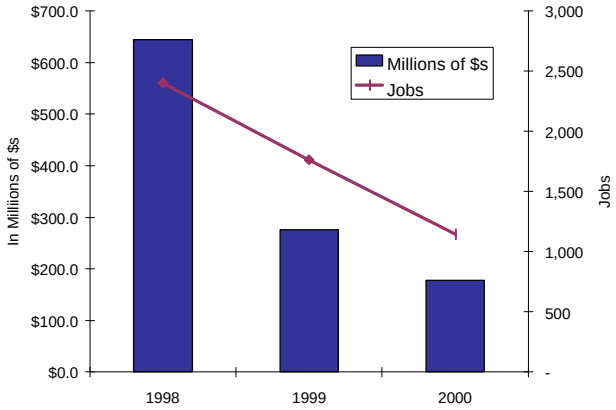
  In addition to investing $87 million, Corning is adding 500 jobs to an existing base of 1,100 workers. New technology is improving picture quality, which in turn, has led to strong increases in unit sales.
- **Salvagnini America**, an Italian-based company, which makes automatic punching and shearing systems, plans to expand its Hamilton facility adding 60 workers.
- **Denison Hydraulics**, a United Kingdom-based company, announced plans in March of 2000 to expand its Marysville facility and create 25 new jobs.
- **Akron Brass**, owned by UK-based Premier Farnell, announced plans in August of 2000 to expand its Wooster operations. Akron Brass is the world's largest manufacturer of firefighting equipment.

Capital Expenditures



Source: U.S. Bureau of the Census

Announced Projects



Source: Ohio Department of Development

Top 5 Announced Investments, 2000

Company	County	Product	Investment (Millions$s)
Corning/U S Precision Lens	Clermont	Lenses for TVs	$87
Salvagnini America	Butler	Machine tools	$10
Denison Hydraulics	Union	Pumps	$9
Akron Brass	Wayne	Firefighting equip	$8
Mark Concepts	Montgomery	Industrial dies	$6

Source: Ohio Department of Development

Leading and Notable Machinery Manufacturing Establishments in Ohio Employing at Least 500 Persons, 2000

Source: 2001 Ohio Industrial Directory,
Harris InfoSource International
Prepared by: Ohio Department of Development,
Office of Strategic Research (May 2001)

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