



MACHINERY MANUFACTURING: A MAJOR COMPONENT OF U.S. EXPORTS

Overview

Machinery manufacturing is one of the largest and most competitive sectors of the American manufacturing economy. The United States is the world's third-largest supplier of capital equipment, exporting \$161 billion in 2011.¹ American manufacturers hold a 61.1 percent share of the U.S. domestic market—the world's largest, and account for nearly 12 percent of global trade in machinery.

The economic impact of machinery manufacturing extends throughout the American economy. Machinery industries provide essential and highly sophisticated technology for many other manufacturing and service industries. Process control and other automation technologies enable end-users to maximize the productivity of their equipment. Sales of many types of machinery are accompanied by a variety of high-value services, as well, including specialized architecture, engineering, and logistics. Machinery manufacturing industries employ more than one million American workers in well-compensated trades and professions.

Leading markets for U.S. machinery exports in 2011 included Canada, Mexico, China, Australia, and Korea. Brazil was our sixth-largest export market, and Germany was seventh. The European Union taken as a whole would have been U.S. machinery manufacturers' second-largest market in 2011, after Canada. India, Peru, China, Chile, and South Africa were the most rapidly growing export markets between 2001 and 2011. Among the wide range of machinery manufactured in the United States, construction machinery, engine equipment, turbines and turbine generator sets, and agricultural equipment led U.S. exports last year. Major competitors in global machinery markets include Germany, Japan, Italy, and China.

Key Statistics – 2011

(unless otherwise noted)

Manufacturers' Sales:	\$413.7 billion ²
Exports:	\$161.0 billion ³
Export Growth (2010-11):	13.9 percent ⁴
Exports as a Share of Manufacturers' Sales:	38.9 percent ⁵
Direct Employment (December 2012):	1,106,100 ⁶
U.S. Share of Global Market:	11.7 percent ⁷
U.S. Share of Domestic Market:	61.1 percent ⁸

Manufacturers

Tens of thousands of companies manufacture machinery in the United States. Most are SMEs, but there are also many large, public companies and iconic American brands that trade on a global scale. Machinery is manufactured in 47 states, but production is concentrated in the industrial Midwest. California and Texas are also major

¹ U.S. International Trade Commission; includes data for includes NAICS 333 "Machinery Manufacturing," plus selected products covered in NAICS 334 and 335.

² Bureau of the Census, 2011 Annual Survey of Manufactures; includes NAICS 333 "Machinery Manufacturing," plus selected products covered in NAICS 334 and 335.

³ U.S. International Trade Commission.

⁴ Ibid.

⁵ International Trade Administration, Office of Transportation and Machinery.

⁶ U.S. Department of Labor, Bureau of Labor Statistics; NAICS 333.

⁷ Global Trade Atlas, United Nations; calculated from certain data in HS Chs. 84, 85, and 87.

⁸ International Trade Administration, Office of Transportation and Machinery.

machinery manufacturing states. Since 2009, machinery manufacturers of all sizes have benefitted from increasing domestic capital investment and strong growth in export markets.

U.S. machinery manufacturers face numerous challenges in foreign markets. Market access is problematic in a number of key growth markets, especially trade barriers based on foreign governments' import substitution policies and local content requirements. Protection of intellectual property is a serious concern, as well. For a number of machinery industries, bans or restrictions on import of remanufactured goods are a significant problem. Despite high private-sector profits since the end of the recession, access to capital can still be a challenge, especially for SME manufacturers.

Employment

More than 1 million Americans are employed directly in machinery manufacturing, as of December 2012. Machinery manufacturing companies have added more than 125,000 jobs since January 2010.⁹ The unemployment rate for machinery manufacturing has dropped significantly from a mid-recession high of 14.2 percent in October 2009.¹⁰

Machinery manufacturing jobs are primarily in highly-skilled, well-compensated trades and professions. Leading employment categories include team assemblers, machinists, welders, tool-and-die makers, and mechanical and other engineers. Machinery manufacturing also supports the jobs of hundreds of thousands of Americans in a variety of other manufacturing and service industries.

Major Supply Chains

Agriculture/Food/Beverage [agricultural equipment, food processing machinery, packaging machinery, materials handling equipment, refrigeration equipment, pumps, electric motors, printing machinery, process control technology]

Aerospace [machine tools, materials handling equipment, welding equipment, process control technology]

Automotive [machine tools, material handling equipment, welding equipment, process control technology]

Construction [construction machinery, materials handling equipment, power generating equipment, fluid power]

Energy [power generation equipment, oil & gas field equipment, mining equipment, materials handling equipment, pumps, electric motors, process controls]

Mining [power generation equipment, mining equipment, materials handling equipment, process controls, pumps, electric motors, fluid power]

Relationship with MAS and ITA

Tens of thousands of companies manufacture machinery in the United States. Most are SMEs, but there are also many large, public companies and iconic American brands that trade on a global scale. Machinery is manufactured in 47 states, but production is concentrated in the industrial Midwest. California and Texas are also major machinery manufacturing states. Since 2009, machinery manufacturers of all sizes have benefitted from increasing domestic capital investment and strong growth in export markets.

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⁹ U.S. Department of Labor, Bureau of Labor Statistics

¹⁰ Ibid.

Information for Machinery Exporters

U.S. Government Resources for Exporters:

www.export.gov

The International Trade Administration:

www.trade.gov

The Export Import Bank of the United States:

www.exim.gov

The Small Business Administration:

www.sba.gov