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Industrial Fasteners

US Industry Study with Forecasts for **2011 & 2016**

Study #2173 | April 2007 | \$4400 | 263 pages

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The Freedonia Group

767 Beta Drive

Cleveland, OH • 44143-2326 • USA

Toll Free US Tel: 800.927.5900 or +1 440.684.9600

Fax: +1 440.646.0484

E-mail: info@freedoniagroup.com

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US demand for industrial fasteners will be fueled primarily by healthy growth in aerospace equipment production and nonresidential construction and a rebound in motor vehicle production.

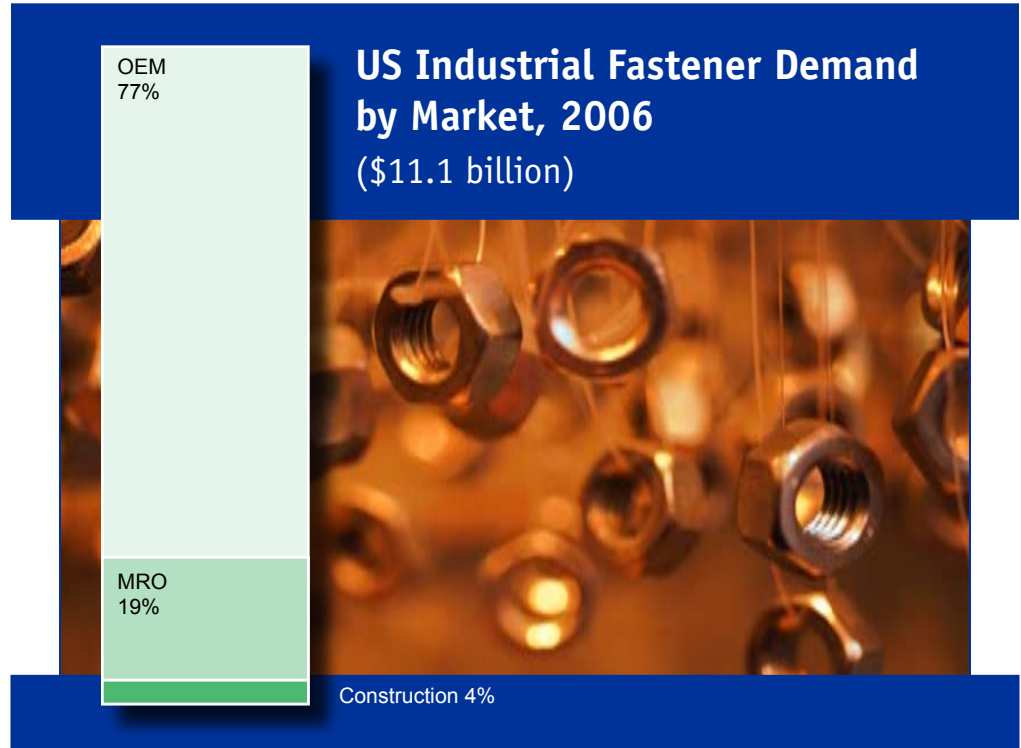
US demand to reach \$12.9 billion in 2011

Through 2011, US industrial fastener demand will increase 3.0 percent annually to \$12.9 billion. Demand will be fueled primarily by healthy growth in aerospace equipment production and nonresidential construction and a rebound in motor vehicle production. In addition, production of many other durable goods will continue to rise, providing some opportunities for fastener suppliers. However, overall market gains will be limited to some extent by competition from adhesives and other alternative joining technologies and by a moderation in residential construction.

Shipments of industrial fasteners from US plants will increase 1.9 percent annually through 2011 to \$10.7 billion, trailing the forecast pace for demand. Domestic suppliers will benefit from strong increases in aerospace-grade fastener demand worldwide. However, competition from imports will be particularly strong in the standard fastener segment.

OEM segment to offer best market opportunities

The MRO segment will see the fastest increases supported by continued strength in the defense market and solid growth in transportation equipment repair. While not as rapid in percentage terms, continued gains in original



equipment applications will be the most important factor for fastener manufacturers, given the large size of the OEM market. Gains will be especially rapid in aerospace equipment, with the electrical and electronic product market also seeing above average gains. In addition, increased motor vehicle production will provide opportunities, although these will be restrained by less rapid growth in larger, more fastener intensive models, such as trucks and sport utility vehicles.

Aerospace-grade products to be the fastest growing

Sales of aerospace-grade products will grow more rapidly, rising 8.2 percent

annually compared to 2.0 percent annual increases for standard fasteners. Strong growth in aerospace equipment production will drive demand for aerospace-grade fasteners. However, the growing use of composites in place of aluminum panels on airplane bodies will prevent even faster gains.

There has been a strong move to consolidate the aerospace-grade fastener market, led by Precision Castparts, which has become one of the world's leading producers via a series of acquisitions. The company continued this trend in February 2007 when it purchased the Cherry Aerospace fastener business of Acument Global Technologies.

Sample Text, Table & Chart

PRODUCTS

Nonthreaded

Sales of nonthreaded standard fasteners will increase annually to \$1.2 billion in line with the overall fastener market. This is up from 2006 performance of \$1.1 billion. Demand will be supported by increases in nonresidential construction. In addition, innovations in nonthreaded design will slow gains in industrial machinery and equipment. In addition, the limited replacement market potential for nonthreaded devices such as rivets (which are usually designed for permanent joints), competition from alternative joining technologies and the use of washers in a number of applications will all restrict growth through 2011.

Nonthreaded fasteners are devices with smooth surfaces or otherwise lacking the ridges characteristic of screws, bolts, nuts and other threaded industrial fasteners. The most common types are rivets and washers, although numerous others are available as well, including bushings, nonthreaded pins, retaining rings, stud receivers and various plastic fastener designs. Nonthreaded fasteners are typically more difficult to disassemble and reinstall than threaded fasteners, which means they tend to be used when permanent fastening is required. However, this permanence also makes nonthreaded fasteners more susceptible to replacement by adhesives and welded joints in a number of applications. In addition, the development of higher quality and locking-type threaded fasteners has had a negative impact on demand for nonthreaded items like lock-washers in recent years, particularly in the aerospace, electronics, fabricated metal products and industrial machinery industries. Nevertheless, nonthreaded fasteners continue to be used in large quantities in a number of applications, especially where more or less permanent installation is desired.

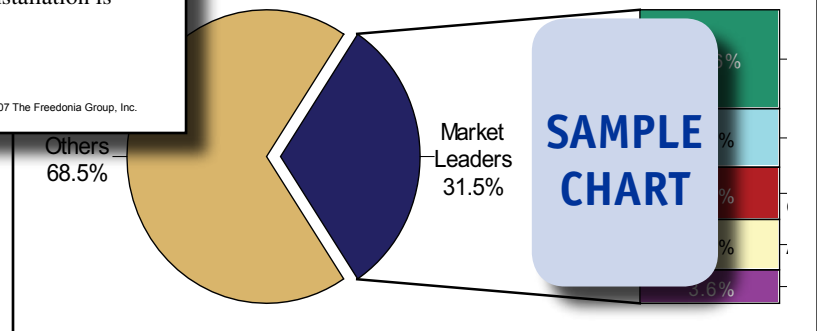
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TABLE III-2
STANDARD FASTENER SUPPLY & DEMAND
 (million dollars)

Item	1996	2001	2006	2011	2016
Industrial Fastener Demand					100
% standard					70
Standard Fastener Demand					50
Externally Threaded					60
Internally Threaded					50
Nonthreaded					40
Application-Specific					40
+ exports					50
- imports					50
Standard Fastener Shipments					50
price deflator (2000=100)					7.9
Standard Fastener Shpts (mil 2000\$)					70

CHART V-1
INDUSTRIAL FASTENER MARKET SHARE BY COMPANY, 2006
 (\$11.1 billion)



Sample Profile, Table & Forecast

COMPANY PROFILES

MacLean-Fogg Company

1000 Allanson Road
 Mundelein, IL 60060
 847-566-0010
<http://www.maclea-fogg.com>

Annual Sales: (verify, 1/07)
 Employment: (1/07)

Key Products: nuts, assemblies and fastening systems

MacLean-Fogg is a privately held manufacturer of plastic components, hot- and cold-formed tooling, custom threaded fasteners, electric power equipment and medical equipment. The Company operates through two divisions: MacLean Vehicle Systems (MVS) and MacLean Power Systems.

The Company participates in the industrial fastener industry through the MVS division (Mundelein, Illinois), which is primarily engaged in the design, production and sale of numerous fasteners, including nuts, bolts, studs, washers, retainers, assemblies and fastening systems. These fasteners are marketed to the aerospace, automotive, farm equipment, lawn and garden equipment, military vehicle, recreational vehicle, off-road vehicle and truck industries. The division's principal customers include Ford Motor Company (Dearborn, Michigan), General Motors Corporation (Detroit, Michigan) and DaimlerChrysler AG (Germany).

The MVS division's nut product line encompasses acorn, clinch, flange, spindle, wheel, wing and other models, as well as stud/nut assemblies. Bolts include blow, hex flange, knurled P-point, trimmed

**SAMPLE
PROFILE**

TABLE IV-12

ELECTRICAL & ELECTRONIC PRODUCT FASTENER DEMAND (million dollars)

Item	1996	2001	2006	2011	2016
Electrical/Electronic Prdt Shpt (bil \$)	47	45	47	50	55
\$ fastener/000\$ shipments	1.5	1.4	1.5	1.6	1.7
Electrical & Electronic Fasteners	20	19	20	21	22
Measuring & Control Instruments	5	5	5	5	5
Electronic Components	10	10	10	10	10
Household Appliances	5	5	5	5	5
Computer Equipment	5	5	5	5	5
Industrial & Transmission Equip	5	5	5	5	5
Communications Equipment	5	5	5	5	5
Lighting & Wiring Equipment	5	5	5	5	5
Other	5	5	5	5	5
% electrical & electronic products	43	42	43	42	40
OEM Industrial Fastener Demand	65	63	65	68	72

**SAMPLE
TABLE**

"Fastener Market -- Electrical and electronic product OEM demand for industrial fasteners is projected to increase 3.5 percent annually to nearly \$1.1 billion in 2011. This is both a strong rebound from the declines registered between 2001 and 2006 and ahead of OEM demand in the aggregate. Fastener suppliers will benefit from a rebound in electrical and electronic product shipments. Preventing even faster increases will be..."

--Section IV, pg. 123

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OTHER STUDIES

World Elevators

World elevator and escalator demand will rise 5.1% yearly through 2011. Gains will be driven by the ongoing migration to cities in developing regions, and by mandated retrofit services and nonresidential construction in developed markets. Escalators and moving walkways will outpace elevators. This study analyzes the \$44.5 billion world elevator and escalator industry, with forecasts for 2011 and 2014 by type, market, world region and for 15 countries. It also details market share and profiles major players.

#2248 09/2007..... \$5500

Elevators in China

Elevator/escalator product and service demand in China will grow 9.7% yearly through 2011. Gains will be driven by strong new construction spending (especially on multifamily buildings) and on nonresidential establishments. New product installations will remain dominant over the elevator service segment. This study analyzes the ¥39 billion Chinese elevator/escalator industry, with forecasts for 2011 and 2016 by type, market and region. It also evaluates market share and profiles industry participants.

#2216 07/2007..... \$4900

Bearings

Ball, roller and plain bearing demand in the US will reach \$10.4 billion in 2011. Growth will be driven by largely favorable market conditions and by a shift toward more expensive, better performing products. Unmounted plain bearings will grow the fastest while aerospace, automotive and engine/turbine manufacturing will lead gains by market. This study analyzes the US bearing industry, with forecasts for 2011 and 2016 presented by product and market. It also details company market share and profiles major players.

#2207 07/2007..... \$4500

Industrial Fasteners in China

Demand in China for industrial fasteners will grow 9.4% annually through 2010. Nonthreaded sales will lead gains among standard types, with externally threaded fasteners remaining dominant. Aerospace-grade fasteners will outpace standard products. Construction will be the fastest growing market. This study analyzes the ¥25.6 billion Chinese industrial fasteners industry, with forecasts for 2010 and 2015 given by type and market. This study also evaluates company market share and profiles major players.

#2187 06/2007..... \$4900

Gaskets & Seals

US demand for gaskets and seals will grow 3.6% annually through 2010. Gains will be supported by an improved economic outlook and increasing penetration of more advanced materials. Molded seals and packings, plastic gaskets, expanded graphite gaskets and metallic gaskets will grow the fastest. Aerospace will see the most rapid gains by market. This study analyzes the \$7.3 billion US gasket and seal industry to 2010 and 2015 by product and market. It also evaluates market share and profiles major firms.

#2150 02/2007..... \$4300

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