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Gaskets & Seals

US Industry Study with Forecasts for **2012 & 2017**

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Gaskets & Seals

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Suppliers will benefit from a rebound in motor vehicle production, increases in machinery production, and rising demand for more expensive sealing products made from advanced materials.

US demand to reach $8.8 billion in 2012

Through 2012, the US market for gaskets and seals is expected to expand 2.7 percent per year (including price increases) to $8.8 billion, roughly in line with sales performance during the 2002-2007 period. Suppliers will benefit from a rebound in motor vehicle production, as well as from solid increases in machinery production and capital spending. Rising demand for more expensive sealing products made from advanced materials will also support gasket and seal demand growth. Increased use of better performing products will have a mixed effect over time, as initial value gains will tend to be offset by longer useful lives, decreasing aftermarket sales.

Expanded graphite, plastic gaskets, body seals to be fastest growing

Expanded graphite gaskets, plastic gaskets and body seals will post the most rapid sales increases among individual products. Expanded graphite and plastic gaskets will continue to supplant more traditional gasketing material because of their better performance characteristics, and both product types will benefit from an improved motor vehicle industry outlook. Body seal demand will also be spurred by a rebound in motor vehicle production, as well as by healthy increases in the production of aerospace equipment and construction machinery.

Motor vehicles, machinery best market opportunities

The aerospace market for gaskets and seals is forecast to grow the fastest of any major market through 2012. Growth will be driven by increased spending on military aircraft due to the ongoing war on terror and by rising civil aircraft production levels. The much larger motor vehicle and machinery markets will provide better sales opportunities for gasket and seal makers than the faster growing aerospace equipment market. Increases in motor vehicle production, as well as in the number of motor vehicles in use, will support associated gasket and seal sales. A move toward the use of higher-end sealing products in the motor vehicle market will also contribute to future value gains. Continued growth in capital spending and a large aftermarket created by harsh operating environments will bolster machinery gasket and seal demand.

Original equipment manufacturing (OEM) applications account for about two-thirds of all gasket and seal demand. However, this ratio varies widely on an industry-by-industry basis. For example, in both aerospace and machinery applications, aftermarket demand was larger than its OEM counterpart in 2007. In contrast, aftermarket demand made up just 28 percent of all electric and electronic product gasket and seal demand in the same year.

Sample Text, Table & Chart

TABLE V-1

SEAL & PACKING SUPPLY & DEMAND
(million dollars)

Item	1997	2002	2007	2012	2017
Durable Goods Shipments (bil $)					60
$ seals & packings/000$ durables					8
Seal & Packing Demand					0
Molded Seals & Packings					0
Body Seals					0
Shaft Seals					5
Compression Packings					5
+ exports					0
- imports					5
Seal & Packing Shipments					5
price deflator (2000=100)					0
Seal & Packing Shipments (mil 2000$)					70

SAMPLE TABLE

GASKET SUPPLY & DEMAND

Nonmetallic Gaskets

The market for nonmetallic gaskets is forecast to climb per year to $ ... major types of nonme... kets will see ... growth experienced 2002-2007 p... accelerated after th... cession. Sol... e to the positive out... major gaske... e, demand increases supported by ... ts, boosting demand end products ... dollar gains. Many advances will involve the development of new materials and formulations of older materials. A number of these newer pr... supplant traditional gasketing materials -- both metallic and n... lic -- although much of the gain will eventually come at the e... nonmetallic products like cellulose fibers, commodity rubber and paper.

SAMPLE TEXT

When choosing a gasketing material, a number of critical factors must be considered. The materials being sealed, the types of fluids inside the application, the amount of pressure on the gasket and the temperature range involved are all elements that have to be taken into account. Widely used conventional nonmetallic gasketing materials include elastomers such as neoprene, ethylene-propylene diene monomer (EPDM), styrene-butadiene (SBR), and sponge and nitrile rubber. Cork and fibers such as paper, felt and cellulose are also utilized as basic gasketing materials. Asbestos was once a major nonmetallic gasketing material, particularly in high temperature applications, but li... currently used in the US due to safety concerns.

With the discontinuation in use of asbestos as a materia... a variety of less traditional materials are now utilized. These... vanced fibers like aramid, carbon and fiberglass; ceramics su... expanded graphite; polymer-based materials like foam-in-pla...

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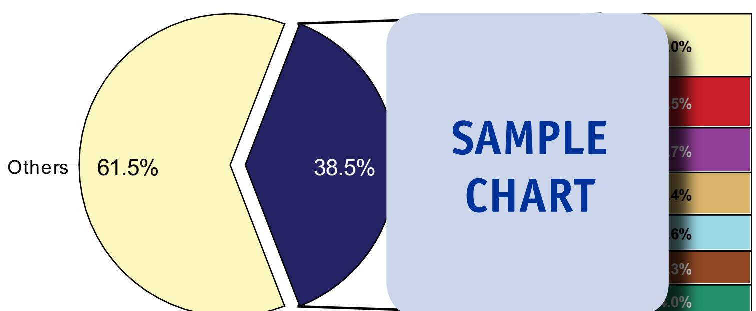
CHART VII-1

US GASKET & SEAL MARKET SHARE BY COMPANY, 2007
($7.7 billion)



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Sample Profile, Table & Forecast

TABLE VI-6

MACHINERY GASKET & SEAL DEMAND BY MARKET & SOURCE (million dollars)

Item	1997	2002	2007	2012	2017
Machinery Shipments (bil $)	25[illegible]	[illegible]	[illegible]	[illegible]	[illegible]3.0
$ gaskets & seals/000$ machinery	6[illegible]	[illegible]	[illegible]	[illegible]	[illegible]52
Machinery Gasket & Seal Demand	1[illegible]	[illegible]	[illegible]	[illegible]	[illegible]35
By Market:					
Construction & Related Equip	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]50
General Purpose Machinery	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]25
Engines, Turbines & PT Equip	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]90
HVAC & Service Equipment	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]55
Other	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]15
By Source:					
OEM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]90
Aftermarket	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]45
% machinery	2[illegible]	[illegible]	[illegible]	[illegible]	[illegible]8
Total Gasket & Seal Demand	622[illegible]	[illegible]	[illegible]	[illegible]	[illegible]630

SAMPLE TABLE

COMPANY PROFILES

Flexitallic Group Incorporated
201 Kingwood Medical Drive, Suite B200
Kingwood, TX 77339
281-604-2400
http://www.flexitallic.com

Annual Sal[illegible]
Employ[illegible]

Key Pro[illegible] [illegible]kets and seals, gasket materials[illegible]

SAMPLE PROFILE

Fle[illegible] [illegible]engaged in the manufacture [illegible] [illegible]n October 2007, the Compan[illegible] [illegible]ital SA (France) and Holding [illegible] [illegible]s global operations are divided between Flexitallic LP (Deer Park, Texas), which serves the Western Hemisphere; and Flexitallic Limited (United Kingdom), which serves the Eastern Hemisphere.

The Company participates in the US gasket and seal industry through Flexitallic LP, which produces semi-metallic and non-metallic gaskets and seals, gasket materials, joint sealant tape and ring-type joints. Semi-metallic gaskets include spiral-wound, high-temperature, BAKER, metal-jacketed, CGI-MRG, metal-reinforced and FLEXPRO types. Spiral-wound gaskets from the company are used to seal pipes in petrochemical plants, refineries and other processing applications. High-temperature gaskets, which are sold under the HOT brand name, utilize high-heat shields that protect against graphite oxidization and are can operate in temperatures of up to 1,830 degrees Fahrenheit. Flexitallic LP's BAKER gaskets are spiral-wound gaskets with emissions containment systems for use in hydrofluoric acid and other

234

"The market for gaskets and seals in construction and related equipment (e.g., agricultural, mining and oilfield, and lawn and garden equipment) applications is expected to rise 3.4 percent per annum to $745 million in 2012, outperforming sales gains in the machinery market as a whole. Like the gasket and seal market for all categories of machinery, this represents a slowdown from the 2002-2007 period, primarily due to ..."

--Section VI, pg. 134

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Other Studies

World Diesel Engines

This study analyzes the global diesel engine industry. It presents historical demand data for 1997, 2002 and 2007 and forecasts for 2007 and 2012 by diesel engine application (e.g., motor vehicles, off-highway, stationary), world regional market (e.g., North America, Western Europe, Asia/Pacific) and major national market. The study also considers market environment factors, reviews emission control technology, details industry composition, evaluates company market share and profiles industry competitors.

#2441 .... 01/2009..................... $5700

Machine Tools in China

Machine tool demand in China will grow 13% yearly through 2012, based on rapid growth in durable goods production and infrastructure expansion and modernization. Metal cutting tools will outpace other products, spurred by strong growth in manufacturing investment. Industrial machinery will remain the largest market. This study analyzes the 328.5 billion yuan machine tools industry in China, with forecasts for 2012 and 2017 by product, market and region. It also evaluates market share and profiles industry players.

#2390 .... 09/2008..................... $5100

World Industrial Fasteners

Global demand for industrial fasteners will rise 4.8% yearly through 2012, driven by increasing aerospace equipment and motor vehicle output. Market gains in emergent economies will outpace demand in more advanced, mature countries. Aerospace-grade fasteners will outpace standard types. This study analyzes the $52 billion world industrial fastener industry, with forecasts for 2012 and 2017 by product, market, world region and for 28 countries. It also evaluates market share and profiles major players.

#2374 .... 09/2008..................... $5700

Industrial Rubber Products

US demand for industrial rubber products will reach $18.6 billion in 2012, buoyed by accelerating motor vehicle production and strong growth in the aerospace industry. Mechanical rubber goods will remain the largest segment, while other miscellaneous industrial products such as geomembranes will grow the fastest. This study analyzes the US industrial rubber product industry, with forecasts for 2012 and 2017 by product and market. It also evaluates company market share and profiles leading competitors.

#2361 .... 05/2008..................... $4600

World Rubber & Tire

World rubber consumption will rise 4% yearly through 2011, driven by solid growth in motor vehicle production and a stronger world economy. Non-tire rubber will outpace and overtake tire rubber demand based on opportunities in the automotive, industrial, consumer and construction sectors. This study analyzes the world tire and rubber industry, with forecasts for 2011 and 2016 by type, market, world region and for 30 countries. It also evaluates company market share and profiles leading competitors.

#2282 .... 02/2008..................... $5500

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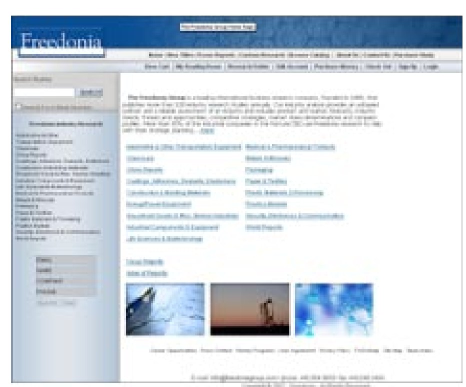

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