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Filters

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

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

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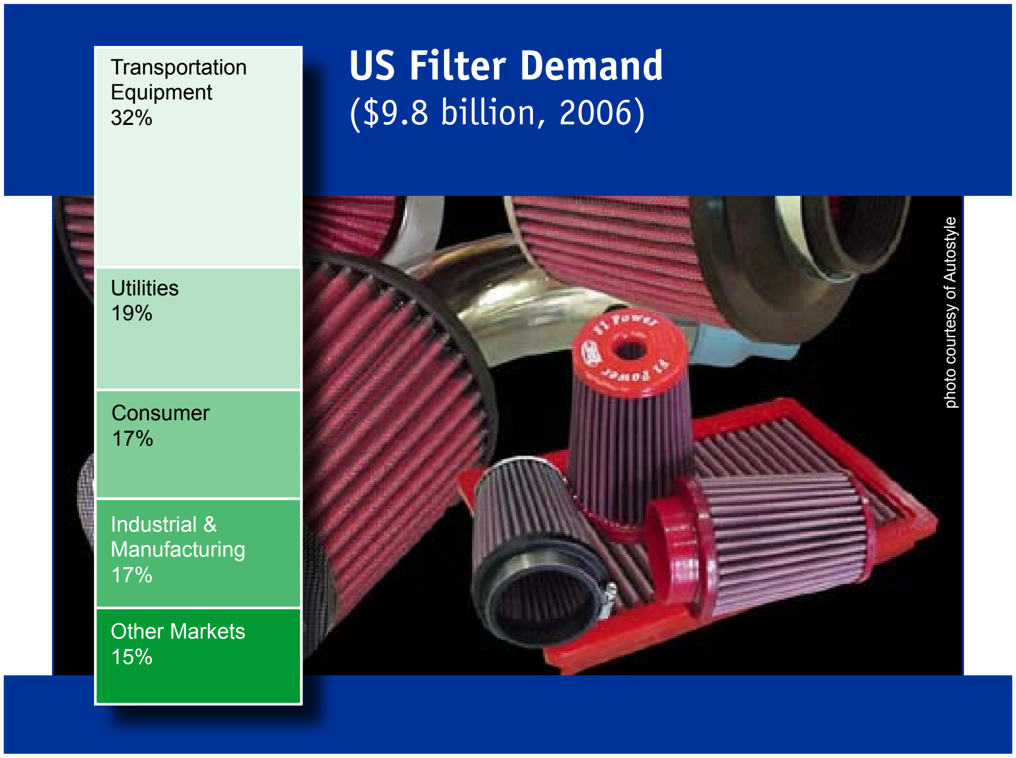
Increasing penetration of newer products, particularly motor vehicle cabin air filters and many varieties of home air and water filters -- along with their aftermarkets -- will aid gains in demand.

US demand to grow 4.2% annually through 2011

Demand for filters in the US is expected to increase 4.2 percent per year to $12 billion in 2011. Gains will be driven by ongoing sales in the aftermarket, which accounts for the vast majority of demand. Advances will also be spurred by pending changes in environmental regulations, particularly those involving cleaner air and a reduction in diesel engine emissions. Manufacturers' increasing interest in reclaiming production inputs from process water and investing in water recycling processes to reduce costs will also drive demand for filters. Additionally, advances will be aided by increasing penetration of newer products, particularly motor vehicle cabin air filters and many varieties of home air and water filters, and the development of a significant aftermarket within these segments.



Motor vehicle market to remain dominant

The motor vehicle market will continue to account for the largest portion of total demand, with a 24 percent share in 2011, despite below-average growth. The high volume of these oil, fuel and air intake filters sold as original equipment and in the aftermarket more than offsets their relatively low unit prices. Demand for filters in the other transportation equipment and utilities markets is projected to post the strongest gains, powered by current and pending regulations, and concerns about the quality of air and potable water supplies. Demand for filters used in diesel-powered off-road equipment will also post strong gains, primarily stemming from pending regulatory changes.

Air filters to lead gains

In 2006, fluid filters (e.g., fluid power, municipal water and waste, consumer water and industrial fluid filters) accounted for the largest share of total shipments, with 38 percent. Growth going forward will be buoyed by strong gains in the consumer market and interest in input reclamation processes and water recycling. Although they compete with high-end membrane separation technologies, fluid filters will also benefit from their use as pre-treatment steps for these technologies.

Shipments of air filters are expected to post the strongest growth through 2011, driven primarily by changes in environmental regulations and gains in the consumer market. The internal combustion engine and related filters segment (e.g., oil, air intake, fuel and cabin air) is a relatively mature product group that is expected to post more modest gains, but will benefit from the ongoing development of new types of diesel engine filters and a growing aftermarket for cabin air filters.

Filters

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Sample Text, Table & Chart

TABLE III-1

FILTER DEMAND BY MEDIA TYPE
(million dollars)

Item	1996	2001	2006	2011	2016
Manufacturers' Shipments (bil $)	3409				
$ filters/000$ shpts	1.85				
Filter Demand	6302				
Paper	3990				
Fabric	1836				
Other	476				

SAMPLE TABLE

PRODUCTS

Air Intake Filters

Shipments of internal combustion engine air intake filte pected to increase million in 201 a slight decelerat period, in lin deceleration in th k. Value grow stimulated by an lue, better pe longer lasting air ven in part by ongoing changes in engin rresponding changes in air filter design. d by the relatively mature and price competi lter industry. As with the rest of the internal combustion engine filter industry, US-based producers are under pricing pressure from OEMs, from discount retailers and from the growing number of imported filters, most of which are from low cost suppliers. Additionally, the export market is not as vibrant as it once was since OEMs outside the US increasingly prefer to source the filters from domestic producers. Thus, although trade is a key indicator, particularly on the import side, growth of US air intake filter shipments is directly affected by changes in demand trends since most US-produced air intake filters are sold in the US. Other types of air filters for vehicles, including cabin air filters and exhaust filters, are considered separately from air intake filters.

SAMPLE TEXT

Air filters are designed to protect the engine from damage caused by the small particles such as road dust that are pulled into the system with the air that is needed to mix with the fuel to support the combustion process. As with the other engine filters, there is a balancing point between providing sufficient filtration without blocking the flow of the air into the system. Inadequate air intake leads to poor engine performance and lowered fuel efficiency. Another purpose of an air filter is to serve as a silencer for a vehicle's intake system. In some fuel-injected systems, the air intake filter also plays a role in keeping contaminants off the airflow sensor, and in some systems the air filter cleans the air that enters the

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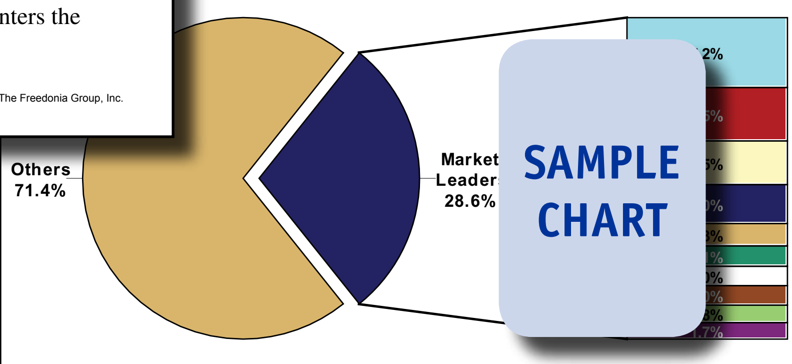
CHART VI-1

US FILTER MARKET SHARE, 2006
($9.8 billion)



SAMPLE CHART

Filters

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

Sample Profile, Table & Forecast

TABLE V-2

MOTOR VEHICLE MARKET FOR FILTERS
(million dollars)

Item	1996	2001	2006	2011	2016
Motor Vehicles in Use (mil)	206.3				
$ filters/vehicle	9.6				
Motor Vehicle Filter Demand	1988				
By Market Segment:					
Aftermarket	1832				
Original Equipment	156				
By Type:					
Oil & Fuel	1168				
Air Intake	576				
Cabin Air Filters	17				
Others	227				

SAMPLE TABLE

COMPANY PROFILES

Culligan International Company
One Culligan Parkway
Northbrook, IL 60062
847-205-6000
http://www.culli

Annual Sales: $ verify, 2/07)
Employment: 5 2/07)

Key Products: r systems, do-it-yourself water f filtration systems

SAMPLE PROFILE

Culligan International is a producer of water systems that are primarily used to purify water in residential and commercial applications. The Company is privately held by Clayton, Dubilier & Rice Incorporated (New York, New York), a leading global private equity firm.

The Company participates in the filters industry through the production of residential and commercial filtration systems, as well as replacement filters for these products. These systems are offered by Culligan through a network of over 800 dealerships in North America and Western Europe.

Residential Filtration Systems -- Among Culligan's residential products are whole-house filters, drinking water systems and do-it-yourself water filtration systems. Whole-house filters, which are designed to improve water quality throughout a household, are offered through the GOLD, MEDALLIST, IRON-CLEER and SUPER S series. GOLD series large-unit filters incorporate a full-flow, 1-inch control valve that allows multiple simultaneous running water sources. These filters also feature Culligan's exclusive, non-corrosive piston-driven control valve and patented QUADRA-HULL tank. The MEDALLIST

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"Demand for filters in the motor vehicle aftermarket is expected to advance 1.5 percent annually to $2.5 billion in 2011. Sales growth will benefit from steady increases in the number of motor vehicles in use. Additionally, gains will benefit from improved consumer compliance with recommended filter replacement rates. This trend is partly the result of..."

--Section V, pg. 157

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Other Studies

Air Pollution Control in China

China's air pollution control market will see significant growth as the country's rapid economic expansion, industrialization and urbanization has generated high pressure on the environment. This study analyzes the Chinese air pollution control industry to 2010 and 2015 by product (equipment, consumables), market (e.g., utilities, manufacturing) and region (e.g., Central-North, Central-East, Southwest). The study also considers market environment factors, evaluates company market share and profiles leading players.

#2163 .... 04/2007.................... $4900

Consumer Water Purification & Air Cleaning Systems

US consumer water and air treatment system demand will grow 4.7% yearly through 2010. Gains will be driven by home air and water quality concerns, quieter and more user-friendly systems, and better filter replacement compliance. Conventional types will remain dominant while higher value systems lead gains. This study analyzes the $1.3 billion US consumer water purification and air cleaning system industry to 2010 and 2015 by product, market and region. It also details market share and profiles major players.

#2088 .... 09/2006.................... $4400

World Filters

The global filter industry will expand 5.5% yearly through 2009 based on favorable economic factors and stricter environmental and product purity laws. China will lead gains and top Japan as the second largest national market behind the US. Air purification and fluid filters will outpace the dominant engine filter segment. This study analyzes the $34 billion world filter industry to 2009 and 2014 by product, market, world region and for 23 countries. It also details market share and profiles major players.

#2036 .... 03/2006.................... $5500

World Water Treatment Products

The global market for water treatment products will grow 5.9% annually through 2009. Gains will be driven by an ongoing shortage of safe drinking water and by a strong energy production sector. The best prospects will be found in India, China and Eastern Europe, followed by Latin America and Africa/Mideast. This study analyzes the $30.2 billion world water treatment product industry to 2009 and 2014 by type, market, world region and for 20 countries. It also profiles major players and details market share.

#2035 .... 03/2006.................... $5500

Membrane Separation Technologies

US membrane materials demand will grow 8.7% annually through 2010, driven by further penetration into water and wastewater treatment and food and beverage processing. Growth will also result from a shift toward value-added, high performance membranes (e.g., ultrafiltration, reverse osmosis). Polymeric types will remain dominant. The study analyzes the $2.4 billion US membrane separation industry to 2010 and 2015 by type and end use. It also evaluates market share and profiles industry players.

#2033 .... 03/2006.................... $4300

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