Filters in China

Industry Study with Forecasts for 2011 & 2016

Study #2310 | May 2008 | $5100 | 242 pages
Table of Contents

EXECUTIVE SUMMARY .............................................. 1

MARKET ENVIRONMENT ............................................... 3

General .............................................................. 4
Economic Overview ................................................. 4
Demographic Overview ............................................. 8
Population .......................................................... 8
Urbanization ......................................................... 11
Households ......................................................... 12
Personal Income & Expenditure Trends ...................... 13
Industrialization & Manufacturing ......................... 13
Outlook ............................................................. 15
Building Construction Trends .................................. 18
Motor Vehicle Outlook .......................................... 20
Motor Vehicles in Use ............................................ 21
Motor Vehicle Production Trends ......................... 22
Motorcycle Outlook .............................................. 23
Nonagricultural Water Withdrawal ......................... 24
Pollution Abatement & Control ................................ 27
Environmental & Regulatory Considerations .......... 30
The Five-Year Plan ............................................... 34
World Filter Markets ............................................. 35
International Trade ............................................... 37

FILTRATION TECHNOLOGY ........................................... 38

General .............................................................. 40
Conventional Filtration Technology ....................... 40
Fluid Filtration ..................................................... 42
Air Filtration ......................................................... 43
Filtration Media ..................................................... 43
Paper ................................................................. 46
Fabric ................................................................. 49
Nonwoven Fabric ............................................... 50
Woven & Knit Fabric ......................................... 52
Other Filter Media ............................................... 52
Activated Carbon ............................................... 53
All Others .......................................................... 54
Competitive Technologies ..................................... 56
Ion Exchange ......................................................... 56
Membrane Separation .......................................... 57
Distillation ........................................................ 59
Photo-Oxidation ................................................. 60
Ozone Treatment ................................................ 62
Chelating Agents & Zeolites ................................ 64

PRODUCTS ............................................................... 66

General .............................................................. 66
Internal Combustion Engine & Related Filters ........ 70
Air Intake Filters .................................................. 73
Light Duty Air Intake Filters ................................ 75
Heavy Duty Air Intake Filters .............................. 76
Oil Filters ............................................................. 78
Light Duty Oil Filters ........................................... 81
Heavy Duty Oil Filters ........................................ 82
Fuel Filters .......................................................... 83
Light Duty Fuel Filters ........................................ 85
Heavy Duty Fuel Filters ....................................... 86
Cabin Air Filters ................................................... 87
Other Internal Combustion Engine & Related Filters 90
Emissions Filters .................................................. 91
Miscellaneous Filters ........................................... 92
Fluid Filters ........................................................... 94
Fluid Power Filters .............................................. 97
Industrial & Mobile Equipment Fluid Power Filters .... 99
Aerospace Fluid Power Filters ............................. 100
Other Fluid Filters ............................................... 102
Municipal & Industrial Fluid Treatment .................. 104
Other Fluid Filters ............................................... 105
Air Filters ............................................................ 107
Panel & Pocket Filters ......................................... 111
Low Velocity Filters ............................................ 113
High Velocity Filters .......................................... 115
Fabric Air Pollution Filters .................................. 116
Cartridge Filters .................................................. 119
Electrostatic Air Filters ....................................... 121
Other Air Purification Filters ............................... 124

MARKETS ............................................................. 126

General .............................................................. 126
Motor Vehicles ..................................................... 128
Motor Vehicle Aftermarket ................................ 131
Motor Vehicle OEM Market ................................ 133
Other Transportation Equipment ....................... 135
Manufacturing ..................................................... 138
Processing & Component Filters ......................... 140
Industrial Pollution Control ................................ 143
Utilities ............................................................. 146
Water & Waste Treatment Market ....................... 148
Electric & Gas Utilities Market ......................... 151
Consumer .......................................................... 154
Water ............................................................... 156
Air ................................................................. 159
Other Markets ..................................................... 162

INDUSTRY STRUCTURE ............................................... 165

General .............................................................. 165
Industry Composition .......................................... 166
Market Share ....................................................... 169
Competitive Strategies ......................................... 172
Research & Development ..................................... 174
Marketing & Distribution ..................................... 175
Cooperative Agreements ....................................... 177
Foreign Participation in China ............................. 180
Legal & Regulatory Issues .................................... 181
Wholly-Owned Foreign Enterprises ..................... 183
Joint Venture ....................................................... 184
Representative Offices ......................................... 186

COMPANY PROFILES .................................................. 188

Affinia Group ...................................................... 188
Bengbu City Haoye Filter ..................................... 189
Bengbu Jinwei Filters .......................................... 190
Camfil Farr Group ............................................... 191
CLARCOR Incorporated ....................................... 194
Corning Incorporated .......................................... 195
Cummins Incorporated ........................................ 197
Daikin Industries Limited ................................... 199
Donaldson Company .......................................... 201
Dongguan Flourished Filter Manufactory Plant ....... 205
Faurecia SA ........................................................ 206
Foshan Tora Filter MFRS ...................................... 207
Freudenberg & Company .................................... 208
Goldensea Group ............................................... 210
Guangzhou Leetka Filter .................................... 211
Liuzhou Risun Filter ........................................... 212
MAHLE International GmbH ............................... 213
MANN+HUMMEL GmbH ...................................... 216
MWZ Beteiligungs ............................................... 219
Nanchong PanFeng Filters .................................... 220

(continued on next page)
## Table of Contents

### COMPANY PROFILES
(continued from previous page)

- Pall Corporation ........................................ 221
- Pentair Incorporated ................................. 225
- Rongsun Filter MFG ................................. 226
- Sinoma Science & Technology .................... 227
- Tianjin TK Filter Development ..................... 228
- Toyo Roki Manufacturing ............................ 229
- Watsun Filters Shenzhen ............................. 230
- Wetzel Technologies Shanghai ..................... 231

Xinxiang Pingyuan Aircraft Support Equipment ......................... 232
YBM Group China ........................................ 233
Zhangjiagang City Huasheng Purifying Equipment ......................... 233
Zhejiang Hengbo Air-Filter ......................... 234
Zhejiang Universe Filter ............................... 235

Other Companies Mentioned in the Study ..................................... 237

### List of Tables/Charts

#### EXECUTIVE SUMMARY
1 Summary Table ........................................... 3

#### MARKET ENVIRONMENT
1 Gross Domestic Product of China ........ 8
2 Population of China ................................... 10

Cht Population of China by Age ........... 11
3 Households in China by Region ..... 13
4 Personal Income & Expenditures in China ........................................ 15
5 Manufacturing Production in China .... 17
6 Building Construction Expenditures in China ........................................ 19
7 Motor Vehicle Indicators in China .. 20
8 Motorcycle Supply & Demand in China ........................................ 24
9 Water Withdrawal in China .......... 27
10 Pollution Control Expenditures in China ........................................ 30

Cht Light Vehicle Emissions Standards Rollout in China ......................... 33
11 Chinese Foreign Trade in Filters ...... 39

#### FILTRATION TECHNOLOGY
1 Filter Demand by Media Type in China ........................................ 45

Cht Filter Demand by Media Type in China, 2006 ......................... 46
2 Paper Filter Demand in China .......... 48
3 Fabric Filter Demand in China ........... 50
4 Other Media Filter Demand in China 53

#### PRODUCTS
1 Filter Supply & Demand in China ...... 69

Cht Filter Demand in China by Type, 2006 ................................ 69
2 Internal Combustion Engine (ICE) & Related Filter Supply & Demand in China ........................................ 72

Cht Internal Combustion Engine & Related Filter Demand in China by Type, 2006 ........................................ 73
3 Internal Combustion Engine Air Intake Filter Demand in China ...... 75
4 Internal Combustion Engine Oil Filter Demand in China ........... 80
5 Internal Combustion Engine Fuel Filter Demand in China ........... 85
6 Internal Combustion Engine Cabin Air Filter Demand in China ........ 90
7 Other Internal Combustion Engine & Related Filter Demand in China ........................................ 91
8 Fluid Filter Supply & Demand in China ........................................ 97

9 Fluid Power Filter Demand in China 99
10 Other Fluid Filter Demand in China104
11 Air Filter Supply & Demand in China ........................................ 110

Cht Air Filter Demand in China by Type, 2006 ................................ 111
12 Panel & Pocket Air Filter Demand in China ........................................ 113
13 Fabric Air Pollution Filter Demand in China ........................................ 119
14 Cartridge Filter Demand in China .... 121

15 Electrostatic Air Filter Demand in China ......................... 123
16 Other Air Filter Demand in China ...... 125

#### MARKETS
1 Filter Demand by Market in China 127
Cht Filter Demand by Market in China, 2006 ................................ 128
2 Motor Vehicle Market for Filters in China .......... 131
3 Motor Vehicle Filter Aftermarket in China ........................................ 133
4 Motor Vehicle Filter OEM Market in China ........... 135
5 Other Transportation Equipment Market for Filters in China .......... 138
6 Manufacturing Market for Filters in China ......................... 140
7 Industrial Processing & Component Filter Demand in China .......... 143
8 Industrial Pollution Control Filter Demand in China ......................... 146
9 Utilities Market for Filters in China ........................................ 148
10 Water & Waste Treatment Market for Filters in China .......... 151
11 Electric & Gas Utilities Market for Filters in China ......................... 154
12 Consumer Market for Filters in China ........................................ 155
13 Other Markets for Filters in China ......................... 164

#### INDUSTRY STRUCTURE
1 Revenue Data: Selected Filter Companies, 2006 ......................... 167
Cht Filter Market Share in China by Company, 2006 ......................... 170
2 Selected Cooperative Agreements ................. 179

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Solid growth in motor vehicle production in China, together with a growing vehicle park, will drive both OEM and replacement filter demand in the key motor vehicle market for filters.

Demand to grow 14.4% annually through 2011

Demand for filters in China is projected to increase 14.4 percent per year through 2011 to ¥41 billion. Advances will be stimulated by solid growth in motor vehicle production in China, which together with a growing vehicle park, will drive both OEM and replacement filter demand. In addition, growth in manufacturing output, building construction spending and urbanization of the population will all stimulate demand for various types of filters. Government efforts to alleviate air and water pollution, and to improve the quality of drinking water by enacting more stringent regulations and standards, will also contribute to gains. Growth will also be aided by increased demand for newer products, such as motor vehicle cabin air filters and many varieties of household air and water filters, and the development of a significant aftermarket within these segments.

Air filters to be fastest growing product segment

Demand for air filters is expected to post the fastest growth of the three major product types through 2011. Advances will be spurred by rising manufacturing output of durable goods such as HVAC equipment and electronics, and non durable goods such as chemicals and pharmaceuticals. Many of these products are either equipped with air filters or produced in facilities with high air purification requirements. Rising concerns about air pollution in China will also boost demand for air filters used in a variety of markets. The internal combustion engine and related filters segment (e.g., air intake, oil, fuel and cabin air) accounted for 62 percent of total demand in 2006, and will climb at a double-digit annual rate through 2011. Advances will be buoyed by continuing growth in automobile production and the number of motor vehicles in use, the ongoing development of new products and growing aftermarket sales. Sales of fluid filters will be fueled by an acceleration in nonagricultural water use and ongoing urbanization. The implementation of tougher water and wastewater treatment regulations will also spur filter sales. Fluid filter sales will also be driven by the expected growth in production of industrial machinery and equipment, which often use fluid power filters.

Motor vehicle market to remain largest filter outlet

The motor vehicle market will continue to account for the largest portion of demand through 2011. The high volume of air intake, oil and fuel filters sold at the OEM level and in the large aftermarket will more than offset their relatively low unit prices. The water and waste treatment segment of both the utilities and consumer markets is projected to post the fastest gains.
Internal Combustion Engine & Related Filters

Demand for internal combustion engine and related filters is expected to advance at a compound annual rate of 13.3 percent per year to ¥24.2 billion in 2011. This rate is largely based on the expected number of vehicles in use, as well as the associated demand for oil and fuel filters. Implementation of increasingly stringent environmental regulations regarding emissions levels will fuel demand for exhaust and other emissions filters, as well as prompting the introduction of better performing products. Increasing penetration of newer filter products such as cabin air filters also contribute to sales gains.

Further gains will be restrained by technologies that result in increased filter life, which will continue to have a dampening effect on the aftermarket, a key area for engine filter sales. For instance, conventional paper-based filters need to be replaced regularly since they tend to become clogged and ineffective in a relatively short period of time. However, newer nonwoven and other high-tech media offer longer useful life span, a greater capacity to filter out finer particulates, higher flow rates or some combination of these benefits. Pricing pressure will continue to slow growth for filter sales in value terms.

Air intake filters account for the largest share of demand for internal combustion engine filters and related products, with 49 percent of total sales in 2006. Oil and fuel filters followed with shares of 27 percent and 18 percent, respectively. Demand for other types of internal combustion engine-related filters -- including smaller volume types such as products for filtering transmission fluid, engine coolant and brake fluid; and emission-control filters -- will advance at a below average annual rate. In general, these other types of filters are not available on as large a variety of internal combustion engine-powered equipment and are not replaced as often as air intake and oil filters. Sales of cabin air filters are projected to advance as an increasing number of motor vehicle producers include

<table>
<thead>
<tr>
<th>TABLE IV-2</th>
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<tbody>
<tr>
<td>INTERNAL COMBUSTION ENGINE (ICE) &amp; RELATED FILTER SUPPLY &amp; DEMAND IN CHINA (million yuan)</td>
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<td>Motor Vehicle &amp; Part Prdn (bil ¥)</td>
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<td>ICE &amp; Related Filter Demand</td>
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<td>Other Filters</td>
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<td>+ net exports</td>
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<td>ICE &amp; Related Filter Shipments</td>
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<td>% ICE &amp; related Filter Shipments</td>
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Sample Profile, Table & Forecast

**COMPANY PROFILES**

**Watsun Filters Shenzhen Company Limited**

Number 86, East Road
Tenth Industry, Longhua
Shenzhen, Guangdong 518109
China
86-755-2813-4938
http://www.watsun.com

Annual Sales: ¥280 million (US$35 million)
Employment: 400 (estimated)

Key Products: premium automobile, industrial oil separation, air, spin-on fuel, spin-on oil, hydraulic and water filters

International Contact: Mr. Zibin Liang, General Manager

Watsun Filters Shenzhen is a manufacturer of filters for the transportation, power equipment, air purification, gas turbine, chemical and environmental protection sectors. The Company is privately held.

Among the filters produced by Watsun Filters Shenzhen are premium automobile, oil, industrial oil separation, air, spin-on fuel, spin-on oil, hydraulic and water varieties. These products are marketed to customers in China, Malaysia, Korea, the US, the United Kingdom and elsewhere worldwide.

Manufacturing operations for Watsun Filters Shenzhen are conducted in China at facilities in Shenzhen, Guangdong; Shanghai; and Yulin, Guangxi. Combined, these facilities have the capacity to produce over ten million filters per year. Additionally, the Company maintains nine branch offices across Asia.

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**TABLE V-2**

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<td>Motor Vehicles in Use (000 units)</td>
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<td>Aftermarket</td>
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<td>Fuel</td>
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<td>Cabin Air Filters</td>
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<td>Others</td>
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<tr>
<td>% motor vehicles</td>
<td>31.5</td>
<td>34.1</td>
<td>36.1</td>
<td>40.5</td>
<td>41.6</td>
</tr>
<tr>
<td>Filter Demand</td>
<td>6055</td>
<td>9970</td>
<td>20880</td>
<td>40950</td>
<td>69200</td>
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</table>

“Demand for filters in the motor vehicle OEM market is forecast to grow 14.2 percent annually to ¥1.3 billion in 2011, supported by sustained growth in motor vehicle production. Additionally, growth will be driven by the increased penetration of newer products such as cabin air filters. The motor vehicle OEM industry faces competing trends on the pricing side. Although OEMs are increasingly using higher value filters with greater filtration capabilities, suppliers are faced with stiff pricing pressure from the OEMs themselves.”

--Section V, pg. 133

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evaluates company market share and profiles leading industry players. It also evaluates company market share and profiles leading industry players.

World Filters
Global filter demand will climb 5.6% annually through 2011. Developing areas will lead gains based on faster-growing economies and the enactment of stricter environmental laws. China, India and Russia will post some of the strongest sales growth. Air and fluid filters will be the fastest growing types. This study analyzes the $37 billion world filter industry, with forecasts for 2011 and 2016 by product, market, world region and for 26 countries. It also evaluates company market share and profiles major players.

Filters
US filters demand will grow 4.2% yearly through 2011. Gains will be driven by ongoing sales in the dominant aftermarket, pending laws for cleaner air and reduced emissions, as well as increasing penetration of motor vehicle cabin air filters and home air and water filters. Fluid filters will remain the largest segment while air filters will grow the fastest. This study analyzes the $9.8 billion US filter industry, with forecasts for 2011 and 2016 by product, market, and region. It also evaluates company market share and profiles major players.

Air Pollution Control in China
Demand for air pollution control equipment in the world’s leading emitter of sulfur dioxide and other air pollutants will grow 18% annually through 2010. Particulate removal equipment will remain the largest product category and grow the fastest. Manufacturing and utilities will stay the top markets. This study analyzes the $30 billion Chinese air pollution control industry for 2010 and 2015 by product, market, and region. The study also evaluates company market share and profiles leading industry players.

World Water Treatment Products
Global demand for water treatment products will grow 6.4% annually through 2011. Advances will be the fastest in the developing world, especially China and India. Gains in more established markets will be driven by technology upgrades such as higher-end membranes in desalination and other uses. This study analyzes the $29.3 billion world water treatment product industry, with forecasts for 2011 and 2016 by product, market, world region and for 26 countries. It also evaluates company market share and profiles major players.

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