Filters in China

Industry Study with Forecasts for 2014 & 2019

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**Table of Contents**

**EXECUTIVE SUMMARY**

**MARKET ENVIRONMENT**

General ........................................... 4
Economic Overview............................ 4
Recent Economic Performance ... 5
Economic Outlook ........................... 7
Demographic Overview ...................... 10
Population .................................... 11
Urbanization .................................. 14
Households ................................... 14
Personal Income & Expenditure Trends .. 16
Industrialization & Manufacturing Outlook . . . . . . . . . . . . . . 18
Building Construction Trends .......... 21
Motor Vehicle Outlook ...................... 23
Motor Vehicles in Use ...................... 26
Motor Vehicle Production Trends ..... 28
Motorcycle Outlook ......................... 29
HVAC Equipment Outlook .................. 31
Nonagricultural Water Withdrawal .... 33
Pollution Abatement & Control ........ 36
Environmental & Regulatory Considerations ........... 38
International Trade .......................... 41

**TECHNOLOGY**

General ......................................... 44
Conventional Filtration Technology .. 45
Fluid Filtration ............................... 46
Air Filtration .................................. 47
Filtration Media .............................. 48
Paper ........................................... 50
Fabric .......................................... 53
Nonwoven Fabrics ........................... 54
Woven & Knit Fabric ......................... 56
Other Filter Media .......................... 57
Activated Carbon ............................ 58
All Others .................................... 59
Competitive Technologies ............... 61
Ion Exchange ................................... 61
Membrane Separation ...................... 62
Distillation .................................... 64
Photo-Oxidation ............................. 65
Ozone Treatment ............................ 67
Chlorine ....................................... 69
Chelating Agents & Zeolites ............. 69

**PRODUCTS**

General ......................................... 71
Internal Combustion Engine & Related Filters ........... 75
Air Intake Filters ......................... 78
Light Duty Air Intake Filters .......... 81
Heavy Duty Air Intake Filters ....... 81
Oil Filters .................................... 83
Light Duty Oil Filters .................... 86
Heavy Duty Oil Filters ................. 87
Fuel Filters ................................... 89
Light Duty Fuel Filters ................. 91
Heavy Duty Fuel Filters ............. 92
Cabin Air Filters ......................... 93
Other Internal Combustion Engine & Related Filters .... 95
Emissions Filters .......................... 96
All Other ICE & Related Filters ... 97
Fluid Filters ................................... 99
Fluid Power Filters ...................... 102
Industrial & Mobile Equipment Fluid Power Filters ........... 104
Aerospace Fluid Power Filters ....... 106
Other Fluid Filters ....................... 106
Municipal & Industrial Fluid Treatment Filters ........... 109
All Other Fluid Filters ................. 110
Air Filters .................................... 112
Panel & Pocket Filters .................. 116
Low Velocity Filters ..................... 119
High Velocity Filters .................... 120
Fabric Air Pollution Control Filters ... 122
Electrostatic Air Filters ............... 125
Cartridge Filters ......................... 127
Other Air Filters ............................ 129

**MARKETS**

General ......................................... 131
Motor Vehicles ................................ 133
Motor Vehicle Aftermarket ............. 136
Motor Vehicle OEM Market ............. 138
Other Transportation Equipment ...... 140
Manufacturing ............................... 143
Equipment & Products ................. 145
Industrial Pollution Control .......... 148

Utilities ...................................... 151
Electric & Gas Utilities ................. 153
Water & Waste Treatment .............. 156
Consumer ..................................... 158
Water .......................................... 160
OEM ........................................... 162
Aftermarket .................................. 162
Air ............................................. 164
OEM ........................................... 165
Aftermarket .................................. 166
Other Markets ............................... 167

**INDUSTRY STRUCTURE**

General ......................................... 171
Industry Composition ..................... 172
Market Share ................................... 174
Competitive Strategies ................... 178
Research & Development ............... 179
Marketing & Distribution ............... 181
Cooperative Agreements ................. 183
Foreign Participation in China ........ 186
Legal & Regulatory Issues .............. 187
Wholly Owned Foreign Enterprises ... 189
Joint Ventures ............................... 190
Representative Offices .................... 192

**COMPANY PROFILES**

Albany International Applied Technologies Suzhou ........... 194
Bengbu City Haoye Filter ............... 195
Bengbu Jinwei Filters .................... 196
BWF Offermann Schmid ................. 198
Camfil Farr Group ........................ 200
CLARCOR Incorporated .................. 203
Corning Incorporated .................... 206
Cummins Incorporated ................... 208
Daikin Industries ......................... 210
Donaldson Company ...................... 213
Foshan TORA Filter Manufacturing ....... 218
Freudenberg & Company ............... 219
Golden Haiye Auto Parts Manufacturing ................... 222
Goldensea Company ....................... 223
HYDAC International .................... 225
Jiangsu Suzhou Purification ........... 227

(continued on following page)
Filters in China
Industry Study with Forecasts for 2014 & 2019

Table of Contents

COMPANY PROFILES
(continued from previous page)

MAHLE International .................... 229
MANN+HUMMEL GmbH .................... 232
MayAir SEA ................................ 235
Pall Corporation ......................... 237
Pentair Incorporated ..................... 242
ROKI Company Limited .................. 244
Shanghai BG Industrial Fabric .......... 245
Sinoma Science & Technology .......... 246
Sofima Hydraulic Filters ................. 248
3M Company .................................. 250
Tianjin Teda ................................ 252
Watsun Filters Shenzhen ................. 253
Wetzel Technologies Shanghai ......... 254
Xiamen Savings Environmental
Industrial ................................. 255
Xingtai Pingyuan Filter & Purification 256
YBM Group China ......................... 257
Zhejiang Headman Filtration
Technology ................................ 258
Zhejiang Hengbo Air-Filter .............. 260
Zhejiang Topyauld Motor Parts ......... 262
Zhejiang Universe Filter ................. 263
Other Companies Mentioned in Study 264

List of Tables/Charts

EXECUTIVE SUMMARY

1 Summary Table .......................... 3

MARKET ENVIRONMENT

1 Gross Domestic Product of China .... 10
2 Population of China ..................... 13
Cht Population of China by Age ........ 13
3 Households in China by Region ....... 15
4 Disposable Personal Income &
Consumer Expenditures in China .. 18
5 Manufacturing Value Added
in China ................................. 21
6 Building Construction
Expenditures in China ................. 23

7 Motor Vehicle Indicators in China .. 26
8 Motorcycle Supply &
Demand in China ...................... 31
9 HVAC Equipment Production
in China .................................. 33
10 Nonagricultural Water Withdrawal
in China ................................. 35
11 Pollution Control
Expenditures in China ................. 38
12 Chinese Foreign Trade in Filters .... 43

TECHNOLOGY

EXECUTIVE SUMMARY

1 Filter Demand by Media Type
in China .................................. 49
Cht Filter Demand by Media Type
in China, 2009 .......................... 50
2 Paper Filter Demand in China ....... 52
3 Fabric Filter Demand in China ....... 54
4 Other Media Filter Demand in China 57

PRODUCTS

1 Filter Supply & Demand in China .... 74
Cht Filter Demand in China
by Type, 2009 .......................... 75
2 Internal Combustion Engine (ICE)
& Related Filter Supply &
Demand in China ...................... 77
Cht Internal Combustion Engine
& Related Filter Demand
in China by Type, 2009 .............. 78
3 ICE Air Intake Filter
Demand in China ...................... 80
4 ICE Oil Filter Demand in China ..... 86
5 ICE Fuel Filter Demand in China .... 91
6 ICE Cabin Air Filter
Demand in China ...................... 95
7 Other ICE & Related Filter
Demand in China ..................... 96
8 Fluid Filter Supply &
Demand in China .................... 102
9 Fluid Power Filter
Demand in China ..................... 104
10 Other Fluid Filter Demand in China 109
11 Air Filter Supply &
Demand in China .................... 115
Cht Air Filter Demand in China
by Type, 2009 ....................... 116
12 Panel & Pocket Air Filter
Demand in China ..................... 118
13 Fabric Air Pollution Control Filter
Demand in China ..................... 124
14 Electrostatic Air Filter
Demand in China ..................... 127
15 Cartridge Filter Demand in China .. 128
16 Other Air Filter Demand in China . 130

MARKETS

1 Filter Demand by Market in China 132
Cht Filter Demand by Market
in China, 2009 ....................... 133
2 Motor Vehicle Market
for Filters in China ................. 136
3 Motor Vehicle Filter
Aftermarket in China ............... 137
4 Motor Vehicle Filter OEM
Market in China ..................... 140
5 Other Transportation Equipment
Market for Filters in China ....... 143
6 Manufacturing Market
for Filters in China .................. 145
7 Industrial Equipment & Product
Filter Demand in China ............ 147
8 Industrial Pollution Control
Filter Demand in China ............ 151
9 Utilities Market for
Filters in China ...................... 153
10 Electric & Gas Utilities Market
for Filters in China ................. 156
11 Water & Waste Treatment
Market for Filters in China ....... 158
12 Consumer Market for
Filters in China ..................... 160
13 Consumer Water Filter
Demand in China .................... 161
14 Consumer Air Filter
Demand in China .................... 165
15 Other Markets for Filters in China. 170

INDUSTRY STRUCTURE

1 Revenue Data: Selected
Filter Companies, 2009 ............ 173
Cht Filter Market Share in China
by Company, 2009 .................. 174
2 Selected Cooperative Agreements 185
Demand for filters in China will post double-digit gains, led by rapid growth in motor vehicle production, and government policies promoting energy conservation and emission reduction.

Demand to grow 13.5% annually through 2014

Demand for filters in China is projected to grow 13.5 percent annually to ¥66.2 billion in 2014, supported by rapid growth in motor vehicle and other transportation equipment production and stocks, and government policies that promote energy conservation and emissions reductions. Growth in manufacturing output, building construction spending and urbanization of the population as industrialization efforts continue will also all stimulate demand for various types of filters. As income levels grow, more people in China will be able to afford home water and air purification equipment. Moreover, rising demand for higher quality and extended life filters will boost overall market value.

Internal combustion engine filters dominant

Internal combustion engine filters account for the majority of Chinese filter demand and will post the strongest gains at 14 percent annually through 2014, driven by robust growth in the production and stock of motor vehicles and other transportation equipment. Sales of fluid filters will be fueled by growth in non-agricultural water use and expanding urbanization. The implementation of energy saving and emissions reduction policies by the government, especially in wastewater treatment, will also support fluid filter sales. Sales of air filters are projected to rise 13.7 percent per year through 2014. Demand will be spurred by rising manufacturing output of both durable goods such as HVAC equipment, metal products and building construction materials, and nondurable goods such as chemicals and pharmaceuticals. Many of these manufactured products are either equipped with air filters or produced in manufacturing facilities with high air purification requirements. Heightened concerns about air pollution in China will also spur demand for air filters used in a variety of markets.

Motor vehicles to remain largest market

Motor vehicles will remain the largest filter market through 2014, when sales will reach ¥24.6 billion due to the high volume of air intake, oil and fuel filters sold at the original equipment manufacturer level and as aftermarket products. Demand for filters in consumer and other markets will be fueled by rising personal income levels and rising concerns about air and water quality. Filter demand in the manufacturing sector will benefit from increases in manufacturing activity, with higher output of beverages, chemicals, pharmaceuticals, metal products, building materials, and food and beverage products helping to boost demand for filters used in their production. Utility filter market gains will be supported by the implementation of stricter air and water pollution regulations, and the construction of numerous new power plants, water and wastewater treatment facilities, and waste incinerators.

Filter Demand in China by Product (¥66.2 billion, 2014)
Technology

Fabric

Demand for filters incorporating nonwoven or woven fabric is forecast to grow to ¥19.0 billion in 2014. Demand for filters will be driven by increasing production of filters, sometimes in combination with other media, as a way to improve the filter’s performance. In addition, the increased competitiveness of fabric filters is also driving growth formerly dominated by paper filters. Fabric media are used to benefit from ongoing development of new materials and materials for use in filters. Such developments include electrospun nanofiber nonwoven filters that feature enhanced filtration capabilities as the nano meshes are better able to trap more and smaller particles. Moreover, more local governments are requiring the use of fabric bag filters for coal-fired boilers, which will also boost demand.

Fabric media are used in a variety of internal combustion engine, fluid and air filters. In the internal combustion engine sector, fabric media are primarily utilized in cabin air filters, exhaust filters and other smaller use applications. In the industrial market, fabric media are used in fabric bag pollution control filters. This type of material is also utilized in conventional and high-efficiency HVAC systems and other air cleaning systems. Similar to paper filters, many nonwoven filters feature pleated media to increase the surface space available for collecting particulates, important to those nonwoven fabrics that operate as surface filter media (others are configured to perform as depth media). Woven and knitted fabric filter media have more uniformly sized pores than nonwoven fabrics, which are made with fibers that are connected through weaving or knitting operations.

Among natural fibers, cotton and wool are commonly used as filter materials, while nylon, acrylic, polyester and rayon are commonly used synthetic materials which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.合成材料, which can be used in either woven or nonwoven form.
Sample Profile, Table & Forecast

**COMPANY PROFILES**

Xiamen Savings Environmental Industrial Company Limited
No. 3, Xiangyu Road
Xiamen Torch Hi-Tech Industry Development Zone
Xiangan, Xiamen City, Fujian
China
86-592-607-0815
http://www.savings.com.cn

Annual Sales: ¥132 million (US$19 million) (FY 2010)
Employment: 165 (FY 2010)

Key Products:
- Filter bags and filter materials

International Contact:
Xutao Liu, Sales Manager – Import and Export Department

Xiamen Savings Environmental Industrial is a privately held manufacturer of filter bags and filter materials for air and water filtration applications. These products are used by such markets as iron and steel, refuse incineration, utility and industrial boiler, cement, and tobacco. The Company has a plant in Xiamen, Fujian, China.

The Company produces filter bags in numerous configurations, including plain, tubular, envelope, snap band, open corded, sewn-in-disc, flanged, strap, loop, snap ring and compression band types. Filtration materials made by Xiamen Savings Environmental Industrial include several types of PUNATE needle-punched felt composed of such materials as polyethylene terephthalate, polytetrafluoroethylene, polypropylene, aramide, polyphenylene sulfide, and acrylic. PUNATE needle-punched felt is supplied with various surface and chemical treatments and is suitable for a variety of room temperature and high-temperature applications. At its plant in Xiamen, the Company has the annual

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**TABLE IV-2**

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“Light duty fuel filter sales are projected to grow 14.9 percent per year to ¥2.8 billion in 2014. Product sales will be stimulated by growth in the production of light motor vehicles and other transportation equipment powered by ICEs (e.g., low-speed vehicles, gas motorcycles), as well as by growth in the overall number of such vehicles in use. In addition, ...”

--Section IV, pg. 91
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