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Water Treatment in China

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

Study #2329 | April 2008 | \$5100 | 281 pages

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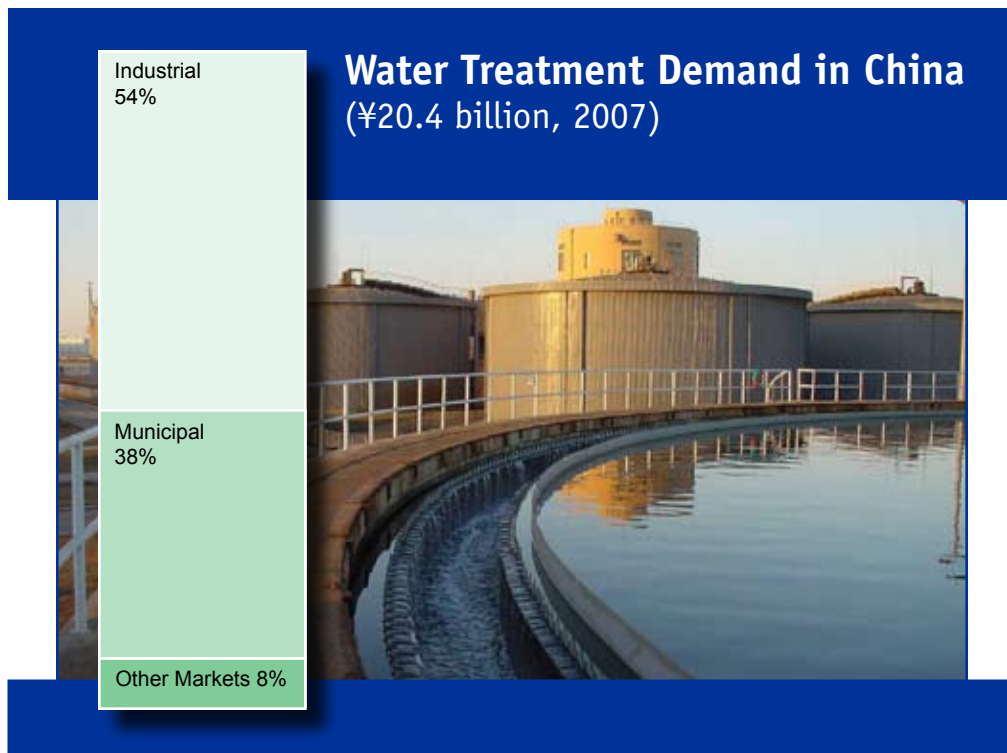
Continued double-digit annual growth for every major product category and market will enable China to grow to the world's third largest outlet for water treatment chemicals, equipment and supplies.

Demand in China to grow 15.5% yearly through 2012

The market for water treatment products in China will soar to ¥42 billion in 2012, as the world's most populous nation struggles to increase its access to fresh water and improve the deplorable condition of the surface water sources that supply most of its water needs. Continued double-digit annual growth for every major product category in every significant market will enable China to grow from being a developing market to the world's third largest outlet for water treatment chemicals, equipment and supplies, after the US and Japan.

Industrial market to expand despite efforts to reduce water usage

The industrial sector accounts for over half of the water treatment market in China. Gains in essentially every market will be robust due to efforts to use water more efficiently. Although such efforts will reduce industrial water usage on a per production unit basis, overall industrial water usage will grow 15 percent per year due to sustained expansion of the Chinese industrial economy. Industrial water users such as paper mills and metal processing concerns will implement more aggressive reclamation projects that will allow for the recovery of pulp for use in papermaking and the collection of precious metals normally lost with traditional processing methods,



in addition to allowing for reduced wastewater discharges and overall water savings. Such efforts will lead to growth for chemicals such as biocides and chelating agents, as well as advanced filtration and membrane systems.

Continued water infrastructure growth to drive municipal sector

The municipal water treatment market will grow rapidly due in large part to the continued expansion of the nation's water supply and wastewater treatment infrastructure. Although most of China's cities have at least one wastewater treatment plant, most towns do not, and

such facilities are rarer yet in rural areas. Access to improved water supplies has broadened demonstrably in the past two decades, but there is still considerable room for growth in this regard. Moreover, China's citizens, as they become more affluent, are coming to expect better quality water from municipal supply systems, and efforts are underway to meet those expectations, which will boost demand for filtration systems and a broad range of treatment chemicals. Even seawater desalination, often considered impractical because of its capital and energy costs, is being considered to address the dire situation of China's water supply.

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Sample Text, Table & Chart

PRODUCTS

Corrosion Inhibitors

Demand for corrosion inhibitors in water treatment applications in China is projected to increase significantly over the next five years to ¥1.5 billion in 2012. Gains in every segment, especially in municipal, industrial, and power, are expected to show double-digit growth in 2008. Industrial and municipal applications will continue to show strong growth. The municipal market is also expected to show growth.

SAMPLE TEXT

Corrosion inhibitors are used to protect equipment and piping from the effects of prolonged contact with water. Chemicals, especially chlorine, but also other biocides and chemicals that reduce pH, can greatly intensify corrosion problems. Corrosion leads to costly depreciation of capital equipment, accelerates equipment and replacement rates, and can lead to system failures and diminished finished product quality. As a result, the costs associated with the repair or replacement of damaged equipment greatly exceed the cost of using chemical inhibitors such as sodium polyphosphates, even though they are generally more expensive than most widely used water treatment chemicals.

Nitrite corrosion inhibitors are easy to formulate and efficient, and do not need oxygen for corrosion control. Nitrites are active in a wide temperature range, and their limitation to a relatively narrow, alkaline pH range means that they are commonly used in conjunction with borate buffers. In addition, nitrites are compatible with numerous other water treatment chemicals. They are often added with other corrosion inhibitors, including azoles and molybdates, to recirculating cooling water applications, to help maintain a noncorrosive pH. The most common nitrite corrosion inhibitors are sodium and calcium types. In higher pH environments, nitrites work more effectively than some other corrosion inhibitors. Nitrites are also relatively low-priced by the standards of corrosion inhibitors, as they are commodity chemicals that can provide

110

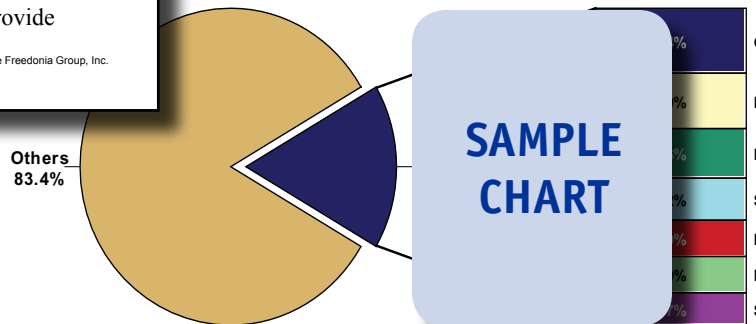
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TABLE IV-8
FILTRATION PRODUCT DEMAND IN WATER TREATMENT IN CHINA BY TYPE & MARKET (million yuan)

Item	1997	2002	2007	2012	2017
Water Use (bil cubic meter)					
¥ filtration/cu m water					
Filtration Product Demand					
By Type:					
Sand					
Cartridge					
Other					
By Market:					
Municipal					
Industrial					
Other					
% filtration					
Water Treatment Product Demand	3475	7610	20400	42000	75000

SAMPLE TABLE

CHART V-1
TREATMENT PRODUCTS IN CHINA MARKET SHARE, 2007 (¥20.4 billion)



SAMPLE CHART

Sample Profile, Table & Forecast

COMPANY PROFILES

Wujin Fine Chemical Factory Company Limited

Hengshanqiao Town
 Changzhou, Jiangsu 213119 CHINA
 86-519-5122 222
 http://www

Sales: ¥ (US
 Chinese (pany)
 Employr

Key Products: inhibitors, oxygen scavenger

International Contact: Mr. Andy Zhang, Export & Import Manager

Wujin Fine Chemical Factory (WFCF) is a leading water treatment chemicals manufacturer in China. The privately held company operates a production site in Changzhou, China. Although China is among WFCF's geographic markets, exports account for the majority of the Company's sales.

The Company's water treatment chemicals include biocides, preservatives, corrosion inhibitors, oxygen scavengers, phosphonates and polymers. Among these, WFCF produces a range of biocides and preservatives, including products based on such chemicals as bronopol, glutaraldehyde, isothiasolinone and 2,2-dibromo-3-nitrilo-propionamide. Products in this line have various applications in sanitizing drinking water, swimming pools and industrial circulating water. The Company's copper corrosion inhibitors include XF-2100, a tolyltriazole sodium salt that is suitable for use in industrial water treatment end uses, while related products encompass XF-701 and XF-702 oxygen

TABLE III-3
PULP & PAPER MARKET FOR WATER TREATMENT PRODUCTS IN CHINA
 (million yuan)

Item	1997	2002	2007	2012	2017
Paper & Board Prdn (mil metric ton)					40
¥ treatment/000 ton paper					6
Water Treatment Product Demand					50
Chemicals:					90
Corrosion Inhibitors					50
Coagulants & Flocculants					90
Oxidizers & Biocides					90
Other					50
Membranes					35
Filtration					95
Deionization					90
All Other					30
% pulp & paper					0
Industrial Water Treatment Demand	21				150

**SAMPLE
TABLE**

"Demand for water treatment chemicals in pulp and paper applications in China is projected to increase 11.4 percent annually to ¥3.9 billion in 2012. Advances will be faster than paper and board production growth, but will be curtailed somewhat by sustained efforts to reduce water usage in paper production. Already, there has been substantial success in curbing water use per ton of paper produced, but China remains very inefficient in terms of water usage compared with other paper producing nations. However, growth will be boosted by greater efforts to treat water in a manner more consistent with global standards."

--Section III, pg. 39

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OTHER STUDIES

World Activated Carbon

The world activated carbon industry is analyzed in this study. It presents historical demand data (1997, 2002, 2007) and forecasts for 2012 and 2017 by product type (e.g., powdered, granular); application (e.g., liquid phase, gas phase); market (e.g., water treatment, food and beverage processing, industrial, pharmaceutical and medical, motor vehicle); geographic sector and major national market. The study also considers market environment factors, evaluates company market share and profiles major players.
 #2363 05/2008..... \$5700

Filters in China

This study analyzes the Chinese market for filters. It presents historical demand data (1996, 2001, 2006) and forecasts for the years 2011 and 2016 by product type (e.g., internal combustion engine and related filters, fluid filters, air filters); and by market (e.g., transportation equipments, industrial and manufacturing, utilities, consumer). The study also considers market environment factors, reviews filtration technology, details industry structure, evaluates company market share and profiles leading competitors.
 #2310 04/2008..... \$5100

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.
 #2295 03/2008..... \$5800

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 20 countries. It also details market share and profiles major players.
 #2276 01/2008..... \$5800

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

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