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Water Treatment Equipment

Industry Study with Forecasts for **2017 & 2022**

Study #3052 | July 2013 | \$5100 | 273 pages

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Gains will be supported by rising concerns about contaminants, chemicals, and byproducts in supply water and wastewater, and by more stringent manufacturing requirements in process water.

US demand to rise 5.9% annually through 2017

Demand for water treatment equipment in the US is forecast to grow 5.9 percent per year to \$13.0 billion in 2017. Gains will be supported by increasing concerns about the health risks and environmental impacts of biological contaminants, chemicals, and disinfection byproducts in supply water and wastewater, and by more stringent manufacturing requirements in process water. Resource extraction and the commercial and residential markets are expected to be among the fastest growing markets for water treatment equipment, while the larger municipal and manufacturing markets are projected to expand at healthy rates.

Resource extraction market to show fastest gains

The resource extraction market is expected to show the most rapid gains among the major markets, as the treatment requirements for produced water in oil and natural gas extraction continue to rise, and as water recycling and reuse increase to satisfy the needs of expanded hydraulic fracturing activities. An expected rebound in mining output, particularly for minerals, will also contribute to an increased need for water treatment equipment. Rising demand will particularly benefit conventional filtration systems, which are the most commonly used type of equipment in the resource extraction market.

US Water Treatment Equipment Demand, 2017 (\$13 billion)



Conventional Filtration

Membrane Equipment

Disinfection Equipment

Other Equipment

The commercial and residential markets for water treatment equipment are expected to continue to recover from the declines seen during the 2007-2009 economic recession, with demand boosted by greater consumer interest in drinking water quality, increased consumer confidence, and expanded commercial and residential construction activities. Point-of-entry membrane filtration, disinfection, and deionization equipment is expected to benefit the most from rising demand.

The municipal market for water treatment equipment is expected to continue to experience healthy growth through 2017. Demand for membrane systems and disinfection equipment in the

municipal market will benefit from new EPA regulations that stipulate maximum allowable limits for disinfection byproducts, volatile organic compounds, perchlorates, and other potentially hazardous contaminants.

The need for very high quality process water in a number of applications will support greater demand for technologies such as reverse osmosis, ultrafiltration, nanofiltration, and disinfection equipment. Water treatment equipment demand in manufacturing markets will also benefit from the recycling of wastewater for reuse. While quite small in 2012, ballast water treatment is expected to be the fastest growing market segment overall.

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Sample Text, Table & Chart

APPLICATIONS

Process Water

Demand for equipment used in the treatment of process water is projected to increase by \$1.5 billion in 2017 and \$2.5 billion in 2022. Growth will be supported by the US economy and the manufacturing industry. Expenditures on a per capita basis will continue to increase in process water treatment. A deal of the water used in manufacturing comes from suppliers, process water is reasonably good. However, many industries require process water with greater purity than are attained in municipal water treatment. As a result, sophisticated technologies such as disinfection equipment and membrane equipment are expected to show the fastest gains going forward. Conventional filtration equipment will remain the largest product type in process water applications in the near term, although gains will be limited. By 2022, it is expected that membrane systems will overtake conventional filtration to become the largest product type in dollar terms.

Process water includes boiler water, cooling water, cleaning and rinsing water, injected water in oil or natural gas wells, and any other manufacturing or industrial water that is not included as part of a final product (e.g., food, bottled water, and beverages). Issues impacting process water quality include water hardness (mineral content), pH levels, chemical contaminants, and biological contaminants. Some process waters, such as those used in the production of pharmaceuticals or electronics components, must have a very high level of purity, and even disinfectants are considered contaminants. Other types of process water, such as water used as cooling water or for injection into an oil well, do not require extremely good quality; in these cases, if not supplied by a municipal facility, water treatment involves the removal of particulate matter and other potentially problematic

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**SAMPLE
TEXT**

TABLE III-5

SAND FILTRATION EQUIPMENT DEMAND BY MARKET & TYPE
(million dollars)

Item	2002	2007	2012	2017	2022
Conventional Filtration Demand % sand	2				
Sand Filtration Equipment Demand By Market:					
Municipal					
Manufacturing					
Commercial & Residential					
Resource Extraction					
Power Generation					
Other Markets					
By Type:					
Systems					
Replacement Filtration Media					

**SAMPLE
TABLE**

CHART VI-1

US WATER TREATMENT EQUIPMENT MARKET SHARE
(\$9.8 billion, 2012)

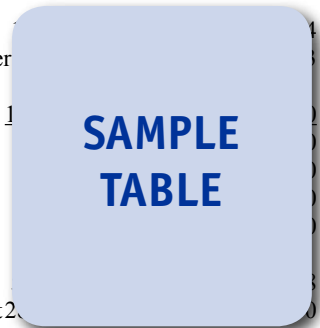


**SAMPLE
CHART**

Sample Profile, Table & Forecast

TABLE IV-3
SUPPLY WATER TREATMENT EQUIPMENT DEMAND
 (million dollars)

Item	2002	2007	2012	2017	2022
Municipal Water Use (tril gal) \$ water treatment equip/mil gal water					
Supply Water Treatment Equipment					
Conventional Filtration					
Membrane Equipment					
Disinfection Equipment					
Other Equipment					
% supply water					
Municipal Water Treatment Equipment2					



COMPANY PROFILES

Calgon Carbon Corporation

400 Calgon Carbon Drive
 Pittsburgh, PA 15205
 412-787-6500
<http://www.calgoncarbon.com>

Sales: \$1.2 billion
 US Sales: \$1.2 billion
 Employed: 1,000



Key Products: Activated Carbon, Ultraviolet light
 water treatment equipment

Calgon Carbon designs, manufactures, and markets products and services for the purification, separation, and concentration of liquids and gases. The Company operates in three segments: Activated Carbon and Service, Equipment, and Consumer.

The Company participates in the US water treatment equipment industry through the Equipment segment, which generated 2012 sales of \$66 million. Among other products, the segment manufactures continuous ion exchange units and ultraviolet (UV) light water treatment systems for drinking water and wastewater disinfection, and groundwater remediation applications. For example, continuous ion exchange units from Calgon Carbon comprise ISEP and CSEP models. ISEP ionic separators are used for the purification of water, among other substances, in the food, pharmaceutical, mining, chemical, and biotechnology industries. The company's CSEP chromatographic separator systems are suitable for such environmental end uses as removing perchlorate and nitrates from drinking water.

Calgon Carbon's UV light water treatment systems are produced through its UV Technologies division (Coraopolis, Pennsylvania) and

STUDY COVERAGE

This Freedonia industry study, **Water Treatment Equipment**, presents historical demand data (2002, 2007, 2012) plus forecasts for 2017 and 2022 by market, function and product. The study also considers market environment factors, examines the industry structure, evaluates company market share data and profiles 20 US industry players.

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OTHER STUDIES

World Water Treatment Chemicals

World water treatment chemical demand will rise 5.8 percent per year to \$30.6 billion in 2017. The fastest growth will occur in developing regions, driven by rising industrial water quality standards, more complex manufacturing processes, and efforts to improve access to safe drinking water supplies and sanitation facilities. This study analyzes the \$23.1 billion world water treatment chemical industry, with forecasts for 2017 and 2022 by product, market, world region, and for 16 countries. The study also evaluates company market share and profiles industry players.

#3122January 2014 \$6100

World Consumer Water Treatment Systems

World demand for consumer water treatment systems will jump 12.4% annually, led by the BRIC (Brazil, Russia, India, China) and other countries with poor public treatment infrastructure. Gains will be driven by rising incomes and increasing awareness of water contamination. This study analyzes the \$7.5 billion world consumer water treatment system industry, with forecasts for 2017 and 2022 by type, aftermarket component, technology, world region, and for 21 countries. The study also evaluates company market share and profiles industry participants.

#3110January 2014 \$6100

Water Treatment Chemicals

Demand for water treatment chemicals in the US is forecast to advance 3.2 percent annually to \$6.7 billion (15.1 billion pounds) in 2017. The energy and mining markets will grow the fastest. Scale control agents will be the fastest growing products, while coagulants and flocculants will pace the larger, more mature categories. This study analyzes the \$5.7 billion US water treatment chemical industry, with forecasts for 2017 and 2022 by product, application and market. The study also evaluates company market share and profiles industry competitors.

#3072September 2013..... \$4900

Consumer Water & Air Treatment Systems

US demand for consumer water and air treatment systems will rise 6.9 percent yearly to \$2.3 billion in 2017. Whole-house air treatment systems will be the fastest growing segment, while point-of-use water treatment systems will remain the largest. Water filters and membranes will remain the largest consumables category. This study analyzes the \$1.6 billion US consumer market for water and air treatment systems, with forecasts for 2017 and 2022 by technology, product, and region. The study also evaluates company market share and profiles industry players.

#3032May 2013..... \$5300

World Water Disinfection Products

World demand for water disinfection products will rise 5.5 percent annually to \$7.7 billion in 2016. China and the Asia/Pacific and Africa/Mideast regions will be the fastest growing markets. A shift in the product mix from elemental chlorine towards higher value chemicals and advanced technologies will continue. This study analyzes the \$5.9 billion world water disinfection product industry, with forecasts for 2016 and 2021 by product, market, world region and for 16 countries. The study also evaluates company market share and profiles industry participants.

#2992March 2013..... \$6100

About The Freedonia Group

The Freedonia Group, Inc., is a leading international industry market research company that provides its clients with information and analysis needed to make informed strategic decisions for their businesses. Studies help clients identify business opportunities, develop strategies, make investment decisions and evaluate opportunities and threats. Freedonia research is designed to deliver unbiased views and reliable outlooks to assist clients in making the right decisions. Freedonia capitalizes on the resources of its proprietary in-house research team of experienced economists, professional analysts, industry researchers and editorial groups. Freedonia covers a diverse group of industries throughout the United States, the emerging China market, and other world markets. Industries analyzed by Freedonia include:

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