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World Membrane Separation Technologies

Industry Study with Forecasts for **2015 & 2020**

Study #2755 | June 2011 | \$6100 | 481 pages

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The countries that will see the fastest growth in membrane demand include the BRIC countries and others with large, developing industrial bases and stressed local water resources.

World demand to rise 9% annually through 2015

Global demand for membranes is projected to increase a healthy 9.0 percent annually to \$19.3 billion in 2015. The countries that will see the fastest growth include the BRIC countries and others with large, developing industrial bases and stressed local water resources. Combined, the US and China are expected to account for 46 percent of the market gains between 2010 and 2015.

North America to lead gains in developed areas

North America, the largest regional market, accounted for one-third of global membrane sales in 2010 and will advance a strong 8.3 percent annually through 2015. Gains in the dominant US market will be aided by the ongoing development of improved membranes and related systems to accommodate newer water quality regulations and the use of low-quality water in water-stressed regions. Demand will also be aided by the growing number of industries using membranes to make more efficient use of water resources and to reduce waste disposal expenditures and by a projected rebound in manufacturing activity and investment.

Western Europe and Japan are similar to the US in the maturity of their water infrastructures, the type of regulatory environment and the level of technological sophistication in manufacturing. This maturity will contribute to growth in

World Membrane Demand, 2010 (\$12.6 billion)



North America
33%

Asia/Pacific
29%

Western Europe
21%

Other Regions
17%

photo: Siemens Water Technologies

membrane demand well below the global average. Still, the increased emphasis on conservation through water recycling will boost sales. The relative affluence of these countries allows for the use of advanced technologies despite their high upfront costs.

Desalination market growing in developing areas

In developing countries, gains will be based on the continued growth of water-intensive industries, increased need to tap brackish or otherwise poor quality water resources, and rising investment in modernizing water and waste infrastructure. However, in many of the least developed countries -- especially in

Africa and parts of South Asia -- growth will be more limited due to lack of adequate funding and local corruption that impedes progress.

Much of the Middle East, North Africa and the Caribbean have invested heavily in seawater and brackish water treatment to ensure a sufficient supply of water for drinking, agriculture and industry use. Historically much of that came from thermal distillation plants, but even oil-rich nations are shifting to more efficient reverse osmosis desalination. Other countries, including Australia, China, India, Israel, Japan, Singapore, Spain and the US, have also added membrane-based desalination capacity in recent years.

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Sample Text, Table & Chart

ASIA/PACIFIC

India: Membrane Demand by Type

Demand for membranes in India is expected to grow through 2015, the second strongest growth rate among all regions. Advances will be driven by ongoing investments in the country's water and wastewater treatment infrastructure. Many of these systems are incomplete. Many of these systems have been in place since the country has insufficient capacity to meet its growing needs since the country has insufficient capacity to meet its growing needs. The projected population growth and increasing industrialization. Further gains will be restrained to a certain degree by the difficulty in financing many projects as many installations that are announced are not completed.

In 2010, microfiltration membranes accounted for the largest share of Indian membrane demand, with 38 percent of sales. However, reverse osmosis and ultrafiltration membranes -- which accounted for 22 and 19 percent of sales, respectively -- are forecast to achieve stronger growth over the forecast period. This trend will largely be aided by the increased investment in desalination technology to treat very low-quality water, brackish water or seawater for use in producing municipal potable water or in a variety of industrial applications.

Membrane-based desalination systems are the most widely used technology because of lower capital and energy costs compared to conventional thermal distillation versions. The membrane-based systems most commonly installed in India feature reverse osmosis membranes as the primary treatment step. Ultrafiltration membranes are used as a key pretreatment step to protect the reverse osmosis membranes and prolong its useful life. Reverse osmosis systems are also increasingly common in residential installations as the growing numbers of middle class homeowners are willing and able to take steps to improve their drinking water. Interest is further boosted by rising public awareness of water safety issues and falling membrane and membrane system costs.

216

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TABLE VI-10

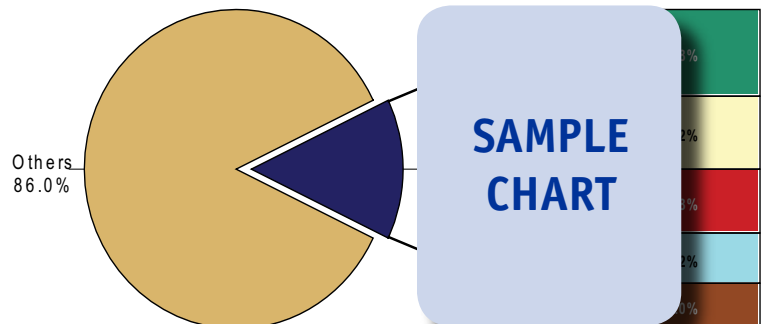
INDIA: MEMBRANE DEMAND BY TYPE
(million dollars)

Item	2000	2005	2010	2015	2020
Manufacturing Value Added (bil 2009\$)					
\$ membranes/000\$ MVA					
India Membrane Demand					
Microfiltration					
Reverse Osmosis					
Ultrafiltration					
Other					
% India					
Asia/Pacific Membrane Demand					

SAMPLE TABLE

CHART VIII-1

WORLD MEMBRANE MARKET SHARE BY COMPANY
(\$12.6 billion, 2010)

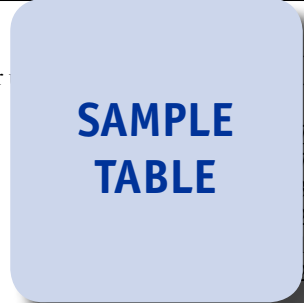


SAMPLE CHART

Sample Profile, Table & Forecast

TABLE VI-11
INDIA: MEMBRANE DEMAND BY MARKET
 (million dollars)

Item	2000	2005	2010	2015	2020
Water Use (bil cubic meters)					0
\$ membranes/000 cubic meter water					0
India Membrane Demand					7
Water Treatment					7
Wastewater Treatment					5
Food & Beverage Processing					1
Pharmaceutical & Medical					9
Other					5



COMPANY PROFILES

Vontron Technology Company Limited
 No. 1108, T1, Xihuan Guangchang, Xizhimenwai Street
 Xicheng District, Beijing 100044
 China
 86-10-5830-18
 http://www.vontron.com



Annual Sales:
 Employment:
 Key Products:

Vontron Technology specializes in the design, manufacture and sale of reverse osmosis membranes sold under the VONRON brand name for use in potable water, seawater desalination, sewage treatment, power generation, electronics, pharmaceutical and beverage industries, and other markets. The Company is privately held.

VONRON reverse osmosis membranes include general-purpose, fouling-resistant, seawater desalination, oxidation-resistant and residential types. For example, VONRON general-purpose reverse osmosis membranes include the LP series. VONRON LP membranes feature high permeated flow and enhanced desalination performance, among other benefits. These membranes are used in brackish water desalination processes, as well as the preparation of high-purity water for the electronics and electrical power sectors.

Vontron Technology manufactures reverse osmosis membranes at facilities in Guiyang and Beijing, China. As of 2009, the Beijing plant had the capacity to make two million square meters of compound reverse osmosis membranes per year, while the Beijing site had the capacity to produce one million compound reverse osmosis membranes

“India is also installing seawater distillation plants -- a growing number of which use reverse osmosis membranes -- to help provide adequate quantities of clean water. In March 2011, the Chennai Metropolitan Water Supply and Sewerage Board announced that it was seeking bids for the construction of a third seawater desalination plant in Chennai. The city already has a 100,000 cubic-meter-per-day reverse osmosis desalination plant at Minjur and a second reverse osmosis desalination plant with the same capacity is due to be completed at Nemmeli by the end of 2011.”
 --Section VI, pg. 221

OTHER STUDIES

World Water Desalination

This study analyzes the world water desalination industry. It presents historical demand data for the years 2000, 2005 and 2010, and forecasts for 2015 and 2020 by desalination technology, product (e.g., membrane systems, evaporators, pumps, filters, chemicals) and service, and by world regional market and major national market. The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry players.

#2782 July 2011 \$5900

World Water Disinfection Products

World demand for water disinfection products will increase 7.5 percent through 2014. In the developed world, gains will be prompted by efforts to reduce the environmental impact of water disinfection. In developing areas, efforts are underway to increase water treatment rates and quality up to advanced country standards. This study analyzes \$5.7 billion the world water disinfection product industry, with forecasts for 2014 and 2019 by product, market, world region and for 20 countries. It also evaluates company market share and profiles industry participants.

#2723 February 2011 \$5900

Activated Carbon

US activated carbon demand will grow 15.8 percent annually through 2014, driven mainly by stringent new air and water pollution laws. Powdered activated carbon (PAC) will be the main beneficiary of tighter industrial mercury controls, while granulated activated carbon (GAC) will benefit from new drinking water regulations. This study analyzes the 565 million pound US activated carbon industry, with forecasts for 2014 and 2019 by product, application and US regional market. It also evaluates company market share and profiles industry players.

#2713 January 2011 \$5100

Membrane Separation Technologies

US demand for membrane materials will rise eight percent per year through 2014. Nonpolymeric membranes will outpace the dominant polymeric segment. Ultrafiltration and reverse osmosis types will be the fastest growing. Chemical processing and pharmaceutical/medical uses will be among the best market opportunities. This study analyzes the \$3.3 billion US membrane industry, with forecasts for 2014 and 2019 by type, application and market. It also evaluates company market share and profiles industry players.

#2632 May 2010 \$4900

World Filters

Global demand for filters is forecast to expand 5.1 percent annually through 2013. Market advances in the developing areas will considerably outpace increases in the US, Western Europe and Japan. Sales of air purification filters will be the fastest growing segment while internal combustion engine and related filters remain the largest. This study analyzes the \$45.5 billion world filter industry, with forecasts for 2013 and 2018 by product, market, world region and for 26 countries. It also evaluates market share and profiles industry players.

#2568 November 2009 \$6100

About The Freedonia Group

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