Industrial Valves

US Industry Study with Forecasts for 2018 & 2023

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INDUSTRY STRUCTURE

1 Industrial Valve Market Share, 2013 ……… 181
Valve manufacturers will benefit from renewed strength in key industries that utilize valves, including process manufacturing, public utilities, resource industries, and construction.

US demand to rise 4.9% annually through 2018

Demand for industrial valves in the US is forecast to increase 4.9 percent per year to $19.8 billion in 2018, a considerable improvement from the performance registered during the 2008-2013 period. Valves are relatively mature products, and although design innovation and material developments provide some impetus for growth, sales levels in any given year are primarily determined by the performance of the industries that utilize these valves. During the 2008-2013 timeframe, end-use markets for valves were negatively impacted by the recession, posting below average growth or declines. Through 2018, valve manufacturers will benefit from renewed strength in the industries that utilize these products.

Construction market to grow the fastest

The construction market will post the strongest increases in valve demand, as both residential and nonresidential construction spending increase at double-digit growth rates, rebounding from the declines recorded during the 2008-2013 period. Utilities construction will also recover, bolstering the large associated valve market. In addition, US oil and gas production will continue to increase, driving sales of the often high-value valves utilized in these applications (custom engineered valves for use in large-diameter oil pipelines can cost upwards of $100,000). However, process manufacturing will remain the largest end-use market for valves. Gains in this market will be supported by growth in manufacturing output, particularly in the valve-intensive chemical industry.

Automatic valves to outpace standard types

Demand for automatic valves is forecast to outpace increases in standard valve sales, as a result of efforts by consumers to improve operational efficiencies. Furthermore, the positive outlook for most valve-using industries will lead companies to opt for automatic products in applications where they may have purchased standard valves in weaker economies. Automatic regulator valves will post the strongest gains of any product, as a result of their widespread use in chemical, oil and gas, and utility applications.

Valve imports to accelerate

Shipments of industrial valves from US manufacturers are forecast to slightly outpace domestic demand through 2018. As US valve demand grows, import gains will accelerate from the 2008-2013 period and the US trade deficit will expand. Moreover, in order to remain competitive with foreign companies, a number of US valve producers have established offshore manufacturing facilities in countries with lower labor costs, which will limit export opportunities.
MARKETS

Utilities

Private and public facilities and institutions that provide services to residential, commercial, industrial, and other customers comprise the utilities sector. Utilities purchasing large quantities of industrial valves include water, sewage, and sanitation (including desalination, irrigation water supply, and wastewater treatment, as well as basic municipal water and sewer systems); electric power generation and distribution (including both conventional regulated public utilities as well as cogenerators and other nonutility producers); and natural gas transmission and distribution. These industries use massive quantities of water, oil, gas, and other fluids in their daily operations.

Utility demand for industrial valves is expected to match projected increases in overall valve demand, advancing 4.9 percent per annum to $6.1 billion in 2018. This rate of growth will be a considerable improvement from the gains registered during the 2008-2013 period. Industrial valve demand is expected to see a strong rebound in utility construction. Utility construction was brisk during the 2003-2008 period, but declined from 2008-2013 as a result of the recession. As the economy picks back up, utilities will resume efforts to upgrade and expand related US infrastructure. Increased construction activity in the water and sewer segment will be of particular interest to valve manufacturers, as these tend to be valve-intensive applications. Growth in electric and gas construction will also spur valve sales, although not to the same degree. Electric and gas construction spending will not grow quite as fast as water and sewer applications, and these segments are less intensive users of valves. Further gains will be held back by the mature nature of many utility valve applications, which will limit sales of high-value products.

Many of the valves utilized in utilities operations endure harsh conditions, such as corrosive media and fluctuating temperatures.
Mueller Water Products Incorporated
1200 Abernathy Road Northeast, Suite 120
Atlanta, GA  30328
770-206-4200
http://www.muellerwaterproducts.com

Sales:  $1.2 billion (FY 2014)
US Sales:  $1.0 billion (FY 2014)
Employment:  4,200 (FY 2014)

Key Products:  check, air, butterfly, ball, plug, cone, energy dissipating, rectangular, nuclear, gate, tapping, and cut-in valves; actuators; and dry-barrel and wet-barrel fire hydrants

Mueller Water Products manufactures a range of water infrastructure and flow control products used in water distribution networks and water treatment facilities. The Company operates through two segments: Mueller Company and Anvil.

Mueller was the fourth biggest supplier of industrial valves in the US in 2013, with a 2.9 percent share of domestic demand based on $460 million in related sales. The Company participates in the US industrial valves industry via the Mueller Company segment, which had sales of $783 million in FY 2014. Through the segment, Mueller Water Products manufactures and markets check, air, butterfly, ball, check, plug, cone, energy dissipating, rectangular, nuclear, gate, tapping, and cut-in valves; actuators; and dry-barrel and wet-barrel fire hydrants, among other products, for the water and wastewater infrastructure, gas, and fire protection industries. These products are sold mainly under the MUELLER, US PIPE VALVE AND HYDRANT, JONES, and CANADA VALVE brand names. In FY 2014, water and gas valves and related products accounted for $474 million of the Company’s gross

### TABLE V-6
REGULATOR VALVE SUPPLY & DEMAND
(million dollars)

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<thead>
<tr>
<th>Item</th>
<th>2003</th>
<th>2008</th>
<th>2013</th>
<th>2018</th>
<th>2023</th>
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<td>Nonresidential Fixed Investment (bil $)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ regulator valves/000$ NFI</td>
<td>1.70</td>
<td>2.40</td>
<td>2.50</td>
<td>3.00</td>
<td>3.50</td>
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<tr>
<td>Regulator Valve Demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure</td>
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<td>674</td>
<td>774</td>
<td>1115</td>
<td>1440</td>
</tr>
<tr>
<td>Flow</td>
<td>280</td>
<td>396</td>
<td>455</td>
<td>616</td>
<td>762</td>
</tr>
<tr>
<td>Temperature</td>
<td>64</td>
<td>85</td>
<td>98</td>
<td>129</td>
<td>160</td>
</tr>
<tr>
<td>Other Regulator Valves &amp; Parts</td>
<td>476</td>
<td>626</td>
<td>718</td>
<td>950</td>
<td>1173</td>
</tr>
<tr>
<td>- net imports</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Regulator Valve Shipments</td>
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<td>1581</td>
<td>1935</td>
<td>3010</td>
<td>3735</td>
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<td>% regulator</td>
<td>44.7</td>
<td>45.9</td>
<td>45.0</td>
<td>48.2</td>
<td>48.5</td>
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<tr>
<td>Automatic Valve Shipments</td>
<td>2209</td>
<td>3446</td>
<td>4300</td>
<td>6250</td>
<td>7700</td>
</tr>
</tbody>
</table>

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World Pumps
Global demand for fluid handling pumps is projected to increase 5.5 percent annually to $64.2 billion in 2018. The Asia/Pacific region will remain the largest market and the second fastest growing, behind Central and South America. The key positive displacement and centrifugal pump segments will offer the best growth opportunities. This study analyzes the $64.4 billion world pump industry, with forecasts for 2018 and 2023 by product, market, world region, and for 35 countries. The study also evaluates company market share and profiles industry participants.

World Industrial Fasteners
World demand for industrial fasteners will climb 5.4 percent annually through 2018 to $93.8 billion. Gains will be strong worldwide, but developing areas will outpace demand in developed countries. The key motor vehicle OEM market will post the largest value gains, while the smaller construction market will grow the fastest. This study analyzes the $72 billion world industrial fastener industry, with forecasts for 2018 and 2023 by product, market, world region, and for 21 countries. The study also evaluates company market share and profiles industry participants.

Gaskets & Seals
The US market for gaskets and seals is expected to expand 3.9 percent annually through 2018 to $10.6 billion. Compression packings and molded seals and packings will be the fastest growing seals, while expanded graphite gaskets will be the most rapidly growing gasket products. The electrical and electronic products market will lead gains. This study analyzes the $8.7 billion US gasket and seal industry, with forecasts for 2018 and 2023 by product and market. The study also evaluates company market share and profiles industry players.

Water & Wastewater Pipe
Water and wastewater pipe demand in the US will grow 7.7 percent per year to $18.1 billion in 2018. Municipal end uses will continue to claim a majority of demand, while building construction will be the fastest growing market. The best opportunities by product will be found in the dominant and fastest growing plastic pipe segment. This study analyzes the $12.5 billion US water and wastewater pipe industry, with forecasts for 2018 and 2023 by product, market, application and product. The study also evaluates company market share and profiles industry players.

World Industrial Valves
Global demand for industrial valves will rise 5.1 percent per year through 2017 to $82.5 billion. The Asia/Pacific and Africa/Mideast regions, along with Central and South America, will grow the fastest. The oil and gas industry and process manufacturers will be the fastest growing markets. Automatic valves will outpace conventional. This study analyzes the $64.2 billion world industrial valve industry, with forecasts for 2017 and 2022 by product, market, world region, and for 36 countries. The study also evaluates company market share and profiles industry competitors.

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