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# Industrial Valves

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US Industry Study with Forecasts for **2013 & 2018**

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Study #2521 | July 2009 | \$4700 | 275 pages

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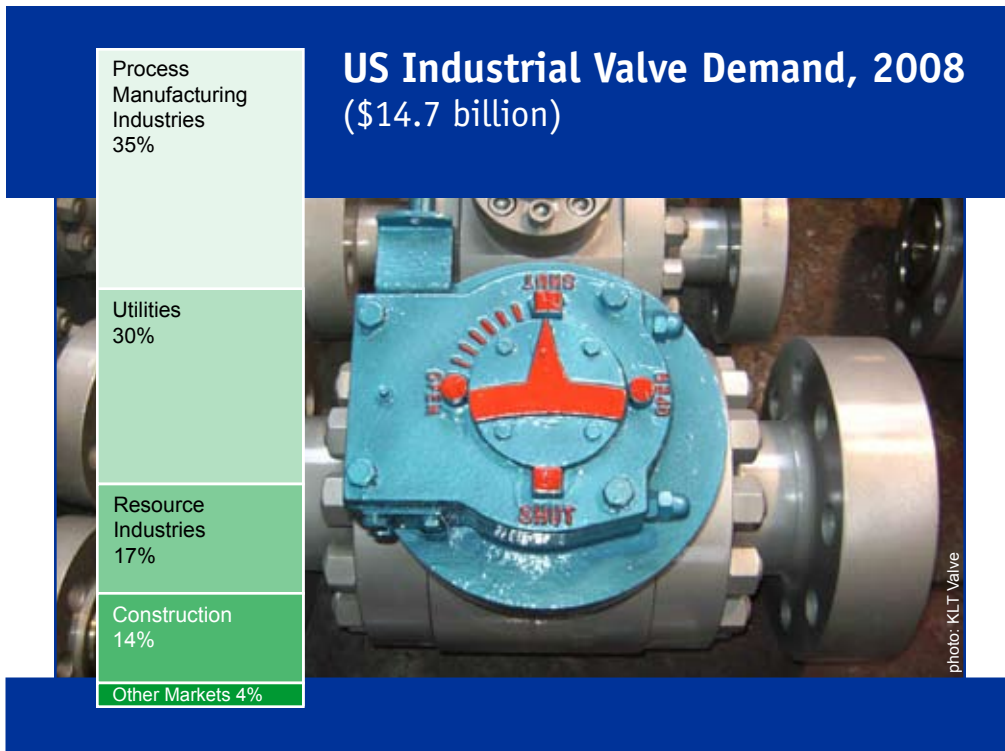
*Demand will be bolstered by a strong rebound in residential construction spending from low 2008 levels, and the continued development of better performing, technologically advanced valves.*

## US demand to reach \$15.2 billion in 2013

Industrial valve demand is forecast to increase less than one percent per year to \$15.2 billion in 2013. Although gains will not match those registered during the 2003-2008 period, slowing growth will largely be due to changes in average valve prices. Much of the robust market expansion during the 2003-2008 period was due to value gains supported by price increases, which were caused by rising raw material costs. Through 2013, unit prices are expected to remain flat or drop in response to decreasing raw material costs. In fact, in inflation-adjusted terms, valve demand will strengthen through 2013, bolstered by an acceleration in construction expenditures, and, in particular, a strong rebound in residential construction spending from the low levels of 2008. The continued development of better performing, technologically advanced valves will also support gains.

## Standard valves to outpace automatic types

Demand for standard valves is forecast to outpace that of automatic valves. More buyers will opt to purchase the less expensive standard valves as nonresidential fixed investment slows, possibly upgrading them with separately sold actuators at a later date. Steel and steel alloys will remain the most commonly utilized valve construction materials due



to their durability and strong performance in high temperature, high stress applications. Although valve performance will continue to be improved by advances in nontraditional materials (e.g., plastics, titanium and other metal alloys), steel and steel alloys will still make up nearly one-half of valve demand in 2013.

## Construction to be fastest growing market

Process manufacturing industries and utilities are the dominant markets for industrial valves because of their heavy fluid handling requirements. However, demand gains in these markets will be modest, as production increases in most

process manufacturing industries are expected to moderate and growth in utilities construction spending will not be as strong as during the 2003-2008 period. The fastest gains through 2013 will be posted in the construction market, with industrial valve sales expanding 2.4 percent per year. Growth in the construction market will be supported by an acceleration in building construction, including an expected turnaround in residential building. In 2008, original equipment manufacturing applications accounted for more than two-thirds of total industrial valve demand, and are expected to remain the dominant source of valve sales for the foreseeable future.

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## Sample Text, Table & Chart

### AUTOMATIC VALVES

#### Pneumatic

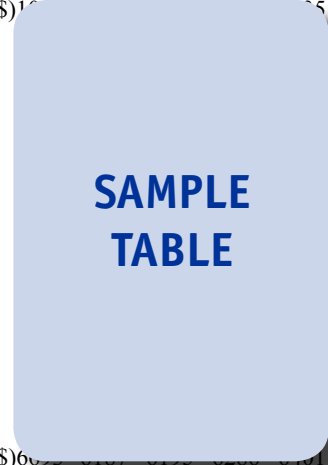
Shipments of pneumatic valves are forecast to remain relatively flat through 2013. This will be in contrast to the 2008 period, but will approximate the 2008 level. Pneumatic control valve shipments overall the market. Pneumatic control valve shipments from U.S. manufacturers face competition from solenoid control valves produced in foreign countries. In addition, slowing shipments in a number of U.S. manufacturing industries, combined with slowing nonresidential fixed equipment spending growth, will contribute to the weak performance. The chemical industry is a major market for pneumatic control valves and shipments in that industry are forecast to slow considerably through 2013.

Pneumatic power is the most simple, economical and easily employed form of valve actuation. Pneumatic actuators are also not affected by wet environmental conditions, will not overheat and are inherently explosion-proof. Pneumatic power is also easy to store and is suitable for all but the very largest industrial valves. However, pneumatic actuated valves require compressed air to operate and are therefore dependent upon air compressors. This limits the use of pneumatic valves in applications where a source of compressed air is not readily available. In addition, low ambient temperatures can cause pneumatic systems to fail, and the piston materials used in these systems are vulnerable to high temperatures. Other limitations of this form of actuation include the lack of kinetic energy needed to unseat wedging valves and position drift due to air compression.

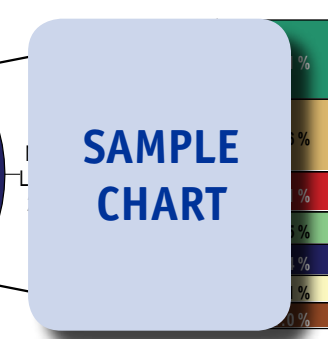
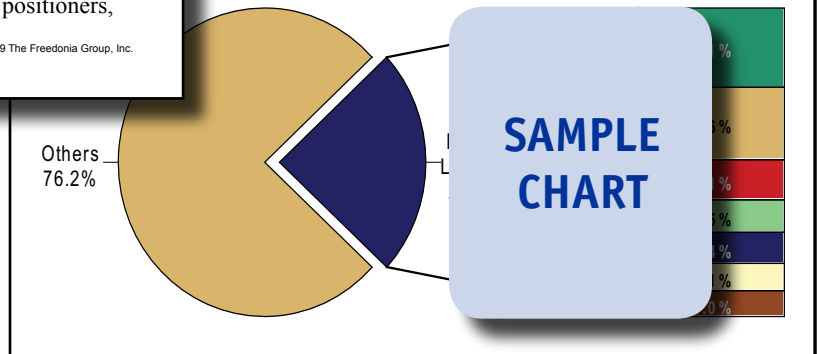
Pneumatic actuators typically fall into three categories: piston actuation, vane actuation and pneumatic motor actuation. Various accessories are also widely used with these valves (e.g., limit switches, positioners,

**TABLE IV-1**  
**STANDARD INDUSTRIAL VALVE SUPPLY & DEMAND**  
 (million dollars)

Item	1998	2003	2008	2013	2018
Nonresidential Fixed Investment (bil \$)100=100					
\$ standard valves/000\$ NFI					
Standard Industrial Valve Demand					
Application-Specific Valves					
Multiturn Valves					
Quarterturn Valves					
Safety & Relief Valves					
Other Valve Products					
- imports					
+ exports					
Standard Industrial Valve Shipments					
price deflator (2000=100)					
Stand Ind Valve Shipments (mil 2000\$)600=100					



**CHART VII-1**  
**INDUSTRIAL VALVE MARKET SHARE BY COMPANY, 2008**  
 (\$14.7 billion)

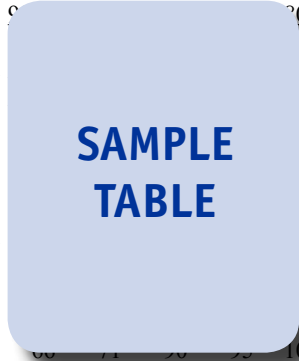


## Sample Profile, Table & Forecast

TABLE VI-2

INDUSTRIAL VALVE DEMAND BY SOURCE  
 (million dollars)

Item	1998	2003	2008	2013	2018
Industrial Valve Demand	900	1000	1100	1200	1300
OEM:					
Process Manufacturing Industries	400	450	500	550	600
Utilities	100	110	120	130	140
Resource Extraction Industries	150	160	170	180	190
Construction	100	110	120	130	140
Other	50	55	60	65	70
Aftermarket:					
Process Manufacturing Industries	200	220	240	260	280
Utilities	50	55	60	65	70
Resource Extraction Industries	75	80	85	90	95
Construction	50	55	60	65	70
Other	25	27	29	31	33



### COMPANY PROFILES

**Taylor-Wharton International LLC**  
 4718 Old Gettysburg Road, Suite 300  
 Mechanicsburg, PA 17055  
 717-763-5080  
<http://www.taylorwharton.com>



Annual Sales:  
 Employment:  
 Key Products:  
 seal, post medical  
 pressure relief

outlet, pressure  
 pack, ball,

Taylor-Wharton International LLC is a manufacturer of bulk and portable cryogenic storage tanks, high pressure compressed gas and asbestos-free acetylene cylinders, and other products. The privately held company is owned by Wind Point Partners (Chicago, Illinois), an equity investment firm.

The Company entered the valves industry through the December 2007 acquisition of the Gas Technologies segment of Harsco Corporation (Harrisburg, Pennsylvania) for approximately \$340 million. The segment, which operated as Harsco GasServ (Mechanicsburg, Pennsylvania), consisted of four units, including Sherwood, a producer of valves for the compressed gas industry. Sherwood has major production facilities in Niagara Falls, New York and Washington, Pennsylvania.

Valves from Sherwood include types for general compressed gas and specialty applications. Compressed gas valves are available in chlorine, industrial and medical models. The unit's chlorine valves encompass the 1210-1214 series chlorine cylinder and ton container varieties. Industrial valves are produced in acetylene, check, dual-outlet and pressure seal types. Sherwood's medical valves comprise OXY-GEN 1, KVA series post medical valves and YVBA series vertical

"Industrial valve sales in the construction market will reach \$2.2 billion in 2013, growing 2.4 percent per year. Gains will not be as strong as those registered during the 2003 to 2008 period, when high valve prices bolstered demand in value terms, but will outpace total industrial valve market growth. Solid increases in construction expenditures through 2013 will be the primary factor boosting demand. Both residential and nonresidential building construction expenditures, as well as non-building construction spending, are expected to increase through 2013. Several factors will serve to ..."  
 --Section VI, pg. 174

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This study analyzes the US HVAC equipment industry. It presents historical demand data for the years 1998, 2003 and 2008, and forecasts for 2013 and 2018 by fuel (e.g., electricity, natural gas, heating oil, geothermal), type (e.g., heat pumps, warm air furnaces, boilers, humidifiers, unitary air conditioners, room air conditioners, chillers, absorptive liquid chillers, dehumidifiers) and market (e.g., residential, nonresidential). The study also considers market environment factors, evaluates company market share and profiles industry players.

#2553 ..... 10/2009..... \$4800

**Filters**

The US filter industry is analyzed in this study. It presents historical demand data for 1998, 2003 and 2008, and forecasts for 2013 and 2018 by filter product (e.g., fluid power, oil, air intake, fuel, cabin air, emissions, panel and pocket air, fabric air pollution), and market (e.g., motor vehicles, utilities, consumer). The study also considers market environment factors, details industry structure, evaluates company market share and profiles manufacturers competing in the US filters market.

#2524 ..... 08/2009..... \$4800

**World Water Desalination**

This study analyzes the global water desalination industry. It presents historical demand data (1998, 2003, 2008) and forecasts for 2013 and 2018 by desalination product (e.g., equipment and systems, membranes, filters, evaporators, pumps and valves), service, source water, market (e.g., municipal, industrial), energy source, world region (e.g., Africa/Mideast, Asia/Pacific) and for 16 national markets. The study also considers market environment factors, evaluates company market share and profiles industry players.

#2523 ..... 08/2009..... \$5700

**Plastic & Competitive Pipe**

US demand for plastic and competitive pipe will reach 11.1 billion feet in 2013, stimulated in part by needs to upgrade sewer, drainage and municipal water systems. Plastic pipe will grow at the fastest pace, with PVC remaining the dominant resin. The construction and energy sectors offer the best market opportunities. This study analyzes the US pipe industry, with forecasts for 2013 and 2018 by market, material and plastic resin. It also evaluates company market share and profiles selected industry participants.

#2472 ..... 03/2009..... \$4800

**Industrial Valves in China**

Demand for industrial valves in China will rise 11.5% annually through 2011, driven by rapid growth in process manufacturing and in public utilities and other construction activity. Standard valves will remain the largest segment while automatic valves grow the fastest. Steel and steel alloys will remain the dominant valve material. This study analyzes the ¥45.8 billion market for industrial valves in China, with forecasts for 2011 and 2016 by type, market and region. It also evaluates market share and profiles industry players.

#2330 ..... 06/2008..... \$5100

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