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# Industrial Controls

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US Industry Study with Forecasts for **2011 & 2016**

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Study #2269 | November 2007 | \$4400 | 238 pages

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*US demand will be supported by ongoing improvements in solid-state control technology, and increasing strength in the aerospace, motor vehicle and electrical/electronics industries.*

## US demand to reach \$15.4 billion in 2011

US demand for industrial controls is forecast to rise 2.9 percent annually through 2011 to \$15.4 billion. Gains will be supported by the continual technological advancement of solid-state control products that will enable manufacturers to improve their productivity and remain competitive on a global scale. Growth will also benefit from increasing strength in the aerospace and motor vehicle industries, as well as from a projected upturn in electrical and electronic product shipments through 2011. Advances will be restrained, on the other hand, by a relatively mature US market for these products, as well as competition from personal computers that perform control-related functions.

Shipments of industrial controls are projected to grow 2.3 percent annually through 2011 to \$13.7 billion, a slower pace than that of demand. Nevertheless, US exports of industrial controls have increased significantly in recent years, as rapid development in nations such as China and India spurs demand for industrial controls and provides sales opportunities for US manufacturers that supply more sophisticated products.

## Service industries to be fastest growing market

Durable goods industries accounted for the largest share of demand in 2006,

Advanced  
55%

Conventional  
45%

## US Industrial Control Demand (\$13.3 billion, 2006)



with 61 percent of the total. Industrial controls are highly utilized by electrical and electronic equipment and machinery manufacturers. Original equipment manufacturer (OEM) applications are expected to provide better prospects for growth than maintenance/repair/operations (MRO) applications, due to a rise in nonresidential fixed investment through 2011. Service industries are expected to be the fastest growing market for industrial controls through 2011, supported by strong growth in business service revenues. Industrial controls are used by a number of different types of service businesses, primarily for repair/maintenance of motor-containing machinery and equipment.

## Advanced controls to outpace conventional types

Demand for advanced controls is expected to continue to grow more rapidly than that for conventional controls, as the advanced types provide superior performance and production capabilities. As these products become more technologically intricate, system integration services and industrial control software will continue to account for a larger share of demand. Among conventional controls, marine controls are expected to post notable gains, benefiting from an acceleration in military shipbuilding activity and strong national defense expenditures through 2011.

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## Sample Text, Table & Chart

### ADVANCED INDUSTRIAL CONTROLS

#### Proximity & Positioning Sensors

Demand for proximity and positioning sensors is projected to grow at a rate of 2.6 percent per annum through the 2001-2006 period. Gain these capabilities in the process in and positioning sensors will nonelectronic alternatives in and discrete parts environment. Proximity and positioning sensors offer superior signal processing and conditioning capabilities, improving the quality of communications between sensor and controller, and maximizing the reliability of sensor-collected data. Similarly, proximity and positioning sensors also provide greater diagnostic and data checking capability relative to less sophisticated limit switches and related devices. Further gains will be somewhat restrained by the higher cost of proximity and positioning sensors, as well as by end user comfort and familiarity with more basic electromechanical technology. Demand for optical units is expected to grow at a slightly faster pace than that of nonoptical units, resulting from advances in laser, fiber optic, infrared and visible light emitting diode sensor technology.

Proximity and positioning sensors are solid-state devices that are able to convert a physical change in a discrete part or continuous manufacturing process into a predetermined action or decision, and to communicate the outcome of that action to a remotely located control processor. Positioning sensors not only determine whether or not an object is present, but can pinpoint the specific location. They do this without coming into physical contact with the object -- a key differentiation from electromechanical limit switches. Related capabilities include measuring the distance from a base line, determining alignment or rotation, and tracking motion. Detecting defects in products traveling along a conveyor is a common function for proximity/positioning sensors in

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SAMPLE  
TEXT

TABLE VI-4

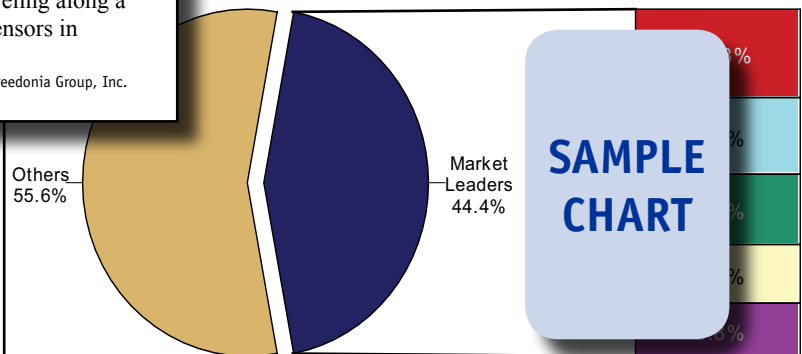
MACHINERY INDUSTRIAL CONTROL DEMAND  
(million dollars)

Item	1996	2001	2006	2011	2016
Machinery Shipments (bil \$)	2				
\$ controls/000\$ machinery					
Machinery Industrial Control Demand					
Industrial Machinery					
HVAC & Commercial Refrig Equip					
Metalworking Machinery					
Construction & Related Machinery					
Other					
% machinery controls					
Durable Goods Indust Control Demand					

SAMPLE  
TABLE

CHART VII-1

INDUSTRIAL CONTROL MARKET SHARE BY COMPANY, 2006  
(\$13.3 billion)

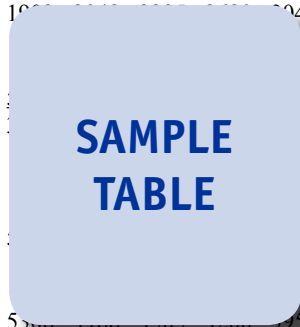


SAMPLE  
CHART

## Sample Profile, Table & Forecast

**TABLE V-1**  
**CONVENTIONAL INDUSTRIAL CONTROL SUPPLY & DEMAND**  
 (million dollars)

Item	1996	2001	2006	2011	2016
Durable Goods Shipments (bil \$)	1,000	1,100	1,200	1,300	1,400
\$ controls/000\$ durables	10	11	12	13	14
Conventional Indust Control Demand	100	110	120	130	140
General-Purpose	80	85	90	95	100
Special-Purpose	20	25	30	35	40
net imports	10	10	10	10	10
Conventional Industrial Control Shpt	90	100	110	120	130
price deflator (2000=100)	100	100	100	100	100
Conv Indust Control Shpt (mil 2000\$)	550	600	650	700	750



### COMPANY PROFILES

**Magnetek Incorporated**  
 N49 W13650 Campbell Drive  
 Menomonee Falls, WI 53051  
 262-783-2000  
 http://www.magnetek.com

Sales: \$1.2 billion  
 US Sales: \$1.0 billion  
 Employees: 1,000



Key Products: remote radio control products, power delivery and pushbutton pendants, inverter-duty motors, industrial braking systems, adjustable frequency drives

Magnetek is a designer, manufacturer and supplier of digital power control systems used to control motion and power distribution primarily in used in material handling equipment, elevators, wireless telecommunication systems, coal mining equipment, and fuel cells and wind turbines. During the second quarter of FY 2007, Magnetek relocated its headquarters from a site in Chatsworth, California to its existing manufacturing complex in Menomonee Falls, Wisconsin.

The Company is active in the US industrial controls industry mainly through the manufacture of control devices used in material handling, mining and related industries. Products for the material handling market include adjustable frequency drives, remote radio control products, power delivery and pushbutton pendants, inverter-duty motors and industrial braking systems. These products are principally used in overhead cranes, hoists, industrial mills and mining equipment. Magnetek's adjustable frequency drives include crane control drives sold through the IMPULSE, TCONTROLS, MAC 2000 and OMNI-PULSE product lines. A representative unit is the IMPULSE G+ drive,

"Demand for general-purpose controls is forecast to rise 1.4 percent annually through 2011 to \$3.9 billion, a slower pace than that for special-purpose controls. Gains will be restrained by competition from solid-state devices, which are more reliable and offer enhanced performance characteristics. At the same time, general-purpose controls will remain a viable option for those seeking a less expensive alternative. The maintenance/repair/operations (MRO) market for general-purpose controls will ..."  
 --Section V, pg. 68



**OTHER STUDIES**

**World Water Treatment Products**

World demand for water treatment products will be influenced by stricter water quality laws, greater emphasis on water treatment in developing nations, improvements on water treatment methods and continued expansion in industrial activity and population. This study examines the global market for chemical and nonchemical water treatment products, with forecasts for 2011 and 2016 by product, market, world region and major country. The study also evaluates market share and profiles industry competitors.

#2276 ..... 12/2007..... \$5800

**Packaging Machinery in China**

China is one of the fastest growing packaging machinery markets in the world. This study presents historical demand data (1996, 2001, 2006) and forecasts to 2011 and 2016 by product (e.g., filling and form/fill/seal machinery, bundling and palletizing machinery); by market (e.g., food, beverages, medical, pharmaceutical, personal care products); and by region (e.g., Central-North, Central-East). The study also considers market environment factors, evaluates company market share and profile leading suppliers.

#2257 ..... 11/2007..... \$4900

**Advanced Lighting**

US demand for advanced lighting will grow nearly 14% annually through 2011. Gains will be driven by energy efficient compact fluorescent lamps (CFLs), improved light emitting diode (LED) technology, and popular high intensity discharge headlamps for motor vehicles. Building applications will be the fastest growing market. This study analyzes the \$2.3 billion US advanced lighting industry, with forecasts for 2011 and 2016 by product and market. It also evaluates market share and profiles major players.

#2197 ..... 06/2007..... \$4400

**Industrial Valves**

US industrial valve demand will top \$16 billion in 2011, driven by the construction and public utilities markets. Imports will approach 60% of demand. Key export markets include Canada, Mexico, Western Europe, and the Asia/Pacific and Africa/Mideast regions. Steel and alloys will remain the dominant valve material. This study analyzes the \$13.9 billion US industrial valve industry, with forecasts for 2011 and 2016 presented by type and market. It also evaluates market share and profiles major manufacturers.

#2205 ..... 05/2007..... \$4400

**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 to 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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