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1 Introduction and Economic Overview

1.1 Introduction

This study of the valve industry reviews the markets, technological trends and major manufacturers of valves on a worldwide basis. Although an independent work, it can be seen as complementary to Profile of the International Pump Industry – Market Prospects to 2007 (2002, 5th edition) and Profile of the International Fluid Sealing Industry – Market Prospects to 2008 (2004, 3rd edition), both published by Elsevier Advanced Technology.

The report considers the international valve industry, looking at flow control valves for industrial applications. Valves for internal combustion engines and domestic plumbing and central heating applications have been excluded.

Profile of the International Valve Industry – Market Prospects to 2009 has been researched using: a combination of personal and telephone interviews with key manufacturers on a worldwide basis; scientific and technical literature searches; and, detailed analysis of international production and trade statistics.

Chapter one continues with an overview of the world economy as seen at the time of writing.

Chapter two includes an industry overview looking at the structure of the industry and future trends.

Chapter three highlights a number of issues facing the industrial valve industry.

Chapter four provides a detailed overview of merger and acquisition activity in the industrial valve industry since the fourth quarter of 2000.
Chapter five gives brief economic and industry notes for the world’s major countries and geographic regions and provides market size estimates for 2003, plus forecasts from 2004 to 2009.

Chapter six looks at the main end-user markets for industrial valves, highlighting trends and developments.

Chapter seven contains a technology review outlining the basic principles, types and materials associated with valves, as well as highlighting major developments.

Chapter eight provides a ‘top ten’ of companies based on sales of industrial valves and services.

Chapter nine contains profiles of 42 leading industrial valve manufacturers with details of (where available) company history, products, markets, manufacturing facilities, mergers and acquisitions, and, financial information.

Chapter ten is a directory of more than 850 industrial valve manufacturing companies with details (where available) of address, telephone and fax numbers, key executives, products manufactured, sales figures and employees.

1.2 Economic Overview

The market for new valves is obviously influenced by the capital expenditure levels in the main end-user industries, which in turn is affected by general economic conditions.

Based on statistics for 2002 (the latest available comprehensive data) for Gross Capital Formation (formerly Gross Domestic Fixed Investment) – defined as the outlays on additions to the fixed assets of the economy plus net changes in the level of inventories – the North America region was responsible for the largest amount of capital investment, with 30.7% of the world total followed closely by the Asia & Far East region, with 29.5% of the total.
Table 1.1 Gross Capital Formation in 2002

| Country/Region              | Gross Capital Formation (Current US$ billion) | Gross Capital Formation (% World Total) |
|-----------------------------|----------------------------------------------|----------------------------------------|
| North America               | 2031.6                                       | 30.7%                                  |
| Central & South America¹    | 325.7                                        | 4.9%                                   |
| Western Europe²             | 1773.4                                       | 26.8%                                  |
| Central & Eastern Europe³   | 215.5                                        | 3.2%                                   |
| Middle East                 | 112.1                                        | 1.7%                                   |
| Africa                      | 107.5                                        | 1.6%                                   |
| Asia & Far East             | 1951.5                                       | 29.4%                                  |
| Australia & New Zealand     | 110.7                                        | 1.7%                                   |
| **Total**                   | **6628.0**                                   | **100%**                               |

¹ Includes Mexico and Caribbean
² Includes Turkey
³ Includes Former Soviet Union (FSU)

Source: The World Bank Group

Twenty countries accounted for 87% of Gross Capital Formation in 2002 and clearly have a great influence on the valve market.

Table 1.2 Top 20 Economies

| Country/Region | Gross Capital Formation in 2002 (Current US$ billion) |
|----------------|-----------------------------------------------------|
| USA            | 1886.9                                               |
| Japan          | 961.1                                                |
| China¹         | 550.3                                                |
| Germany        | 358.1                                                |
| France         | 275.9                                                |
| United Kingdom | 246.2                                                |
| Italy          | 235.9                                                |
| Spain          | 169.9                                                |
| Canada         | 144.7                                                |
| Mexico         | 129.1                                                |
| South Korea    | 124.2                                                |
| India          | 116.5                                                |
| Australia      | 98.8                                                 |
| Brazil         | 92.0                                                 |
| Netherlands    | 85.2                                                 |
| Russian Federation | 73.0                                               |
| Taiwan         | 49.9                                                 |
| Belgium        | 47.6                                                 |
| Switzerland    | 46.7                                                 |
| Austria        | 44.5                                                 |
| **Total**      | **5736.5**                                           |

¹ Includes Hong Kong and Macao

Source: The World Bank Group & Taiwan Ministry of Finance
With the global recovery strengthening and broadening, the International Monetary Fund (IMF), in its April 2004 forecast, revised upwards its forecast of global Gross Domestic Product (GDP) growth in 2004 and 2005 to 4.6% and 4.4% respectively, following growth in 2003 of 3.9%. However, this recovery that started in the second half of 2003, and which has continued in early 2004, is facing significant challenges and risks. These include the continuing problems in the Middle East and the fear of terrorist attacks, which have led to soaring oil prices, as well as the need to achieve an orderly resolution of global imbalances, notably the large US current account deficit and surpluses elsewhere. Difficult medium-term fiscal situations in many industrial and emerging market economies will also have to be addressed.

Among the industrial countries, recovery will continue to be led by the USA, where expansion is now firmly established across most sectors of the economy, helped by continued stimulus from fiscal and monetary policies. Despite a weak labour market and considerable excess capacity, growth of GDP, which was 3.1% in 2003, is forecast to rise to 4.6% in 2004, falling back to 3.5% in 2005.

In the euro area, continued disappointing private domestic demand and the appreciation of the euro led to growth of only 0.4% in 2003. With the overall policy stance less supportive and the region-wide outlook adversely affected by the continuing difficulties in Germany, the projected pick-up is expected to be relatively gradual, supported mainly by a gradual pick-up in private consumption and inventories, and the expected improvement in external demand. GDP growth is forecast at 1.7% in 2004 and 2.3% in 2005.

In Japan, the economic expansion gained momentum in late 2003, thanks to an acceleration of business investment and exports and some strengthening of private consumption. This resulted in a growth in GDP in 2003 of 2.7% after the fall of 0.3% that had occurred in 2002. The pick-up in world trade and steady increase in domestic demand, buoyed by some improvement in the labour market, is expected to result in GDP growth in 2004 of 3.4%, as forecast by the IMF, although the Organisation for Economic Co-operation and Development (OECD) is more cautious with a forecast of only 3.0%.

The outlook for emerging markets continues to be driven – to differing extents – by developments in industrial countries, external financing conditions, geopolitical factors, and country-specific developments. In emerging markets in Asia, with the effects of Severe Acute Respiratory Syndrome (SARS) less than expected, growth picked up in the second half of 2003 and the year enjoyed a GDP growth of 7.2%. Growth in Asia is expected to remain high in 2004, based on the continued momentum of domestic demand and the strong outlook for the global economy.
In Central and Eastern Europe, GDP growth in the countries of the former Soviet Union exceeded expectations in 2003 and is estimated at 7.6%. Growth was fuelled by high oil prices, buoyant consumption and wage growth, highly competitive exchange rates and unexpected strong growth in investment. Looking forward, the IMF expects GDP growth to moderate to 6.0% in 2004 and 5.2% in 2005, as consumption and investment growth return to more sustainable levels.

The eight EU accession countries also showed strong growth in 2003, led by the three Baltic states of Estonia, Latvia and Lithuania, with a GDP growth of 7.4%. The IMF forecasts that this growth will ease to 6.2% in 2004 and 5.9% in 2005.

The five central European states of Czech Republic, Hungary, Poland, Slovak Republic and Slovenia had a combined GDP growth in 2003 of 3.4%. The IMF expects this growth to increase to 4.0% in 2004 before easing slightly to 3.8% in 2005, with Poland and the Slovak Republic showing strongest growth.

Activity in much of Latin America appears to be stabilizing and external confidence in the region – particularly Brazil – has improved markedly. Growth is expected to strengthen during 2004 as the recovery in domestic demand takes further hold, although the outlook remains vulnerable to deterioration in the global financial market environment or domestic policy slippages that undermine investor confidence.

In the Middle East, while the quick end to the conflict in Iraq had initially boosted confidence, the fragile security situation remains a major source of uncertainty. In 2003, oil-exporting countries benefited from both higher world oil prices and increased export volumes, as they raised oil output to replace the loss of Iraqi production and as the demand for oil picked up as the global economy gained momentum. GDP growth for the whole region increased from 4.2% in 2002 to 5.4% in 2003. Geopolitical uncertainties and the unsettled security situation make short-term forecasts for the region difficult to determine, with the medium-term growth prospects depending crucially on structural reforms in a number of its countries.