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INTRODUCTION

The Freedonia Group Incorporated is a leading international industry study/database company. Founded in 1985, Freedonia now publishes over 100 studies each year, covering such areas as building materials, chemicals, health care, packaging, pharmaceuticals, plastics, security and many other industries. Studies cover entire industry sectors as well as key niche markets. Each study includes such valuable intelligence as growth markets and products, market share, product analyses and forecasts, market analyses and forecasts, and company profiles.

This study analyzes the global market for elevators (i.e., lifts), escalators and related products and services. Elevator and escalator products are defined as passenger and freight elevators; escalators and moving walkways; and associated products and parts (e.g., controls and electronics, elevator doors, architectural/structural products, power transmission equipment, etc.) sold separately (i.e., not packaged with a complete elevator/escalator system for sale). Elevator/escalator services are defined as installation and such aftermarket services as repair, maintenance, and modernization and upgrades.

Historical data (1996, 2001, 2006) and forecasts to 2011 and 2016 are provided for elevator supply and demand by type of product and service, as well as end market, on a country-by-country and region-by-region basis. Market data are valued in current US dollars, including inflation. Historical and forecast passenger and freight elevator unit data -- both installed base and new installations -- by country is also provided.

A potential source of statistical discrepancy in the historical series for elevator demand is the conversion from national currencies to a common currency (the US dollar). Every effort has been made to adjust compiled data to form a consistent pattern for comparing the various national markets, including the use of purchasing power parity currency conversions.

Data on elevator demand are derived from differing sources and developed from statistical relationships. Given that variations are commonplace in international reporting, data presented in this study are historically consistent but may vary from other sources. Variances may occur because of definitional differences, different methods of currency translation, and various other factors.

In addition, major global elevator vendors are identified and profiled, and the key competitive variables are discussed. The entire report is framed within the world elevator industry's economic, technological and market environments. World elevator market share data presented in the "Industry Structure" section are estimated based on consultation with multiple sources. In addition, tabular details may not add to totals due to rounding.

Freedonia Group Industry Studies covering related topics include #2216 *Elevators in China* (July 2007), #2113 *World Material Handling Products* (November 2006) and #1843 *Industrial Power Transmission Components* (September 2004).

Macroeconomic and demographic indicators presented in this study were obtained from The Freedonia Group Consensus Forecasts dated June 2007.

Gross Domestic Product (GDP) historical data are derived from the national income and products accounts from the Organisation for Economic Co-Operation and Development (OECD) for its member countries, from the European Bank for Reconstruction and Development (EBRD) for its member countries, and from the International Monetary Fund for its member countries that are not part of the OECD or EBRD. Sources of GDP estimates for other countries are based on information from the World Bank and a variety of sources including the countries' statistical bureaus. GDP forecasts are developed from a consensus of public agencies and private firms.

All estimates of gross domestic product and components of GDP are done in terms of constant purchasing power parity, using purchasing power parity GDP estimates obtained from the OECD, the World Bank, the US Central Intelligence Agency and selected other sources. That is, the GDP estimates for the year 2005 are based on gross domestic product data expressed in the individual countries' local currency, which are then converted to US dollars by valuing each country's output at US prices in the year 2005. This approach values the same physical output at a consistent price for all countries, thereby reducing the distorting influence of different price levels in the different countries. The alternative approach of using exchange rates to convert local currency GDP to US dollars will tend to overvalue the output of countries with high average price levels and undervalue the output of countries with low average price levels, because exchange rate conversions only partially reflect the relative prices for goods and services that are domestically consumed and invested. Furthermore, factors other than relative prices, such as demand and supply in currency markets, interest rates and capital flows, affect exchange rates.

For years other than 2005, the growth in inflation-adjusted GDP for a given country is based on historical and forecast growth rates of GDP, expressed in inflation-adjusted units of local currency. This approach ensures that the GDP

series for any given country is an accurate index of changes in inflation-adjusted GDP for that country, but it implicitly assumes that the price structures across countries do not change from those of the base year. Therefore, caution should be used in comparing the relative GDP of countries in years other than the 2005 base. If the ratio of prices across two countries in a given year differs from the ratio of prices across those countries in 2005, the change in the relative sizes of those two economies as measured will not accurately reflect changes in output.

A wide variety of primary and secondary sources were used in the compilation of this report. These include national and regional statistical agencies and foreign embassies. The US Bureau of the Census, United Nations, OECD, World Bank, International Monetary Fund, European Union and various national government statistical publications were among the public sector data sources utilized. Also useful were market data and background literature provided by various industry and trade associations, including but not limited to the China Elevator Association, European Elevator Association, European Lift Association, European Lift Components Association, Hungarian Lift Association, Japan Elevator Association, Lift and Escalator Industry Association, NEII and Polish Lift Association. These base and supporting data were refined and adjusted in light of consultations with industry and other private contacts.

In addition to various business and online databases, trade publications consulted included *Elevator World*, *Elevation Magazine*, *Elevatori*, *Lift Report* and *Revista Del Ascensor*. Used extensively in framing the industry and market environments and as input to market size assessment were corporate annual reports, SEC Form 10-K filings, product catalogs, interviews with company officers, and security analyst and brokerage reports.