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Summary

The size of the Korean market for plastic injection molding machinery, including components, parts and peripherals, was estimated to be US$316.9 million in 2003. In 2004, the total market decreased to $296.6 million because end-users of plastic injection molding machinery had not invested in new production lines.

By contrast, imports and exports of plastic injection molding machinery were very active in 2003. Exports of plastic mold products by local manufacturers, the end-users of plastic injection molding machinery, was record breaking, showing an 18% increase compared to 2002. This triggered a surge in imports of plastic injection molding machinery, its components, parts and peripherals. Due to the increase in exports, the plastic molding industry in Korea grew by 26.6% growth in 2003 even though the business climate was not as favorable due to a slowdown in domestic consumption, an unstable international economy and competition from low-priced Chinese products.

To meet end-user demand in the plastic molding industry, local manufacturers of plastic injection molding machinery are continuously seeking advanced technologies through R&D or technical partnerships with foreign countries. It is expected that the U.S. will maintain an 8-9% share of Korea's import market over the next few years.

Market Overview

Many of the major Korean manufacturing companies using plastic molding machinery went bankrupt during the Asian financial crisis in 1997. Also half of the importing companies for plastic molding machinery and parts have closed down their offices since late 1997. Currently, there are several new Korean companies and they dominate local industry.

Korea exported $626.7 million worth plastic mold products in 2003. These exports influenced the increase in the production of plastic injection molding machinery in 2003 which reached $377.5 million, an 8% increase over the previous year. The operation rate of existing plastic molding equipment has also increased to meet the demand in plastic molding production.

Local

Currently, Korea is the world's third largest producer of plastic raw materials, increasing an average of 6.8% per year. To meet the demand for raw materials including plastic mold products, major local machinery manufacturers expanded production capacity until 2002. However, one of the major local manufacturers went bankrupt due to excessive facility investment and fierce competition between local manufacturers for plastic production machinery. Although great efforts have been made by local manufacturers to replace imported machines with local products, some state-of-the-art, technically advanced models are still not produced in Korea.

There are 60 member companies at the Korea Plastics Processing Machine Industry Association registered as plastic production machinery manufacturers and there are 600 member companies registered at the Korea Plastics Industry Association as plastics products manufacturers.

There are no known trade barriers for U.S. companies interested in exporting their equipment to Korea. Machinery coming from U.S. companies is well known for durability and long life cycle performance.

Market Trends

Demand for expensive European plastic extruding machines decreased sharply after the Asia financial crisis. Japan has filled the gap by providing electronic plastic molding machinery to meet Korean end-users' needs for cost-saving and environmentally sensitive equipment. Electronic plastic molding machinery came into the market in 2002 and major Korean companies have been producing such machinery locally since then. Large Korean manufacturers focus on producing various types of plastic machinery whereas small and medium sized Korean manufacturers focus on manufacturing in one or two specialized areas such as vertical rotary machinery, vertical two color machinery or extra small size precision machinery.

LG Cable is the largest manufacturer in Korea of injection molding machinery. The annual production capacity of the Korean firm is 5,000 units. The five major Korean manufacturers including LG Cable, Dongshin Hydraulic Co., Ltd., Hyundai Precision, Woojin Selex and Glotech Co. Many injection molding machinery production facilities have been moved from Korea to China to reduce costs, such as labor costs.

The plastic molding industry has enjoyed continued growth over the last few years due to increasing orders from major end-user industries such as home electronic appliances, semiconductors, automobiles and other consumer industries. Currently, the major end-user of plastic injection molding machinery is the home electronic appliances industry. However, it is expected that the mobile phone industry will become the dominant end user in the next few years due to the fact that many Korean companies in the home electronic appliance industry have moved their production to other Asian countries such as China or Indonesia, seeking lower wages. Since Korean labor is still competitive in the mobile phone industry, companies will continue production in Korea.

Local demand for imported machinery has shifted from basic machinery to high precision, high speed and fine quality to prevent shrinkage, frosting and excessive cavities in mold products.

Competition

Major players in the market are the above mentioned five Korean manufacturers who have 60% of the total local market in the plastic injection molding industry. These key Korean manufacturers easily meet delivery dates and have nationwide networks for sales and after sales service.

Total imports for plastic molding machinery increased 18% in 2003 reaching US$91.1 million. Japanese suppliers dominated the import market, with an approximate 42% share, followed by German suppliers who maintain a 13 percent share.

Import Market

(Unit: US$ million)

	2002	2003	2004 (Estimate)
Local Production	$314.5	$377.5	$344.2
Import	$77.2	$91.1	$122.7
Export	$79.6	$151.7	$170.3
Total Market	$312.1	$316.9	$296.6
U.S. Import	$9.6	$8.1	$15.2
Exchange Rate	W1250	W1,192	W1,162

Market share of major foreign countries: Japan (42.9%), Germany (13.2%), U.S.A. (8.9%), Italy (4.9%), France (2.7%)

Japanese machinery has a good reputation in the import market due to easy equipment operation, modified to Korean specifications, and prompt after sales service, which is possible for geographic reasons. Major Japanese suppliers for injection molding machinery are Toyo Machinery & Metal Co., Ltd., Sanjo Seiki Co., Ltd. and Sumitomo Heavy Industries Ltd. These Japanese suppliers conduct their business activities through their Korean agents.

Engel Machinery, an Austrian company that established a production facility in Korea in 2001, is one of the major suppliers for MuCell type injection molding machinery in Korea. Engel's primary end-users are major Korean automobile companies and their sub-contractors, which manufacture gaskets.

Since end-users that apply resin processing have experienced technical difficulties with bubbles occurring during the manufacturing process, advanced machinery that would solve such problems should have good sales opportunities in Korea. In addition, the Korean high-end market for parts and components, with enhanced resistance to erosion and corrosion, should have good market prospects.

The import volume of parts and components (HS 8477.59 & 8477.80) is considerable because Korean end-users very often purchase replacement parts, components and peripherals instead of purchasing new equipment.

End Users

The Korean mold and die industry grew by 5% in 2002 due to brisk domestic markets, particularly in electronic home appliances, semi-conductors, IT and the automobile industry as well as a strong performance in overseas markets. The industry is expected to increase production by an annual average of about 10% until 2005. Accordingly the demand for plastic injection molding products machinery and related parts is expected to increase steadily. Currently, there are about 232 major end-users for plastic molding machinery and related parts.

The end-users for plastic injection molding machinery are major contractors of the automobile, electronics and semiconductor industries. Life cycles for injection molding machinery used in Korea are generally longer than in advanced countries. In many cases, this is due to the fact that small and medium sized Korean companies operate the machinery for a longer period of time than usual by replacing parts and components, such as screws and cylinders, rather than buying new equipment. This fact also explains why the import volume for components and parts is considerable. One of the Korean end-users for plastic injection molding machinery stated that the durability and performance of locally manufactured parts were not considered satisfactory.

Market Access

The Korean Ministry of Finance & Economy has reduced tariff rates for mold processing machinery when it is imported by members of the Korea Die & Mold Industry Cooperative.

There are no non-tariff or other systematic restrictions on foreign imports of plastic injection molding machines and international safety standards are generally accepted in local commercial practice. The tariff rate for injection molding machinery is 8%. A 10% value added tax (VAT) is also imposed when the machinery clears customs.

Imports of used machinery require approvals and the procedure has been simplified.

Market Entry

Business deals for machinery in Korea are generally achieved through ongoing

communication with local distributors/agents and end-users on an individual basis. Local representatives call on potential customers to provide information on products, as well as to maintain good relationships. Purchases of new machinery usually stem from a constant exchange of information between end-users and distributors/agents.

Korean businessmen place great emphasis on after-sales service, such as reliable maintenance, prompt parts and components delivery and the timely dispatch of technicians or engineers to job sites.

Opportunities for Profile Building

The most effective way for a new-to-market U.S. firm to tap into the Korean market is to locate a well-qualified local agent. The agent should be familiar with changes in local markets and related regulatory procedures including customs clearance and tariff rates.

Regular presentations, educational seminars, including information on equipment maintenance, safety training, and timely after-sales service and local exhibitions, have been very effective in increasing product sales, and a company's reputation, for U.S. exporters.

Key Contacts

Government

Industrial Machinery & Aerospace Industry Division
Ministry of Commerce, Industry & Energy
www.mocie.go.kr

Associations:

Korea Plastics Processing Machine Industry Cooperative
www.plasticmachine.or.kr

Korea Federation of Plastic Industry Cooperatives
www.koreaplastic.or.kr

Korea Die & Mold Industry Cooperative
www.koreamold.com

Upcoming Trade Shows/events

Trade Promotion Opportunities

U.S. exporters of injection molding machinery should be aware of the following trade events that will be held in Korea.

Intermould.Korea 2005 (biannual)
Venue: COEX, Seoul
Date: April 14-18, 2005
Organizer: Korea Die & Mould Industry Cooperative
www.koreamold.com

Korea International Plastics/Rubber Show (KOPLAS) 2005
Venue: COEX, Seoul
Date: To be Decided
Organizer: Korea Plastics Processing Machine Industry Cooperative/Korea Federation of Plastic Industry Cooperatives
www.koplas.com