

Pricing and Mark-Ups

Average mark-ups range from 10 to 20 per cent at each level. Prices for domestic or imported machines (with no customizing and purchased off the rack) are filling machines: ¥50 – ¥100 million; overwrapping machines: ¥20 million; board casers: ¥20 million; and pouch packaging: ¥10 million.

Technology Protection

Generally, patents are not considered sufficient protection for new packaging machinery technology in Japan. On average, it takes competitors six months to implement new technology once it has been introduced. Therefore, the best way to protect equipment-related technology is to secure carefully outlined agreements and maintain a strong business relationship with partner(s). Being first in the marketplace or recognized as the original manufacturer, as well as establishing a reputation for product quality and innovation is considered more effective in protecting new technology than patents.

While in theory transfer of technology is one way to deal with the issue of technology protection, in reality it is difficult to achieve, as many manufacturers find it difficult to assess value using this manner of trade. Industry sources agree that there are very few basic patents remaining for packaging machinery and foresee no immediate change in the situation.

Industry Standards

North American equipment entering the Japanese market requires very little modification as Japan Industry Standards (JIS) are modelled after North American and European standards. There are, however, voltage considerations. Japan runs on 200 volts with a hertz difference of 50 cycles north and 60 cycles south of the Fujigawa River. Japan's relatively high humidity, which affects not only machinery but also end products, can rust equipment and cause poor adhesion in packaging.

Tariff and Non-Tariff Barriers

As of April 1, 1990, import duties on packaging machinery were lifted. However, certain replacement parts, including electrical parts, are still subject to import duties.

There are no specific regulations governing the use of safety labels on foreign machinery. However, the manufacturers normally translate the labels for the end user. The advent of symbols is now making translation unnecessary.

No special permits or licences are required when importing packaging machinery. Customs clearance normally takes one to two weeks.

5 Industry Structure and Key Players

According to the Japan Packaging Machinery Manufacturers' Association, the industry consisted of 423 domestic manufacturers in 1988. The value of their total combined production was estimated at ¥373 282 million in 1988 and nearly ¥400 000 million in 1989.

Over 250 of these companies employed less than 50 workers and together they claimed a 61 per cent market share. Only 44 firms employed more than 300 workers and together recorded a market share of 10 per cent. However, the larger firms accounted for close to 40 per cent of total production, while those employing less than 50 workers recorded a 19 per cent share of total production.

Leading Manufacturers

The top manufacturers in eight of the principal segments of the packaging industry, as defined by machine function, are identified below. See the section on Companies and Associations for further information on these firms.

Packing equipment. Collectively, the top six companies accounted for 21 per cent of production, valued at ¥79 900 million in 1988 (see Table 17). Other manufacturers include Toyo Jidoki, Kawashima Seisakujo, Hitachi Zosen Trading and Manufacturing, O-M, Kubota, Furukawa, Minamisenju Manufacturing and Kyoto Seisakusho.

Table 17

Top Domestic Packaging Machinery Makers — 1988

Company	Share
Shibuya Kogyo Company Limited	6
Toyo Food Equipment	4.6
Fuji Machinery	3.1
Ohmori Machinery	2.7
Tokyo Automatic Machinery Company	2.6
New Long Machinery Works	2
Others	79
Total	100

Source: Yanmo Economic Research.