

# DOUBLE VISION



Yomura is finding growing demand for its expertise in two-component injection moulding. Han Mui Ching reports

**Y**omura Technologies is a home-grown Taiwanese plastics injection moulding company with global customers. Established in 1985 by Leon C Liu, the president and engineering director, with US\$300,000, the company recorded a turnover of US\$7 million last year. It has set up two joint venture companies in China and is currently looking for a new and bigger site for its Taiwanese operations.

One of Yomura's main areas of expertise is two-component injection moulding. One example is the production of two-colour keypad buttons — the letters and figures are produced in the second colour instead of being printed. Managing director, Harry C Kao, explains that frequent use of keypads on electronic goods, such as computers and telephones, tends to wear out printed designs. As a result, two-component moulding is increasingly popular because the design is more durable. Kao adds that one of the latest trends is opaque buttons with translucent characters where light shines through from behind the button.

The use of soft-touch thermoplastic elastomers (TPEs) is another application area that is driving demand for



Managing director, Harry C Kao (left), and president and engineering director, Leon C Liu

two-component injection moulding. There is an increasing requirement for TPEs to be overmoulded onto plastics, such as PC, ABS and PP, to give improved grip for products such as hand tools, razors and electrical appliances. Yomura has been producing housings for mobile phones, personal digital assistants (PDAs) and cameras. A recent project involved a colourful electric thermometer in the shape of a penguin for Chicco, a Taiwanese company that markets children's products.

Many of Yomura's customers are major international companies, such as Acer, Compaq, Panasonic and Lucent. Typical end products include casings for mobile phones and elec-

tronic books. Over 50% of production is exported directly to the US or Europe, says Liu, while parts supplied to the local market are typically incorporated into finished products which are then exported.

Like other small and medium sized enterprises in Taiwan, Yomura understands that it cannot limit its market and resources to this country alone. It has recently set up two joint ventures in Ningbo and Dongguan in China, following many customers which have located there and taking advantage of the significantly lower wages and rental. The Ningbo plant has about 20 staff and focuses on mould design and tooling, while the Dongguan site has 300 staff and focuses on injection moulding. These plants are equipped with a total of 22 injection moulding machines ranging from 120 to 1,380 tonnes.

Two-component injection moulding is mainly carried out in Taiwan at the Taipei plant. This currently occupies a floor space of about 1,850 m<sup>2</sup> over four levels and houses 50 employees and 25 two-component injection moulding machines. In order to accommodate its expansion plans, the company is searching for an appropriate site in Taipei that is double the size of the existing facilities and preferably on one level for convenience.

Yomura has another site situated in Xizhi, which is about 20 km away from its Taipei plant. This houses 10 operators and 18 injection moulding machines with clamp forces between 60 and 800 tonnes. This smaller plant manufactures less complex, single-component products.

In an effort to keep up with changes in technology, Yomura has ventured into new areas such as thermoplastic rubber (TPR), which it is using to manufacture casings for LCD monitors and medical parts. Yomura is also working with a US company to develop in-mould decorating techniques. (203)