Safety glass

Following China's expanding glass industry Michael Tsui* TAMGLASS LTD. OY The increasing use of safety and coated architectural glass in China

China is without doubt one of the rising stars of the global glass industry. The Peoples' Republic has over 70 float units running, with more under construction. Finland's Tamglass, a world leader in the safety glass machinery sphere, has established a manufacturing bridgehead in the world's most populous nation; the plant in question is located near in Tianjin, about 100 kilometres south-east of Beijing, and its first furnaces are

Michael Tsui, Sales Manager for Tamglass China

orldwide, the current number of float manufacturing units is about 230 and, China apart, float manufacturing units amount to between 15 and 20. In its own right, the Chinese market is huge, with over 70 production units, five to six under construction and 20 to 25 being planned. The Peoples' Republic is, without doubt, one of the rising stars of the global glass industry, with the market being boosted by growing volumes.

already being delivered.

Owing to an incomplete communications network and company register, the exact number of glass processors in China is still difficult to verify; what can be said is that there are hundreds of specialized production units. The majority are typically independent, individually-owned workshops which, according to geographical location, serve some of the following industries: building, automotive or appliance and furniture. When considered as a whole, the Chinese glass market is huge - and still offers plenty of room for further expansion.

Most of the Chinese glass processors are small to medium-sized companies. They are mainly involved in the furniture, appliance and window industries, which are more labour intensive and less capital intensive. Bigger glass processors, including several float companies, are able to focus on processing architectural and automotive glass, investing in bending, tempering and other auxiliary equipment.

With China's GNP growth of seven to eight per cent per year, the automotive and architectural industries are growing too. This growth is additionally helped by the forthcoming Olympic Games. The development is encouraging glass processors to invest in safety glass processing equipment in order to seize any opportunities that may present themselves.

At present, moreover, the Chinese construction, automotive and appliance glass industries are developing new applications in order to answer current and projected market needs. In such markets, glass is no longer just a window, but an application creating added value, with new properties for the buildings, vehicles and appliances in question. This has opened up totally new and different opportunities, especially in the coated glass segment.

INCREASING SAFETY GLASS USE

One interesting development in China is the growing share of safety glass vis-à-vis glass consumption as a whole. In the automotive segment, safety glass accounts for 95 per cent of total glass use worldwide; in construction this figure stands at 15 to 20 per cent, and in appliances 15 to 25 per cent. It is

Following China's expanding glass industry

144

evident that both the construction and appliance sectors will have room for vastly increased volumes in the years to come. At the same time, the automotive industry has its own growth factors, such as new shapes, all-around visibility generated by increased glass surfaces, as well as glass products with new properties, such as laminated sidelites.

In China, the share of processed glass is 18 to 20 per cent of total glass consumption. The figure is expected to grow to 25 to 30 per cent of total glass output in China in 2005. The use of safety glass, in most cases tempered glass, is becoming more popular in major cities, especially in the south and along the coastal area. Chinese glass processors are quite confident in the market and expecting continuous growth in the use of safety glass.

The demand for tempered glass in China is rapidly increasing owing to the introduction of safety glass regulations, enhanced building design requirements and an expanding economy, which also boosts demand in respect of production machinery. Safety glass regulations have recently been introduced in the metropolitan areas. Just on this basis, therefore, the potential for safety glass machines in China is promising indeed. Current figures for the penetration of safety glass machinery in China show 1.1 machines per five million inhabitants. In the United Kingdom, the densest market for safety glass, the figure is 16.

GLOBAL STRATEGY

As self-designated market and technology leader for safety glass machinery, one of Tamglass's strengths is based on global operations being close to the local customers.

Tamglass has 16 sales, manufacturing and maintenance units worldwide and, if its production plant in China is included, the company can now boast machine production across four continents.

Strengthening Tamglass's presence in China is a significant part of company strategy aimed at expanding regional production and developing post-sales networks in the main market areas. According to Juha Liettyä, Tam-

Tamglass Tianjin premises





glass Production and R&D Vice-President, local manufacture facilitates cost effectiveness and offers clients products in the local currency - a crucial factor in terms of the Peoples' Republic's current stage of economic development. Tamglass had, however, been operating in the Chinese safety glass machinery market long before the inauguration of its new plant, with over 100 production lines already in operation.

Tamglass's market presence was visibly rewarded by virtue of the fact that the Tianjin plant began receiving orders immediately following its inauguration.

LOCALLY-MADE FURNACES

Tamglass Tianjin Co., wholly owned by Tamglass, manufactures flat glass tempering machines for quality-conscious glass processors in China. The company is also in charge of installations and after-sales services in China. The new plant follows the high-quality manufacturing standards of Tamglass.

Tamglass Tianjin's local personnel have been trained at the company's main plant in Fin-

Tamglass Tianjin Co. personnel land. The safety glass machine manufacturing of Tamglass Tianjin is based on an effective use of local subcontractors, focusing on quality control. According to Tamglass Tianjin General Manager Pekka Hukia, the strength of the plant is its ability to concentrate on continuous technology development and market-driven machine design.

The first Tamglass *GHF* flat tempering furnaces manufactured at Tamglass Tianjin have already been delivered to customers. The first customer for a Chinesemade GHF furnace was *Yin Tong*, a com-

pany established in 1989, occupying a factory area of 25,000 square metres, and with a workforce of about 1,000. The subsidiary of Yin Tong is *Tai Xin Glass*, which imported its first Tamglass horizontal furnace from Finland in 1997.

The main business of Yin Tong is the processing of furniture and architectural glass products. The thickness of the processed glass is 3 to 19 millimetres. The main products to be processed are clear and painted glass. The end products are mainly exported from Yin Tong to the United States, Europe and Australia.

*Sales Manager (China)
TAMGLASS - FINLAND

Information Service no. 104See coupon on the last page