

## Maplan to exhibit MTF100/40C machine at Chinaplas 2011

The Austrian injection moulding machine manufacturer Maplan will participate in Chinaplas, the 25th international exhibition on plastics and rubber industries, which is set to take place at Asia's largest exhibition centre, China Import & Export Fair Pazhou Complex, from 17 – 20 May 2011 in Guangzhou, China.



Vertical C-frame  
rubber injection  
moulding  
machine  
MTF250/40C



Horizontal  
machine  
MHF400/100

At the trade show, **Maplan** will highlight a **MTF100/40C** vertical C-frame rubber injection moulding machine with control **PC50touch**. The machine offers a clamping force of 400 kN and is one of the smaller machines in the C-frame series.

To achieve optimal accessibility, Maplan C-frame machines are built in a tie-bar-less design. Available clamping forces of the machine series range from 150 – 1,000 kN and shot volumes from 50 – 400 cm<sup>3</sup>. A typical industrial application for the C-frame machines is the production of small rubber parts. According to Maplan, the machine series is also aimed at suppliers of window seals for the automotive industry as well as hose manufacturing companies.

### Maplan machine portfolio

Maplan injection moulding machines are offered with clamping forces from 15 – 1,000 t and shot volumes of 5 – 30,000 cm<sup>3</sup>, as well as injecting from top, bottom or from a parting-line, in horizontal and vertical construction. The machines are used e. g. to produce parts for the automotive industry, components for the electrical industry, high-voltage insulators, seals for washing machines, seals for the oil industry, O-rings, rollers for conveyor belts for the mining industry, precision parts for medical technology, as well as other technical rubber parts. In addition, Maplan machines can also be used for the processing of solid- and liquid silicone as well as thermoplastic elastomers. The latest machine series **Maplan edition** offers European machine quality at a very good price/performance ratio, says the company.

The **PC5000touch** is an innovative control system for Maplan elastomer injection machines that is said to provide an outstanding performance level and is easy to operate.

A further technical highlight is the **FIFO** injection unit with the short nozzle system which guarantees a minimum of injection pressure drop during the injection process. Together with the Maplan **Cool Drive** technology these are the highest energy efficient injection machines in the market, says the company.

## **TFI injection unit for good compound uniformity**

The unique feature of the **TFI** injection unit is balancing temperatures and through a spiralling material flow, it achieves an even temperature distribution throughout the compound without shearing it. This creates a thoroughly homogenous state of the material with a high quality level, says Maplan.

## **Maximum power from minimum energy**

About one third of the energy consumption of rubber injection moulding machines is required for the hydraulic drive. The **Cool Drive II** drive unit based on constant volume pumps powered by servo-electric motors allows adjustment of the pump activity and with it the motor speed to the actual power requirement. Due to the process-inherent cyclic standstill of hydraulic loads this results in drive-related energy savings up to 70 %, a value confirmed by actual measurement.

## **Intelligent Temperature Control units**

Another 20 % of the overall energy consumption of the machines is caused by the temperature control units for the injection unit and the tools. According to Maplan, their power consumption was also reduced by up to 80 %. This was made possible by the intelligent, demand-driven control of the coolant circulation. As for the drive, the company designed an actively adaptive solution for this purpose and that has been filed for patenting. Along with the energy savings, the **ITC** units have also lead to considerable noise reduction and to an improved quality of the flow rate control, resulting in an optimised temperature distribution.

Maplan is a member company of the Starlinger Group, which was founded in 1835. With over 170 years of commercial success behind it, Maplan customers are assured of assistance by a quality conscious, technically innovative, highly stable manufacturing company. The company is a leading supplier of injection moulding machines for elastomer processing. Maplan says its machines are designed at a high technology level and with good performance.

### **Adresse:**

<http://www.gupta-verlag.com/rubber/news/chinaplas-2011/9754/maplan-to-exhibit-mtf100-40c-machine-at-chinaplas-2011>