

PRESS INFORMATION  
Kottingbrunn – Austria / August 2019



## **MAPLAN at K-2019**

### **Increased efficiency with ‘Injection Intelligence’**

**The trade fair presence of Austrian rubber injection moulding machine manufacturer MAPLAN, in Hall 16, Stand D 40, will focus on ways in which to upgrade existing systems in addition to their newly structured range of innovative machines. Both focal points are aimed at offering users economically interesting ways to increase their competitiveness at a time of economic uncertainty. This encompasses options such as affordably exchanging machine control systems, upgrading automation equipment and refitting energy consumption displays. A horizontal RAPID<sup>+</sup> 700 dual / 300 and a vertical ERGO<sup>+</sup> 6000 / 400 with comprehensive automation modules will be presented as examples of the new machine range, demonstrating MAPLAN’s new range as a purveyor of modular and 360° full-system solutions.**

This year, MAPLAN’s K-2019 presence is strongly related to the current uncertainties of further economic development, and thus to important customer industries for elastomer moulded articles, such as the automotive industry. In order to give affected businesses the tools to lower production costs and rather increase competitiveness, MAPLAN is putting forward a whole host of measures and installations to upgrade existing systems which can increase their service life or production efficiency through economically interesting investments. The central area of this year’s larger trade show booth will be dedicated to this topic.

It will be used to display and demonstrate a wide range of control and monitoring equipment, such as the upgraded version of the current MAP.commander C6 control system with the classification X6, which can be used to upgrade MAPLAN machines which

use the 4th generation of control systems and above (= from Y.o.C. 1995) in only three working days, thus allowing them to be connected to the internet or the company network. Retrofitting consumption meters for power, air and water to provide a basis for the introduction of cost-cutting measures is also possible.

### **Efficiency through automation: 'RAPID+' horizontal machine for mass production**

One of the two exhibited machines is representing the newly updated horizontal machine series, which will be available after K-2019 in clamping force ranges of 2000 to 4000 kN as part of the 'RAPID+' series. This machine is the RAPID+ 700 dual / 300 (3000 kN clamping force) with the energy-saving 'MAP.cooldrive' servo drive for the hydraulic system. On the injecting side, it features a 725 cm<sup>3</sup> MAP.fifo plasticizing unit with an injection pressure of up to 2,300 bar. HTV silicone is processed. A compacting device with hydraulic locking system is included for the silicone feed to the plasticizing unit. Elastic crown corks bottle caps are produced with a 16-cavity cold runner mould by OR.P. STAMPI s.r.l. The 16 cold runner jets are individually electrically controllable, meaning their filling properties can thus be adapted individually or in clusters, as necessary. For this specific model, the demoulding function in the mould is performed by a stripper plate. In order to be able to demonstrate various demoulding methods, the machine is also equipped with a servo-electrically driven double brush device (Fig. 1).

### **Ergonomic and productive: Fully automated production cell based on an 'ERGO+' vertical machine**

The second machine which is being exhibited is a hydraulic vertical machine closing from below from the new 'ERGO+' series, which comes in four clamping force ranges up to 4000kN. It is complemented by the 'ERGOMAX+' model series which follows in three sizes up to clamping forces of 9000 kN. In addition to the standard plate size, each clamping force size of both type series also features a model with an enlarged clamping surface. The common feature of all ERGO+ machines is the design of the clamping unit, which has been optimised for a minimum operating height, so that as a rule there is no need to add walk-on platforms or install the machines in foundation pits.

An ERGO+ 6000/400 with a clamping force of 4000 kN will be featured on the trade booth. It comes equipped with a 6000 cm<sup>3</sup> MAP.fifo plasticizing unit with an injection pressure of 2000 bar. The machine functions as an automated production cell when combined with an industrial robot, which takes on the task of manipulating the cavity plates between the machine and a demoulding and reworking station.

The multifunctional smartphone holder will be made with an 8-fold mould of AS-Zerspanungstechnik GmbH in combination with an 8-cavity cold runner model von PETA Formenbau GMBH and inscribed or decorated with a laser from Bluhm Systeme GmbH. after demoulding in a reworking station from WEAsystec GmbH. (Fig. 2)

### **System networking and status transparency through Industry 4.0 capabilities**

The depicted application possibilities show all current possibilities in the immediate machine environment when it comes to industry 4.0. The machine control system MAP.commander C6 forms the basis for this, which features a notably increased processing speed. It communicates with robots and peripherals via the OPC/UA industry standard interface and can also be connected with MES systems for data exchange purposes within company networks.

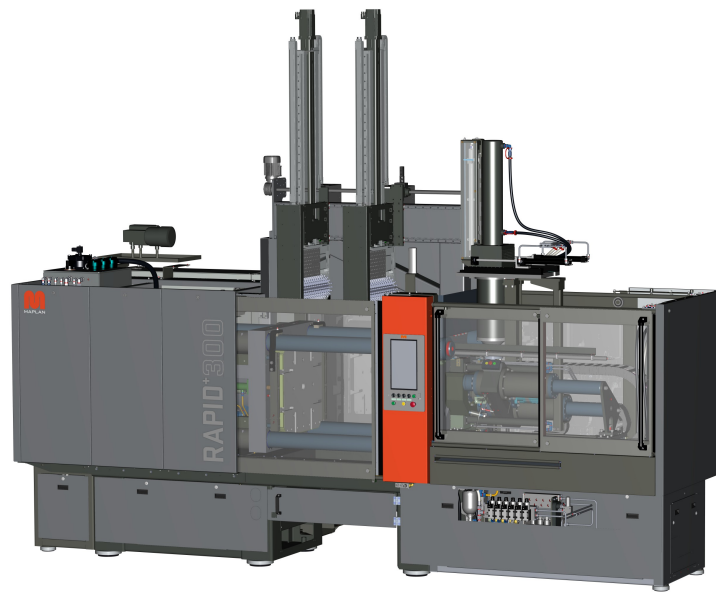


Fig. 1: MAPLAN exhibited machine 1: The hydraulic horizontal machine RAPID+ 700D/300

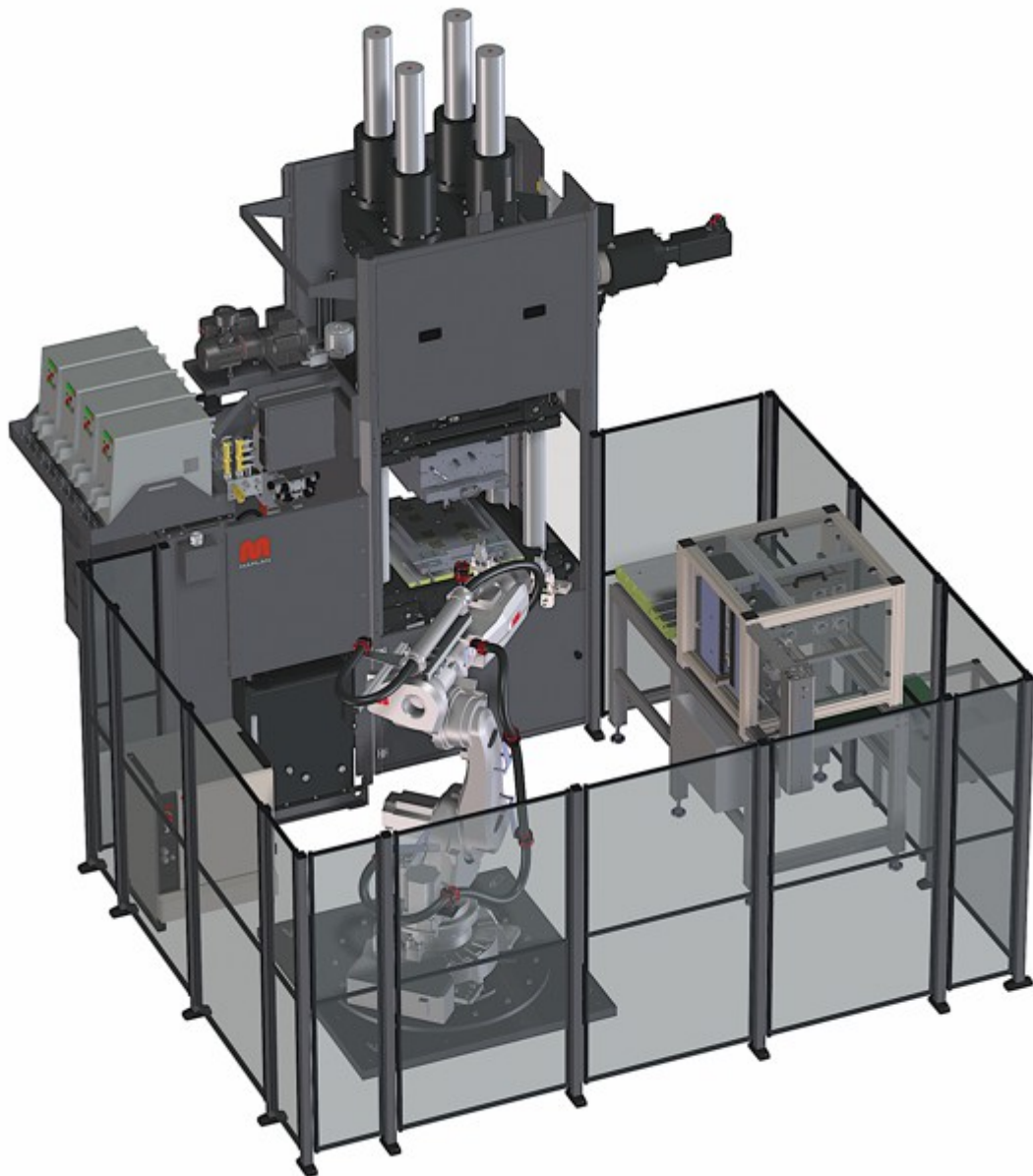


Fig. 2: MAPLAN exhibited machine 2: A production cell based on a hydraulic vertical machine from the new ERGO<sup>+</sup> series.