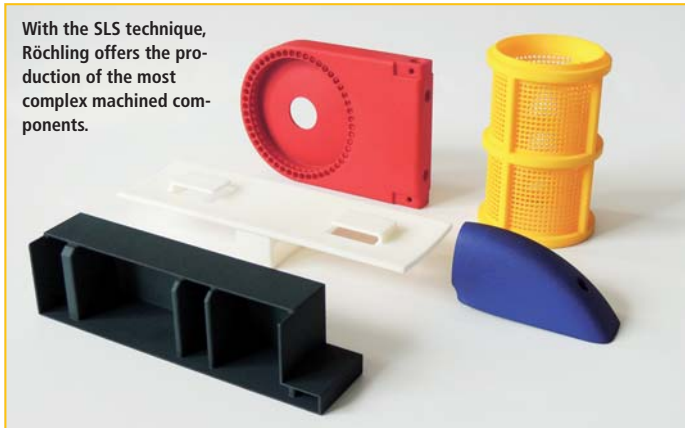


strength of the components as well as the reproducibility, says Röchling. The company is focusing on small-scale production of components, which could not be realised with the technologies available so far, such

as CNC machining or injection moulding. In addition, Röchling offers the production of prototypes. This enables adaptations to the design or functional tests to be performed relatively inexpensively.



With the SLS technique, Röchling offers the production of the most complex machined components.

Kaco applies new machine concept from Maplan

Since 2008, **Sabó Kaco Sealing Systems Co. Ltd.**, a subsidiary of **Kaco** – a manufacturer of sealing solutions for the automotive, engine, and machinery industries, has been manufacturing locally in the vicinity of Shanghai, China. The company's new production line in China has been configured for transmission components. These components need to be resistant to temperatures of about 150 °C and also to particularised media, so that functionality is guaranteed throughout the life cycle of the vehicle. The outer diameter of these components is between 100–300 mm. In all cases, the company deals with rubber-metal compounds and multiple injections of different materials and/or other inlay components. The range of very different diameters and the combination of 1K parts and 2K parts added high demands to the process reliability and performance of the elastomer machine. Therefore, Kaco sought a special machine

builder and met **Maplan**. The Austrian machine manufacturer delivered a specially configured **MTF200HF200/320editionS** with **PC5000touch** control from its factory's construction kit. This machine consists of an overhead injection unit with 200 cm³ and a horizontally arranged FIFO injection aggregate also with a volume of 200 cm³ and an injection pressure of 2,500 bar. The clamping force is 3,200 kN. The tool engineering from Kaco used on this machine is based on the so-called "Fast Double Shuttle". The particularly rapid shuttle is possible through parallel hydraulic movements of the machine, which can save up to 10 % of the cycle time, according to the manufacturer's data. A highlight results from the tool engineering from Kaco in conjunction with the clean injection of the Maplan injection units. The cold runner helps to optimally distribute the rubber and saves material. Clean injection into the cold runner is provided by

the **MTF200HF200/320editionS** with a movable horizontal injection unit. The unit drives without lifting. The injection unit compresses the material during injection in the cold runner. Due to the contact pressure, the rub-

ber can then sufficiently relieve tension again in the direction of the injection unit. In addition, the cold runner remains free of contamination and there is no residual rubber in the cold runner.



MTF200HF200/320editionS from Maplan

Silicone seals become tack-free faster with plasma treatment

With its room temperature crosslinking silicone foam sealants from the **Fermasil** product family, the Cologne-based German company **Sonderhoff Chemicals GmbH** offers a solution which saves energy and costs and makes an annealing furnace unnecessary. However, in certain production situations, the curing time can still be too long, if the parts have to be further processed immediately after the application of the foam, says the company. To achieve an even quicker tack-free time, the sealant application is immediately followed by a finishing treatment with plasma. The plasma nozzle is applied directly to the mixing head of the mixing and dosing system and is often needed for the pre-processing of plastic compo-

nents for improved adhesion. For foam sealants, the operator can use the **Fermasil-A-93-1-VP3** silicone foam system together with the **Fermasil-B-93** hardener in a mixing ratio of 1:1. Immediately after application to the part, the plasma nozzle treats the surface of the applied silicone sealing at a defined distance. As a result, the tack-free time can be improved by approximately 25 % with the same speed of application. If a lower speed is selected, the sealant actually becomes tack-free 40 % faster. The plasma treatment also has a positive effect on the mechanical sealant properties, says Sonderhoff. The gasket becomes generally more stable against mechanical shearing forces and shows an improved compression set.