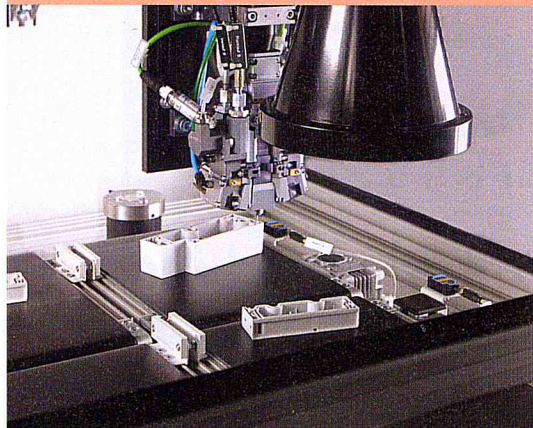




One exhibit, two innovations: with the Allrounder 820 S, the energy-saving servo-hydraulic drive concept and the long-fibre direct injection moulding were presented. (photo: Arburg)



Due to the optionally equipped automatic part recognition in the dispensing cell the fully automatic sealing process with Sonderhoff foam gasket and potting products is also possible in the case of a random parts feed. (photo: Sonderhoff)

Dispensing cell with automatic component recognition

Sonderhoff presented for the first time the newly developed Smart - DM 402 dispensing cell. It can be equipped with an image recognition system which automatically recognises different component sizes and positions on the transfer conveyor. Thus precise foam gasket or potting application of varying part contours and shapes are possible.

At the Engel Austria booth Sonderhoff presented the Mold'n Seal procedures, a system solution for intelligent process integration interlinking the Engel machine victory 1350/300 tech and the dispensing machine DM 402 from Sonderhoff Engineering. Mold'n Seal combines two formerly separated processes injection moulding and foam gasket application from the viewpoint of high efficiency and product quality in one production step.

www.sonderhoff.com

Potential for increasing efficiency

In terms of cost-effectiveness, the subject of lightweight construction is growing in importance, explaining why Arburg presented two relevant applications. The new "long-fibre direct injection moulding" process developed together with Süddeutsches Kunststoff-Zentrum SKZ in Würzburg, allows inline feeding of the fibres and melt, enabling longer fibres than ever before to be processed, so that, for example, even lighter injection moulded parts with thin walls and high strength can be produced. Further advantages of this process are that the fibre length, fibre content and material combination can be individually adjusted.

Particle-foam Composite Injection Moulding (PCIM) is a joint project with Krallmann and Ruch Novaplast in which a foamed component is combined with polymer for the first time using the injection moulding process. The two components are bonded together, so that there is no need for subsequent assembly steps and a finished part is produced in a single step. Production of composite parts made from particle foam and injection moulded plastic thus opens up completely new options in the fields of electric mobility, lightweight construction and insulation.

www.arburg.com

Styrenics in exterior applications

Styrolution has announced that automotive manufacturers and suppliers, such as Volkswagen (VW), Skoda and Magna, have selected Styrolution's Luran S SPF30 for various pre-coloured applications for automotive exteriors. The product utilises a new ultraviolet (UV) stabilisation technology and is said to provide major improvements in colour fastness and surface quality for components such as the front grills on the new Golf 7, mirror triangles on the VW Up and the front grills on the Skoda Yeti.

Luran S grades are based upon acrylonitrile styrene acrylate (ASA) copolymers and offer high thermal stability, good chemical resistance as well as good resistance to weathering, ageing and yellowing. Luran S is therefore used in applications with exposure to extreme conditions. Typical applications in the automotive sector include exterior mirror housings, front grills and other exterior trims.

www.styrolution.com

Lightweight construction

Lanxess focused on lightweight construction solutions for automobile manufacturing. One highlight was a natural gas car tank with an inliner made of a new polyamide 6 that is said to remain tough even in extremely cold conditions. As lightweight construction materials are also in demand under the bonnet, another highlight was a new polyamide 66 sump for cars with petrol turbo engines. It weighs around 1kg less than the corresponding steel component and 50% less than an equivalent aluminium design. Lanxess also showcased the opportunities that can be harnessed by making sumps using the highly reinforced polyamide 6 Durethan DP BKV 60 H2.0 EF with 60% glass fibres by weight. A transmission oil pan for the Audi R8 was on show.

www.lanxess.com