Technology and product news

Shorter curing times in the production of lightweight components

The St. Augustin-based German PU machinery manufacturer **Hennecke GmbH** has developed a new function for its **Streamline** series high-pressure metering machines for HP-RTM applications: the separation of the activator components by means of an individual additive line – the so-called **Variocast** technology. With this technology the company is now able to further reduce the mould holding times for HP-RTM components. This especially meets the demands of users within the field of lightweight automotive construction in series production.

With Variocast technology, the Streamline does not perform the metering according to a defined output but in accordance with a time-dependent function. In order to further reduce the curing time and thus the associated mould holding time, the injected mix can be time-dependently controlled. The advantage is that – depending on the level of the additional activation – the basic raw component has a specific start time and an individual curing time related hereto, which is significantly shorter compared to a fixed activation. Thanks to Variocast, mould holding times can be reduced for long shot sequences. This is an advantage particularly in the framework of large-scale production of lightweight components, for instance, in the automotive industry, says the manufacturer. Hennecke customers can include the equipment feature Variocast as an option during the purchase of a Streamline metering machine or they can also retrofit their Streamline machines with this feature. + online

Variocast technology enables the reduction of the mould holding times.

Fast-Cure PU foam seals for series production

The new **Fast-Cure** seals of the **Fermapor K31 FC** product family from **Sonderhoff Chemicals** are fast reacting two-component polyurethane foam systems with a very short tack-free time. According to the company, the seal surface is tack-free after only 2–3 min at room temperature so that the foamed industrial parts can be seamlessly processed in the subsequent production process. Fast-Cure foam seals have a low water absorption, and even some of them meet the protection class IP69K in mutual combination with the sealed part. Their good resetting ability (96–98 % under test conditions at 70 °C) is critical when a part is frequently opened and closed in order to maintain a constantly high sealing effect in closed position. Fast-Cure foam sealing systems are used wherever high production speeds are required by the industry as is the case in control cabinet or vehicle construction. For sealing automobile door modules or control cabinet panels made of metal or plastic according to the FIPFG method, **Sonderhoff Engineering** offers low-pressure mixing and dosing systems of the **DM 40x** series. The users may integrate these systems in a semi- or fully automatic manner into their production process either as a standalone solution or as a fully automatic production line. The Sonderhoff **Mold'n Seal** procedure allows for a process-integrated in-line production combining injection moulding and gasket application in a central place saving space. When applying a sealing to a control cabinet door, the linear robot moves the mixing head of the mixing and dosing system along the part contour. Regarding more complex three-dimensional parts with inclinations, the automatic sealing application may also be performed by an articulated-arm robot. Two configurations are possible in this regard: Either the robot grabs the part to be foamed and moves it below the mixing head of the dosing system or the mixing head is guided by the articulated-arm robot and precisely travels along the part contour for the sealing application. + online

An articulated-arm robot grabs the part to be foamed and moves it below the mixing head of the dispensing system.