



## Intelligent lightweight construction with PUR-CSM technology – Hennecke at Fakuma 2015

24th International Trade Fair for Plastics Processing from 13 to 17 October 2015 in Friedrichshafen, Hall A5, Stand 5217

Hennecke GmbH has been developing polyurethane processing machinery and equipment for over 65 years. At this year's Fakuma, the traditional company headquartered in Sankt Augustin will showcase new machine concepts and further developments in the area of state-of-the-art and established processing technologies. The focus of its trade show presence will be on intelligent lightweight construction in the form of an automotive door module made of ultra-thin sheet steel which, thanks to a CSM long-glass-fibre polyurethane spray coat, saves significant weight and extends the required range of properties.



InCar@plus door module with PU-reinforced outer skin

Hennecke is the specialist when it comes to substituting familiar manufacturing methods and processes using polyurethane. The best example of this is the PUR-CSM technology which has now become part of

a promising project by the ThyssenKrupp Group. Within the framework of ThyssenKrupp's technology offensive, InCar@plus passenger car door modules are for the first time reinforced with a locally focused polyurethane spray coat. This makes it possible to use very thin sheet thicknesses for the outer skin because the inevitable loss of dent resistance and buckling stiffness is effectively compensated by the PU coat. The properties of the hybrid material can be precisely adjusted by adding stiffening additives and by varying the number of sprayed layers. The aim is to significantly expand the lightweight potential for automotive body parts with improved performance because apart from dent resistance, acoustic and insulating features are enhanced.

Due to the characteristic spray pattern, precise spraying in selective areas is possible. With this, Hennecke's technology provides for a very uniform and reproducible PU distribution. The output is variable while production continues. On the one hand, this enables a rapid and homogeneous spray application over a large area, and on the other hand - by reducing the spraying distance and spraying discharge - locally focused spraying is possible. The self-cleaning CSM spray mixhead again shows the great potential of a PU spray technology for use in large-scale production.

The InCar@plus project takes advantage of ThyssenKrupp's many years of know-how in material development and manufacturing in order to significantly increase the efficiency in drive, body and chassis components - for example by intelligent lightweight construction.

But Hennecke GmbH has even more innovations to offer at this year's Fakuma, including advanced mixhead technology and additional impressive sample parts from traditional and cutting-edge polyurethane applications of all of Hennecke's product lines.

#### Further information and public relations

Marketing & Communications Dept.

Stefanie Geiger

Phone +49 2241 339 266  
Fax +49 2241 339 974  
e-mail [stefanie.geiger@hennecke.com](mailto:stefanie.geiger@hennecke.com)

Hennecke GmbH

Birlinghovener Straße 30  
D-53757 Sankt Augustin

Phone +49 2241 339 0  
Fax +49 2241 339 204  
e-mail [info@hennecke.com](mailto:info@hennecke.com)

[www.hennecke.com](http://www.hennecke.com)