# PRESS RELEASE

|  |
| --- |
| **Schuler AG**  Bahnhofstraße 41  73033 Göppingen  Germany  **Simon Scherrenbacher**  Corporate Communications  Tel.: +49 7161 66-7789  Fax: +49 7161 66-907  [Simon.Scherrenbacher@ schulergroup.com](mailto:Simon.Scherrenbacher@schulergroup.com)  [www.schulergroup.com/pr](http://www.schulergroup.com/pr) |

# The New Generation in Hot Stamping

## Schuler’s PCHflex allows economical production with high output performance, high part quality and maximum availability

*Göppingen/Waghäusel, August 20, 2015* – In the press hardening method, parts are heated to 930 degrees Celsius and then simultaneously cooled and hardened in the subsequent forming process. This gives them their extremely high rigidity. At the Waghäusel site today, Schuler presented its new PCHflex technology, a further development of the “Pressure Controlled Hardening” process. It allows a flexible and economical production of hot stamped parts with high output performance and consistently high quality – combined with maximum process reliability and availability.  
  
“More performance pays off,” says Schuler Managing Director Dr. Martin Habert. “In this way, costs and energy consumption per part are reduced.” PCHflex uses the fastest hydraulic presses with Dynamic Force Control and RingValve technology. With four parts per stroke (4-out mode), up to four million parts per year can be produced on one line.

By controlling pressure during hardening, the necessary press force can be distributed evenly over the part. The flexible bed cushion ensures – within the part and distributed over several parts – a uniformly high contact pressure, resulting in faster cooling. This ensures a reliable and optimized metallurgical transformation process. Moreover, the cooling time is only half that of conventional methods, while productivity and part quality are increased.

At the same time, with PCHflex, automobile manufacturers and suppliers are more independent of die and material fluctuations for process reasons; different manufacturing tolerances and sheet thicknesses can be compensated more easily. This reduces scrap as well as downtime and idle losses that would otherwise occur due to the reworking of dies, for instance.

## Conventional dies can still be used

The new PCHflex technology also has the benefit that existing conventional press hardening dies can be used on these lines. And conversely, dies designed for PCHflex technology can be used on conventional lines.

A US car manufacturer has placed an order with Schuler for four production lines to manufacture lightweight parts using PCHflex technology. In addition, options have been agreed for four further lines. “As a systems supplier, Schuler will not only be providing hydraulic presses and automation equipment, but also the roller hearth ovens and dies,” explains Dr. Martin Habert, Head of Schuler’s Hydraulic Division. “Our employees will also be helping launch production in the first few months.”

Schuler is the global market leader for press hardening equipment. Due to the growing requirements for passenger protection and the need to reduce CO2 emissions, demand is expected to grow in the coming years. A Hot Stamping TechCenter will therefore be put into operation at the Group’s main site in Göppingen, Germany, in early 2016. It will serve both as a demonstration center as well as a location for training and research on the topic of press hardening.

### Captions

Bild1.jpg: With its PCH technology (Pressure Controlled Hardening), Schuler has succeeded in halving cooling times for parts.

Bild2.jpg: The new PCHflex technology also has the benefit that conventional press hardening dies can be used on these lines.

*Please name Schuler as the photo source.*

***About the Schuler Group –*** [***www.schulergroup.com***](http://www.schulergroup.com)

*Schuler is the technological and global market leader in forming equipment. The company offers cutting edge presses, automation, dies, process know-how and services for the entire metal forming industry and lightweight vehicle construction. Its clients include car manufacturers and their suppliers, as well as companies in the forging, household equipment, packaging, energy and electrical industries. Schuler is the market leader in coin minting presses and supplies systems solutions for the aerospace, railway and large pipe industries. In fiscal year 2014, Schuler posted sales of € 1.18 billion. With around 5,400 employees, Schuler is represented in 40 countries and is a member of the Austrian ANDRITZ Group.*