Media Release

Cavity Pressure Sensors for More Transparency in Composite Production
Monitoring, open- and closed-loop control of RTM and SMC processes

Dusseldorf, July 3, 2013 - The large-scale repeatable production of lightweight structures is a key technology for the future mobility. The production of lightweight components and composite structural parts is a challenge for process monitoring and quality assurance. Kistler’s new special sensor for Resin Transfer Molding (RTM) is the key to optimizing the processing of crosslinking molding compounds for polymer lightweight applications in automotive and aeronautical engineering.

The sensor Type 6161AA... measures cavity pressure levels of up to 200 bar and is therefore ideal for industrial applications, particularly for monitoring, open- and closed-loop control of RTM processes, high pressure RTM (HP-RTM) and SMC (Sheet Molding Compound) processes involving pressure levels of up to 150 bar. Typical application examples are the recognition of filling errors or the control of cascade filling processes via several gates. Other applications for the new sensors include processing of low-viscosity polymers such as liquid silicone (LSR) and elastomers. In addition to pressure measuring, the sensor is also suitable for measuring the vacuum in the evacuated cavity. This way, this sensor records the condition of the relevant process.
The cavity pressure sensor type 6161AA... helps detect filling errors during RTM processing and facilitates the control of cascade filling processes.