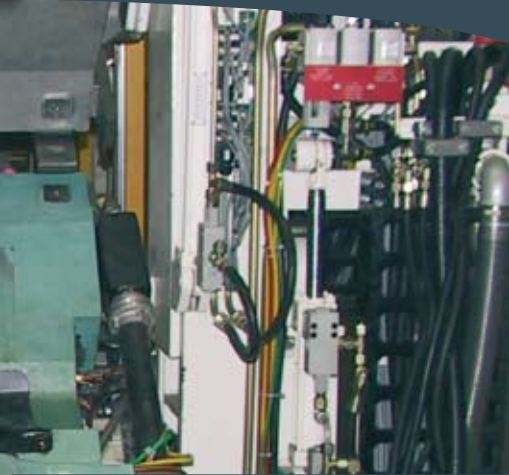


FLIR

APPLICATION STORY



A foam making machine for instrument panel production



The system mounted on a mobile rack

Quality assurance: FLIR Systems A-Series infrared cameras optimize motor vehicle dashboard production



Leading car manufacturers use the ThermoVision™ A-Series camera combined with a verification method from system integrator Automation Technology to eliminate the formation of cavities and air pockets in foam layers of motor vehicle instrument panels.

A dashboard consists of three material layers: the carrier, a significant foam layer and a surface from a plastic or leather composition or from genuine leather.

Intrusion of air or gas pockets into the foam can take place during production. When the dashboard, assembled and installed in the car, is heated by the sun, bulges and bubbles tend to become visible on the dashboard's surface. Not a nice perspective for the car manufacturer, his supplier or the car owner.

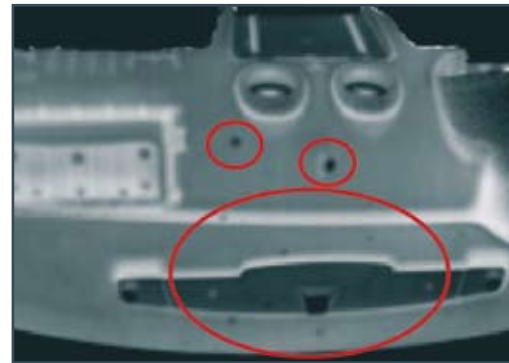
Manufacturing quality technicians know this problem and try to remedy by checking the instrument panels manually.

A consistent solution is offered by a combination of an infrared camera and appropriate verification and analysis software. The ThermoVision A-series, a fix-mounted infrared camera with an

uncooled, maintenance-free 320 x 240 pixel detector is equipped with the required imaging and measurement capabilities and connectivity options. The camera comes with a 45° lens to be able to see the entire instrument panel surface at a close distance.

The measurement solution DashboardCheck™ developed by German system integrator Automation Technologies works with image processing technology that is based on the difference in cooling cycles of the defective and error-free areas. The solution also gathers and stores data and evidence for further process optimization and quality assurance.

Leading car manufacturers are taking advantage from the solution or have ordered their suppliers to implement the system for their production.



Result image showing cavities in the foam



Result image showing cavities in the foam

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