

# Auto advances

Microcellular foam continues to advance, with one of the latest applications being door trim parts made by Johnson Controls Interiors (JCI) in Korea for Kia Motors.

According to Trexel, the project evaluations started in 2001 and have led to the introduction of the front and upper trims of the 2004 Kia models, with series moulding having started in October last year at Jintech, using a 550 tonne MuCell machine from Dongshin Hydraulics.

There has also been further progress with MuCell in Europe. Injection moulding machinery manufacturer Engel is working on a project that allows it to produce test mouldings in the MuCell microcellular physical foaming system with a high gloss surface, using the gas counter pressure technique. A transparent polycarbonate had been used for the trials, so Engel was able to show that there were no voids or other defects in the microcellular core.

Engel technical manager Peter Egger said in January this year that because the project is under evaluation with institutes and customers, he cannot yet give further information on the project. But Engel has continued sales of MuCell equipment. It claims to have recently supplied the largest MuCell plant worldwide, to a customer in the UK. The moulding machine has a clamping force of 1,700 tonnes and a screw diameter of 150 mm.

Krauss-Maffei has also sold a MuCell plant to Schröder Kunststofftechnik in Kierspe, Germany. Two plants using KM 175 and KM420 injection moulding machines were delivered to Schröder last year. Schröder uses the process for an automotive door lock moulding.

Schröder managing director Martin Witulski says it is the more economic production with shorter cycle time that appeals to the company, as well as reduced warpage tendency. Ticona also worked with Schröder on the project and has participated in MuCell seminars held by the company. As a result, interest has been shown in the process by Gardena in its moulding plant in Gerstetten. Gardena's production manager Werner Delle told *EPN* that trials made on Gardena's behalf at Schröder have given good results, but it is still too early to provide further details or whether Gardena will invest in the technology itself.

As well as interior parts for the Porsche Cayenne and the VW Tuareg boots, Polytec Riesselmann has produced an electrical box for the engine compartment of the VW Transporter T5. The company's production manager Josef Kranach says of his experience with the MuCell process "we obtain parts that are particularly free of warpage and with low stress with savings in both material consumption and weight". Based on the experience with the first equipment, Polytec Riesselmann is considering acquisition of another MuCell plant.

**David Vink**



**Schröder has used MuCell  
to produce a door  
lock moulding**