

Domat/Ems, August 21, 2018

PRESS INFORMATION

EMS-GRIVORY shines at the SPE Award Night

At the 18th SPE Award Night of the "Society of Plastics Engineers", EMS was one of the radiant winners of the evening. Three innovative applications made of EMS polymers were each nominated for a SPE Automotive Award and all three were prize winners!

At the 18th SPE Award-Night on July 6, 2018, the Society of Plastics Engineers again presented their coveted awards for the most innovative polymer applications in the automotive industry. Three applications using EMS materials were in the race for these highly prestigious awards.

Getting a grip

An exterior door handle made by the ITW Company using Grivory GVX and Grilon BG was nominated in the category "Body Exterior". This so-called "Flush Handle" is used for the Jaguar I-Pace and the Land Rover Velar models and is raised electrically from a standard position flush with the bodywork, to allow it to be used to open the door. Reliably functioning under varying climatic conditions in a temperature range from -40 °C to +80°C was the central requirement on this challenging handle mechanism. A special kind of glass-fiber reinforcement provides Grivory GVX with high dimensional stability and extremely low warpage – both prerequisites for functioning of the tolerance-critical components. The complex interior systems and electronics of the handle are reliably protected by the housing made of Grilon BG.

A hot job

The second component was a universal turbo actuator made by the Hella Company using Grivory HTV. This completely all-plastic solution illustrates development of the second generation of turbo-actuators for control of variable turbine geometries and allowing weight and assembly costs to be saved compared to the first generation. With a high distortion temperature of 280 °C (HDT/A), Grivory HTV provides the basis for the required high stiffness and strength values. The robust polymer component even makes a 35 °C higher working temperature and transfer of even higher torque values possible, allowing higher working temperatures of the engine and higher charging pressure to be achieved. The two shells of the actuator are laser-

welded - a special colour adjustment was developed to make this possible. In visible light the colour appears black, in the relevant wave range of 700 – 1100 nm during laser welding however, it is transparent.

Sitting made easy

The sport seats in the new Opel Insignia GSI model were the third application using EMS material. Together with the Lear Corporation and the automotive manufacturer OPEL, based in Rüsselsheim, Germany, EMS-GRIVORY developed the back support and seat shell for a sports seat made of Grivory GVL HP. The special long-glass fiber reinforcement of the material forms a fiber skeleton during the injection-moulding process, thus significantly increasing the notched impact strength values and allowing clearly higher energy absorption in the case of a crash. Compared to a similar metal version, a massive weight saving of two kilogrammes was achieved. With comprehensive CAE calculations and technical support during processing, EMS-GRIVORY made realisation of this very challenging application possible.

EMS comes out tops

Based on these three innovative components, EMS was entitled to have justified hopes of receiving an award, but it was still a surprise when all three applications were prize winners! The exterior door handle made of Grivory GVX and Grilon BG took third place in the category "Body Exterior", while the universal turbo-actuator made of Grivory GTV was awarded first prize in the category "Electrical/Optical Parts". The highlights however, were the back support and seat shells of the sport seat made of Grivory GVL. The intelligent and extremely innovative use of plastics in this highly complex application completely convinced the jury members and the part received not only the "Innovation Award" in the "Body Interior" category, but also the "Grand Innovation Award" for excellent innovation in all categories.

EMS-GRIVORY is extremely proud of this great honour. The awards are a major incentive to continue to surprise the plastics world with high-performance polymers and innovative solutions in future.

* * * * *

*Pictures / Copyright: EMS-CHEMIE AG
Reprint free of charge if source is named*



*Seat shell and back support made of
Grivory GVL HP; at right, the complete
seat.*



*Exterior door handle made of Grivory
GVX and Grilon BG.*



*The door handle is moved electrically
from the outset position flush with the car
bodywork, to the use position where it is
used to open the door.*



Universal turbo-actuator made of Grivory HTV.



Contact for technical inquiries

Christian Kruse
Head of Application Development
EMS-GRIVORY Europe
Tel. +41 81 632 71 61
E-Mail: christian.kruse@emsgrivory.com



Contact for the press

Andreas Müller
Head of Communication
Tel.: +41 81 632 72 50
E-Mail: andi.mueller@emsgrivory.com