

Domat/Ems, March 18, 2015

PRESS INFORMATION

Press Release VDI

EMS named “Supplier of the Year” by General Motors for the fifth year in succession

The German car maker Opel relies on high-performance polyamides from EMS-GRIVORY for various applications – and has now presented the Swiss supplier with its “Supplier of the Year” award for the fifth time in a row. This recognises the outstanding service provided by the polyamide specialist.

On March 5, 2015, EMS-GRIVORY was awarded an unprecedented honour. For the fifth year in succession, General Motors has given the Swiss manufacturer of high-performance polyamides its prestigious “Supplier of the Year” award. EMS-GRIVORY received the award again not only for being a reliable supplier, but also – and even more – for the expert support it provides as a development partner and problem solver in dealing with the highly complex components made by General Motors suppliers. The deciding factor for General Motors was the consistent effort put in by EMS-GRIVORY and the suppliers to develop measures for optimising costs and weight. Information about this cooperation will also be provided in a joint presentation to be given by Opel and EMS-GRIVORY at the VDI Conference on March 18, 2015.

VDI Plastics in Automotive Engineering

Joint presentation by Opel and EMS-GRIVORY on “Metal replacement with high-performance polyamides in Opel vehicles to reduce weight and costs”

VDI Conference, Mannheim
March 18, 2015, at 5.40 p.m.,
Mozartsaal

A wealth of experience

For more than 40 years, EMS-GRIVORY has been making a major contribution to developing modern vehicle components of the highest quality for the automotive engineering industry. It was one of the first polyamide producers to recognise, more than 20 years ago, the potential for metal replacement in vehicles, and in recent years it has consistently focused its product portfolio, development capability and technical services on this area. Thanks to this experience, EMS-GRIVORY is able to support its partners from the early stages of a project with feasibility studies and design concepts. Finite element analysis, tailored to the

properties of the materials in question and the intended purpose, is used to optimise component design.

A broad range of applications

Polyamides from EMS-GRIVORY are used in countless applications in all Opel models. Thermoplastics based on polyamides 6 and 66 are used in interiors for the seat adjustment levers, air vents and speaker covers. Yet Opel also relies on EMS polyamides for technically more complex components, the central clutch operator being one such example. When the vehicle changes gear, this component interrupts and reconnects the power flow between the engine and the gearbox. This requires a material with excellent wear properties, even at high temperatures. Whereas the housing of the central operator was originally made of die-cast aluminium, nowadays a polyphthalamide such as Grivory HT is used. This material is characterised by its high rigidity and strength, and its outstanding resistance to high temperatures and chemicals.

The central clutch operator illustrates the advantages of metal replacement. Using Grivory HT brings significant benefits in terms of cost, weight and design compared with die casting solutions – without compromising on functionality.

Strong performance

Another example of the use of EMS polyamides in complex components at Opel is the new generation of adaptive front lights, the AFL (Adaptive Forward Lighting) system, used for example in the Opel Insignia. AFL uses moveable lenses to enable the light to be dynamically adjusted to suit the road. The required manoeuvrability in the headlight unit, which weighs about 0.4 kg, is provided by a swivelling module made of Grivory HT1. This component is exposed to temperatures of up to 150°C for long periods. To guarantee precise angling of the light cone, the swivelling module must not become deformed, nor must any vibrations impair the functioning of the lighting system. Grivory HT1, with its extremely high rigidity, durability and heat resistance, offers the required level of performance for this kind of demanding application where tolerances must be kept to a minimum.

Everything under one roof

The main focus when using polyamides in vehicle manufacture is on cutting both weight and costs. Often, however, other benefits such as function integration, a high-quality surface finish or acoustic properties may be the deciding factor. With its efficient application technology centre, EMS-GRIVORY is able to offer its customers a service package that covers the entire development process, from the initial concept to series production. This complete package of polyamide expertise was one of the main factors that led to the company being named “Supplier of the Year” by General Motors for the fifth time in succession.

* * * * *

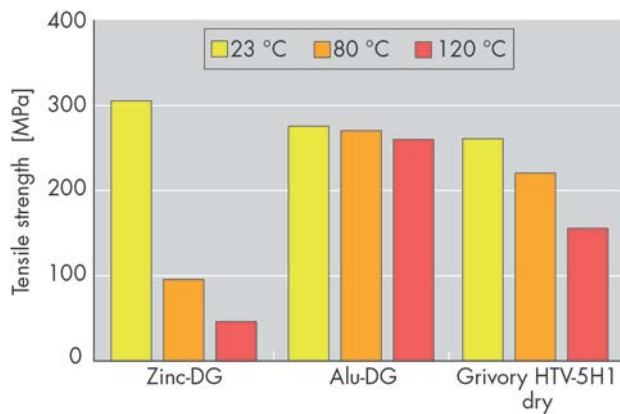
Images / Copyright: EMS-CHEMIE AG
Reprint free of charge if source is named



The central clutch operator from the Opel Corsa, made of Grivory HT.



Adaptive headlight
Swivelling frame and lens-holder made of Grivory HT.



Tensile strength of Grivory HT at high temperatures compared with die-cast metals (ISO 527).



Contact for technical queries

Christian Kruse

Vice President Application Development

Phone: +41 81 632 71 61

E-mail: christian.kruse@emsgrivory.com



Contact for the GM AWARD

Christian Morf

Vice President Sales & Marketing

Phone: +41 81 632 64 33

E-mail: christian.morf@emsgrivory.com