

# News Release



## Sitting in comfort without metal

➤ **At the K show 2010: New automotive seating technology from Faurecia and BASF**

Together with Faurecia, one of the world's largest automotive suppliers, headquartered in Nanterre France, BASF has developed a car seat back that makes use of new plastics technologies. Third partner in the development team is Performance Materials Corporation (PMC) located in Camarillo, California, U.S.A. The latest prototype was showcased at the Los Angeles Motor Show at the end of 2009. The concept seat has now been further optimized and is marketed by Faurecia as the SUSCO 1.5 (abbreviation for sustainable comfort). It will be exhibited at BASF's stand (C21/D21, Hall 5) at the International plastics trade fair K 2010 in Düsseldorf, Germany in October. The automotive supplier projects that the first serial seats will hit the road in about four years.

### **New plastic – new technology – new seat**

BASF has developed a new Ultramid® (polyamide) grade specifically for this project: The new technology replaces the existing metal structure by implementing a one-piece plastic part that minimizes foam and trim. The seat back weighs about 20% less than conventional car seats and is approximately 30 mm thinner, making a major contribution to achieving a lightweight construction. The seat also takes advantage of the design possibilities that plastic offers,

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combining comfort with a modern thin-walled, high-end component affording greater design freedom and improving the feeling of space.

In this project, expertise in material and technology converges with know-how about seat construction and production. When it comes to reinforcement with continuous fibers – as with other sophisticated automotive part constructions -, simulation of the crash behavior is the first step in any development process. BASF was able to assist Faurecia by deploying ULTRASIM™, its simulation instrument. Specifically for this project it was expanded by the material data relating to continuous fiber reinforced plastics and can now reliably predict the crash behavior of components having a very high (fiber) anisotropy and fiber content.

The seat is a veritable breakthrough in the construction of lightweight seats and is now ready for serial production. The new Ultramid type employed here has a specially selected mechanical properties, giving it tailor-made characteristics for being combined with the continuous-fiber structures. “BASF’s new technology has helped us push our seat technology into the next generation of automotive seating”; said Thilo Ludewig, Faurecia Vice President Research & Development.

The new technology can also be employed for other structural components.

**Figure caption:**

By using a new composite technology, Faurecia, BASF and PMC succeeded in developing a plastic automotive seat back that consist of almost no metal, and distinctly less textile or foam. It has been developed by using a new Ultramid grade from BASF’s polyamide range and BASF’s broadly applicable ULTRASIM simulation tool for the prediction of crash behavior, that has been adapted to the simulation of continuous fiber materials.

**Faurecia**

Faurecia is one of the world's leading (#6 worldwide) automotive equipment suppliers with four key Business Groups: Automotive Seating, Emissions Control Technologies, Interior Systems and Automotive Exteriors. In 2009, the Group posted pro-forma sales of 11.3 billion euros, including Emcon Technologies and Plastal

Germany. It employs 62,000 people in 32 countries at 200 sites and 33 R&D centers. Faurecia is listed on the NYSE Euronext Paris stock exchange. For more information, visit: [www.faurecia.com](http://www.faurecia.com)

### **Performance Materials Corp**

Performance Materials Corporation (PMC) is an innovative developer and manufacturer of Continuous Fiber Reinforced Thermoplastic (CFRT<sup>®</sup>) materials, components and sub-assemblies. These compounded materials offer high strength and stiffness to weight ratios and can be used to improve structural performance in various applications. PMC has business units which focus on basic materials, industrial, medical, recreation, computing and automotive applications. PMC is privately held.

To get “the Material Edge,” visit [www.performancematerials.com](http://www.performancematerials.com).

### **BASF**

BASF is the world’s leading chemical company: The Chemical Company. Its portfolio ranges from chemicals, plastics and performance products to agricultural products, fine chemicals and oil and gas. As a reliable partner, BASF creates chemistry to help its customers in virtually all industries to be more successful. With its high-value products and intelligent solutions, BASF plays an important role in finding answers to global challenges, such as climate protection, energy efficiency, nutrition and mobility. BASF posted sales of more than €50 billion in 2009 and had approximately 105,000 employees as of the end of the year. Further information on BASF is available on the Internet at [www.basf.com](http://www.basf.com).

CFRT is a registered trademark of Performance Materials Corporation

Additional information on Ultramid<sup>®</sup> (PA) resins from BASF can be obtained by sending an e-mail to the address [Ultraplaste.infopoint@basf.com](mailto:Ultraplaste.infopoint@basf.com) or by calling the telephone number +49 (0) 621 60 78780

A press photo is available at [www.basf.com/pressphoto-database](http://www.basf.com/pressphoto-database) under the keyword “Plastics” or by entering the search term “Ultramid”. This text and the photo will also be available shortly in the plastics press archive of BASF at: [www.basf.de/plastics/pressreleasese](http://www.basf.de/plastics/pressreleasese).