

International Recognition: Premium AEROTEC wins the JEC Innovation Award 2016 for its CFRP door frames

Augsburg/Paris, 15 March 2016 – A top prize for a pioneering CFRP component: At the JEC Composites trade show in Paris, aerostructures supplier Premium AEROTEC was once again awarded the JEC Innovation Award – this time for the CFRP door frames for the A350-1000 series. The highly celebrated prize is awarded annually for the most innovative new development in the field of fibre composite technology. In 2009 Premium AEROTEC won it for the CFRP cargo door for the A400M.

This year a high-calibre international jury honoured Premium AEROTEC – together with our partners in this project, the Fraunhofer ICT-FIL, Airbus Operations GmbH and Coriolis Composites GmbH – for the development and production of these new aircraft door frames. This technical innovation was made possible through consistent further development of CFRP production technology – an initiative funded by the Federal Ministry for Economic Affairs and Energy.

The key component of the production process is the automatic placing of the CFRP strips. The use of robots ensures the necessary placement quality and position accuracy. This process was developed in collaboration with Airbus as well as with Coriolis as the supplier for the automation technology. In this project Fraunhofer functioned as the link between industry and research. Compared to conventional door and gate frames made of metal, the CFRP frame construction not only saves on costs but also on weight.

“This award once again underscores how important it is to continuously develop use of materials and production technologies. For us, this highly innovative production process is another important building block in efficient CFRP manufacturing, optimised for lightweight production,” said Joachim Nägele.

Thanks to this new technology, this is the first time that a door frame structure made from CFRP has been used in an Airbus civilian aircraft. Each A350 aircraft has a total of eleven door and gate frames, six of which are currently made from CFRP materials. Irrespective of the material used, each frame comprises five individual components: two so-called frames, a lintel, a shear plate and a sill corner.

These individual components are manufactured by Premium AEROTEC in Augsburg. In Varel the components are then combined into a fully assembled frame, which is subsequently built into the relevant fuselage shell and section in Augsburg and Nordenham.

Premium AEROTEC generated revenues of around 1.9 billion euros in 2014. The company's core business lies in the development and production of metal and carbon fibre composite aircraft structures, as well as the associated equipment and production systems. The company has manufacturing sites in Augsburg, Bremen, Nordenham and Varel in Germany, as well as in Braşov in Romania. For further information see: www.premium-aerotec.com.

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