CASE STUDY

TECHNO COMPOSITES

The better solution.

Roof panels for the Sprinter Lighttrain in the Netherlands

For the Sprinter Lighttrain made by Bombardier, stainless steel sliding blocks were glued into the GRP profiles (A2 bonding) for high rigidity. Vertical tear resistance of 2,772 N was required for every single adhesive bond. This requirement was far surpassed in practice.

The roof panel, which has the appearance of a 3-dimensional component from a single cast, consists of pultruded GRP profiles and 3D moulded parts, partly combined with stainless steel components. 3D-printed components may also be used.

GRP-based design solutions for commercial and railway vehicles

Your systems supplier for the transport sector.

Composite materials are particularly popular in the transport sector due to their special technical and physical properties. TC has been working with renowned European manufacturers of railway vehicles, buses and lorries for many years. We use glass fibre-reinforced plastic (GRP) profiles to develop custom products that meet the most stringent requirements in terms of quality, safety and cost-effectiveness.

Composite materials in the transport sector:

- Lightweight for minimal energy consumption
- Freedom in design for customised shapes
- High strength and rigidity, high breakage resistance
- Assessable fire protection properties
- High-quality, paintable surfaces
- Universal for radio waves

IRIS™ Certification

Certified for bonding in accordance with

DIN 6701

Class A1

Bonding in accordance with DIN 6701 (Class A1)

We have been continuously expanding our expertise in the field of adhesive technology for years. A number of European Adhesive Engineers (EAE, DVS-EWF 3309), European Adhesive Specialists (EAS, DVS-EWF 3301) and European Adhesive Bonders (EAB, DVS-EWF 3305) have been trained in the process.

Cutting-edge technology, vast expertise

When manufacturing pultruded profiles, the fire protection properties can be adapted to your requirements. We produce extremely high-quality surfaces that can then be painted for a textured or smooth finish. We machine the profiles with high precision using our modern 5-axis CNC machinery.

Certified quality management

Every TC component is developed in accordance with the applicable requirements and standards. We conduct careful testing and documentation as a matter of course. Certification according to DIN EN ISO 9001:2015 confirms that our quality management is sound. We also hold IRIS certification in accordance with ISO/TS 22163:2017 for our customers in the rail vehicle sector.

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