# CASE STUDY



The better solution.



# Airflow system for the Desiro ML/ÖBB, Austria

Having developed and manufactured the airflow system for the Desiro ML Mittelrheinbahn and the Desiro ML Brussels, TC is now also producing the airflow system for the Desiro ÖBB. The respective systems are based on pultruded profiles made of fibre glass-reinforced plastic. For the air ducting system, the fire protection properties of the GRP profiles were set in such a way as to meet the requirements in accordance with EN 45545.





### Air duct rear panel

The real panel of the air duct is made of a pultruded GRP profile into which specially painted aluminium dividers and stainless steel connectors have been riveted. The GRP cover can be fixed later used inbuilt sliding blocks. A glued-in aluminium separator supports the air duct.



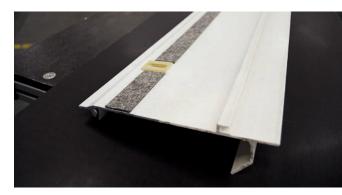
## **Stainless steel cover**

As a supplier of systems, TC naturally also offers stainless steel covers in different designs. Ready to install and rattleproof.



## **3D airflow systems**

As a supplier of systems, TC also provides 3D polycarbonate airflow systems, which are enhanced with air baffles, sealing strips and painted aluminium brackets.



## Air duct rear panel

The air duct rear panel is prefabricated in different lengths. The GRP profiles, which are based on polyester resin, have low thermal conductivity.



**Pre-defined load carriers** 

The finished components are sorted into special load carriers and delivered. This minimises the effort of incoming goods inspections and picking on the customer side.

# 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
- Good thermal insulation







# 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.

#### **Techno-Composites Domine GmbH**

Dieselstraße 34 | 49716 Meppen | Germany T +49 5931 99748-0 | info@techno-composites.de

# TECHNO-COMPOSITES.DE