

Press Release

Voith Turbo GmbH & Co. KG
Alexanderstraße 2
89522 Heidenheim, Germany
Phone +49 7321 37-8497
Fax +49 7321 37-7110
www.voith.com

Rail Vehicles: Voith presents new Vehicle Head Concept Galea at InnoTrans 2012

September 2012

The variable vehicle head concept Galea combines supreme flexibility with low weight, low energy consumption and maximum safety standards. Galea can be viewed at InnoTrans 2012 in hall 1.2, stand 101.

With Galea, Voith has developed a vehicle head for rail vehicles that meets all demands on fire protection, noise and heat insulation, as well as collision safety. As front ends are subject to extreme loads during accidents, special structural and energy absorption elements are being used.

The Galea head can be easily adapted to the vehicle geometry and incorporates a high percentage of fiber composite plastics (FVK). As a result, it weighs significantly less than comparable front ends. Minimized wheelset loads and lower wear on train and rails make it extremely energy-efficient and eco-friendly. Apart from enabling lightweight construction, fiber compounds allow the creation of complex geometries and freeform surfaces. As a result, aerodynamic exterior contours can be produced more easily and cost-effectively. Private and regional transport operators can thus retain their brand identity and differ distinctly from their competitors. Galea can also be adapted individually to any vehicle frame.

Integration of single absorption elements into existing vehicle concepts is also possible: for example A-pillars made from glass fiber, couplers with glass fiber collapsible tubes or crash absorbers.

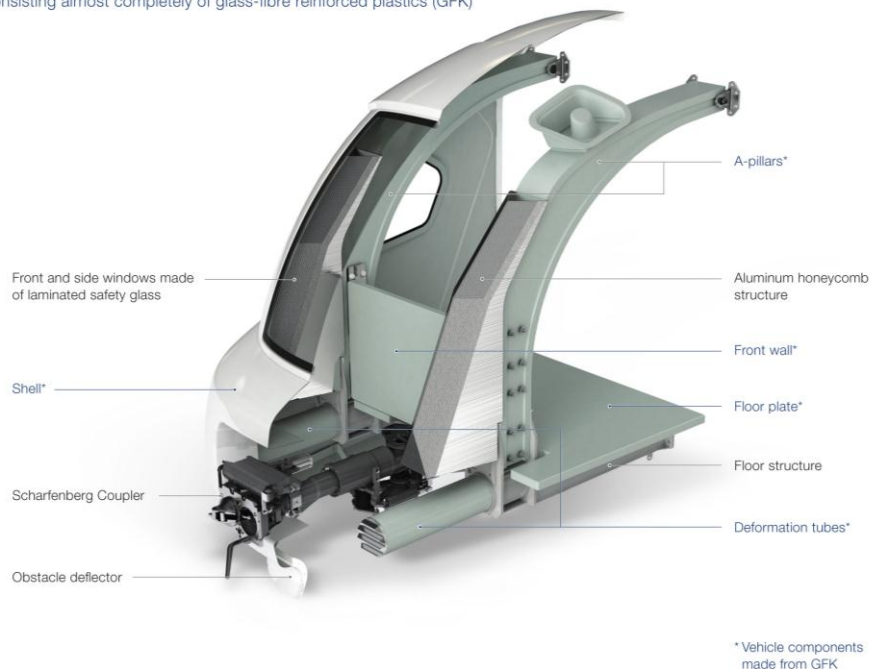
Voith Turbo GmbH & Co. KG
Alexanderstraße 2
89522 Heidenheim, Germany
Phone +49 7321 37-8497
Fax +49 7321 37-7110
www.voith.com

Vehicle heads of the Galea series are suitable for trains with speeds of maximum 200 km/h.

Page 2
Press Release
September 2012

Fibre composite vehicle head Galea

Consisting almost completely of glass-fibre reinforced plastics (GFK)



Vehicle Head Galea

Voith Turbo, the specialist for hydrodynamic drive, coupling and braking systems for road, rail and industrial applications, as well as for ship propulsion systems, is a Group Division of Voith GmbH.

Voith sets standards in the markets energy, oil & gas, paper, raw materials and transportation & automotive. Founded in 1867, Voith employs almost 40 000 people, generates €5.6 billion in sales, operates in about 50 countries around the world and is today one of the biggest family-owned companies in Europe.

Voith Turbo GmbH & Co. KG
Alexanderstraße 2
89522 Heidenheim, Germany
Phone +49 7321 37-8497
Fax +49 7321 37-7110
www.voith.com

Contact:
Susanne Speiser
susanne.speiser@voith.com
Phone: 49 (0) 7321 37 84 97

Page 3
Press Release
September 2012