

## **Double decker trains** Solutions

# Lightweight and high-quality components for double-deck trains



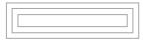
#### INNOCAB®



### Solutions

We offer a broad and high quality product portfolio of components for double-deck trains. Benefit from IRIS (ISO/TS 22163) certified processes with high production capacity for the diversity of our various solutions. With our in-house engineering we provide amongst flexibility, many years of experience and industry knowledge to create new concepts, perform structural calculations and support quality checks on new standards.

#### **COMFLOOR®**





#### Front cab

We offer **INNOCAB® Advanced**, a self-supporting and **INNOCAB® Plus**, a nonself-supporting, GRP sandwich cabin. Both are lightweight, ready-to-install front-end cabin units with tight tolerances and superior impact resistance.

#### Floor

For high standard floor systems, we provide our longproven heated floors **COMFLOOR® Advanced** and **COMFLOOR® Plus**. Latest developments include new unheated floors: the very stiff and acoustic optimized **COMFLOOR® Entry** and our very light **COMFLOOR® Basic**.



#### Intermediate floor

For structural Intermediate floors, we offer our **XBODY® Interdeck**. It provides high stiffness, acoustic insulation and load capacity along with reduced weight.



#### Staircase

Our new and innovative solution **INFIT® Lightstair** provides a light, costoptimized and functionintegrated stair system designed for ease of installation in any kind of train.













Lightweight construction

Sandwich technology

Optimized thickness

Fire protection

**XBODY**<sup>®</sup>



#### Separation walls

Within our **INFIT®** Separation Wall segment, we provide separation walls with different sandwich constructions. The combination of low weight, acoustic insulation and customized function integration makes these walls the ideal choice for separating specific areas-from small cabins to entire compartments.

#### **Driver desk**

INNODESK- Our modular and structural driver's desk, made of a lightweight combination of materials, offers a multifunctional structure and thereby reduces secondary costs. This is achieved by eliminating the need for an additional metal support.



#### **Electrical box**

For electrical components like batteries, transformers or compressors we provide our housing box: **eCASE**. With this lightweight and modular solution you gain the perfect opportunity to secure the critical parts



#### Claddings

**INFIT® Cladding-** We offer a wide range of claddings, including roof and underfloor claddings as well as flaps. Furthermore, we offer claddings for driver cabs, entrances, staircases, passenger compartments and enclosures for control cabinets.



#### Service & Repair

We repair GRP material and all kinds of laminate. Our service includes complex repair including e.g. cutting, grinding and painting. Our flexible offer permits maximum customer satisfaction in time and costs.



#### Spare parts

For spare parts our service includes for example rebuilds, modifications and adaptations. These parts with customized finishing options can be included in the quantity from the beginning or can be subsequently produced again in (small) series.





Precision



Water repellent



Thermal insulation



Tolerance



Acoustic insulation





3A Composites Mobility AG Park Altenrhein CH-9423 Altenrhein Switzerland +41 71 858 48 48

3A Composites Mobility S.A. Inwestorów 6 39-300 Mielec Poland +48 17 773 78 00

www.3acompositesmobility.com