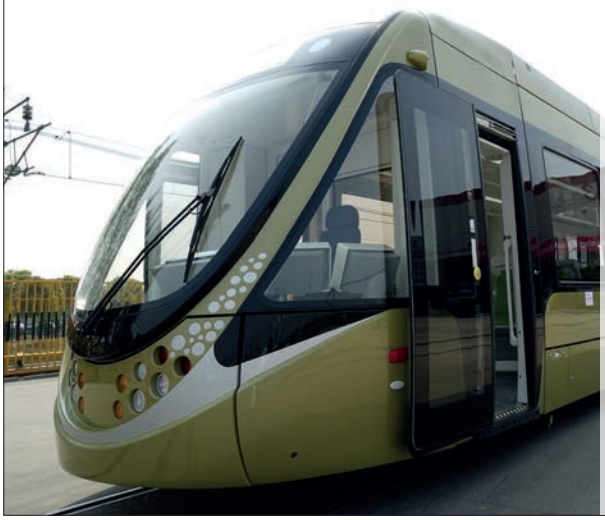
Bayblend® Transport Light Rail Tram Design to New Heights

Stylish rail interiors - efficient manufacturing using thermoforming



Project:	Suzhou New District trams
Manufacturer:	CSR Nanjing Puzhen
Application:	Interior wall panels of railway trams
Market segment:	Transportation
Product:	Bayblend® FR3030 (PC+ABS blend) Thickness: 3.5 mm

Bayblend®

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As population growth and urbanization fuel reliance on mass transit, manufacturers are continually looking for ways to improve this important transportation mode. Reducing energy consumption and environmental impact, while maximizing safety and passenger comfort, are objectives at the pinnacle of modern transportation technology and development. Even the interiors of railroad, subway and trolley cars have changed significantly in recent years. What was uniform and often uncomfortabel has become stylish and highly functional, with state-of-the-art spacious aisles and comfortable seating. In addition rail operators are also discovering interiors for their own purposes, using special colors and surface structures to ensure their vehicles convey a distinctive image to their customers.

China South Railway Nanjing Puzhen had these ideas in mind when implementing new designs for low-floor trams in the Suzhou New District.

The material that meets CSRs needs: Bayblend® FR
Bayblend® FR 3030 is a flame retardant PC+ABS blend sheet which met the requirementes of China South Railway. The material was selected by the engineering department of China South Railway for the interior wall paneling of its new metro line number 1 tram design.

Bayblend® FR sheets not only provide the light weight that is desired for energy savings when operating railway vehicles, but also have the characteristics that are necessary for passenger comfort and safety. The material offers maximum safety for passengers. It is nearly unbreakable and can stand up to vandalism. The thermoplastic sheets pass all flame and smoke safety requirements, and provide excellent durability.

Another feature of the sheets are the excellent thermoforming properties. Thermoforming offers significant cost advantages for small to medium production runs when compared to injection moulding, sheet metal and aluminium components, PU or SMC systems. It is a highly cost-effective production process where thermoplastic sheets are formed under high temperatures.
Savings compared with other manufacturing techniques can go up to 30% or even 50%, depending on the dimensions and the quantity or parts. Particularly the lower tooling costs are significant.

Choose your Style
The blend sheets are available in appealing colors, designs and surface structures, making them beneficial for state-of-the art interior designs.

Know-how and Experience
Our mass transit experience, along with the design, safety and energy-efficiency capabilities offered by the thermoplastic sheets, helped China South Railway Nanjing Puzhen achieve the sleek and safe rail trams it envisioned.

Traveling in style with Bayblend®

Picture source: China South Railway Nanjing Puzhen

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Covestro Deutschland AG
Business Unit Polycarbonates
51365 Leverkusen
Germany

www.sheets.covestro.com
sales.sheetsEMEA@covestro.com