

Trispel GmbH

Target Group-Oriented Individualisation of Rail Vehicles through the Use of Innovative Film Solutions

The discussions on the heterogeneity of society as well as the associated consequences have been increasing in recent years.

Not infrequently, these discussions are a matter of political controversy. However, one undeniable fact is that the associated diversity does not stop at the everyday requirements of passengers of public railway transportation. Manufacturers and operators of public transport, who see this social development as a big opportunity, aim to retain and even expand their customer base by individualising their vehicles by means of target-oriented film solutions.

One thing is certain, the needs of passengers and operators are far more complex in today's society than simply transporting passengers from A to B. In addition to the basic requirements for punctuality, safety and comprehensible passenger information, the desires for identification and an attractive atmospheric design of the vehicles play a more important role than ever. Operators of the vehicles aim for a wide range of demands on their own vehicle fleet, as their vehicles are considered to be the most important figureheads of each company. With an individual design, passengers should be able to tell at first glance which service provider they are being transported by, and regular redesign is used to adapt the design of the vehicles to the current zeitgeist. Within this scope, operators face several challenges such as the effective marketing of indoor and outdoor areas or the protection of surfaces against vandalism. Especially the latter point has been shown to play an increasing role in recent years. By

being a flexible and cost-effective option, modern high-performance film solutions are increasingly used to target those challenges in the railway industry. This is reason enough to familiarise yourself with the possibilities of this technology.

For over 40 years, the major goal of Trispel GmbH has been to support railway vehicle manufacturers and operators in equipping their vehicle fleets with high-tech film solutions. The medium-sized and family-run company with currently around 100 employees is located in Celle, Germany. For many years, Trispel has been considered an expert in providing innovative film solutions to the rail vehicle industry and it is the market leader in Germany.

"Nowadays, we don't just sell products, we offer our customers comprehensive and individual service packages. Starting with the analysis of the substrates in our adhesive technology laboratory, through to the selection of suitable products to the application service for entire vehicle fleets, everything comes from a single source. Over the last 40 years, we have acquired extensive knowledge on the whole industry to provide our customers highly individual, attractive and enduring film solutions," says one of the Managing Directors of Trispel GmbH, Alexander Wenzel. In order to equip operators' as well as manufacturers' adhesive technology personnel with the required knowledge of properly applying film solutions, Trispel offers individual as well as group training. A key success factor of those training sessions is adapting the content of the courses to the individual needs of the audience, ranging from inexperienced maintenance staff to highly qualified adhesive personnel.

The area of application for films has steadily developed over the past few decades and now ranges from pictograms, coloured and structured films, technical inscriptions and large-format prints for interior and exterior design to accessible signage systems and special films to protect vehicle fleets against vandalism. With each new area of application, new requirements are put forward. Low-energy substrates, abrasion resistance, chemical resistance, optimisation for the visually impaired, visibility in the dark, freedom from reflections and the obligatory protection against graffiti removers are just a few of the demands that customers place on the films currently used.

As a qualified supplier of Deutsche Bahn AG, Trispel products are approved according to DBS 918020 for outdoor use and DBS 918021 for indoor use. In 2008, Trispel GmbH established the 'Rail-de-Sign' brand on the market in order to be able to meet the customer-specific requirements of the public transport sector. A look at some of the best-practice projects realised by Trispel GmbH gives an idea of the potential of current film technology when creativity meets technical know-how for successful implementation.

For example, Schweizer Bundesbahnen SBB has recognised the different needs of the heterogeneous society and has taken this as an opportunity to offer passengers in their InterCity vehicles not only the classic 1st and 2nd class passenger compartments,



Imaginative castle motifs are attached to the vehicle walls with the help of film solutions © BB CFF FFS

but also other zoning for individual needs. This idea is certainly not new, but the consistent implementation in the planning and design of the family car is remarkable. On behalf of Alstom (former Bombardier Transportation), Trispel GmbH is applying film solutions to SBB InterCity double-decker trains with motifs suitable for children since 2014. This way, young passengers can recognise the location of family compartments on the train at first sight from the huge, colourful films on the outside of the vehicles. Digitally printed films were chosen for outdoor, long-term usage. The surface of the prints is refined in such a way that they are resistant to both UV radiation and cleaning agents used to remove graffiti. In addition, film solutions also play a central role in interior design of the vehicles. The playground on the upper deck, the 'Ticki Park', is equipped with imaginative castle motifs and the tables are equipped with exciting board games.

In addition to play areas for children or quiet zones for commuters, the needs of passengers can also be much more essential, especially when passengers are physically restricted. In collaboration with several associations for the blind and Deutsche Bahn AG, Trispel GmbH has developed a suitable product for this customer group. Pictograms and information signs can be equipped with three-dimensional tactile images and braille to make it easier for blind and visually impaired people to find their way in vehicles. This product makes information tangible and allows visually impaired passengers to use the vehicles autonomously.

Another problem that every operating company faces is malicious vandalism. Surfaces are smeared,



Tactile information system – to make it easier for blind and visually impaired people to find their way around the German ICE © Deutsche Bahn AG - Volker Emersleben

