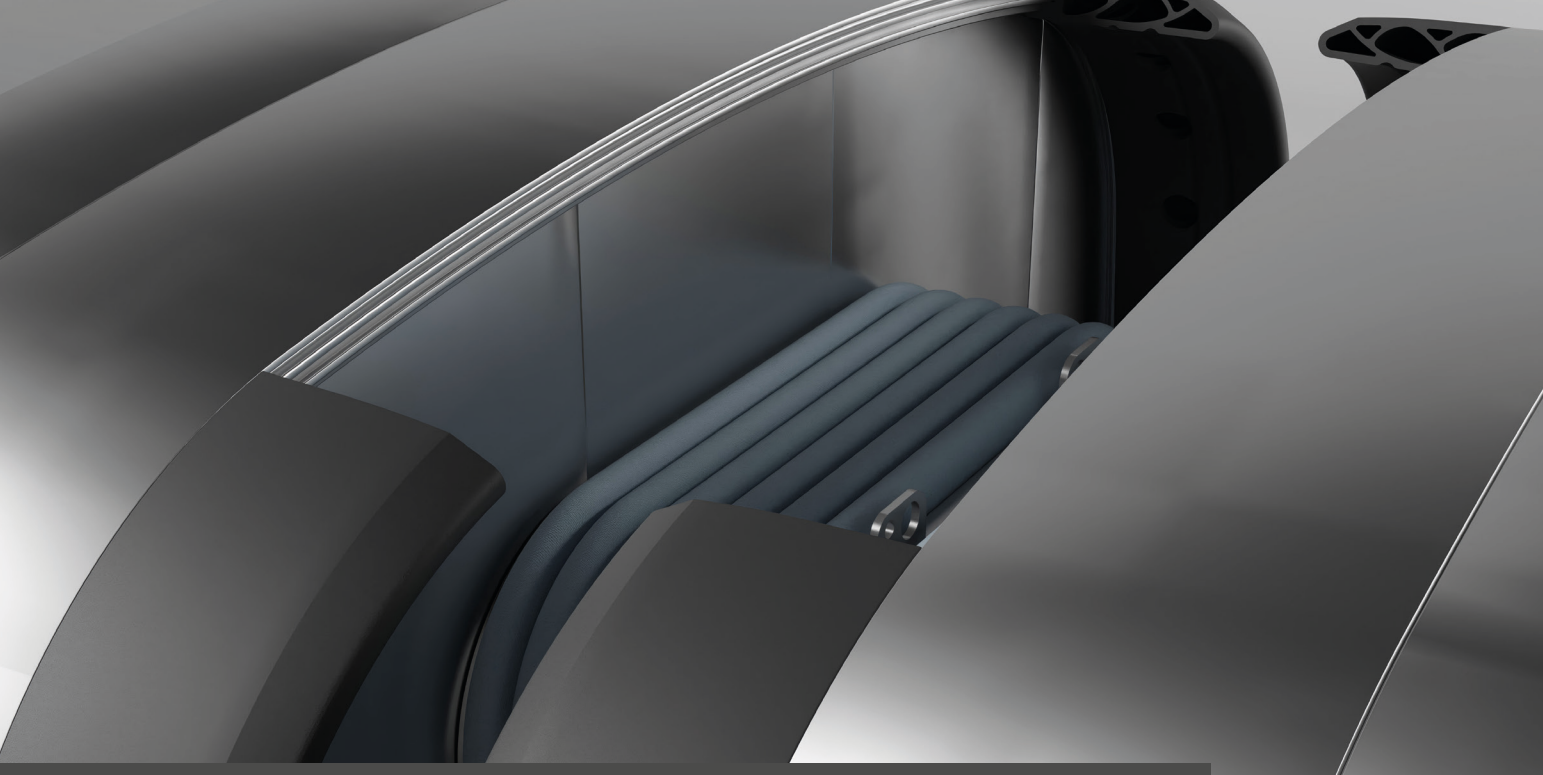

# Wind Deflection Profiles

made with an extrusion process from EPDM or silicone

**Application areas**
Wind deflection profiles are used in high-speed trains that reach speeds of over 200 km per hour. They play a critical role in improving the aerodynamics of the train vehicle, thereby reducing its energy usage. In addition, the wind deflection profiles make it more difficult for so-called “train surfers” to enter the area between rail cars, which increases safety.

**Technology and operating principle**
The wind deflection profiles consist of specially developed profiles made with an extrusion process from EPDM (ethylene propylene diene monomer) or silicone. The profiles are configured to conform precisely to the outer contour of the rail cars to provide optimum aerodynamic performance. The cross-section of the profile is developed individually according to the specific requirements of the installation space and the customer’s wishes, enabling a customized solution for each gangway system.

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## Benefits and efficiency

- **Reduction of air resistance:** The wind deflection profiles reduce the overall air resistance of the train by approximately 3 percent. This results in significant energy savings and a reduction in operating costs.
- **Fire protection standard:** The material used in the components fulfills the strict requirements of EN 45545 HL 3, ensuring maximum safety in case of fire.
- **Durability and reliability:** The wind deflection profiles undergo comprehensive motion simulations and service life tests on gangway testing systems modeled on the actual movements occurring in train operation. This ensures that the product can withstand the high stresses of use in train operation over a long period of time.
- **Wide range of use:** The aerodynamic wind deflection profiles are engineered for use at temperatures ranging from +80°C to -40°C, making them suitable for use in different climatic conditions worldwide.

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