A close-up photograph of a conductor rail assembly. The rail is made of a light-colored metal, likely aluminum or stainless steel, and has a complex, multi-faceted profile. A dark, rectangular brush contact is mounted on top of the rail, making contact with a horizontal metal strip. The background is dark, and there are some yellow and blue highlights on the left side of the image.

Aluminium/ Stainless Steel Conductor Rails

ELECTRIFICATION FOR METRO
AND MASS RAPID TRANSIT SYSTEMS



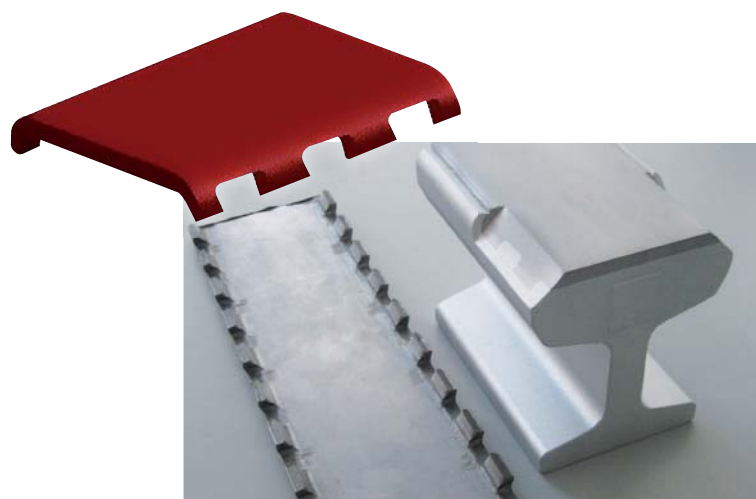
Coextruded Conductor Rail

Aluminium/Steel Conductor Rails used for the electrification of Metro and Rapid Transit Systems are designed and manufactured by Constellium since more than 30 years with worldwide references.

Based on its long-term experience with aluminium and its processing, Constellium came up with a coextruded aluminium/ stainless steel power rail which is worldwide a unique technology for this type of application.

The coextrusion technology combines high conductive aluminium and a laterally punched stainless steel strip in one process under high pressure and temperature and provides a lot of advantages such as:

- ▶ Very low interface resistance between stainless steel strip and aluminium body
- ▶ Extended lifetime due to 6mm stainless steel which can be completely worn down without risk of delamination
- ▶ No debonding or delamination
- ▶ No voids or gaps between the two layers
- ▶ Continuous production process with a homogenous stainless steel surface
- ▶ Very good machinable to form ramps, expansion joints, insulated joints, etc.



Conductor Rail System

For the benefit of the customers, Constellium Singen cooperated in 2002 with a leader in Railway business, the French company RAILTECH INTERNATIONAL.

The experience of two global players is combined and focused to one global company called **RAILTECH-ALU-SINGEN**, 100% dedicated to the market for Conductor Rail Systems.

Our scope covering a complete range of standard as well as specific designed products combined with special tools for proper installations and our long-termed know how in engineering and layout plans are the base and benefit for our customers to create, built and operate a reliable and safe 3rd rail system.

Producing the core products, i.e. conductor rail and insulator in our in-house premises and with our global, long-termed established network of subsuppliers, our group provides high flexibility and focus on project schedules and milestone targets.

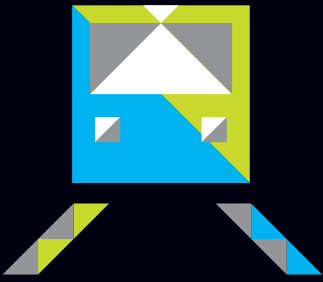


designs, manufactures and supplies conductor rail system components for

- ▶ underneath
- ▶ top running
- ▶ lateral collection

applications and offers a comprehensive engineering package, layout design works, internal and external testing, installation training and supervision and commissioning on site.





Constellium

Automotive Structures and Industry
Rail&Bus Extrusions

Address

Constellium Singen GmbH
Alusingen Platz 1
78224 Singen
Germany

Phone

+49 (0)7731 80 71 39

Fax

+49 (0)7731 80 26 69

Mail

railandbus@constellium.com

www.constellium.com

