



WORLD RAIL SPEED RECORD.

Carbone Lorraine Electrical Applications contributes to the new world rail speed record of 574.8 km/h.

- The achievement

On April 3rd 2007, a shortened version of the TGV set a new world rail speed record of 574.8 km/h.

This achievement took place 200 km away from Paris on the East-European TGV line, in the Strasbourg-Paris direction. The train consisted of 2 power cars and 3 standard duplex cars and developed 25 000 HP.

The train's carbon strip pantograph was manufactured by Carbone Lorraine Electrical Applications in a "Triplex" configuration.

- Our "Triplex" current collector strip

To meet the stringent aerodynamic requirements, our carbon collector strip had to collect 700 amperes of current at a speed greater than 150 meters/second ("Project V150"), whilst remaining in permanent contact with the overhead line. The electric arcing that could be seen on the collector strip as the train reached speeds higher than 500 km/h, showed how extreme the running conditions were. Our 60 mm wide "Triplex" strip, was manufactured with an impregnated carbon central core and carbon composite edges, glued to an aluminium support.

This technical exploit is an example of how Carbone Lorraine Electrical Applications teams can innovate and demonstrate their expertise and innovation ability.

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