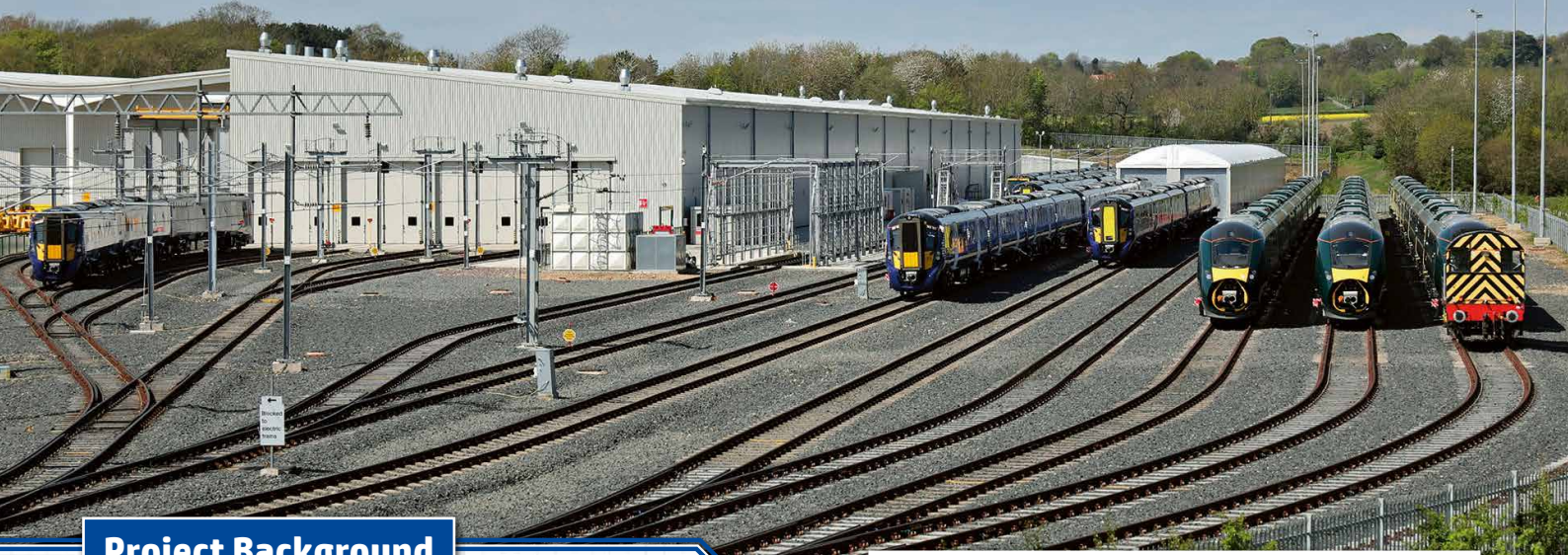


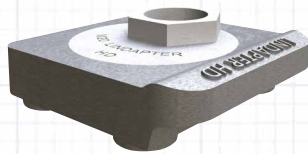
Hitachi Manufacturing Facility

Lindapter low speed rail clips specified in Hitachi's state of the art rail manufacturing and assembly facility.



Project Background

Location: Newton Aycliffe, UK
Product: Type HD Hard
Client: Hitachi Rail Europe Ltd

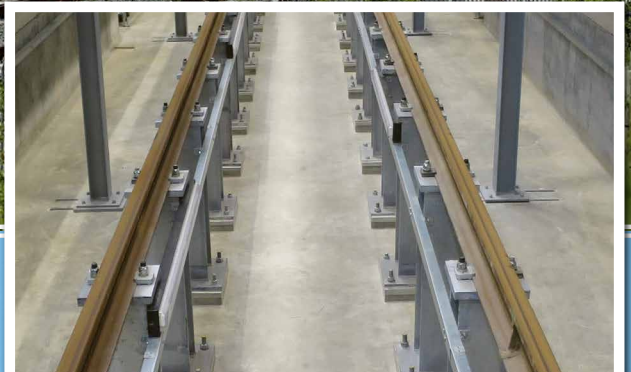


The construction of Hitachi's state of the art rail manufacturing and assembly facility in Newton Aycliffe, County Durham was completed in 2015. The factory was the first to be built in Europe by the Japanese rail vehicle manufacturer, as a result of it winning the Intercity Express Programme tender, and cost £82 million.

Client Requirement

The 43,000 m² factory included several 'bogie drop' systems running the entire length of the building to allow engineers easy access to the under carriage of trains during assembly. There was also a large external yard that required low speed rails to be fitted for the trains to be rolled on to once completed.

Running down the length of each of the bogie drops were steel plinths bolted into the concrete floor. The challenge was to find a suitable method of connecting flat bottomed rails to the steel plinths so that trains could safely roll onto them and over the 'bogie drop' area for assembly.



Rails fixed to steel plinths in the bogie drop



Type HD rail clips used to secure the rails

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Design Solution

Lindapter's M20 Type HD 'Hard' rail clips were specified for clamping down tightly the flat bottomed rails in three different areas of the facility.

Firstly for securing rails to the steel plinths in the bogie drops, then for fastening rails on the edges of the bogie drops, and finally for installing the external rails in the yard.

The Type HD 'Hard' is one of a family of four rail clips that also includes: 'Spring', 'Isolated' and 'Soft' variations, all of which facilitate precise alignment of low speed rails by allowing a high degree of stepless lateral adjustability.



Installation

The high strength Type HD rail clips were installed in pairs down the length of each rail with one either side. Lateral adjustability was achieved by rotating the central plug component of the clip in a clockwise direction to locate the clip against the rail.

If necessary the rails were then moved into their final positions before the hexagon nuts of the clips were tightened to the recommended torque.



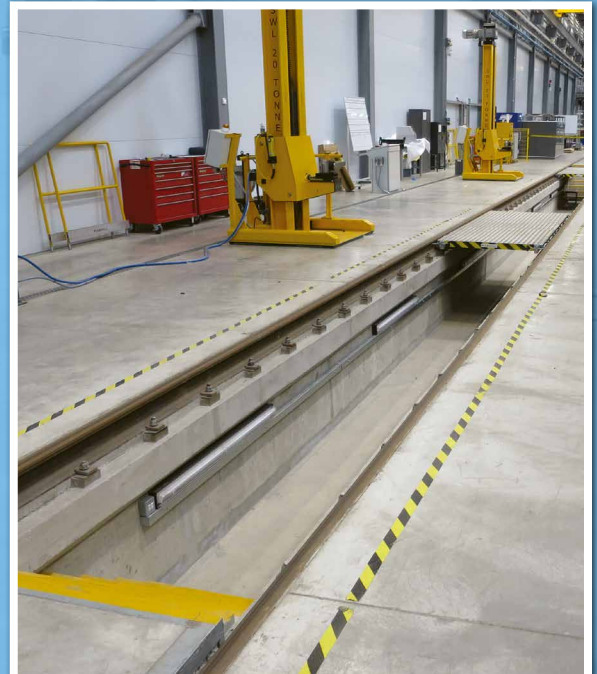
[Click here to watch the installation video](#)



Result

The lateral adjustability of the Type HD helped ensure a quick and easy installation using only standard hand tools, which saved the contractor time and money on the project.

The rail clips are also manufactured from high strength SG iron, creating a reliable connection that minimises ongoing maintenance costs.



Rails fastened to edge of the bogie drop

Benefits

- ✓ High strength clamp
- ✓ High degree of lateral adjustability
- ✓ SG iron provides low maintenance solution
- ✓ Safely and easily secures rail using only hand tools

[Click here for more details](#)

