# Hitachi Maintenance Depot



**Product:** Type HD Isolated Client: Hitachi Rail Europe Ltd

The construction of Hitachi's

state of the art rail depot in Ashford was completed in 2007 and was the first rail vehicle maintenance center built in Europe by the Japanese rail vehicle manufacturer.

The depot is responsible for all maintenance, including cleaning, inspecting, and repairing trains, to ensure safe travel on railway lines in the southeast of the UK.

### **Client Requirement**

Part of the depot included a five-track trainshed with 'bogie drop' systems running the entire length to allow engineers easy access to the under carriage of trains for repairs and maintenance of the bogies, wheelsets and underframe modules.

Running down the length of each side of the bogie drops were reinforced concrete plinths with UKC way beams attached to the top. The challenge was to find a suitable method of connecting flat bottomed rails to the way beams so that trains could safely roll onto them and over the 'bogie drop' area for maintenance.



Type HD rail clips used to secure the rails



## Hitachi Maintenance Depot

#### **Design Solution**

Lindapter's 3/4" Type HD 'Isolated' rail clips, which are supplied with a nylon electrical insulator, were specified for securing the UIC60 flat bottomed rails along the lengths of UKC way beams.

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



The high strength Type HD rail clips were installed in pairs, one either side of the rail, down the length of the way beams. 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 minimizes ongoing maintenance costs, whilst the nylon insulator ensures the rail clips are electrically isolated from the rails to provide a safe working environment.



Trains roll onto the rails for maintenance

#### **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





