

IWT4 Vehicle Acceptance Testing



In June 2007 the first commercial application of Interfleet's ground-breaking Instrumented Wheelset Technology IWT4 was undertaken in Switzerland for running dynamics vehicle acceptance.

The project was undertaken for Railmotive, a major railway test centre in Germany. The total scope involved testing of a four axle, short coupled car transporter wagon, where Interfleets part involved the production of two instrumented wheelsets and the provision of staff to operate them.

With IWT4 capable of being used on the vehicles' standard wheelsets, two wheelsets were sent to Interfleet in Stockholm for instrumentation. In less than three months, the wheels were instrumented, calibrated and transported back to Railmotive.

Two Interfleet measurement specialists participated in Austria to supervise the fitting of the IWT4 wheelsets, install the necessary signal transmission and processing equipment and interface this with Railmotive's data acquisition system. One day of testing was undertaken in Austria, before the vehicle moved into Switzerland for the remainder of the test programme.

Commencing in early July, the vehicle underwent testing against the European running dynamics standard EN14363 in tare condition, around Zurich, Bern and St Gallen. After being loaded with cars and additional weights, further testing was undertaken in fully laden condition giving a total of seven days testing.

The test programme was very successful, with the IWT4 technology proving that the vehicle met the requirements set out in EN14363, and the vehicle was approved by the German railway authority, Eisenbahn Bundesamt (EBA).

"IWT4 was a very attractive option for us, the alternative of sourcing wheelsets with a special geometry would have caused us significant delay and introduced another project risk," says Dr Hempelmann of Railmotive.

