



Testing the Vossloh G6

Case Study



Vossloh's G6 is a 3 axle diesel hydraulic locomotive designed for a top speed of 80kph. For acceptance according to the European Union's processes the vehicle is required to be tested to demonstrate its dynamic behavior (according to EN 14363).

This testing is undertaken to demonstrate that the vehicle is safe (safety against derailment) and does not subject the track to excessive loads. A key part of this testing is the measurement of the forces at the wheel rail interface, and in the case of the G6 three instrumented wheelsets (IWs) were required.

With over 50 years experience in building Instrumented Wheelsets and the benefits of their new IWT4 technology Interfleet was a natural choice for providing the wheelsets for the G6. In contrast to conventional techniques, the IWT4 technology is able to use the G6's existing wheelsets. There was no need for the manufacture of special wheels plates, or any destructive machining of the axle or wheel plate. This reduces the risk to the project, in particular in the area of safety and holding the timeplan. Vossloh simply took three existing wheelsets from their stock (complete with gearboxes) and sent them to Interfleet's laboratory for instrumentation and calibration.

During the summer of 2009 the G6 was tested in Sweden for homologation of the vehicle into Germany and France using an innovative "equivalent conicity" method. Tracks in Sweden, Germany and France have different rail inclinations. However by carefully choosing track conditions and wheel profiles the contact conditions typical in France and Germany can be created on Swedish tracks. The major benefit for Vossloh is that the vehicle could be tested once in Sweden, rather than having to be tested in both Germany and France.

The project shows Interfleet's capability to continuously lead the field, in this case in the field of Instrumented wheelsets, and also in pioneering more efficient testing methods.

Contact :

www.interfleet.se

For more information, please contact
Marketing & Sales +46 8 522 99 200
E-mail: contactus@interfleet.se