PANDROL DELIVERS RAPID SOLUTION FOR HIGH SPEED LINE

Madrid–A Coruña, Spain

CUSTOMER: Azvi

DATE: 2020

SECTOR: High Speed

TRACK LENGTH: Up to 350km/h

Spain has the second largest high speed rail network in the world after China. The Madrid–Galicia high speed rail line connects the city of Madrid with the region of Galicia including A Coruña, a port city in the northwest. The line also provides a link between the Atlantic Axis high speed rail line and the rest of the Spanish AVE high speed network. Designed for trains running at speeds up to 350 kilometres per hour, the Madrid–Galicia high speed rail line has cut down journeys for locals dramatically.

The journey from Madrid to the historic north-western area of Galicia used to take five hours by car. Now, with the high speed rail line, the journey takes just two hours and 15 minutes.

CUSTOMER CHALLENGE

In 2020, our customer, Azvi, required a ballastless fastening solution to be installed on a long viaduct on the Madrid– Galicia high speed rail line. This was an added challenge due to the viaduct needing to support train speeds of up to 350 kilometres per hour.

With speed the name of the game, rapid execution was also a key requirement for the implementation of this project. Azvi needed a solution that could be installed in a very short time so as not to delay the project timeline, and with a high regulation capacity.

PANDROL SOLUTION

The fastening solution used for this project was the Pandrol Fastclip baseplate system, chosen for its easy installation, high speed references and high safety standards. Because the system is available in low toe load or zero longitudinal restraint configurations, it is ideally suited for use on bridge and viaduct applications.

Pandrol worked with sleeper manufacturing association AFTRAV to design and install five kilometres of pre-assembled slab track. The slabs were supplied as captive pre-assembled units ensuring accuracy and allowing fast and easy vertical (+70mm) and lateral (+/-12mm) adjustment per rail seat.

Simple to adjust, with strong anchorages using the GS dowel and the capability for tuning the stiffness if needed, the Fastclip baseplate was the perfect application for this project.

The Fastclip design is optimised for automated installation. Pandrol’s CD100 clipping machine was used to ensure safe, quick and easy clipping. Compact and lightweight, the CD100 is suitable for use by a single operator and can be easily carried onto site.

