



## **V-Speed**

A full range of turnouts for High-Speed lines

**vossloh**  
enabling green mobility

# Vossloh is the pioneer in the field of High-Speed turnouts

For more than 40 years, Vossloh has been an international leader in the design of High-Speed rail turnouts and equipment. From the beginning, the company has been involved in most of the High-Speed rail projects in Europe and in the world. The company therefore benefits from extensive experience in the engineering and manufacturing of turnouts and the associated safety devices. Because of the specific nature of High-Speed railways, Vossloh has been able to reinvent the turnout.

**We have been a partner of the SNCF (Société Nationale des Chemins de Fer Français) since 1980. Together, we have developed a reliable and safe turnout, which now equips the majority of High-Speed networks throughout the world.**

Today thanks to this experience, Vossloh designs and manufactures a range of products that continues to be innovative, meeting the specific needs of High-Speed lines while limiting investment and maintenance costs.

To date, thousands of turnouts for High-Speed lines have been supplied by Vossloh throughout the world. France: All the lines including connections with neighbour countries.

Europe: Belgium, Spain, Italy, UK, Sweden, etc.  
Other Countries: Korea, China, Morocco, Saudi Arabia, Turkey, etc

The products that we manufacture, and which we have been developing throughout the years, are innovative, high-quality infrastructure components. They play a major role in safety and traffic movement.

Vossloh achieved special distinction for its pioneering contribution to the field of High Speed. The first turnouts for the High-Speed line were delivered in France for the Paris-Lyon line in 1980. This was a first in Europe!

## Turnouts adapted to your network, laying on ballasted or slab track

The technology developed ensures the laying on ballast or concrete slab while retaining the same track components. Our turnouts can be installed on all types of laying situations by modifying the design as required.



› Ballasted track

**560 km/h**

When the world speed record on rail was set, a Vossloh turnout was crossed at 560 km/h.

Slab track ›



## A range of high-performance and reliable turnouts Exclusive state-of-the-art technology

### Swing nose crossing with manganese cradle

This technology developed by Vossloh allows trains to run on direct track at 350 km/h and up to 230 km/h in diverging track, with perfect running continuity in complete safety.

### Inclined turnout to ensure running continuity

As a pioneer in this field, Vossloh has been developing the 1/20, 1/30 and 1/40 inclined running table for several years in perfect plain track continuity, by creating innovative, switch rail profiles. It reduces maintenance as well as dynamic interference to rolling stock, while improving passenger comfort.



### Fully secured equipment

The Clamp Lock (VCC), Swing Nose Clamp Lock (VPM) and Paulvé detector are all homologated signalling elements and are standardised for High-Speed lines.



### Switch Locking device (VCC)

It is an individual locking and switch rail control device. Both switch rails are locked and individually controlled in their final positions.



### Swing nose locking device (VPM)

It locks the swing nose and is fixed to the cradle, working on the same principle as the VCC.



### Paulvé detector

It controls the application and opening of switch rail and crossing point.

## Proven signalling systems for safe locking!

### High-performance actuation devices for improved track reliability, availability, maintainability and safety

To meet the needs of railway infrastructures, Vossloh has developed a range of actuation devices that are adapted to the constraints of High-Speed line. The switches and crossing can be driven reliably in order to ensure safety on the network.

#### › Single drive system



#### › Multiple drive system



#### › Integrated mechanical drive



In order to assist customers asset management regime, Vossloh preinstalls digital remote condition monitoring systems to new and existing point machines and accelerometers. The solution will enable the prediction of track degradation and optimize preventive maintenance.



**Reliable, safe switches  
with low maintenance costs  
Ready for Digital Monitoring !**



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