



 ***V-Freight***

A full range of solutions for heavy haul  
and high density traffic turnouts

# Vossloh Cogifer, a world leader in turnouts for all your heavy haul railway projects

Vossloh Cogifer has worldwide experience in heavy haul design and construction of turnouts mastering AREMA, AS & EN standards. We can provide turnouts adapted for up to 42 axle loads, enabling a maximum speed of up to 80 km/h.

Vossloh Cogifer has references in heavy haul markets in North America, Northern Europe, Australia, Africa and Asia, in severe and vast environmental conditions.

## An advanced technology to meet the most extreme conditions



Australia: Axle load 32.5 – 42 T



North America: Axle load 35.75 T



Mauritania: Axle load 32 T



Northern Europe: Axle load 30 T



Adapted to rail temperature range - 50°C > + 70°C

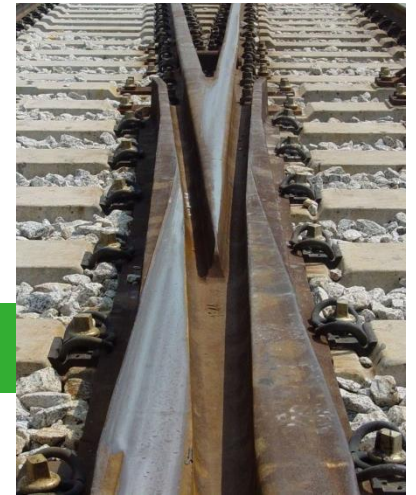


Resistant to extreme environmental conditions such as sand, snow, storms

# Proven and appropriate technical solutions for extreme heavy haul railway networks

## Vossloh Cogifer's technical solution for heavy haul

- ▶ Pre-hardening by explosion of cast manganese crossings
- ▶ Heat treated rails R350 HT
- ▶ Reinforced VCC and VPM clamp locking device (switch and swing nose)
- ▶ Embedded switch toe and built-in stock rail
- ▶ Heavy-haul rail fastening system



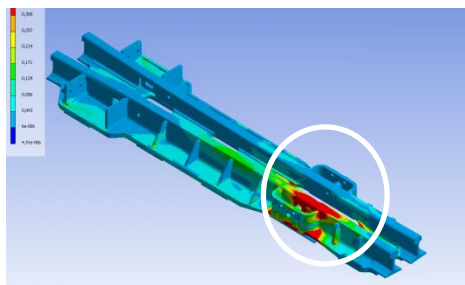
Crossing with W30 HH fastening system, reduction of maintenance costs by permanent elastic tensioning of the rail with tension clamps.

To increase the service life of equipment, Vossloh Cogifer recommends the use of swing nose crossings, adapted to heavy load traffic.

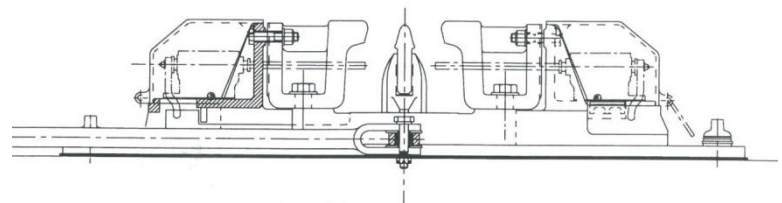
- ▶ **Swing nose crossings designed for heavy haul**
  - with integrated drive device
  - free lubrication slide chairs


**Up to 50%**  
 Savings on Life Cycle Cost

### Swing nose Heavy Load manganese Cradle



Reinforcement of VPM (Swing nose clamp lock)



VPM : Reinforced clamp locking device on swing nose crossing technology

*Vossloh Cogifer technology ensures reliable and safe turnouts for high density traffic.*



### References

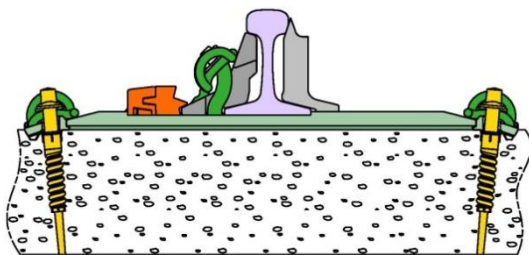
Australia, Brazil, Eurotunnel, Finland, Guinea, Guyana, India, Malaysia, Mauritania, Norway, Saudi Arabia, Sweden, UAE, USA...

# V-Freight

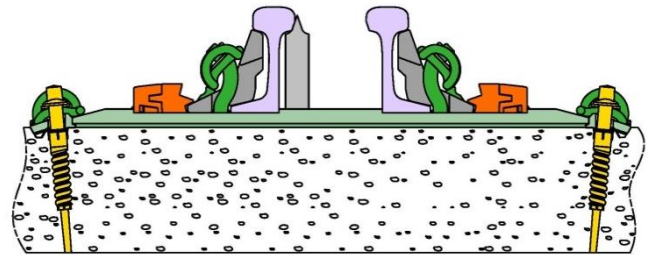
The heavy-haul transportation market is growing rapidly. For decades, Vossloh Cogifer has supplied points and crossings to all types of networks, regardless of environmental conditions, designed for high density traffic.

## Vossloh Cogifer's innovation to improve LCC of heavy loaded track

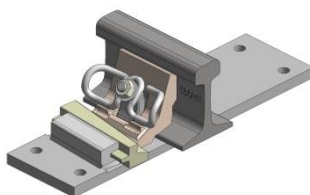
- ▶ Tangent 1:20 geometry with swing nose crossing
- ▶ Introduction of moveable point crossing
- ▶ Single drive point machine for crossing
- ▶ 136 RE TW design
- ▶ Elastic fastening



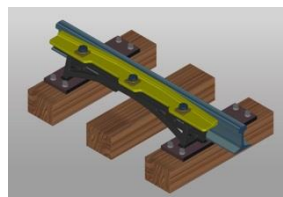
▶ Reinforced switch part



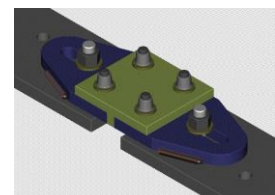
▶ Swing nose crossing with the W30HH fastening system



▶ V-RAM Brace Plate System



▶ Adjustable Switch Point Guard Assembly



▶ Universal Swivel Slide Gage Plate