



Universal use



Exact machining



Flexible



Full switch machining



Can also be used during short track possessions (track cleared quickly)

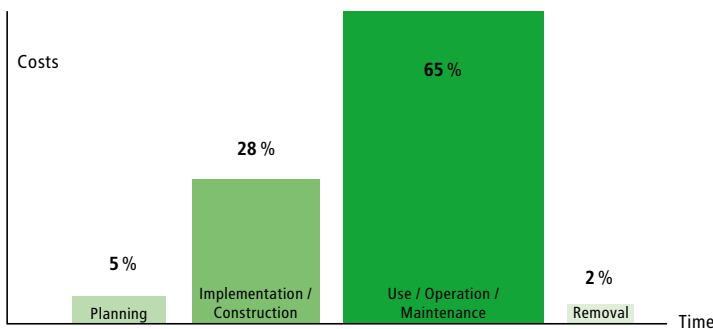
Turnout Services

Inspection and measurement • Diagnostics • Maintenance
Asset Management • Delivery of standard flange rail turnouts
(new and used) • Services for Control & Signaling Systems

Technical Datasheet

Top-level management of your infrastructure

With the asset management provided by Rhomberg Sersa Vossloh, rail network operators get the best value for money out of their tracks, switches and crossings. Our asset managers ensure that all the requirements and specifications relating to track infrastructure are met so that operators get the most out of the service life of these components. Cost-effectiveness is what we focus on. The average life-cycle costs from planning and construction to maintenance and removal show that the operating phase of a track system makes up almost two thirds of total costs. And with asset management as in other fields, Vossloh stands for full service: from measuring, testing and repairs to parts replacement and full installation of new turnouts.



Typical breakdown of costs during the lifecycle of a track system



Benefits

- / Optimum economic management
- / Prevents breakdowns and downtime
- / High operational availability
- / One-stop shop
- / Reduces costs over the long term
- / Extends the service life of your infrastructure

Applications

- / Mainline switches and crossings
- / Light rail switches and crossings
- / Feeder lines
- / Monorails
- / Crane tracks
- / Specially constructed tracks



Switches and crossings need know-how

Switches and crossings are the most demanding elements of a track system. Their proper maintenance requires expertise, and the maintenance measures involved are also more complex. The costs they generate are many times higher than the costs involved with tracks due to the interfaces they have with control, communication & safety equipment, grinding and welding equipment, electronics, and track and switching equipment.

Our team of professionals for switches and crossings is extremely well prepared. For the most part they work independently so there are no delays for the works that follow, and our comprehensive service network puts us within easy reach of our customers 24 hours a day, 7 days a week. And our wide range of replacement parts means that we're perfectly equipped for every situation.



Closing and drive mechanics

Mounting, adjusting and removing drives and closing mechanisms
Performing maintenance, cleaning and inspection
Installing and removing securing bolts
Creating special solutions



Straightening

Straightening point blades
Correcting longitudinal and transverse height discrepancies
Straightening derailment damage



Measuring

Measuring gauge, flangeway gap and guiding distances;
Measuring gauge face clearance;
Measuring transverse and longitudinal heights;
Measuring clearances on closing and drive mechanics
Determining switch and crossing geometries; determining switching forces
Profile measurements, UT and ET



Welding

Rail joint welds
Resurfacing using welding
Using welds to repair damaged areas
Welding on guard rails and points blades



Grinding

Reprofiling point blades and transverse profiles of rails
Removing burrs and laps
Using grinding to repair damaged areas and frogs
Grinding out corrugations



Track and trackway

Correcting gauge, flangeway gap and guiding distances
Reestablishing gauge face clearances
Attending to track fastenings
Replacing large turnout parts
Performing tamping work
Cleaning



Services for Control & Signaling Systems

see page 5

Turnout Services from Rhomberg Sersa Vossloh

Core data

Locations

Dortmund
Föhren (near Treves)
Hamburg
Magdeburg

Mobile workshops

3 in Dortmund
1 in Föhren
1 in Hamburg
4 in Magdeburg

Large-scale equipment

Road-rail excavator
Tamping machines
Track lifter

Measuring and testing equipment

Measuring throw force
Ultrasound
Penetrant testing
Hardness tests
Digital measurement of transverse dimensions (...) e.g. using PTP II or CDM
Use of MRpro®

Previous areas of operation

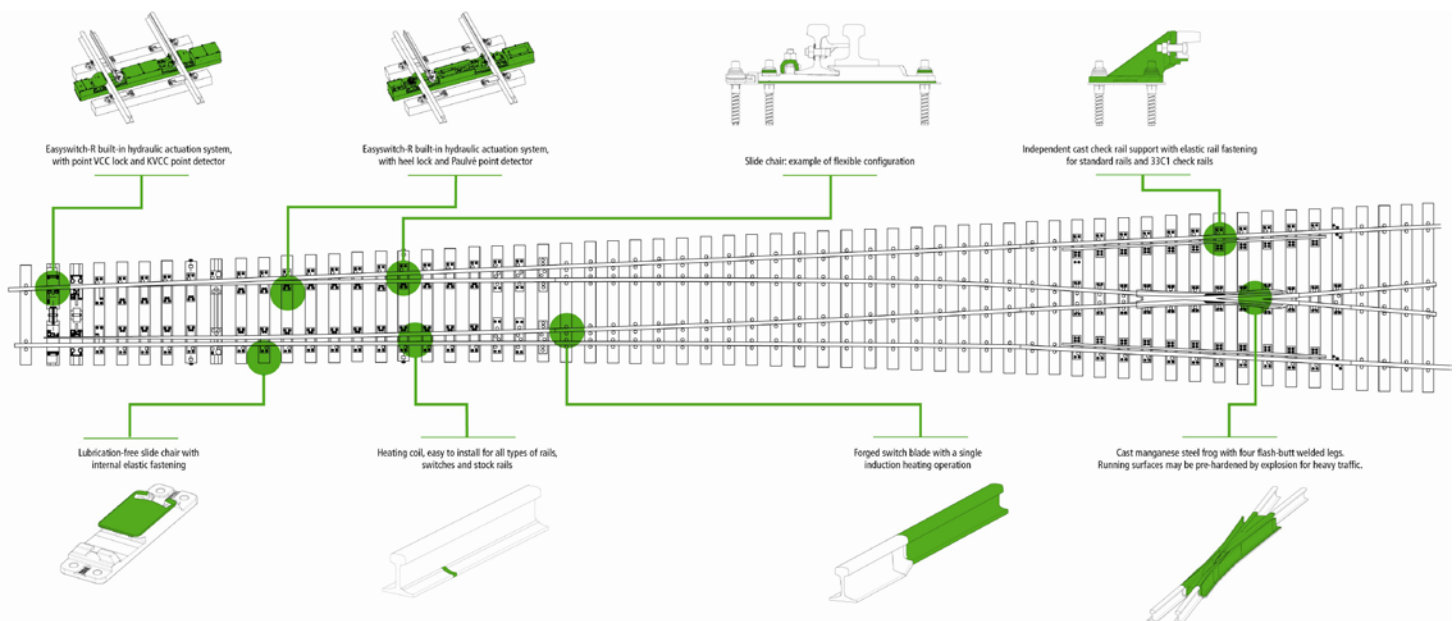
Germany, France, Luxembourg, Netherlands, Austria, Qatar, Scotland and Switzerland

Customer groups

Light railway (Obri NE) and industry (connecting tracks to BOA)
Tramways (BOStrab)
Special constructions (rail-mounted conveyors, crane tracks, railway turntables, crossings in areas of mixed operation EBO/BOStrab)
Mainlines (DB as per EBO)

Qualifications

Switch mechanics
Track welders (deposition and joint welding)
Inspectors as per DB Ril 821.2005
Track workers trained in self-safety
Welding engineers (track welding)
Rail technology specialists, EWS/OS welding specialists
Master track constructors and track construction foremen
Engine fitters and master fitters
Control, communication & safety technicians (e.g. LOP equipment)
Lecturers for Bahnwege seminars
Measurement technicians
Decades of experience in maintaining rails and turnouts (flange and grooved)
Decades of experience in turnout construction (flange and grooved)
Non-destructive testing (US, penetrant testing, hardness testing)
SCC certified



Services for Control & Signaling Systems: Your external control and signaling systems in the best hands

The commissioning and maintenance of switches and crossings is a multifunctional undertaking because several works are involved at different times and have to be coordinated. It's not uncommon for a delay in completing one aspect of this work to disrupt the entire work schedule even though that aspect may not be particularly complex. That's why multidisciplinary work teams are such an enormous advantage to ensure that the project runs smoothly and achieves good results.

RSV has supplemented its operative switch & crossing services with services for control and signaling equipment for external signal box systems (scotch blocks, switch drives, signaling systems and barrier drives) and electrical equipment for railway subsystems.

Range of services

Track work and associated activities (disassembly/assembly of control & signaling equipment)

Assembly/acceptance testing/commissioning of switches and crossings

Switch & crossing modification/decommissioning

Installation, maintenance and repair of electric locally-set points

Cable assembly/cable measuring work

Measurement and testing work

Provision of personnel to assist with measurements during acceptance testing

Electrical grounding and meshing work

Supply of materials and replacement parts for control & signaling systems

Maintenance and inspection using SIG RMI and DB Ril 892 (EBO, BOStrab)

Installation and maintenance of electric switch heating systems

Adjustment measuring technology, machines and equipment

Turnout and track measuring equipment

Switch adjustment equipment (locks and deflection rods)

Point blade straightening equipment (autogenous and mechanical)

Equipment for measuring the actuation force of switches

Equipment for Tiefenbach electric locally-set points, Austroroll and Schwiagh

We operate the following installations and equipment

Points locks and switch drives

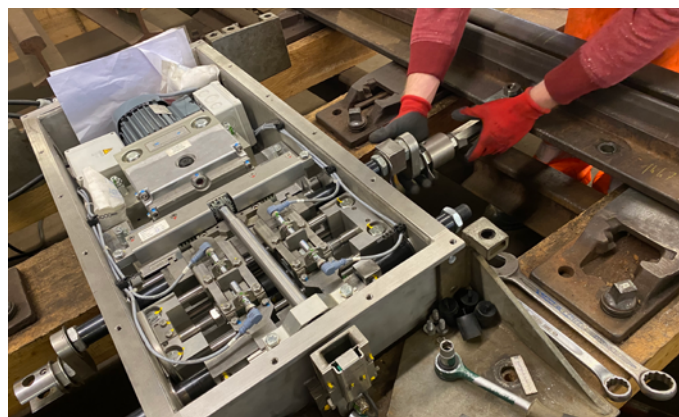
Return switches and Siemens return springs

End position detector

Track locks

Permanent fasteners

Signaling equipment



Global expertise
in over 100 countries

