



 **V-Tram MB-400S**

Monobloc switches for highly stressed tramways

PREMIUM

Vossloh, your ideal partner for all your tramway projects



Specialized in the design and manufacture of tramway turnouts, we have supplied our products to many urban networks in Europe and throughout the world.

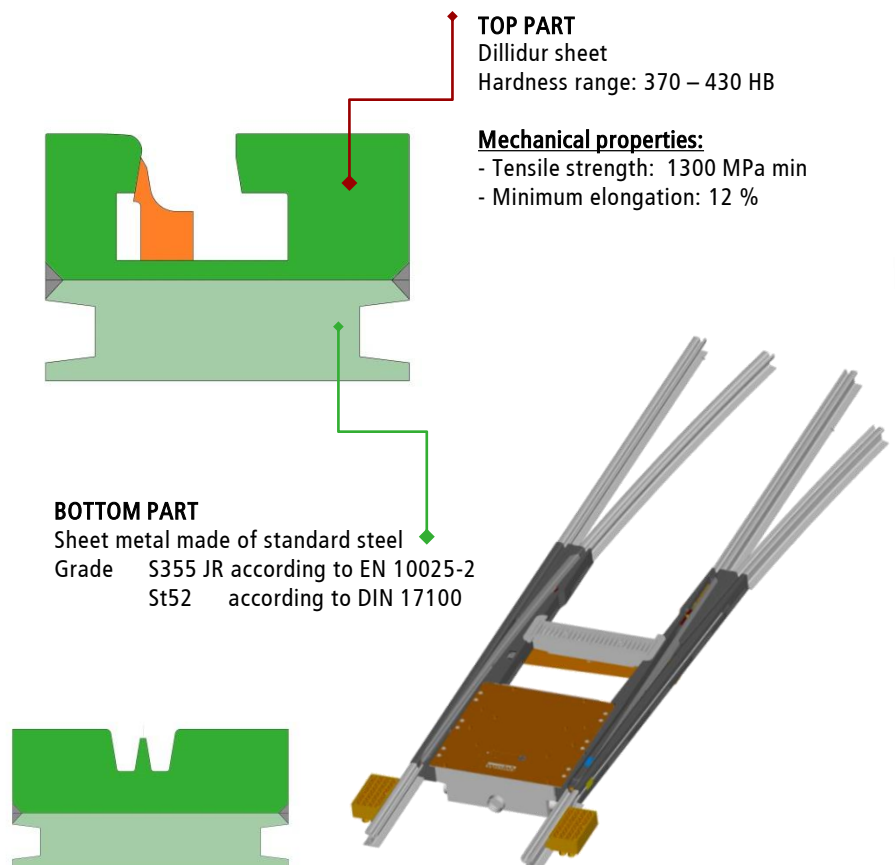
Our extensive experience enables us to provide services to our customers in order to guide them to the best choice of product according to traffic, speed and location.



V-Tram PREMIUM MB-400S the Dillidur monobloc switch

The best technical choice for a high-end product

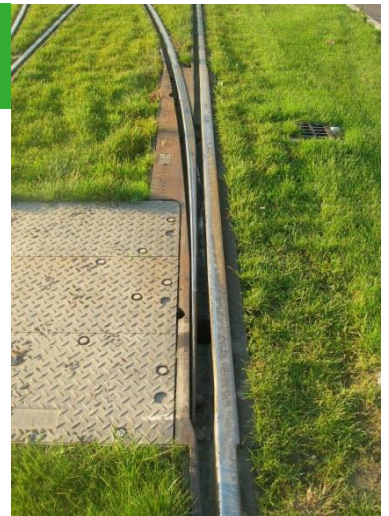
- ▶ Half-switch cradles machined in the mass of a block of steel R=400HB (1300 MPa) with electrically welded leg ends, using a patented process
- ▶ Flexible switch rails in high strength steel (R = 1300 MPa)
- ▶ Sheer connector switch rails for quick or welded replacements in certain cases
- ▶ Switch rail strengthening by embedding
- ▶ Switch rail anti-creep
- ▶ Switch rail anti-lifting
- ▶ Anti-friction coating based on molybdenum, under the switch rail foot = no lubrication, simplification of maintenance
- ▶ Drainage provided by boxes that are easy to connect to the network (plug&play)



All the advantages of a proven technology for full optimization of operating costs

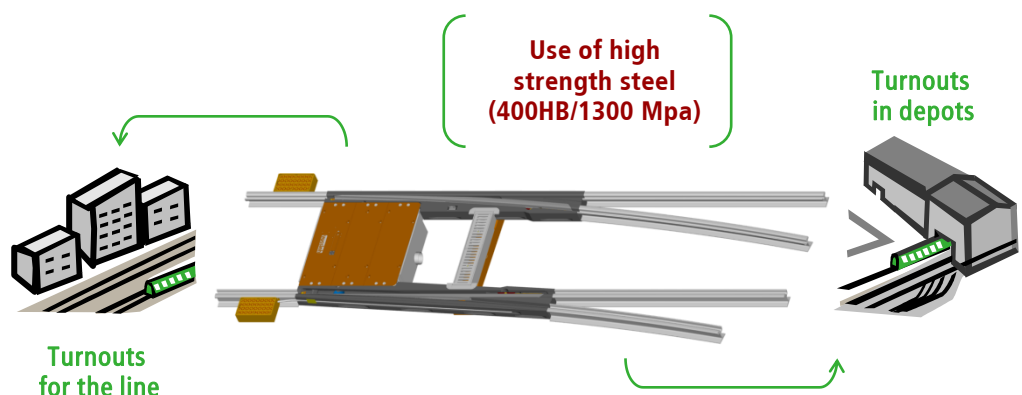
Rationalization of LCC (Life Cycle Cost) savings thanks to Monobloc technology

- Rolled or forged profiles: constant quality of all components
- Use of high strength steel
R = 400HB/1300 Mpa
- Number of parts reduced to a minimum
- Rail/rail connection with the plain track at the ends of the turnout
- Excellent geometric stability of the turnout thanks to its homogeneous design
- Easy assembly of all accessories: drives, heating, drainage, etc.
- Machining on CNC machines: perfect geometry is obtained
- Easy and fast adaptation to customer specifications for rail geometry
- Easy on-site assembly: perfect adaptation to the profile of adjacent rails.
- Easy cleaning: no cavities inside the block
- The central block and the moving switch rail attached are precision machined from a high-quality rolled steel profile: constant quality is ensured for all components, thereby ensuring high resistance to wear
- Reduced maintenance
- Complete machining: digital control milling machines guarantee perfect running surfaces and gentle curves
- Ends of the switch welded to the track: reduction of noise, wear and maintenance
- Spare parts: rapid replacement of embedded switch rails using a shear connector



For heavily stressed turnouts, the best technical choice is essential: the **PREMIUM MB-400S** monobloc switch meets all the safety and maintenance requirements.

Vossloh recommends the materials that are the most appropriate for the use of the turnout, the location on the network and maintenance criteria, while taking budgetary constraints into account.



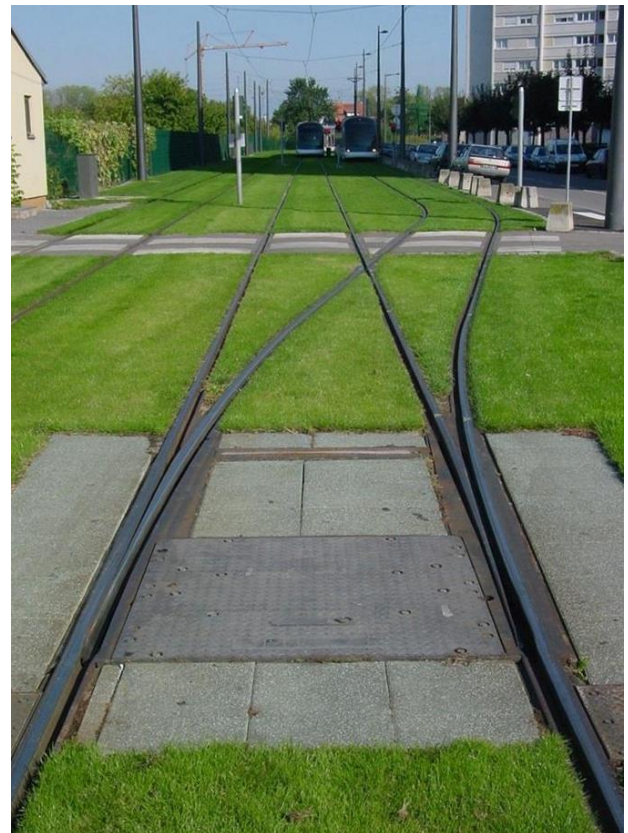
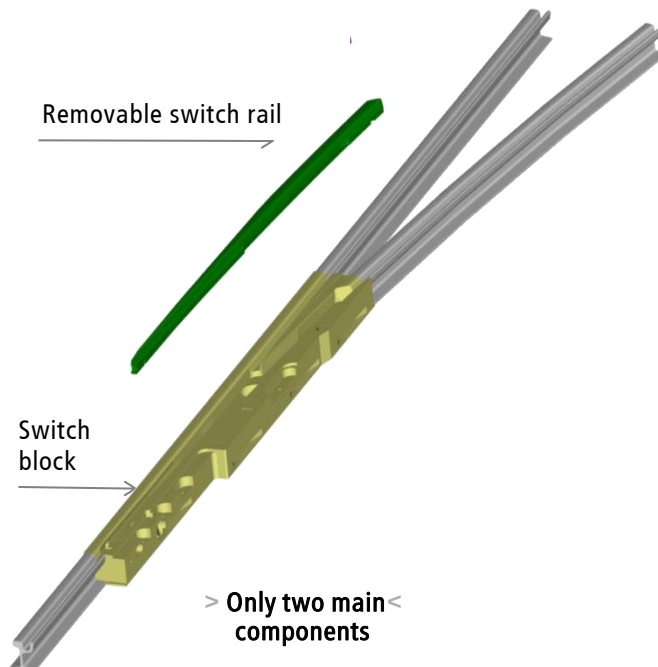
V-Tram MB-400S PREMIUM

Optimised Life Cycle Cost



Up to
50%
savings

with the Monobloc
switch versions
compared to mechanically
welded solutions.



Simple and easy maintenance!

- Accessibility
- Interchangeable modules
- Material suitable for building up by arc welding
- Easy switch rail removal

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