



Milling Machine VTM-compact

Technical Datasheet

vossloh
enabling green mobility

VTM-compact: variable and powerful

The VTM-compact machine corrects serious damage to rails and turnout hotspots in commuter and urban transit systems and tunnels, removing up to 2 mm of metal per machining pass. The VTM-compact's size and light weight make it easy to transport and compatible with virtually every structure clearance gauge. The machine can be transported a number of different ways and put into operation immediately. The VTM-compact can be adjusted for use on all common track gauges and can operate on Vignoles rails, grooved rails, ballasted tracks and slab tracks.



Benefits

- / Optimum milling finish thanks to up-cut milling
- / Adjustable wheel gauge 1.000–1.668 mm.
- / Up to 2 mm of metal removed per pass
- / Operating speed: approx. 180 m/h, max. 240 m/h
- / Fire risk: none
- / Suitable for use in tunnels (no dust or sparks)
- / No removal of trackside switching equipment needed
- / Flexible control and operation

Applications

- / Rail and turnout machining
- / Suitable for standard gauge and light rail
- / Suitable for Vignoles and grooved rails
- / Suitable for ballasted or slab tracks



VTM-compact Technical Data

Main dimensions

Length over buffers (LoB)	6.153 mm
Height	2.243 mm
Width	2.230 mm
Number of bogies Number of axles	2 (+ 2 milling axles)
Wheelbase between bogie pins	4.220 mm (transport mode running gear), 2.500 mm (operating mode running gear)
Distance between bogie axles	no bogies but 2 axles
Height of vehicle floor above TOR	144 mm
Vehicle gauge / structure gauge	Berlin "tight" metro

Speed

Hauling speed when transported as part of train set	transport in train sets not permitted
Hauling speed	30 km/h according to the licence, 60 km/h technically possible
Max. speed (self-propelled)	3 km/h
Operating speed	180 m/h bei 1,5 mm, max. 240 m/h

Weight

Tare weight	16,2 t
Max. permitted overall weight	17,5 t
Maximum axle load	8,75 t

Brake system

Brake system type	hydraulic dual-chamber piston brakes (parking and service brakes), Ortlinghaus-Werke GmbH – Series 0992-009-43-014000
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On-track operability

Shunting maneuvers not permitted (e.g. hump-shunting or loose shunting)	not permitted
Smallest traversable curve radius (transport mode/operating mode)	R _{min} = 30 m (transport) R _{min} = 50 m (operating)
Max. uphill and downhill gradients/cant (transport mode / operating mode)	40 ‰ uphill and downhill (dry conditions), downhill preferable in wet conditions
Transport in train set / as end vehicle	transport in train sets not permitted, only as end vehicle

Weather constraints

Ambient temperature (operating mode)	between -10 °C up to +35 °C, modifications possible
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Equipment / features

Performance data	one milling unit on each side, trailing finish-grinding units (optional)/ flap-disc grinding units, finish-grinding units
Material removal	2 mm max. material removal per pass
Applicable standards	DB Ril 824, EU Standard 13231:3-2012 in preparation
Personnel: machine operator, crew (number, qualifications)	3 personnel for operation + 1 person for maintenance shift

