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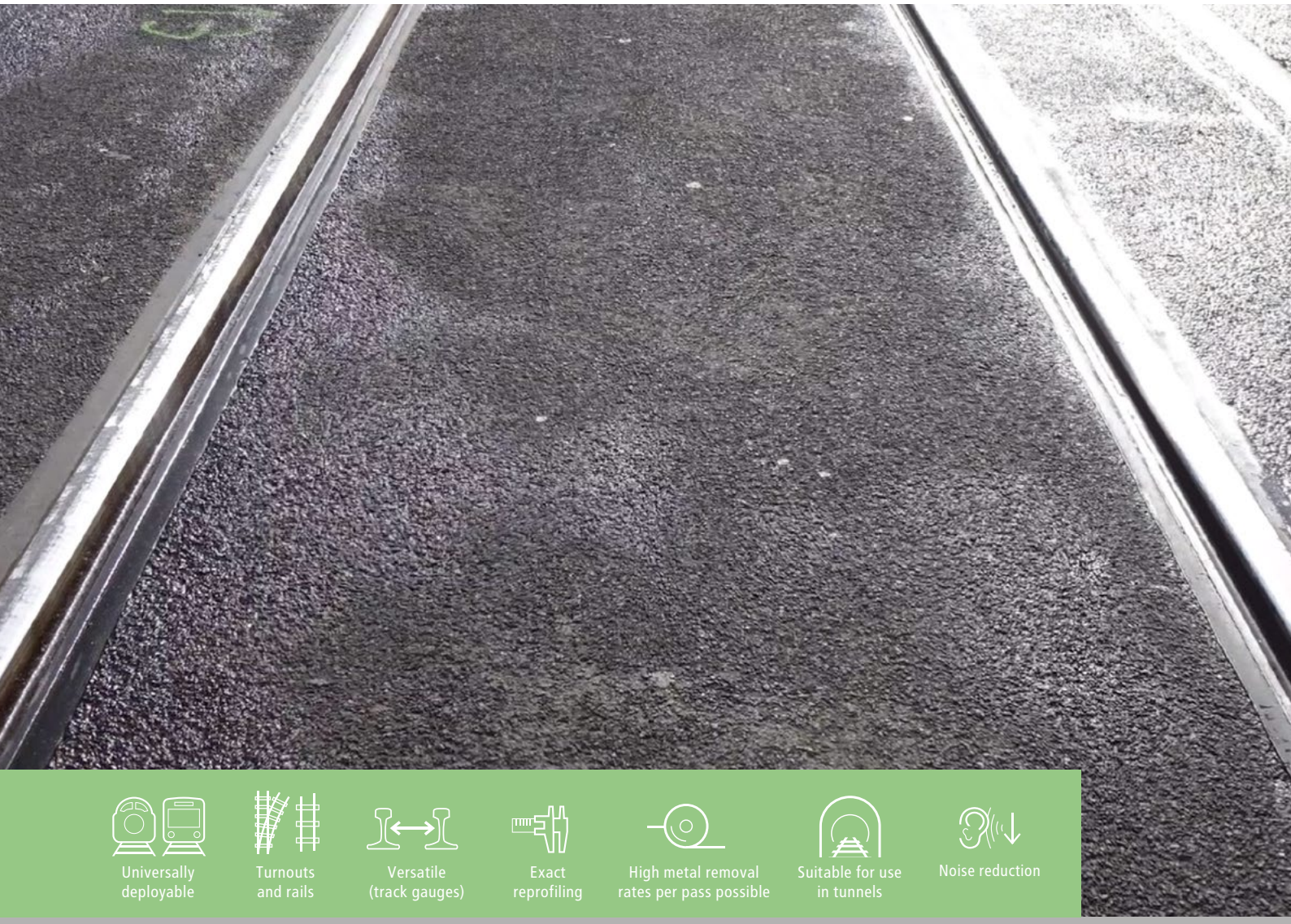

Universally deployable

Turnouts and rails

Versatile (track gauges)

Exact reprofiling

High metal removal rates per pass possible

Suitable for use in tunnels

Noise reduction

Milling technology for machining grooved rails

Technical Datasheet

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Milling technology for maintaining rails in inner-city areas

Up until now it hasn't been possible to correctively machine grooved rails without removing the sealing compound that runs virtually flush along the rail's outside edge. The special tool on our road-rail milling truck has a wheel flange equipped with cutting tips. With this tool it is now possible to rectify defects in a single pass without great expenditure and with deeper radius machining. A positive-tangent cutting angle starting at Y+0 also enables us to achieve a cutting zone that extends to Z-22 mm on the rail's running edge. With larger removal rates, this prevents the wheel flanges on the trams' wheels from bottoming out in the rail groove.


Before machining


After the first pass


After machining

Benefits

/ First comprehensive corrective machining of grooved rails including the bottom of the groove up to the gauge corner with larger material removal rates
/ Efficient use of track possessions thanks to road access for on-railing and off-railing
/ Depending on the number of passes required and the period during which the trains aren't running, several hotspots can be accessed by road in a single shift

Applications

/ Machining track
/ Machining new rails
/ Preventive maintenance
/ Reducing noise in sensitive areas
/ Ideal for small-scale construction works

Video

SF02 W-FS
Technical Data

Main dimensions	
Length over buffers (LoB)	18,320 mm
Height	3,408 mm
Width	2,490 mm
Number of bogies Number of axles	1–4
Wheelbase between bogie pins	not applicable as vehicle has only one bogie and 2 fixed axles
Vehicle gauge / structure gauge	UIC 505-1

Speed	
Hauling speed when transported as part of train set	transport in train sets not permitted
Hauling speed	20 km/h
Max. speed (self-propelled)	rail speed: 45 km/h road speed: 80 km/h
Operating speed	0.4–0.8 km/h

Weight	
Tare weight	45 t
Maximum axle load	12.4 t

Brake system	
Brake system type	hydrostatically operated brake system – activated via traction lever + direct-acting brake system that works by means of an auxiliary shaft on the differential 4 disc brakes
Braked weight	40
Braked weight percentage (calculated using the braked weight and weight of the vehicle)	92
Transport setting (F/P)	not applicable – no F/P change-over

On-track operability	
Shunting maneuvers not permitted (e.g. hump-shunting or loose shunting)	not permitted
Smallest traversable curve radius (transport mode / operating mode)	Ra 50 (transport) Ra 80 (operating)
Max. uphill and downhill gradients/cant (transport mode / operating mode)	40 ‰ uphill and downhill
Transport in train set / as end vehicle	transport in train sets or as end vehicle not permitted

Weather constraints	
Ambient temperature (operating mode)	between -10°C and 40°C, modifications possible

Equipment / features	
Performance data	one milling unit on each side, integrated tangential grinding units and downstream flap-disc grinding units
Material removal	0.9 mm max. material removal per pass
Applicable standards	DB Ril 824, EU Standard 13231:2-2020
Personnel: machine operator, crew (number, qualifications)	4 personnel for operation + 2 personnel for maintenance shift
Equipment for train operation	ATC, ITC, digital train radio

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Global expertise in over 100 countries

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