

ROBEL

Rail Treatment



**THE END TO END SOLUTION
FOR MODERN RAIL MAINTENANCE**

www.robел-railtreatment.com

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For more than 125 years, ROBEL has been developing and manufacturing track construction machines - always aspiring to be a pioneer in terms of safety, sustainability and innovation.

The close proximity to our customers enables us to recognize current challenges, develop needs-based solutions and transform them into new technologies and products.

Customer satisfaction, user safety, economic efficiency and our responsibility towards the environment are at the heart of what we do. Many years of experience in track machine construction allow us to offer a full set of railhead treatment solutions available to markets worldwide. Simply by users for users.

The challenge

Increasing ridership, higher speeds and volumes of cargo as well as high track utilization put enormous stress on rails and switches and accelerate the wearing process. Rail defects such as cracks and corrugation are the result. These lead to a shorter rail service life, contribute to higher noise levels, reduce ride comfort and pose a significant safety risk.

The solution

To meet the growing demands on rail systems and minimize the associated costs and risks, a sustainable and efficient rail maintenance procedure is needed. ROBEL's rail treatment solutions combine state-of-the-art milling, grinding and measuring technology and restore the rail profile. With a single pass, defects are measured and the rail is milled and polished. The wheel-rail contact is optimized and the rail service life is increased. Our worldwide all-round service on-site supports you throughout the entire maintenance process and beyond.

SBI MILLING TECHNOLOGY



- Milling wheel diameter 600 mm / 1445 mm
- Long service life thanks to innovative milling wheel design
- Material removal of up to 2 mm per pass
- Infeed accuracy 0,05 mm steps
- High working speed
- High processing accuracy and reliability even in difficult track positions

SURFACE FINISHING



- Various post-processing methods depending on the requirements (oscillating / rotating)
- Little material removal
- Processing speeds adapted to rail milling
- Optimal surface quality
- Little to no flying sparks

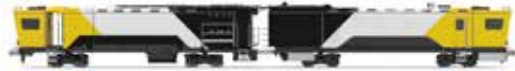
VOGEL & PLÖTSCHER MEASURING



- Cross profile, longitudinal profile and rail defects
- Pre- or post measurement
- High accuracy
- Monitoring and measurement protocol

ROMILL Mainline

- Eliminates the toughest rail defects in one pass
- Reprofiles regardless of the track geometry and condition
- With no sparks or contaminants and no heat induced damage
- Robot-assisted work contained safely within the system
- All-around service on-site minimizes production downtime
- Verification through machine integrated measuring systems
- Rail and switch processing



TECHNICAL SPECIFICATIONS ROMILL Mainline

Length	32.000
Width	3.000
Height	4.000
Traction drive	hydraulic
Main engine	Diesel EU stage V, 600 kW
Max. speed self propelled	up to 60 km/h
Max. gradient	40 ‰
Processing speed	400 – 1200 m/h
Max. removal rate per pass	0.3 – 2.0 mm on the rail surface
Gauge	1067; 1435
Minimal curve radius	
for processing	150 m
Cant at gauge system 1067 mm	160 mm
Chip container volume	6 m ³ (size customizable according to requirements)
Max. axle load	< 15 t
Weight	< 110 t

ROMILL Urban

- Corrective and preventive rail milling
- Reprofilng independent of track geometry and condition
- Surface finishing with innovative hpp system
- Clean and emission optimized processes
- Suitable for urban, metro and subway
- Long tool life
- No disassembly of road obstacles required
- Rails and switch processing
- Evidence by machine-integrated measuring systems
- Modular configuration to increase performance (3 or 4 pieces)
- Optimized logistics concept for use in various networks



TECHNICAL SPECIFICATIONS ROMILL Urban 3 E³

Length	23.000 mm
Width	2.350 mm
Height	2.850 mm
Weight	72 t
Axle loads	~12 t
Travel speed	up to 60 km/h
Min curve radius	50 m
Power source	Diesel eu stage V
Optional powersource	battery power
Milling speed	300 – 1200 m/h
Metal Removal	0.1 – 1. 5 mm



TECHNICAL SPECIFICATIONS ROMILL Urban 4 E³

Length	31.000 mm
Width	2.350 mm
Height	2.850 mm
Weight	96 t
Axle loads	~12 t
Travel speed	up to 60 km/h
Min curve radius	50 m
Power source	Diesel eu stage V
Optional powersource	battery power
Milling speed	300 – 1200 m/h
Metal removal	0.1 – 3.0 mm