



# Rail Replacement Wagon SWW

Technical Datasheet SWW 1 and SWW 2



# SWW 1 and SWW 2 Rail Replacement Wagons: designed for assembly-line rail replacement

The SWW 1 combined with the V + L module and the SWW 2 combined with the V + L modules and the loading and unloading wagon 3 can simultaneously unload and replace rails using an assembly line method. The new rails are delivered using the Robel or STS transport systems or public network wagons. The SWW 2 can also lay rails that are lying on the ground.



## **Benefits**

- / Can be used in combination with the loading train in an assembly line process
- / Minimal preparatory work required
- / Rails replaced in pairs or individually in a continuous process
- / Precise positioning of the new rail



## Applications

- / Infrastructure with a track gauge of 1,435 mm
- / Rail 1/2 renewal measures





### SWW 1 Rail Replacement Wagon Technical Data

Ancillary vehicle	SWW 1 Rail Replacement Wagon
Track gauge	1,435 mm
Main dimensions	
Length over buffers	22,240 mm
Width	2,860 mm
Number of bogies	2
Number of wheelsets per wagon	4
Wheelbase between bogie pins	16,700 mm
Distance between last wheelset and front buffer	1,770 mm
Distance between axles on bogie	2,000 mm
Distance between inner wheelsets	14,700 mm
Loading gauge / structure gauge	G2 as per EBO

Speed	
Hauling speed as part of train set	100 km/h
Max. shunting speed	construction site specification

Weight	
Tare weight	33.6 t
Maximum weight per meter	1.51 t
Maximum axle load	20

#### Brake system

Brake system type	KE-GP
Brake blocks	cast iron
Braked weight	F: 26 / P: 26
Braking power percentage	inside train set on completion of brake bulletin
Transport setting (F/P)	yes
Handbrake / parking brake fitted	no

#### On-track operability

Shunting maneuvers not permitted	hump-shunting, loose shunting not permitted
Sequencing restrictions	none
Smallest traversable curve radius (transport mode / operating mode)	150 m (transport), 350 m (operating)
Max. uphill and downhill gradients	max. 25 ‰
Max. superelevation (transport / operating)	180 mm (operating)
Transport possible inside train set	yes
Max. trailing load	no restrictions

Weather constraints	
Ambient temperature (operating mode)	-40°/ -20°, restrictions when the water is freezing, observe occupational savety
Power supply	
Central power supply	diesel generator, 20 kW gene- rator for on-board train power, hydraulics and on-board lighting
Equipment (basic equipment f	or each machine and features)
Number of wagons	1
Rail types replaced	UIC 60, S49, S54, R65, others on equest
Performance data	max. 2.5 pairs of rails per hour
Personnel / machine operators / crew (number & qualification)	6 machinists
Technical drawing of machines	see TI Wagon Catalogue
Wagon equipment	Attention: Direction-specific vehicle functionality; in combination with V + L, the SWW 1 enables simultaneous unloading and rail replacement in an assembly-line procedure. Also combinable with SLW and ROBEL TE
Safety and communication equipment	communication via walkie- talkies, red and white flag, red dimmable hand lamp
Running gear and suspension	Niesky DG BA 962, wheel profile A
Approvals for transport / operation on tracks	DB Netz NGT 35 Bln, Prorail, HSL DB Netz NGT 35 Bln BZA as ancillary vehicle



### SWW 2 Rail Replacement Wagon Technical Data

Ancillary vehicle	SWW 2 Rail Replacement Wagon
Track gauge	1,435 mm
Main dimensions	
Length over buffers	24,700 mm
Width	2,860 mm
Number of bogies	2
Number of wheelsets per wagon	4
Wheelbase between bogie pins	19,400 mm
Distance between last wheelset and front buffer	1,650 mm
Distance between axles on bogie	2,000 mm
Distance between inner wheelsets	17,400 mm
Loading gauge / structure gauge	G2 as per EBO

Speed	
Hauling speed as part of train set	100 km/h
Max. shunting speed	construction site specification

Weight	
Tare weight	48.5 t
Maximum weight per meter	1.96 t
Maximum axle load	20

#### Brake system

Brake system type	KE-GP
Brake blocks	cast iron
Braked weight	F: 40 / P: 40
Braking power percentage	inside train set on completion of brake bulletin
Transport setting (F/P)	yes
Handbrake / parking brake fitted	yes

#### On-track operability

Shunting maneuvers not permitted	hump-shunting, loose shunting not permitted
Sequencing restrictions	none
Smallest traversable curve radius (transport mode / operating mode)	150 m (transport), 350 m (operating)
Max. uphill and downhill gradients	max. 25 ‰
Max. superelevation (transport / operating)	180 mm (operating)
Transport possible inside train set	yes
Max. trailing load	no restrictions

Weather constraints	
Ambient temperature (operating mode)	-40°/ -20°, restrictions when the water is freezing, observe occupational savety
Power supply	
Central power supply	diesel generator, 20 kW gene- rator for on-board train power, hydraulics and on-board lighting
Equipment (basic equipment f	or each machine and features)
Number of wagons	1
Rail types replaced	UIC 60, S49, S54, R65, others on equest
Performance data	max. 2.5 pairs of rails per hour
Personnel / machine operators / crew (number & qualification)	6 machinists
Technical drawing of machines	see TI Wagon Catalogue
Wagon equipment	Attention: Direction-specific vehicle functionality; in combination with V + L, the SWW 1 enables simultaneous unloading and rail replacement in an assembly-line procedure. Also combinable with SLW and ROBEL TE
Safety and communication equipment	electric horns for acoustic signals, communication via walkie-talkies
Running gear and suspension	Niesky DG BA 962, wheel profile A
Approvals for transport / operation on tracks	DB Netz NGT 35 Bln, Prorail, HSL DB Netz NGT 35 Bln BZA as ancillary vehicle



