



# Loading and Unloading Wagon AAW

Technical Datasheet

## Extremely versatile when it comes to long welded rails: the AAW Loading and Unloading Wagon

This rail loading system comprises a loading and unloading wagon (AAW) for loading rails onto the STS transport system from the middle of the track or the sleeper heads and for unloading them from the STS transport system or third-party wagons onto the middle of the track or the sleeper heads. The AAW 3 can be used in combination with the rail replacement wagon (SWW 2) to replace rails using an assembly-line procedure.



## Benefits

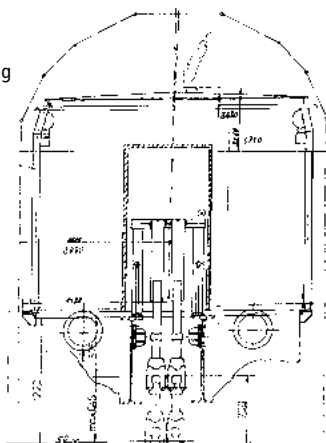
- / Efficient and flexible loading system for STS and third-party wagons
- / Minimal preparatory work required. Rails loaded/unloaded individually or in pairs (STS only)
- / Individual rail lengths of 15 to 180 meters, rail profiles 49E1, 54E1, 60E1, R65 and others on request
- / AAW 3 can be combined with SWW 2 to replace rails using an assembly-line procedure
- / Old rails taken up in a continuous process (onto STS)
- / Loading of old rails does not require cutting them to length or the removal of welding beads

# Applications

- / Infrastructure with a track gauge of 1,435 mm
- / Track + rail 1/2 renewal measures
- / All lines with short track possessions



Cross section drawing  
with dimensions



## Loading and Unloading Wagon

### Technical Data

Support vehicle	AAW 1 / AAW 2 / AAW 3
Track gauge	1,435 mm

Main dimensions	
Length over buffers (LoB)	22.24 m
Width	2.96 meters (working mode) 2.71 meters (transport mode)
Number of bogies	2
Number of wheelsets	4
Wheelbase between bogie pins	16,700 mm
Distance between last wheelset and front buffer	1,870 mm
Distance between axles on bogie	1,800 mm
Distance between inner wheelsets	14,900 mm
Height above TOP of vehicle floor	1,280 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	34 t
Maximum weight per meter	1.53 t/m
Maximum axle load	20 t

Brake system	
Brake system type	KE-GP
Brake blocks	cast iron
Braked weight	F: 26 / P: 26
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	no restrictions
Smallest traversable curve radius	130 m (transport) 250 m (operating)
Max. uphill and downhill gradients/cant	max. 40 ‰ depending on the rail length
Max. superelevation (transport/operating)	180 mm operating
Transport inside train set	yes
Max. trailing load	no restrictions

Weather constraints	
Ambient temperature (operating mode)	between -20° and +40°C, restrictions with frozen water, observe safety provisions

Equipment (basic equipment for each machine and features)	
Number of wagons	1
Loading / unloading of the rails (middle of track, on sleeper heads etc.)	middle of track, on sleeper heads or one in the middle of the track and one on the outside
Performance data (idealized)	unloading: max. 5 pairs/hour under ideal conditions. loading: max. 600 meters of track/hour under ideal conditions
Personnel / machine operators / crew	unloading: 3 machinists, 2 crew loading: 4 machinists, 2 crew
Technical drawings of machines	see TI Wagon Catalogue

Safety and communication equipment	
Communication	walkie-talkies, red-white flag, handheld signaling lamp with red filter
Running gear and suspension	Y 25 bogie
Approvals for transport / operation on tracks	DB Netz NGT Bln and NTB 1(N) Berlin, DK BDK Trafikstyrelsen BZA as ancillary vehicle, AAW operating instructions
Auxiliary equipment required	two-axle flat wagon
Loading guidelines	AAW operating instructions
Compatible with transport systems	STS; ROBEL TE with AAW 1 + 3 AAW 3 with SWW 2 rail replacement wagon DB Cargo/private only unloading: Rs, Rns, Samms

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