



Loading



Unloading

Shifting and Loading Module V+L

Technical Datasheet

V + L Shifting and Loading Module: Smooth workflow when it comes to rail transport

The V module pulls the rails from the transport wagons to the loading and unloading L module. Module L facilitates the loading of rails onto the transport wagons from the middle of the track or the sleeper heads and their unloading from the transport wagons onto the middle of the track or the sleeper heads. The V + L can be used in combination with the rail replacement wagon (SWW) to replace rails using an assembly-line procedure.

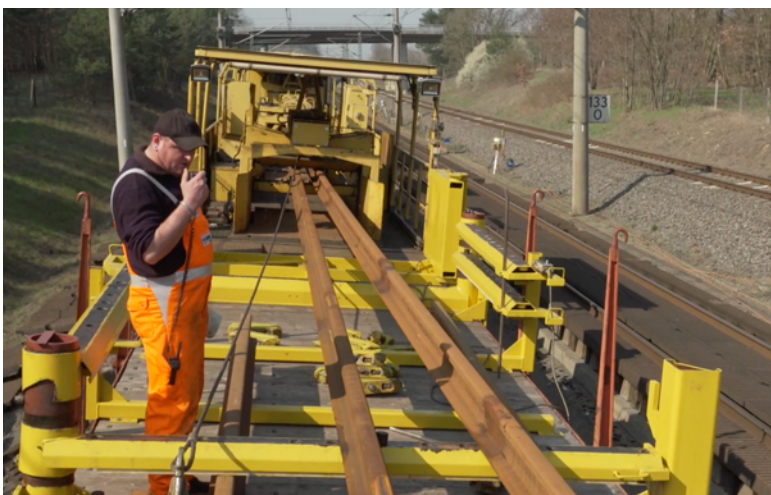


Benefits

- / Efficient and flexible loading system for the STS transport system and third-party wagons
- / Minimal preparatory work required. Rails loaded/unloaded individually or in pairs
- / V + L can be combined with SWW 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
- / Rail lengths of 15 to 180 meters
- / Rail profiles 49E1, 54E1, 60E1, R65 and others on request
- / Track + rail 1/2 renewal measures
- / All lines especially with short track possessions



V + L Shifting and Loading Module

Technical Data

Type	Stahlberg Roensch
Track gauge	1,435 mm

Main dimensions

Length over buffers	2 x 22.24 m = 44.48 m
Width	2.96 meters (working mode) 2.71 meters (transport mode)
Number of bogies	2 + 2
Number of wheelsets per wagon	4 + 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	G1 as per EBO

Speed

Hauling speed as part of train set	100 km/h
------------------------------------	----------

Weight

Tare weight	32.5 t + 36.3 t = 68.8 t
Maximum weight per meter	1.46 and 1.65 t/m
Maximum axle load	20

Brake system

Brake system type	KE-GP
Brake blocks	cast iron
Braked weight	F: 28 / P: 28
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, separation and transport by ferry not permitted
Sequencing restrictions	no restrictions
Smallest traversable curve radius (transport mode / operating mode)	130 m (transport) 250 m (operating)
Max. uphill and downhill gradients	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
--------------------------------------	---

Power supply

Central power supply	diesel generator, 59 kW generator fitted with HUSS particulate filter for on-board train power, conveyor drive, hydraulics and on-board lighting
----------------------	--

Equipment (basic equipment for each machine and features)

Number of wagons	2
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	unloading: max. 5 pairs of rail/hour under ideal conditions; loading: max. 600 meters of rail/hour under ideal conditions
Personnel / machine operators / crew (number & qualification)	unloading: 3 machinists and 2 crew, loading: 4 machinists and 2 crew
Machinery	Note: direction-specific vehicle functionality; in combination with SWW, V + L enables rail replacement in assembly-line procedure
Running gear and suspension	Niesky DG BA 962, wheel profile A
Loading guidelines	Vossloh operating procedure
Compatible with transport systems	ROBEL TE, STS, DB Cargo and private (only unloading): Rs, Rns, Samms

Safety and communication equipment

Communication	walkie-talkies, red-white flag, handheld signaling lamp with red filter
Approvals for transport / operation on tracks	DB Netz NGT 35 Bln, Prorail, HSL BZA as ancillary vehicle, AAW operating instructions

Global expertise in
over 100 countries

