



# Long-Rail Transport Units Robel

Technical Datasheet



## Robel long-rail transport units Heart of a smart system

The LSE long-rail transport unit and the SLW rail loading wagon together form the Robel rail transport system. These special G type wagons with racks for loading rails on three levels do not need loading timbers or separate fasteners. Instead, two main characteristics of the Robel System are its clamping racks that immobilize the rails and the crane rails mounted along the outside edges that allow the crane to traverse the entire transport system.



### Benefits

- / Extremely flexible in its application (loading and unloading possible from either end wagon)
- / Highly efficient, safe transport with rails clamped and resting on rollers. No separate loading timbers required
- / Carries up to 30 x 240 m rail lengths on 3 levels
- / Batch rails and custom-length rails as per rail plan, suitable for combined consignments and relay shipments

### Applications

- / Infrastructure with a track gauge of 1,435 mm
- / All standard-gauge mainline routes
- / Very efficient and flexible with only short track possessions required



## SLW Rail Loading Wagon

### Technical Data

Designation	TE 313 120 m single-sided	TE 221–224 120 m double-sided	TE 321–332 120 m double-sided	TE 421–426 120 m double-sided	TE 531–536 120 m double-sided	TE 341–343 180 m double-sided	TE 441–444 180 m double-sided
Type	Skks	Skks	Skks	Skks	Skks	Skks	Skks
Track gauge	1,435 mm	1,435 mm	1,435 mm	1,435 mm	1,435 mm	1,435 mm	1,435 mm

#### Main dimensions

Length over buffers (LoB)	138.9 m	138.9 m	138.9 m	138.9 m	134.4 m	210.9 m	210.9 m
Width	2,500 mm	2,500 mm	2,500 mm	2,500 mm	2,500 mm	2,500 mm	2,500 mm
Number of bogies per wagon	2	2	2	2	2	2	2
Number of wheelsets per wagon	4	4	4	4	4	4	4
Wheelbase between bogie pins	18,500 mm	18,500 mm	18,500 mm	18,500 mm	16,860 mm	18,500 mm	18,500 mm
Wheelbase between wheelsets in bogie	1,800 mm	1,800 mm	1,800 mm	1,800 mm	1,800 mm	1,800 mm	1,800 mm
Distance between outer wheelsets	20,300 mm	20,300 mm	20,300 mm	20,300 mm	18,660 mm	20,300 mm	20,300 mm
Loading gauge/structure gauge	G1	G1	G1	G1	G1	G1	G1

#### Speed

Hauling speed as part of train consist	100 km/h	100 km/h	100 km/h	100 km/h	100 km/h	100 km/h	100 km/h
Max. operating speed	in accordance with worksite conditions (up to 5 pairs of rails per hour)						

#### Weight

Tare weight, example for one unit	179 t	191 t	187 t	194 t	193 t	277 t	278 t
Maximum axle load	20 t	20t	20t	20t	20t	20t	20t

#### Brake system

Brake system type	KE-GP	KE-GP	KE-GP	KE-GP	KE-GP	KE-GP	KE-GP
Brake blocks	LL Bg IB 116*	LL Bg IB 116*	LL Bg IB 116*	LL Bg IB 116*	LL Bg IB 116*	LL Bg IB 116*	LL Bg IB 116*
Braked weight	G: 54/P: 54	G: 40/P: 40	G: 40/P: 40	G: 46/P: 58	G: 40/P: 40	G: 40/P: 40	G: 40/P: 40
Brake power percentage	depends on the payload weight						
Transport setting (F/P)	dependent on operation and network						
Handbrake/parking brake fitted	1 per unit	1 per unit	1 per unit	1 per unit	1 per unit	2 per unit	2 per unit

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#### On-track operability

Shunting maneuvers not permitted	hump-shunting, loose shunting and banking not permitted
Sequencing restrictions	head of the train or end running wagon
Smallest traversable curve radius	during train movement: 150 meters unloaded/loaded during load movement: 300 meters unloaded/loaded
Transport inside train set	yes

#### Weather constraints

Max./min. ambient temperature	as per Robel SLW loading system
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#### Equipment (basic equipment for each machine and features)

Max. load capacity	28 rails	28 rails	28 rails	28 rails	30 rails	28 rails	28 rails
Number of wagons	6	6	6	6	6	9	9
Load securing system	clamped						
Load splitting	on request						
Loading/unloading of the rails (middle of track, on sleeper heads etc.)	as per Robel SLW loading system						
Performance data	as per Robel SLW loading system						
Personnel/machine operators/crew (number & qualification)	as per Robel SLW loading system						
Technical drawings of machinery	see the TI Wagon Catalogue						



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