



Switch transport

Switch Transport Wagon WTW

Technical Datasheet

WTW: the modern way to transport switches!

The WTW switch transport wagon transports pre-assembled new switches straight to the place at the construction site where they're to be installed. The WTW has a fitted loading table which is tilted at an angled and locked in place to enable large turnouts that have been separated into their segments to be transported in compliance with the loading gauge. The concept answers the challenges of short possession times and the frequent lack of space to assemble switches. The wagons are also equipped with a modern immobilization system to ensure the load is secure.



Benefits

- / Quick unloading and installation (Plug & Play) saves time = short track possessions
- / No on-site assembly area required, and less noise and inconvenience for nearby residents
- / Environmentally-friendly transport (lower CO₂ emissions)
- / Use is made of the railway infrastructure / transport all the way to the unloading point
- / High quality switches thanks to factory-standard production
- / Gentler transport and unloading of the segments

Applications

- / Infrastructure with a track gauge of 1,435 mm
- / Switch replacement or modernization works
- / High-speed lines
- / All track construction sites without pre-assembly facilities



WTW Switch Transport Wagon Technical Data

Designation	WTW 2001 – WTW 2009	WTW 3001 – WTW 3006	WTW 4007 – WTW 4010
Track gauge	1,435 mm	1,435 mm	1,435 mm

Main dimensions

Length over buffers	26.50 m	25.24 m	25.24 m
Height	3.15 m	4.20 m	3.43 m
Width	2.60 m	2.57 m	2.95 m
Number of bogies	2	2	2
Number of wheelsets	4	4	4
Distance between bogie pivots	19.50 m	19.30 m	19.30 m
Distance between last wheelset and front buffer	2.50 m	2.07 m	2.07 m
Distance between wheelsets on bogie	2.00 m	1.80 m	1.80 m
Distance between inner wheelsets	17.50 m	17.50 m	17.50 m
Height above TOP of vehicle floor	1.55 m with the tilting table flat	1.60 m with the tilting table flat	1.50 m with the tilting table flat
Loading gauge / structure gauge	empty: G1 / G1C1. loaded: dependent on drawing / loading	empty: G1 / G1C1. loaded: dependent on drawing / loading	empty: G1 / G1C1. loaded: dependent on drawing / loading

Speed

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

Tare weight	34.7 t	48.0 t	43.0 t
Maximum weight per meter	2.57 t/m	3.17 t/m	3.13 t/m
Maximum axle load	empty: 16 t (for all line categories EN 15528 A-D); loaded: 18 t (for all line categories EN 15528 B-D)	empty: 16 t (for all line categories EN 15528 A-D); loaded: 20 t (for all line categories EN 15528 C-D)	empty: 16 t (for all line categories EN 15528 A-D); loaded: 20 t (for all line categories EN 15528 C-D)

Brake system

Brake system type	KE-GP-A	KE-GP-A	KE-GP-A
Brake blocks	K-Jurid 816M	K-Cosid 810	K-Cosid 810
Braked weight	max. 53 t	max. 55 t	max. 55 t
Braking power percentage	dependent on loading weight	dependent on loading weight	dependent on loading weight
Transport setting (F/P)	dependent on operation and network	dependent on operation and network	dependent on operation and network
Handbrake / parking brake fitted	in some cases	yes	yes



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On-track operability

Shunting maneuvers not permitted	Hump-shunting and loose shunting not permitted	Hump-shunting and loose shunting not permitted	Hump-shunting and loose shunting not permitted
Sequencing restrictions	no restrictions	no restrictions	no restrictions
Smallest traversable curve radius	120 m	120 m	120 m
Max. uphill and downhill gradients	40 ‰	40 ‰	40 ‰
Max. superelevation for loading and unloading	50 mm	70 mm	100 mm
Transport inside train set	yes	yes	yes

Weather constraints

Ambient temperature (operating mode)	between -20° C and 40° C	between -20° C and 40° C	between -20° C and 40° C
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Power supply

Central power supply	individual for each wagon	individual for each wagon	individual for each wagon
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Equipment (basic equipment for each machine and features)

Maximum loading weight	28 t	32 t	36 t
Loading / unloading of the switch	onto / from table	onto / from table	onto / from table
Performance data	dependent on loading system	dependent on loading system	dependent on loading system
Personnel / machine operators / crew	3 WTW operators from VRSD	3 WTW operators from VRSD	3 WTW operators from VRSD
Wagon equipment	Tilting table, crossbeams on the tilting table to secure the load. Flooring: steel grating	Tilting table, holding bars on the tilting table to secure the load. Flooring: steel grating	Tilting table, holding bars on the tilting table to secure the load. Flooring: steel grating



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