

DATA SHEET

- Comfortable driver's cabin
- Joystick controls
- Monitoring and control via multi-functional screen
- Hydrostatic 4 wheel drive
- 4 wheel steering

- Low maintenance lamella brakes
- Screw compressor for rail brakes (2.000 litres/min)
- Permanent mobile digital data transfer for diagnosis
- Wide range of optional equipment

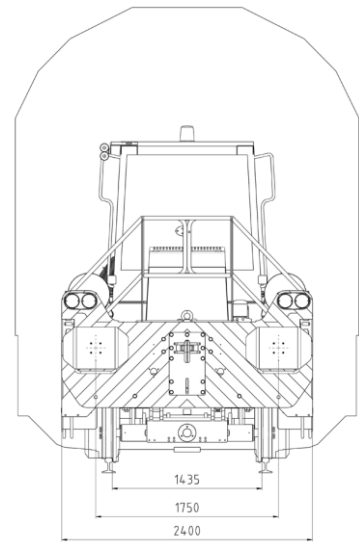
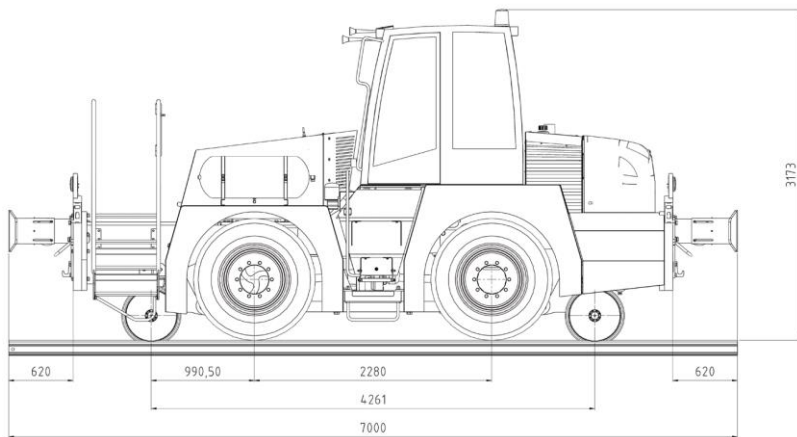
Diesel engine	
Water cooled DEUTZ turbo diesel with direct injection and intercooler, 4 cylinder, 4-stroke (emissions in line with Stage IIIB / TIER 4A standards)	
Type	TCD2012L042V
Net power *	100 kW (136 HP) @2.300 tr/min
Max. torque *	520 Nm @1.500 tr/min
Fuel consumption	8,5 l/h
Specific fuel consumption @max. torque:	225g/kWh
2 Level dry-air intake filter with safety cartridge	
Electrical system : Voltage :	24 Volt
Battery	2x 50 Ah Optima
Alternator:	1540 Watt 55 A
Starter:	3 kW (4 HP)
* according to ISO 9249	
Transmission	
Hydrostatic drive with automotive control, 2 stages for maximum traction	
Multifunctional lever (joystick) for gear and drive selection	
Axes :	planetary axles
Differential :	automatic differential lock in front axle, locking factor 100%
Tyres :	12.00 R24
Max. slope *:	35°
Max. ramp angle *:	15°
* road indication	
Brakes	
Operating brakes :	
1. Hydrostatic inching brake acting on all 4 wheels.	
2. Hydraulically operated wet lamella brakes in front and rear axle, acting on all 4 wheels.	
Parking brake : Spring loaded wet lamella brake in rear axle, acting on all 4 wheels.	
Steering	
Hydrostatic four-wheel steering, can be switched to rear axle steering.	
4 wheel steering in 3 different modes allowing easy manoeuvring.	
Automatic wheel alignment and lock-up in rail modus.	
Turning radius measured over rear end R = 5	

Chassis and standard features	
Rigid single-component chassis for maximum stability, quality steel construction, robot welded.	
Operator's cab with flexible four-point mountings for maximum driver comfort and minimum noise levels.	
Comfortable operator's cabin and 2 lockable doors, door opens through 180° with safety restraint on machine, tinted windows, electrical wipers front and rear, front and rear screen washers, 2 external rear-view mirrors, 1 side window opens through 180°, adjustable steering column and multi-functional lever (joystick), pilot controlled joystick-operation, multiply adjustable driver's seat, adjusts to driver's weight, hydraulic suspension, safety belt, sun-blinds, heater and fresh air system with external filter, interior lighting, glove boxes, intuitive modular cockpit with symbolic display components and monitoring LEDs, 24v power outlet, 2 driving lights, 2 working lights mounted on frame of bucket arm, 2 working lights mounted at front of cab roof and 2 at back of cab roof, reversing lights, indicators, rear and brake lights, fastening point, lifting point, radio pre-radio equipment.	
Colour scheme: yellow (other colours optional), Operator's cab and axles : brown Wheels : black.	
Filling capacities	
Engine with filter	10 L
Fuel tank	170 L
Front axle	21 L
Rear axle with gear box	18,5 L
Hydraulic system with tank	160 L
Distributor gear	6 L
Road performance	
Max. speed:	0-20 km/h
Rail performance	
Tare :	17 tons
Drawbar pull :	80 KN
Traction capacity :	1.600 tons <i>(optimal capacity level on dry and straight rail)</i>
Registration curve :	70 meters
Max. speed (empty) :	20 km/h

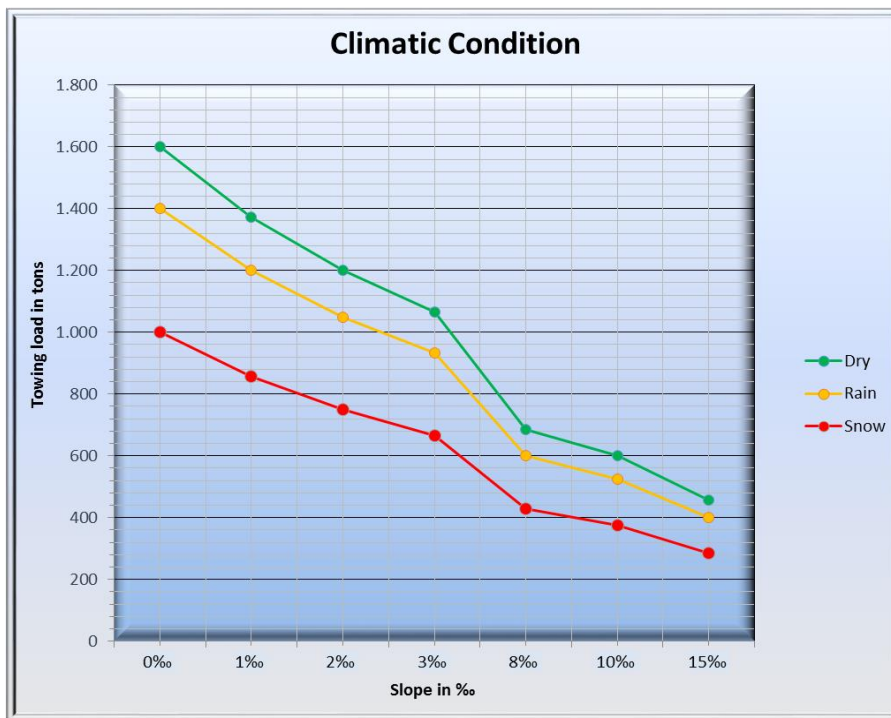
Rail equipment	
- 2 Guiding axles (front axle and rear axle) with guide wheel diameter of 500mm and a pendulum axle for catching the super elevation	
- Lifting and lowering by axle jacks and hydraulic open spheres with constant pressure compensation.	
- Checking of the hydraulic pressure on the lorries guide rail by IFM automation security unit with safety classification SIL 3.	
- Buffers front and rear equipped with 2 buffers, 2 shunter grips, a standard UIC hook with shackle and tap. General conduct in line with IN1417 rail regulations.	
- Ballast distributed under the chassis of the vehicle. This position lowers the centre of gravity of the machine which improves stability and grip.	
- Pneumatic horn (optional).	
Pneumatic braking equipment for wagons:	
- Bauer - Rotorcomp Compressor unit with drive by hydraulic motor and screw compressor with a flow of 2.000 litres to 10 bar	
- Wabco air dryer with heater and integrated oil separator	
- Air supply : 2 tanks of 120 litres to 8 bar	
- Output pressure : according to UIC standard	
- Wagon braking system with dedicated support. Gradual braking system for tightening and loosening.	
- 5 emergency stops for emergency braking and engine to idle : 1 in the driver's cabin and 4 on the buffer plates.	
- Permanent mobile digital data transfer by mobile phone for maintenance and diagnosis	
Optional equipment	
- SIL 3 radio remote control with feedback	
- Automatic coupling hook on front and rear end controlled from out of driver's cabin	
- Approval for public track	
- Extra air tanks for 540 L total capacity	
- Anti-skid system by automatic lift throttle ; combined with radio remote control	
- Atex explosion prevention kit level 2 : Chalwyn valve on main engine intake and stainless steel spark arrestor on main engine exhaust linked with emergency stops	
- Speed control from 0 to 10 km/h in turtle mode	
- Airconditioning in cabin	
- Second seat in cabin	
- Solid tyres filled with polyurethane	
- Steps on both corners on the front of the vehicle	
- Winter package (-20°C)	



Sizes :



Traction capacity :



Traction climate condition		Slope in ‰						
State Rail	Adhesion coefficient	0‰	1‰	2‰	3‰	8‰	10‰	15‰
Dry	80%	1.600	1.371	1.200	1.067	686	600	457
Rain	70%	1.400	1.200	1.050	933	600	525	400
Snow	50%	1.000	857	750	667	429	375	286

