OPERATING CONDITIONS LIMITS

Outside temp limits: Std. -15ºC -+50ºC
(with optional grid heater: -25°C -+50°C)
Maximum GCW: ..... 1500 T @ 0% gradient
Maximum tractive effort: 65kN
(based on 0.6 friction factor)
Track gauge standard: 1435mm
Wide track gauge optional: ...1524 or 1668mm
Narrow track gauge optional: 1000 or 1067mm
Vehicle weight fully ballasted: 14000kg

ENGINE

Caterpillar C4.4 ACERT
4 cylinder , Turbocharged Aftercooled
high pressure Common Rail,
electronically controlled
Displacement: … 4.400 cc3
Bore: ……105 mm.
Stroke: ……...127 mm.
Compression ratio: 1 6.2:1
Rated speed: 22 00 rpm
Rated power: ….. 99.5 kW (1 42 HP) at 2 200 rpm
Max. torque: …. 556 Nm at 1400 rpm
According to ISO 14396

TRANSMISSION

Hydrostatic Linde
2 speeds (low / high)
Full time 4x4
Rigid type Axles with double reduction
(differentials and wheel hubs)
Wheelbase: 3200 mm (Others on request)

MECHANICAL AXELS

Rigid type Axles with double reduction (differentials and wheel hubs)
Wheelbase: 3200 mm
Full time 4x4
Capacity: 10.000 KGs
Tires: 385.65/22

CHASSIS

Articulated chassis that eases the manoeuvrability in reduced radius curves and switches and turno uts.
Easy adaptation to any kind of terrains (4WD machine)
Up to 43º negotiable gradient
Access steps integrated in the chassis

RAILWAY BRAKE

Railway brakes for wagons according to UIC standards.
Suitable for 1 500 tons weight
Service indicators in cabin
Control lever and emergency stop in cabin
High capacity compressor
Working pressure: Reservoir 8 bar / Brake Line 5 bar
Air dryer filter to protect from corrosion, cavitation and freezing.
Brake houses in front and back of the vehicle

ROAD BRAKES

Service brakes: Hydraulic. Oil immersed discs in 4 tires.
Parking brake: negative brake: when the engine is stopped the parking brake is activated automatically. To desactivate it is necessary to start the engine and activate the lever on the cockpit.

PERFORMANCE ON ROAD

Gradient: >45% (dep. ground adherence)
Max. speed: 25 km/h

FUEL TANK

Capacity 150 l. Mounted in chassis.

ELECTRICAL SYSTEM

Alternator: 95 Ah / 14V
Batteries: 1 x 12 Volt / 110 Ah
Fuses and relays easy accessible

LIGHTING

Railway system lighting with automatic change for forward and reverse circulation
Warning signals (Turning lights, reverse circulation)

AUTOMATIC COUPLER RK 900 AT REAR (option)

With buffer device and draw hook at front and rear
For rail vehicles with hook/screw coupli ng as per UIC
Integrated swivelling device
Automatic coupling/uncoupling from cabin
Manual coupling release in emergency cases

BUFFERS

4 buffers (2 front – 2 rear) as per UIC

ROTATING COCKPIT

LACERTIS LOKO is equipped with 180º rotating seat that allows driving in all positions increasing visibility and thus safety.

Frontal driving

TV Cameras and monitor

Backwards driving

CABIN & INSTRUMENTS

Closed cabin, 1 seat.
Steel made, with tubular structure
FOPS – ROPS Homologation
Access from both sides of the vehicle (two doors)
Heating and air conditioning (optional)
Driver seat with suspension and seat belt
Rear view mirrors
Windshield wipers
Electrical sockets
Service indicators: Hydraulic oil temp., parking brake, battery level, headlights ind icator.
Other indicators:

- Pressure indicator of general air tank
- Brake reservoir pressure indicator.
- Indicator of hours of use.
- Tachometer
- Pressure indicator of the brake rail car and the pusher.
- Indicator of direction.
- Battery charge indica tor.
- Switch (type on / off) for wiper windshield.
- LED parking brake activated.
- Switch (type pressed / released) for wiper windshield.
- Switch (supported types / released) for the headlights.
- Switch (type on / off) for indoor lighting.
- Switch (type pressed / released) for the parking brake.
- Positioning the wheels rail / road.
- Heater

TV CAMERAS AND MONITOR (OPTIONAL)

- 3 cameras
- 1 TV monitor

Two (2) cameras positioned in front and back railway system that helps the driver during tracking on rail operation. The driver can see in the same monitor the images of both cameras.

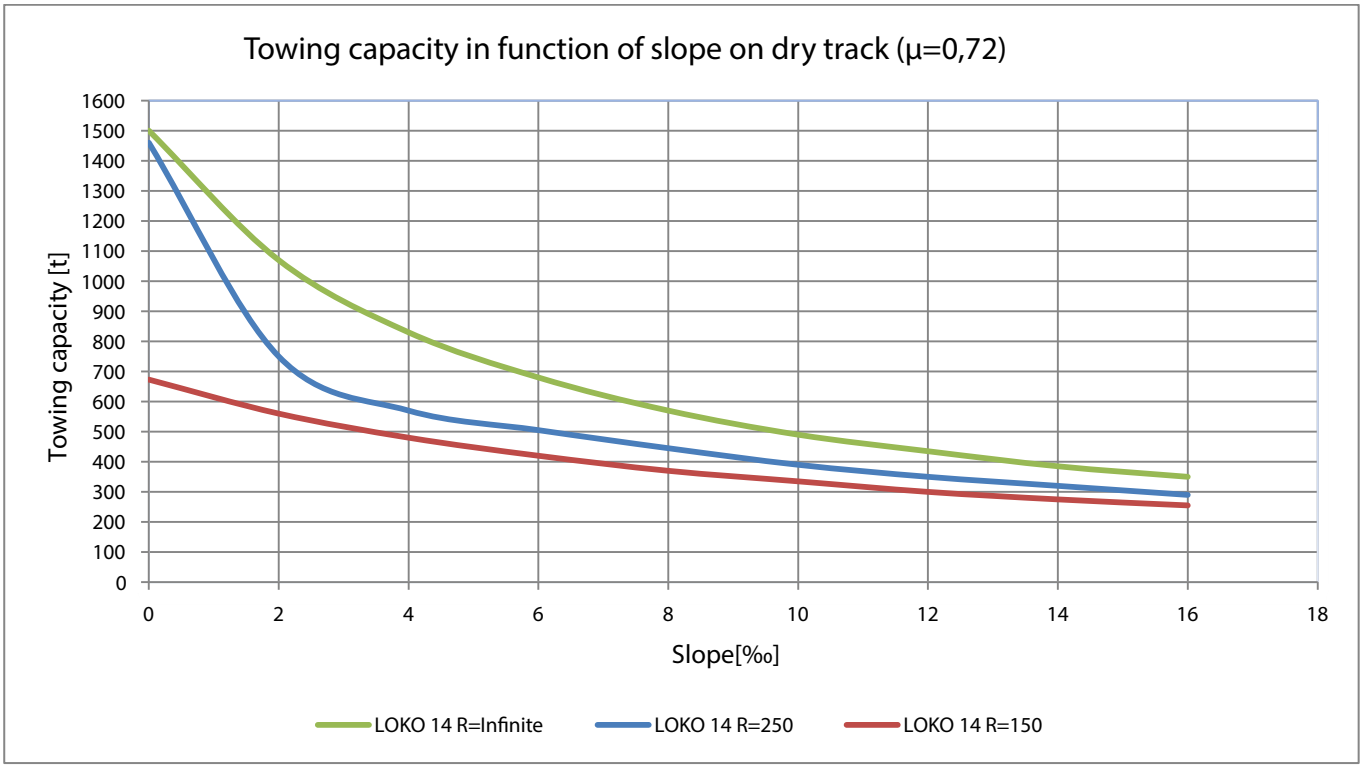
An additional camera to drive backwards is positioned at the rear of the vehicle. The driver can see in the same monitor the images of the three cameras at the same time. These cameras can be used on driving mode to help the driver to increase the visibility.

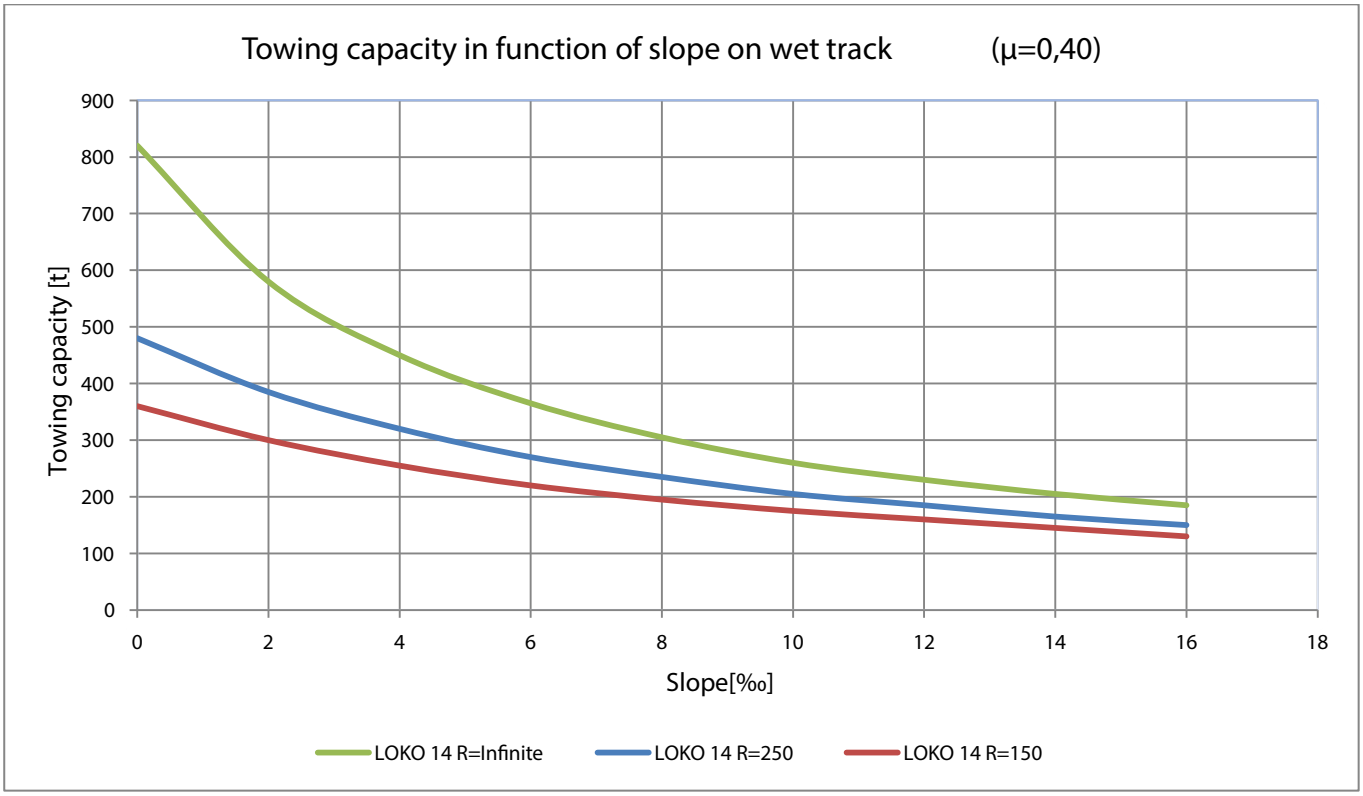
REMOTE CONTROL (OPTIONAL)

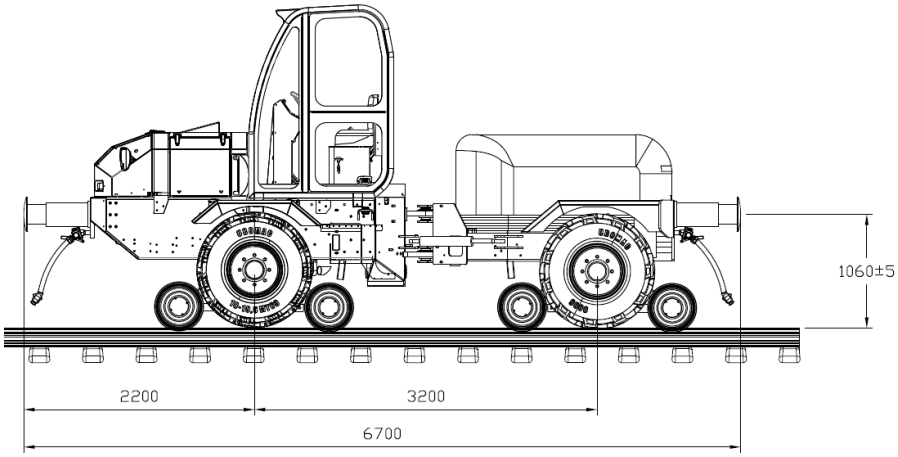
- On/off
- Accelerator
- Brake
- Emergency stop
- Forward driving
- Backwards driving

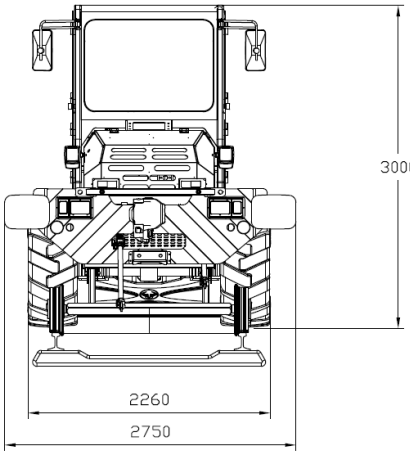
FURTHER OPTIONS

- Search lights for illuminating working area
- Radio + CD Player
- Air connections front and rear
- Wide track gauge 1524 or 1668 mm.
- Coupling system other than UIC
- Drawbar for shunting operation
- Retractable shunting mirrors
- Add-on hydraulics
- Snow plough/brush
- Generator
- Additional air tanks
- Pneumatic and electrical tools on demand
- Special bodybuilding


Towing capacity in function of slope on dry track (μ=0,72)
Towing capacity [t]
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
0
2
4
6
8
10
12
14
16
18
Slope[‰]
LOKO 14 R=Infinite
LOKO 14 R=250
LOKO 14 R=150


Towing capacity in function of slope on wet track (μ=0,40)
Towing capacity [t]
900
800
700
600
500
400
300
200
100
0
0
2
4
6
8
10
12
14
16
18
Slope[‰]
LOKO 14 R=Infinite
LOKO 14 R=250
LOKO 14 R=150


1060±5
2200
3200
6700


3000
2260
2750


CAUTION
9'6"
HIGH
CONTAINER
msc
MSCU 939779 1
4561
CAUTION
9'6"
HIGH