



Pictured machine may include options and additional equipment.

Features

Multimec provides an innovative system for material transport in mines: a multipurpose system that allows the operator to perform several jobs with only one vehicle.

The Multimec system consists of a series of cassettes, each for a different purpose, that fit on the common carrier. The rugged load handling device means the carrier can switch cassettes in less than one minute.

The powerful liquid cooled turbo charged Deutz 96 kW or MB 90 kW TIER 3 approved engine provides clean and efficient operation and gives maximum speed of 9 km/h fully loaded in upward inclined 1:7 tunnel. In horizontal tunnel the maximum speed is 25 km/h.

Vehicle has optional front axle suspension system that improves driving safety and comfort and reduces fatigue. The suspension system reduces vibration from wheels to the cabin and improves handling of the vehicle. The suspension system gives efficiency and speed to vehicle usage, with safety and comfort for the passengers and the driver.

The new Normet FOPS and ROPS approved safety cabin provides superior visibility and comfortable compartment for the driver and the passenger. Cabin is designed for safe and easy entry and exit. Door openings are wide and handrails and non-slip steps are correctly positioned. Dashboard is easy and simple to use. New multifunctional display (MID) provides driving information (speed, RPM, temperatures etc.) and information can be recorded for analysis. Enclosed cabin provides noise level < 75 dB ensuring safe and comfort driving.

Vehicle layout allows easy access to all service points, all daily checks can be done from the ground level.

Normet reserves the right to change this specification without further notice.

Technical specification

CASSETTE HANDLER

Carrying capacity 6000 kg

ENGINE

Liquid cooled turbo charged Deutz TCD 2012 L4,
96 kW/2200 rpm, TIER 3 approved

EXHAUST SYSTEM

Catalytic exhaust gas purifier and muffler

TRANSMISSION

Dana 20 000 series powershift with pump drive group
3 speeds forward and reverse
4-wheel drive

AXLES

Planetary type
Dana 112
Load end axle fixed
Engine end axle oscillation $\pm 10^\circ$

TYRES

10.00 - 20 PR 16

PERFORMANCE

1st gear	max.5 km/h
2nd gear	12 km/h
3rd gear	25 km/h
Max. tractive effort	90 kN
Max speed in upward 1:7 inclined tunnel:	
• Empty	12 km/h
• Fully loaded	5 km/h
Performance curve	4800031

BRAKES

Service brake: hydraulically powered two-circuit oil immersed multidisc brakes in both axles

Safety/Parking brake: spring applied hydraulically released fail-safe -type brake. Brake test possibility in cabin

STEERING

Hydraulic frame steering
Orbitrol type
Frame articulation $\pm 40^\circ$

FUEL TANK

Capacity 112 L

HYDRAULIC SYSTEM

Variable displacement pump system
Pressure setting 190 bar, 95 L/min/2200 rpm
Hydraulic oil tank capacity 115 L
Return oil filtration 10 μ m
Indication of level, filtration and temperature

24 VDC ELECTRICAL SYSTEM

Exposed components are min IP 65 standard

Battery	2 x 115 Ah
Alternator	100 A
Halogen driving lights (4 + 2 pcs)	70 W
Halogen work lights (2 + 2 pcs)	70 W
Halogen work lights on work platform (2 pcs)	70 W
LED parking, brake and indicator lights	
LED side lights; amber	
Side reversing halogen lights 70 W	
Rotating beacon; amber	
Wire harness (self extinguishing) with tinned wires and water tight conduits	

DRIVER'S COMPARTMENT

Open 2-man cabin FOPS/ROPS approved
Air suspended driver's seat
Seat with retractable lap seat belt
Forward and side seating for the driver with two sets of pedals (brake and accelerator)
MID 070 S Multifunctional Display with:

- Meters; e.g. speed, RPM, operating hours
- Status indicators; e.g. fluid levels, temperatures, pressures, alarms, faults

GREASING SYSTEM

Centralized grease fittings for the carrier

OTHER

12 kg hand held fire extinguisher
Standard symbol labels

Optional equipment

DRIVER'S CABIN

Enclosed cabin
Air suspended T-back seat for driver and passenger

ENGINE

Liquid cooled turbo charged MB OM 904 LA,
90 kW/2200 rpm, TIER 3 approved:

1st gear max.	5 km/h
2nd gear	10 km/h
3rd gear	25 km/h
Max. tractive effort	90 kN
• Empty	12 km/h
• Fully loaded	6 km/h
Performance curve	4800032

OTHER

LED driving lights (4 + 2 pcs)
LED work lights on cabin (2 + 2 pcs) 43 W
Warning lights, 1 unit:

• Rotating beacon; red	
• Rotating beacon; blue	18 W

Additional equipment

SUSPENSION

Front axle suspension

FOR ENCLOSED CABIN

CD/Radio system

Cabin ventilation:

- Cabin heating
- Air conditioning

FIRE SUPPRESSION SYSTEM

Fogmaker: Manually actuated

Fogmaker: Automatically actuated

Ansul: Manually actuated

Ansul: Automatically actuated

GREASING SYSTEM

Automatic lubrication system for carrier: Lincoln

AIR COMPRESSOR

4 m³/min hydraulic driven compressor on front rack

OTHER

Fast fuel filling system: Wiggins

Oil evacuation kit with sample points

Extra hand held fire extinguisher (12 kg)

Hydraulic front support legs

Extra Warning light, 1 unit:

- Rotating beacon; amber
- Rotating beacon; red
- Rotating beacon; blue
- Strobe light; white

Text labels in: Fin / En / Por / Swe / Rus / Nor / Ger / Fra / Spa / Ita

Toolbox and maintenance tools

2 wheel chocks with brackets

Reversing camera

Spare wheel with tyre

Hydraulics for mixer cassette

0.4 m³/min compressor for Fuel / Lube cassette

WLAN connection

CASSETTES

Base cassette

C100 Material cassette

C162 Personnel cassette

C125 Crane cassette

C250 Fuel cassette

C200 Lube cassette

C300 Mixer cassette

C315 Scissor lift cassette

C100 Workshop cassette

C350 Lube cassette

C350 Water cassette

C350 Fuel Cassette

C600 Explosives cassette

Services

RECOMMENDED SPARE PARTS FOR EARLY LIFE

Spare parts package: A complete package to make sure your machine runs with optimal uptime up to 1000 operation hours*.

Includes periodical maintenance parts and most critical spare parts related to e.g.:

- Engine (e.g. filters, belts)
- Chassis (e.g. wiper blades, throttle pedal connector)
- Hydraulics (e.g. filters)
- Electrics (e.g. sensors, work lights, solenoid coils, contactors)
- Compressor, if applicable (e.g. filters)

*) In challenging operating environment 1000h of usage may not be reached with this spare parts package.

EXTENDED WARRANTY

Extended warranty extends the standard warranty period (12 months or 2000 usage hours) up to total 24 months or 3000 usage hours, whichever is reached first.

ELECTRONIC MANUALS ON THE WEB

LinkOne electronic spare parts and instruction manuals

TRAINING AND EXPERTISE SERVICES

Available before and at the equipment delivery - and during the whole equipment life-time!

Product training:

Operation and Maintenance
Automation - NorSmart
Foundation of electrics, hydraulics and mechanics
Trouble-shooting

Process & operator improvement audit for:

Concrete spraying
Charging
Scaling

Audit services to improve:

Performance, availability, maintenance & repair efficiency, safety, quality, environmental aspects

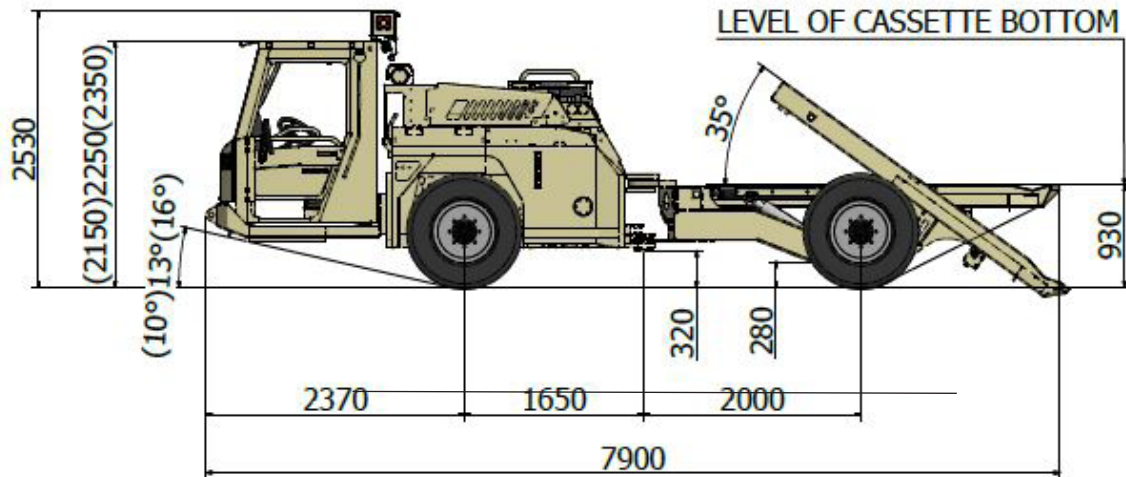
SERVICE CONTRACTS FOR

Spare parts supply
Scheduled inspection
Supervision
Scheduled maintenance
Preventive maintenance

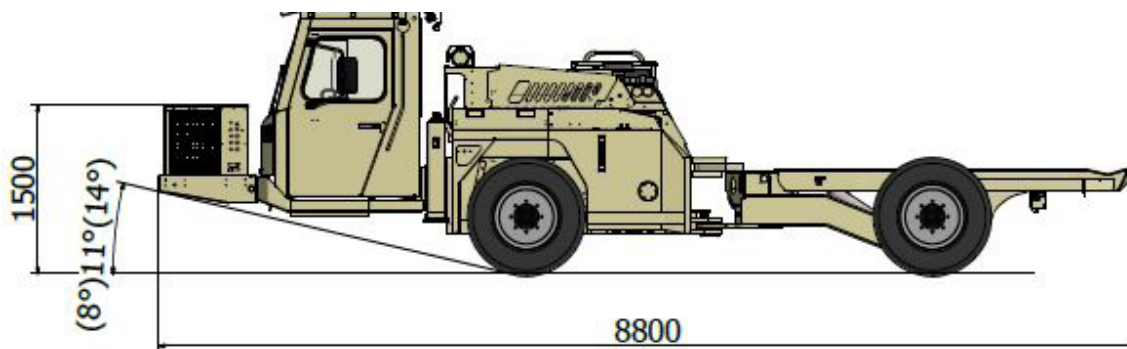
EQUIPMENT HAND-OVER SERVICES

	Start-up training	Commissioning
1. Operator training		
1.1 Classroom training		No classroom training included in commissioning
General introduction and operation of machine	Comprehensive	
Safety instructions	Comprehensive	
Use of manuals	Comprehensive	
Technical introduction of equipment	Comprehensive	
Hands-on service and pre-operation checks	Comprehensive	
Controls and driving (starting, driving, stopping, parking)	Comprehensive	
Work method	Comprehensive	
1.2 Practical training		
Pre-operation checks	Comprehensive	Basic
Driving, starting, stopping, parking	Comprehensive	Basic
Preparing the machine for specific operation conditions	Comprehensive	Not covered
Operation	Comprehensive	Basic
Washing the machine	Comprehensive	Basic
Troubleshooting	Comprehensive	Basic
2. Maintenance and repair training		
General operation of machines	Comprehensive	Basic
Symbols of drawings and codes	Comprehensive	Not covered
Understanding hydraulic and electric schematics	Comprehensive	Basic
Control systems	Comprehensive	Basic
Function of main components (depending on equipment)	Comprehensive	Basic
Locations of components in the machine	Comprehensive	Not covered
Periodical maintenance	Comprehensive	Basic
Troubleshooting	Comprehensive	Not covered
Use of manuals	Comprehensive	Basic
Connection of hydraulic and electrical equipment	Comprehensive	Not covered

Dimensions



SIDE VIEW
Basic machine



SIDE VIEW
Machine with options and additional equipment

DIMENSIONS

Length	7900 mm
Width	1800 mm
Height	(+/- 100 mm) 2250 mm
Wheel base	3650 mm
Track	1500 mm
Ground clearance as shown	280 mm

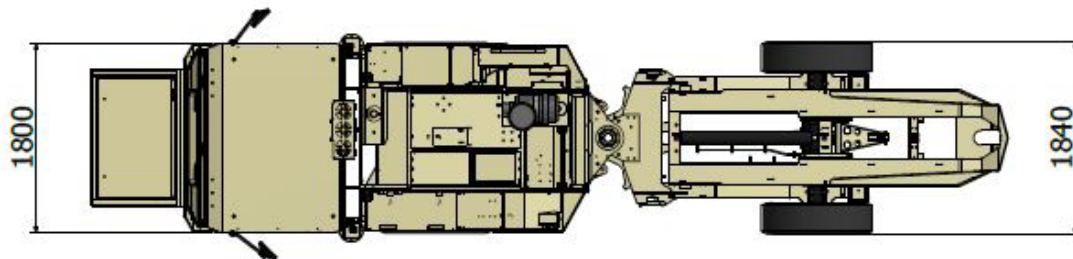
TURNING RADIUS

Outer	6440 mm
Inner	4000 mm

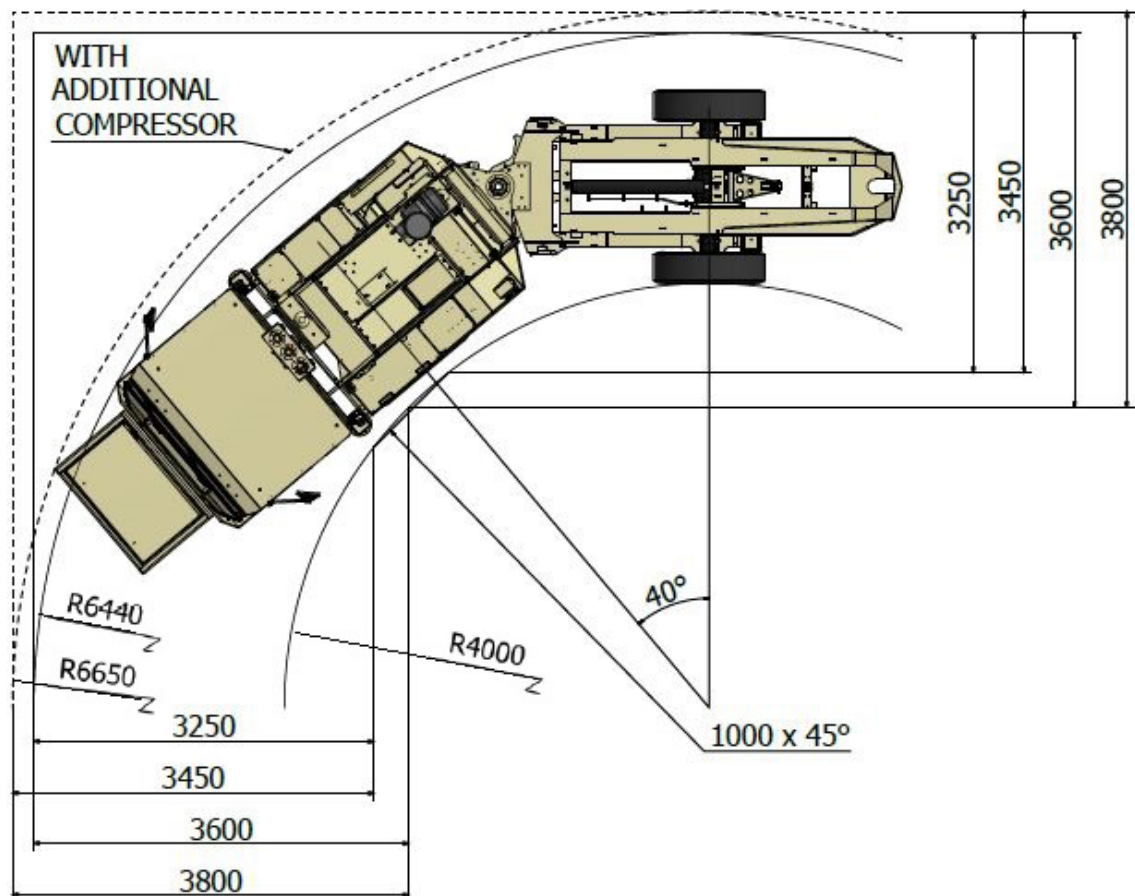
WEIGHT

• Operating	9 000 kg
• With max load	15 000kg

Dimensions

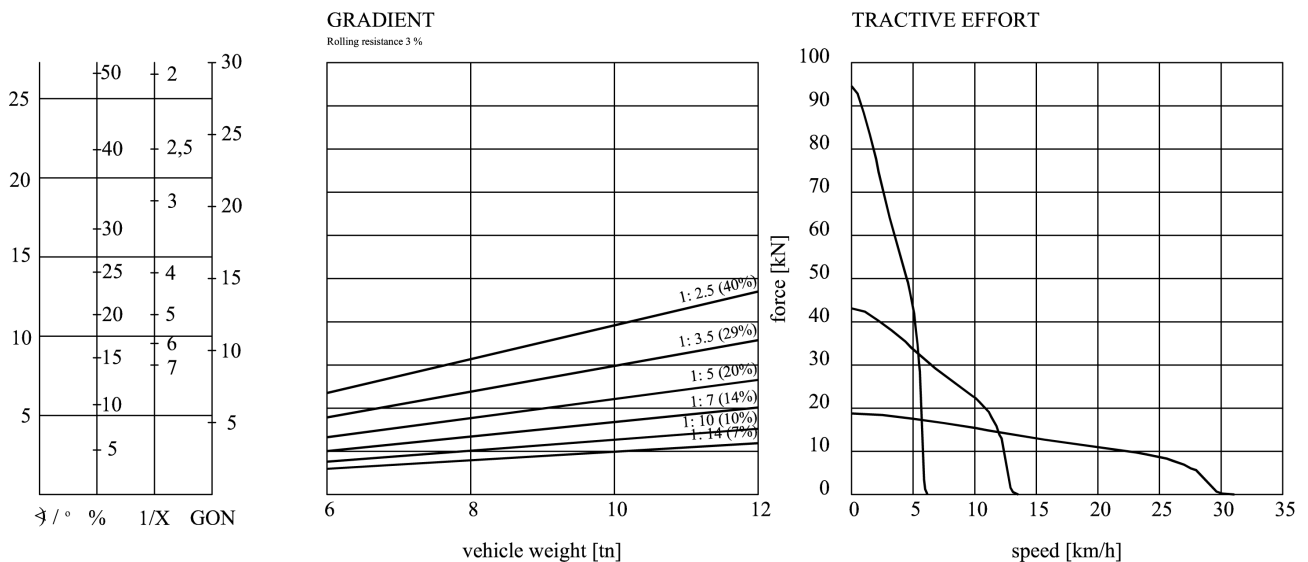


TOP VIEW

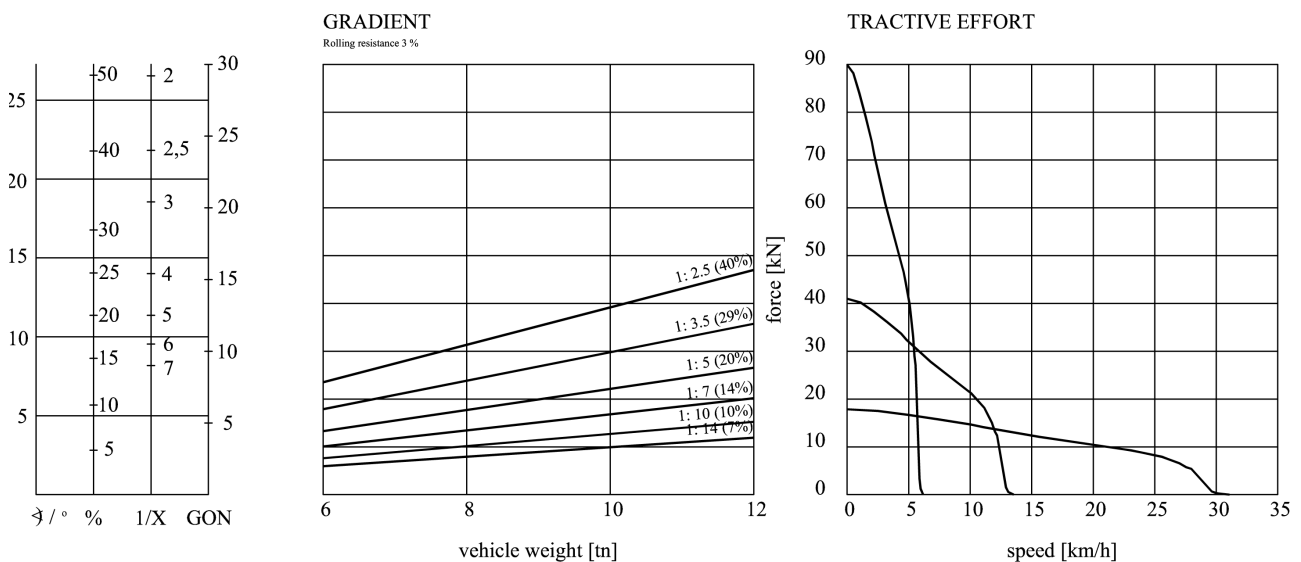


TURNING RADIUS

Tractive efforts



DEUTZ TCD 2012 L4 96 kW Performance curve 4800031



MERCEDES-BENZ OM 904 LA 90 kW Performance curve 4800032