

Pictured machine may include options and additional equipment.

### Features

The Himec MF 905 mechanizes man lifting in medium and large profile tunneling and mining works. Its 500 kg lifting load and maximum 8.7 m platform height helps miners to reach up to 11 m high roofs. The works can be accomplished safely, efficiently and comfortably from the level work platform, elevated to a optimum work height.

The powerful liquid cooled turbo charged Deutz 120 kW or MB 110 kW TIER 3 approved engine provides clean and efficient operation and gives maximum speed of 9 km/h 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 fatique. 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 driver and the passenger.

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.

## **Technical specification**

#### NBB3 BASKET BOOM

2-men basket Lifting capacity of basket 500 kg = 340 kg + 2 persons Boom lift -18°...+ 60° Boom extension 4.0 m Max. Lifting height (basket floor) 8.7 m Max. Vertical reach 11.0 m Boom slew +/- 25° Max. Lateral coverage 10.0 m Diesel start/stop (from the basket) Battery operated emergency pump

#### ENGINE

Liquid cooled turbo charged Deutz TCD 2013 L4, 120 kW/2300 rpm, TIER 3 approved

#### EXHAUST SYSTEM

Catalytic exhaust gas purifier and muffler

#### TRANSMISSION

Dana 24 000 series power shift with pump drive group 3 speeds forward and reverse 4-wheel drive

#### AXLES

Planetary type Dana 123 Load end axle fixed Engine end axle oscillation +/- 10°

#### TYRES

12.00 - 20 PR 20

#### PERFORMANCE

1st gear max.	6 km/h
2nd gear	12 km/h
3rd gear	25 km/h
Max. tractive effort	133 kN
Max speed in 1:7 inclined tunnel	9 km/h
Performance curve	100018584

#### BRAKES

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

Safety/Parking brake: spring applied hydraulically released fail-safe -type brake. Brake testing possible from cabin

#### STEERING

Hydraulic frame steering Orbitrol type Frame articulation +/- 40°

#### FUEL TANK

Capacity 112 L

#### HYDRAULIC SYSTEM

Variable displacement pump system 190 bar, 95 L/min/2200 rpm Hydraulic oil tank capacity 115 L Return oil filtration 10 µm 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 LED driving lights (4 + 2 pcs) LED work lights (2 + 2 pcs) LED parking, brake and indicator lights LED side lights; amber Side reversing LED lights 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) Cabin door interlock switches with safety brake application MID 070 S Multifunctional Display with:

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

#### MACHINE CONNECTIVITY

Machine connectivity hardware (WLAN/3G/4G/LTE)

#### GREASING SYSTEM

Centralized grease fittings for the carrier

#### OTHER

12 kg hand held fire extinquisher Standard symbol labels Hydraulic rear support legs

### **Optional equipment**

#### DRIVER'S CABIN

Enclosed cabin, FOPS/ROPS Air suspended T-back seat for driver and passenger

#### MACHINE CONNECTIVITY

- Data lifetime license (Include connectivity hardware)
- Analytics lifetime license (Include connectivity hardware and data lifetime license)

#### ENGINE

Liquid cooled turbo charged Mercedes-Benz OM 904 LA, 110 kW / 2200 rpm, TIER 3 approved 1st gear max. 6 km/h 2nd gear 13 km/h 3rd gear 25 km/h Max. tractive effort 120 kN Max speed in 1:7 inclined tunnel: 11 km/h

## Performance curve

Particle filter for Deutz TCD 2013 L4 120 kW

#### OTHER

- Warning lights, 1 unit:
- Rotating beacon; red
- Rotating beacon; blue

### Additional equipment

#### SUSPENSION

- Front axle suspension
- Front support legs

#### FOR ENCLOSED CABIN

- CD/Radio system
- Cabin ventilation:
- Cabin heating
- Air conditioning

#### FOR NBB BASKET BOOM

#### Safety bar

10006272

Safety bar with hydraulic lift: Reduces lifting capacity 60 kg Safety roof with hydraulic lift: Reduces lifting capacity 100 kg Safety roof with hydraulic lift and slide: Reduces lifting capacity 200 kg LED working lights on safety roof / safety bar (2 pcs) 43 W Boom suspension

#### FIRE SUPPRESSION SYSTEM

Fogmaker: Manually or automatically actuated Ansul: Manually or automatically actuated

#### GREASING SYSTEM

Automatic lubrication system for carrier and lifter: Lincoln

#### AIR COMPRESSOR

4 m<sup>3</sup> 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 Warning lights, 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

## LTC 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)
- Boom (e.g. sliding parts, bearings, cylinders, seals, pins)
- 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

#### EQUIPMENT HAND-OVER SERVICES

#### 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:

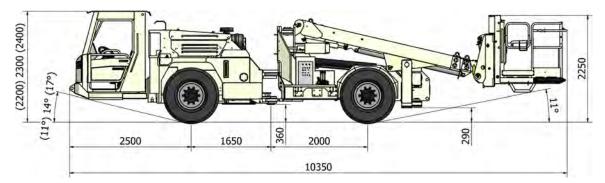
Performance, availability, maintenance & repair efficiency, safety, quality, environmental aspects

#### SERVICE CONTRACTS FOR

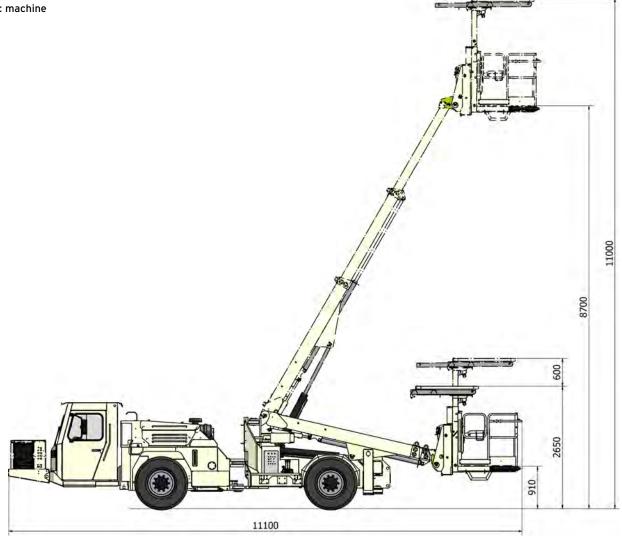
Spare parts supply Scheduled inspection Supervision Scheduled maintenance Preventive maintenance

	Start-up training	Commissioning
1. Operator training		
1.1 Classroom training		
General introduction and operation of machine	Comprehensive	No classroom training included in commissioning
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



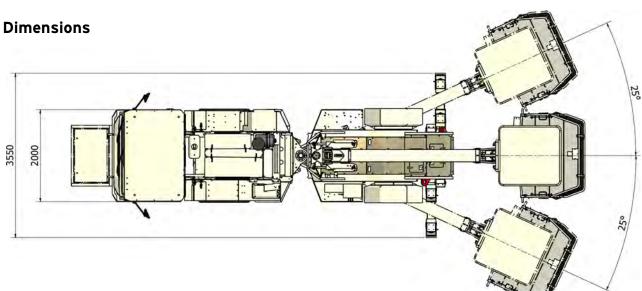




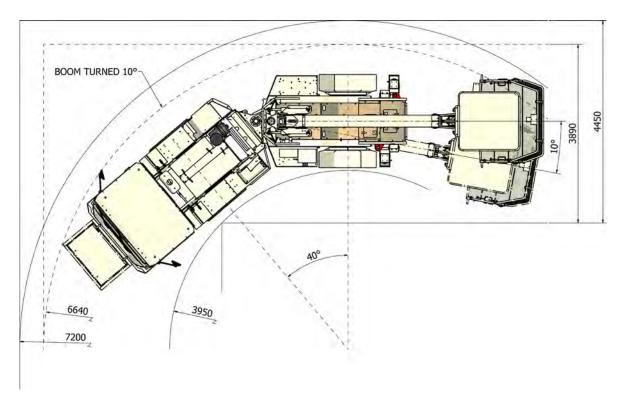
### SIDE VIEW

Machine with options and additional equipment

Technical data sheet 100056993.1 23.08.2022



TOP VIEW



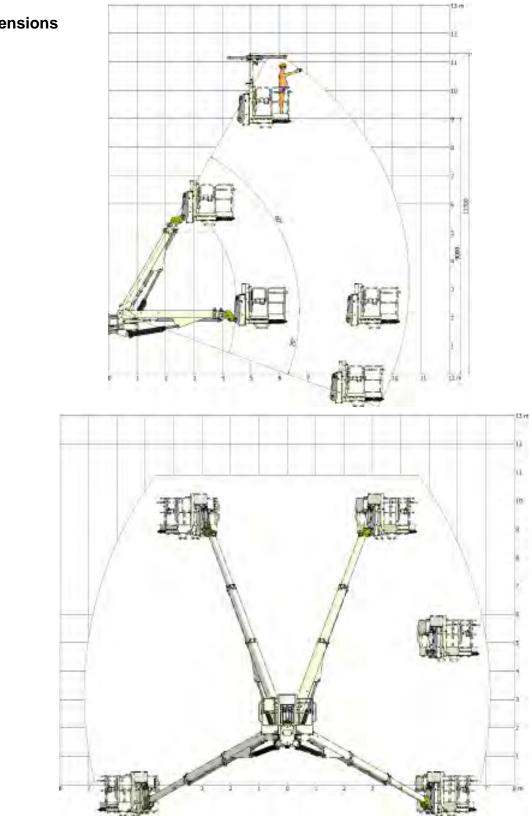
### TURNING RADIUS

DIMENSIONS	
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DIMENSIONS	
Length	10 350 mm
Width	2000 mm
Height	(+/- 100 mm) 2300 mm
Wheel base	3650 mm
Track	1650 mm
Ground clearance as shown	290 mm

TURNING RADIUS	
Outer	7200 mm
Inner	3950 mm
WEIGHT	
Operating	11 000 kg

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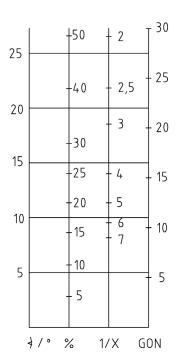


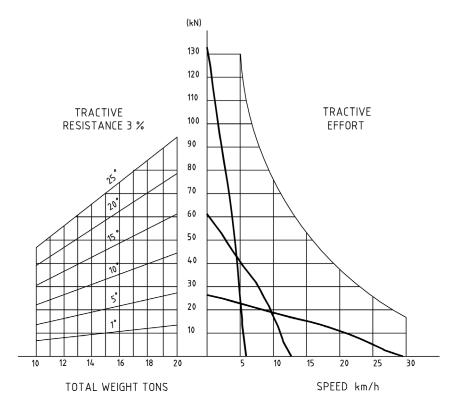
### Dimensions

COVERAGE AREA OF NBB3 BOOM

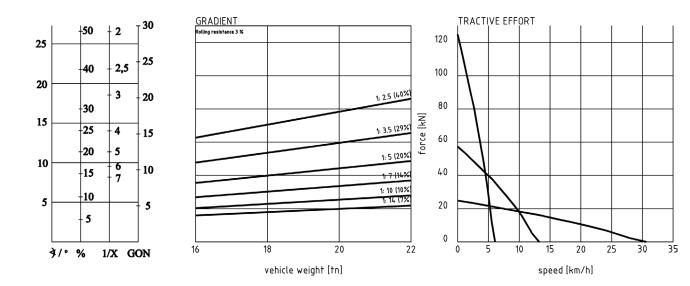
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## **Tractive efforts**





DEUTZ TCD 2013 L4 120 kW Performance curve 100018584



MERCEDES-BENZ OM 904 LA 110 kW Performance curve 100006272

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