



*Pictured machine may include options and additional equipment.*

## Features

Charmec MC 605 ANFO charger with diesel hydraulic drive is designed for face and production charging in underground mines and tunnels up to 65 m<sup>2</sup> cross sections where max face height is 8,4 m.

ANFO vessels options of 2 x 250 / 360 / 500 / 720 litres provides enough explosive storage volume for several faces without need for refuelling. Ready designed place for stick powder boxes, primers and detonators makes it possible to bring all the needed materials to the workplace at once and eliminates the need for an additional explosive service vehicle. Compressor option eliminates the need for external pressure air line.

The liquid cooled turbo charged 110 kW TIER 3 approved engine provides clean and efficient operation and gives maximum speed of 25 km/h and 8 km/h in upward 1:7 inclined tunnel.

The FOPS/ROPS approved safety canopy / cabin with pivotal operator's seat provides comfortable compartment for the driver and his assistant. The enclosed cabin provides noise level < 75 dB.

Self extinguishing marine type wire harness with tinned wires and water tight conduits are specially designed for safe and reliable operation in tough underground conditions. All daily checks can be done from the ground level.

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

### Technical specification

#### CHARGING SYSTEM

2 ANFO vessels and work stand, 1 charging operator  
500 liter stainless steel ANFO kettle  
Pressure max. 7 bar  
Extra air for charging  
Pneumatic hand and foot control for charging and blowing  
Pneumatic control in basket to switch between vessels  
Anfo hose 19 x 25 mm  
Earth straps front and rear  
Storage area for stick powder boxes  
Storage boxes for primers and detonators

#### NBB3XS BOOM

2-men hanging square tube basket  
Lifting capacity 710 kg  
Boom lift -11°...+ 60°  
Max. Lifting height (basket floor) 6.4 m  
Max. Vertical reach 8,4 m  
Boom slew +/- 30°  
Automatic levelling of basket  
Diesel start/stop from basket  
Battery operated emergency pump for lowering the boom

#### ENGINE

Liquid cooled turbo charged Mercedes-Benz OM 904 LA, 110 kW/2200 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°

#### PERFORMANCE

1st gear max.	6 km/h
2nd gear	13 km/h
3rd gear	25 km/h
Max. tractive effort	120 kN
Max speed in upward 1:7 inclined tunnel	8 km/h
Performance curve	4800030

#### STEERING

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

#### 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

#### TYRES

12.00 - 20 PR 20

#### 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  
Driving halogen lights (4 + 2 pcs) 70 W  
Working halogen lights (2 + 2 pcs) 70 W  
LED working lights in basket (2 pcs)  
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  
Seats with retractable lap seat belt  
Forward and side seating for the driver with two sets of pedals (brake and accelerator)  
Support leg jack down switch  
CAN Cockpit, Master Gauge:

- Tacho, rpm
- Operating hours
- Fuel level
- Transmission and cooling water temperature

#### GREASING SYSTEM

Centralized grease fittings for the carrier

#### OTHER

12 kg hand held fire extinguisher (2 pcs)  
Standard symbol labels  
Extendable support legs at the load end

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### Optional equipment

#### CHARGING SYSTEM

**ANFO system:**

- 2 charging operators

**ANFO module:**

- ANFO filling system

**ANFO vessel size:**

- 250 L
- 360 L
- 720 L

**Radio controlled charging and blowing in basket:**

Optional for pneumatic control

**ANFO hose diameter:**

- For manual hose feeding  
22x28 / 26,5x33,5 / 41,5x51 mm

**ANFO hose length:**

- 30/60 m

#### DRIVER'S CABIN

Enclosed cabin

Air suspended T-back seat for driver and passenger

#### EXHAUST SYSTEM

Vertical exhaust stack

#### OTHER

Xenon working lights (2 + 2 pcs) 35 W

LED driving lights (4 + 2 pcs) 18 W

LED working lights (2 + 2 pcs) 43 W

Warning lights, 1 unit:

- Rotating beacon; red
- Rotating beacon; blue

### Additional equipment

#### CHARGING SYSTEM

**Additional pneumatic charging controls:** For toe holes and ground level charging work

**4 m<sup>3</sup>/min onboard diesel-hydraulic compressor**

#### BOOM OPERATION

**Dead man's pedal switch**

Prevents the boom operation if not pressed

#### FOR ENCLOSED CABIN

**CD/Radio system****Cabin ventilation:**

- Cabin heating
- Air conditioning

#### FOR NBB BASKET

**Safety bar****Safety roof with hydraulic lift:**

- 400 kg = 240 kg + 2 persons

**Safety roof with hydraulic lift and slide:**

- 300 kg = 140 kg + 2 persons

**LED working lights on safety roof (2 pcs) 43 W**

#### FIRE SUPPRESSION SYSTEM

**Ansul:** Manually actuated

**Ansul:** Automatically actuated

#### GREASING SYSTEM

**Automatic lubrication system for carrier: Lincoln**

**Automatic lubrication system for carrier and lifter: Lincoln**

#### OTHER

**Fast fuel filling system: Wiggins**

**Extra hand held fire extinguisher (12 kg)**

**Warning lights, 1 unit:**

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

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

**2 wheel chocks with brackets**

**Reversing camera**

**Spare wheel**

### **LTC services**

#### **SPARE PARTS**

**Spare parts package A:** Available for 1000 h of use\*.  
Include periodical service, most common wearing parts and most critical safety parts. Special attention for parts that are crucial for charging process

**Spare parts package B:** Available for 3000 h of use\*.  
Include periodical service, most common wearing parts and most critical safety parts. Special attention for parts that are crucial for charging process

\* Recommendations are based on average hours - can vary a lot depending on work site conditions

#### **TRAINING SERVICES**

Available before delivery, at start up and after delivery

##### **Product training:**

Operation and Maintenance

NorSmart

Foundation of electrics, hydraulics and mechanics

Audit

##### **Process training:**

Concrete spraying

Charging

Process audit

#### **AUDIT SERVICES**

To improve performance of the machines

To improve the performance of your processes

To help improve the quality of maintenance operations

#### **SERVICE CONTRACTS**

**Spare parts supply programmes**

**Scheduled inspection programmes**

**Supervision programmes**

**Periodic maintenance programmes**

**Machine usage programmes**

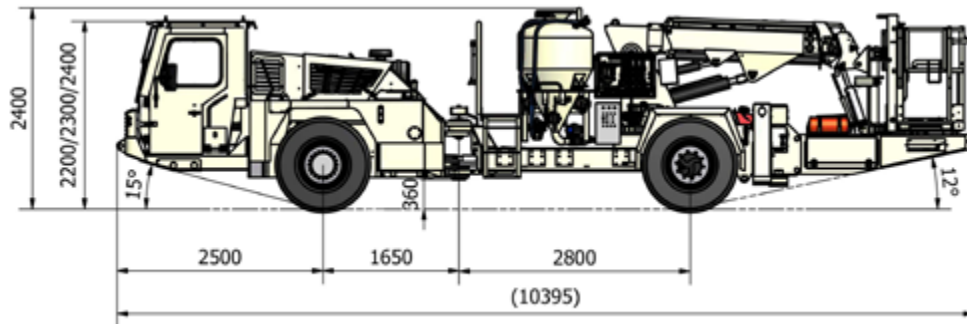
#### **LINK ONE**

Link One electronic spare part manuals

#### **WARRANTY SERVICES**

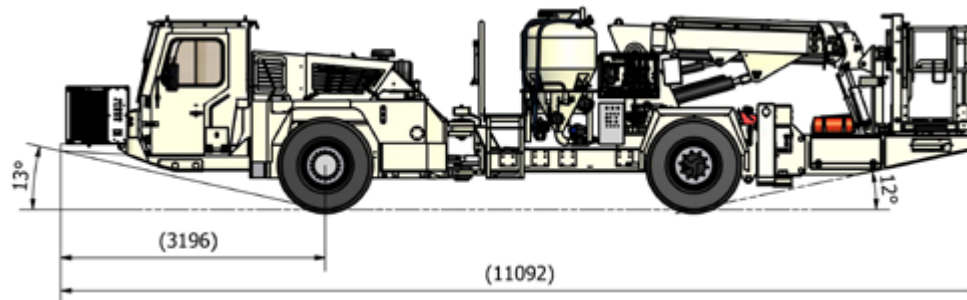
Extended warranty

### Dimensions



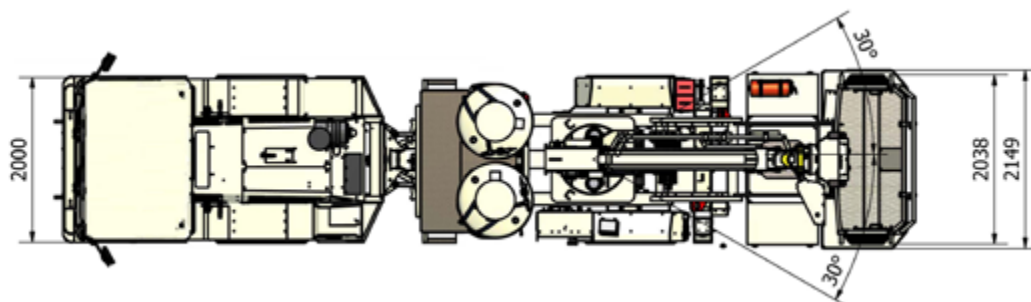
#### SIDE VIEW

Basic machine



#### SIDE VIEW

Machine with options and enclosed cabin



#### TOP VIEW

#### DIMENSIONS

Length	10395 mm
Width	2149 mm
Height	2400 mm
Wheel base	4450 mm
Track	1650 mm
Ground clearance	360 mm

#### TURNING RADIUS

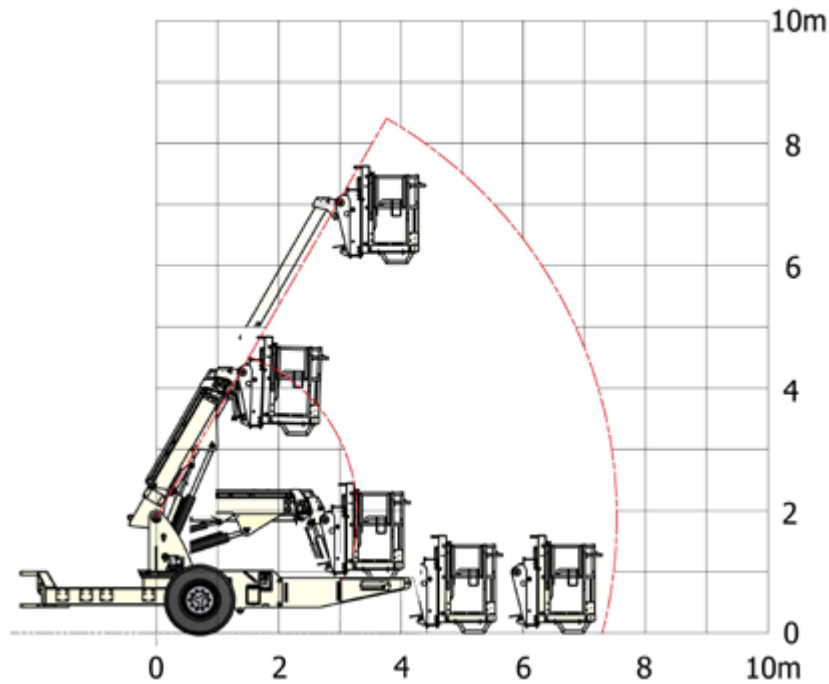
Outer	7685 mm
Inner	4909 mm

#### WEIGHT

Operating weight:	18 000 kg
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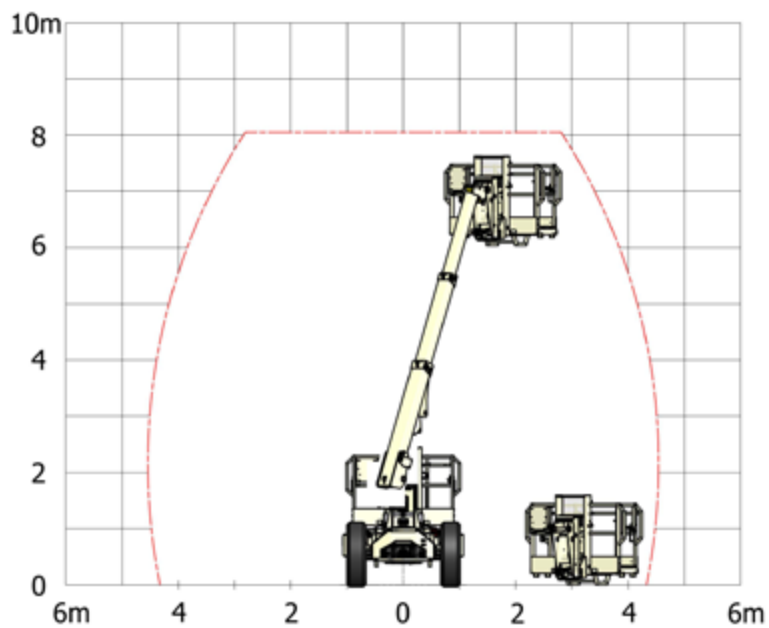
Normet reserves the right to change this specification without further notice.

### Dimensions



### BOOM REACH

Lateral and vertical

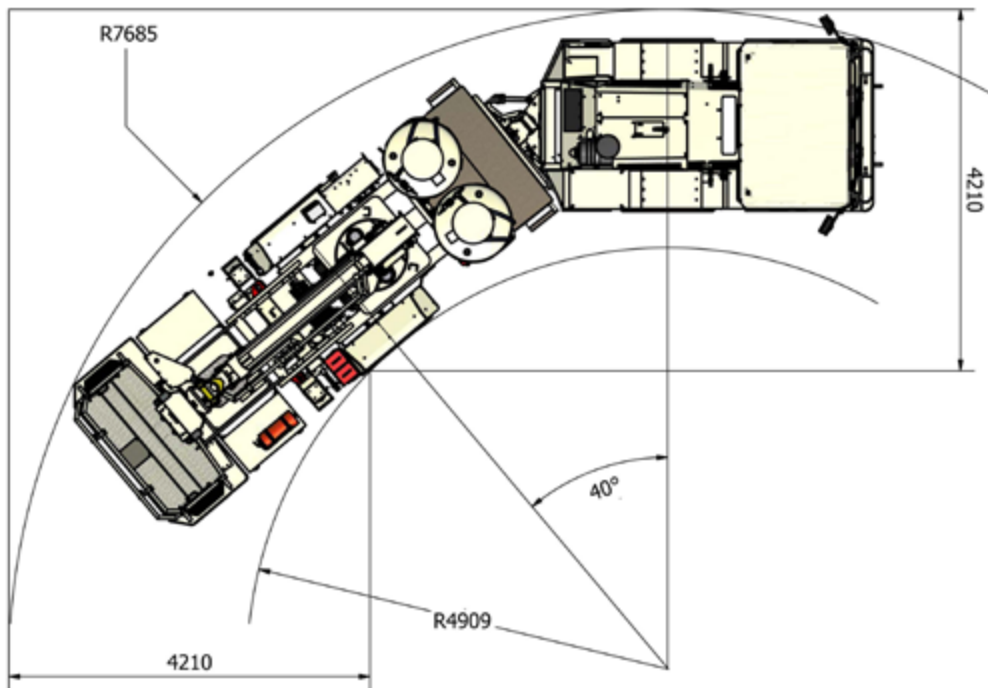


### BOOM REACH

Lateral and vertical

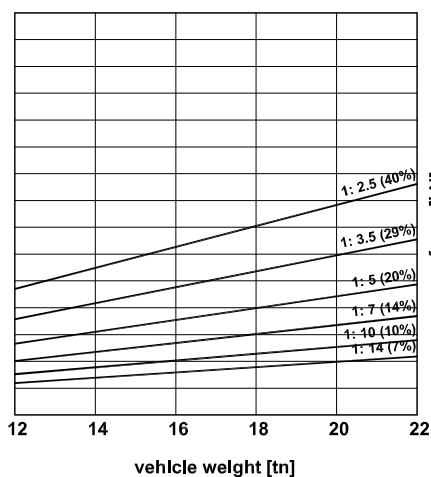
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### Dimensions and Tractive efforts

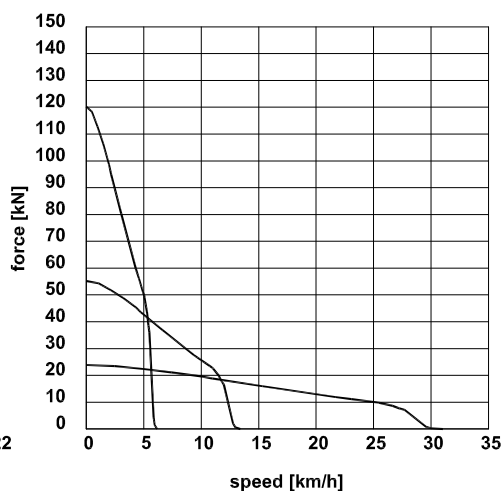


### TURNING RADIUS

**GRADIENT**  
Rolling resistance 3 %



**TRACTIVE EFFORT**



### MERCEDES-BENZ OM 904 LA 110 kW Performance curve 4800030

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