



Pictured machine may include options and additional equipment.

Features

Charmec MF 605 D charger with diesel hydraulic drive is designed for face and production charging in underground mines and tunnels up to 65 m² cross sections where max face height is 8.4 m.

Place for external emulsion kit is located in the middle the unit. 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 120 kW Deutz or 110 kW MB 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.

Technical specification

CHARGING SYSTEM

Process platform at the center of the unit
Inner dimensions 1100 x 2150 x 1600 mm
Max load 4500 kg. Center of gravity shown in dimensional picture
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 500 kg
Boom lift -11°...+ 60°
Max. Lifting height (basket floor) 6.5 m
Max. Vertical reach 8.8 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 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	8 km/h
Performance curve	100018584

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

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
Halogen driving lights (4 + 2 pcs) 70 W
Halogen work lights (2 + 2 pcs) 70 W
LED work 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)
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 (2 pcs)
Standard symbol labels
Extendable support legs at the load end

Optional equipment

DRIVER'S CABIN

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

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 upward 1:7 inclined tunnel	8 km/h
Performance curve	100018584

OTHER

LED driving lights (4 + 2 pcs) 18 W
LED work lights (2 + 2 pcs) 43 W
Warning lights, 1 unit:

- Rotating beacon; red
- Rotating beacon; blue

Additional equipment

CHARGING SYSTEM

4 m³/min onboard diesel-hydraulic compressor

SUSPENSION

Front axle suspension

- Hydraulic front support legs

FOR ENCLOSED CABIN

CD/Radio system

Cabin ventilation:

- Cabin heating
- Air conditioning

FOR NBB BASKET BOOM

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 / safety bar (2 pcs) 43 W

FIRE SUPPRESSION SYSTEM

Fogmaker: Manually actuated

Fogmaker: Automatically actuated

Ansul: Manually actuated

Ansul: Automatically actuated

Tempus: Manually actuated

GREASING SYSTEM

Automatic lubrication system for carrier: Lincoln

Automatic lubrication system for carrier and lifter: Lincoln

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

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.

Spare parts package B: Available for 3000 h of use*. Include periodical service, most common wearing parts and most critical safety parts.

* 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.

NOTE! after/during Start up / Commissioning as additional training days these are cheaper.
In general training reduces operation costs.

Product training:

Operation and Maintenance

NorSmart

Foundation of electrics, hydraulics
and mechanics

Audit

Process training:

Concrete spraying

Charging

Scaling

Process audit

AUDIT SERVICES

To improve machines performance

To improve your processes performance and quality

SERVICE CONTRACTS

Spare parts supply programmes

Scheduled inspection programmes

Supervision programmes

Periodic maintenance programmes

Machine usage programmes

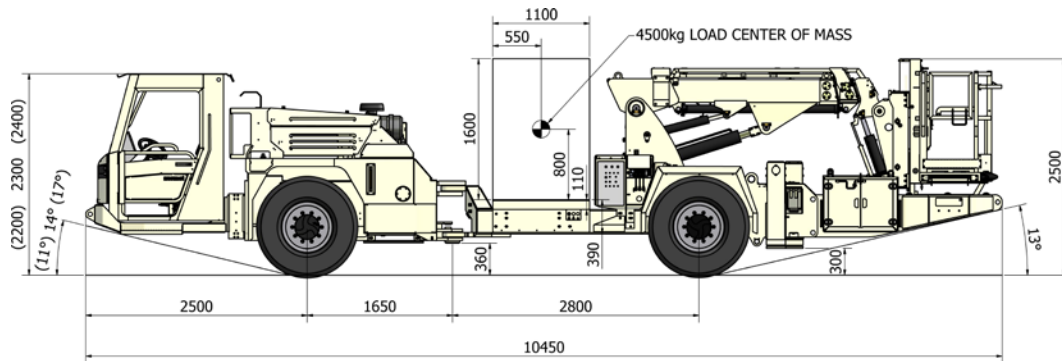
LINK ONE

Link One electronic spare part manuals

WARRANTY SERVICES

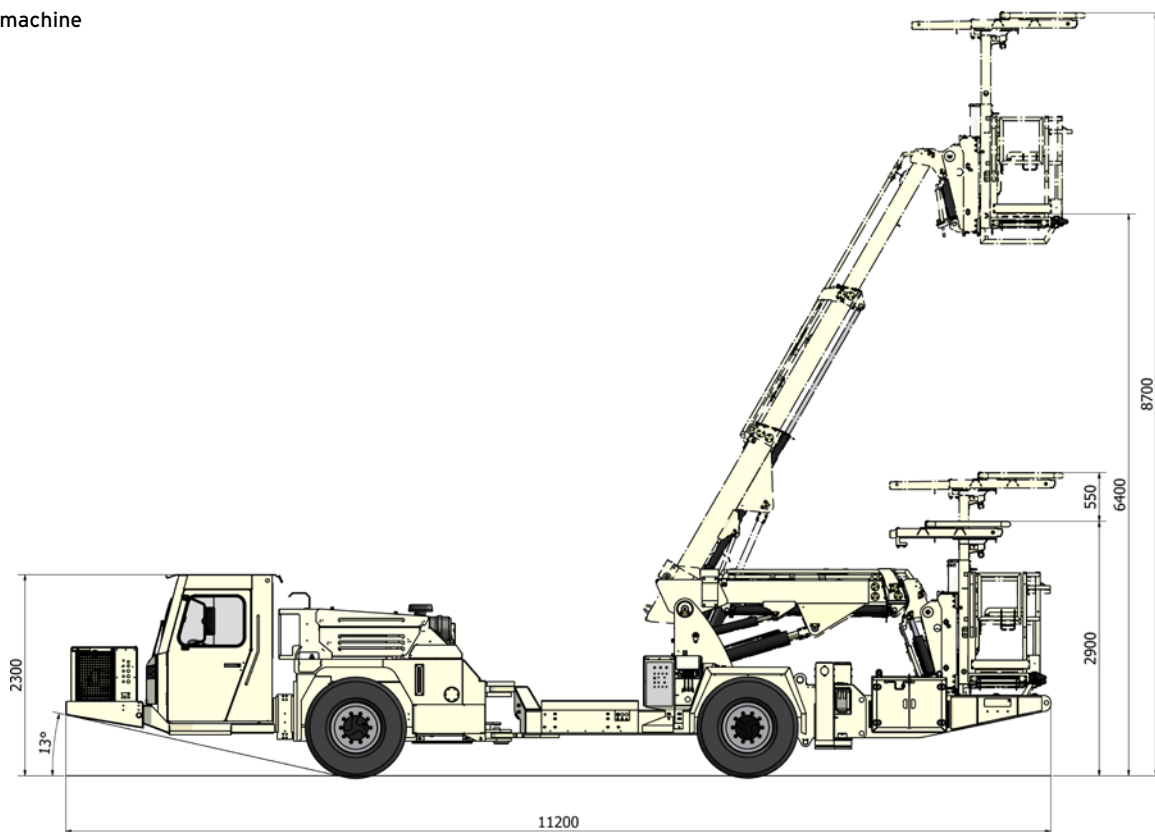
Extended warranty

Dimensions



SIDE VIEW

Basic machine



SIDE VIEW

Machine with enclosed cabin and additional equipment

DIMENSIONS

Length	10450 mm
Width	2150 mm
Height	2500 mm
Wheel base	4450 mm
Track	1650 mm
Ground clearance	360 mm

TURNING RADIUS

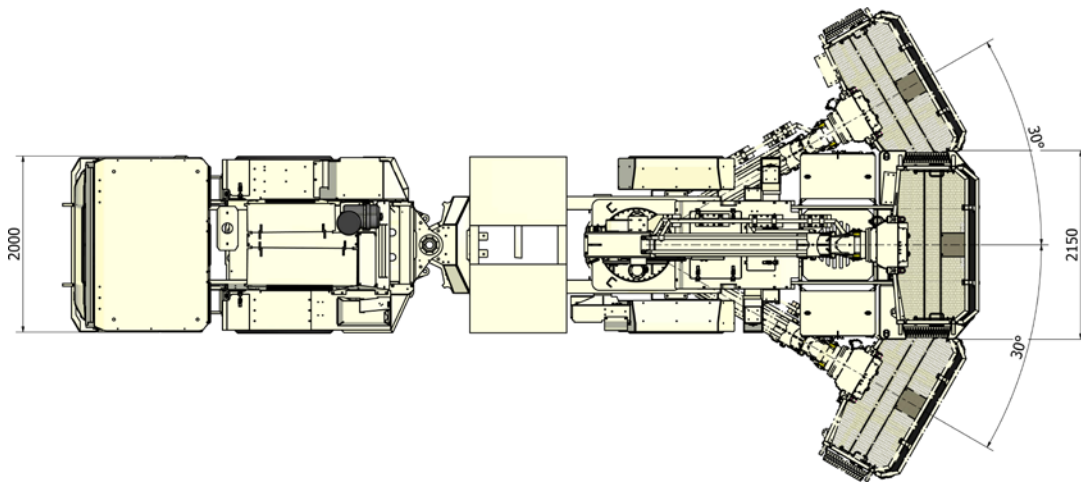
Outer	7750 mm
Inner	4850 mm

WEIGHT

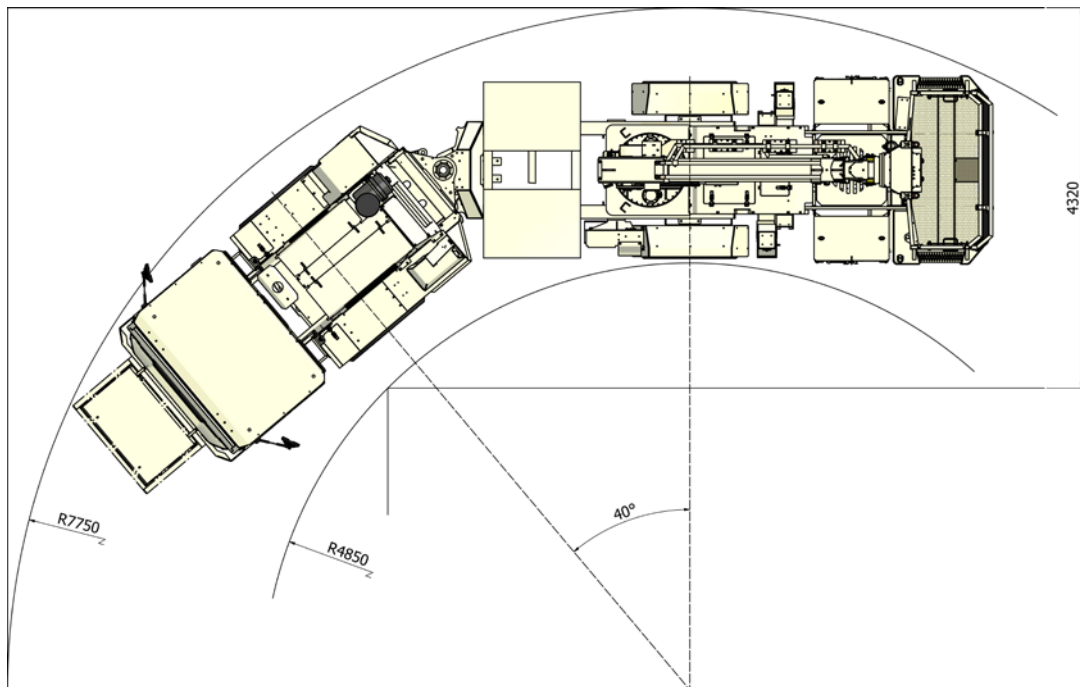
Operating weight	16 000 kg
Max weight	20 500 kg

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

Dimensions

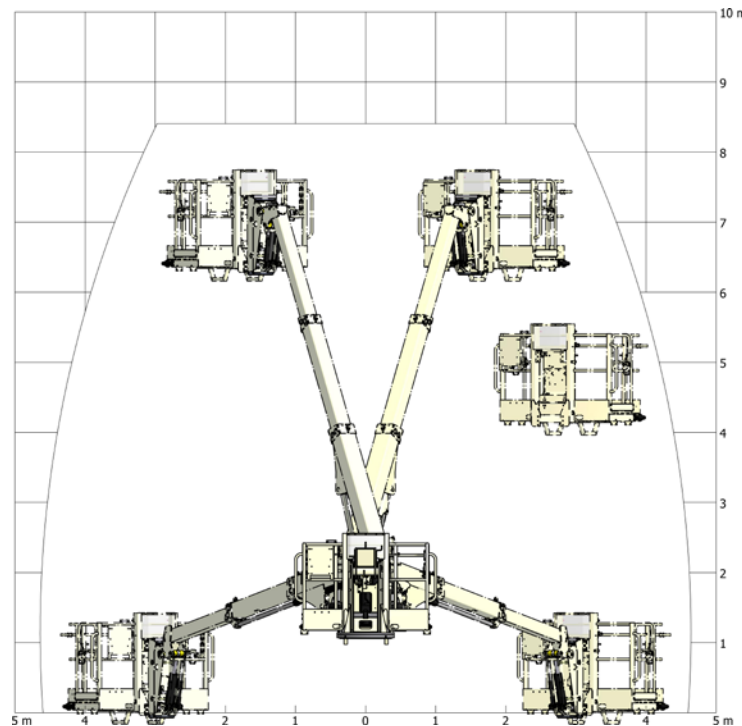
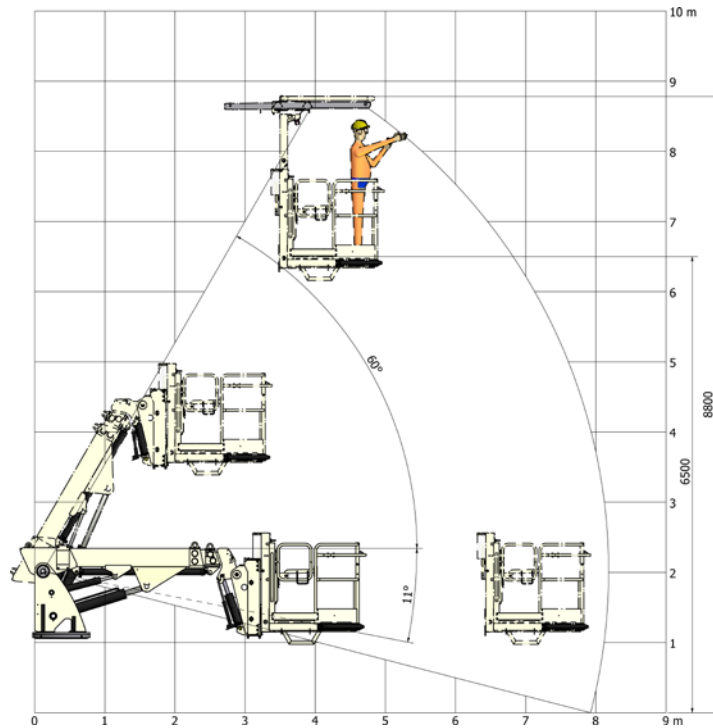


TOP VIEW



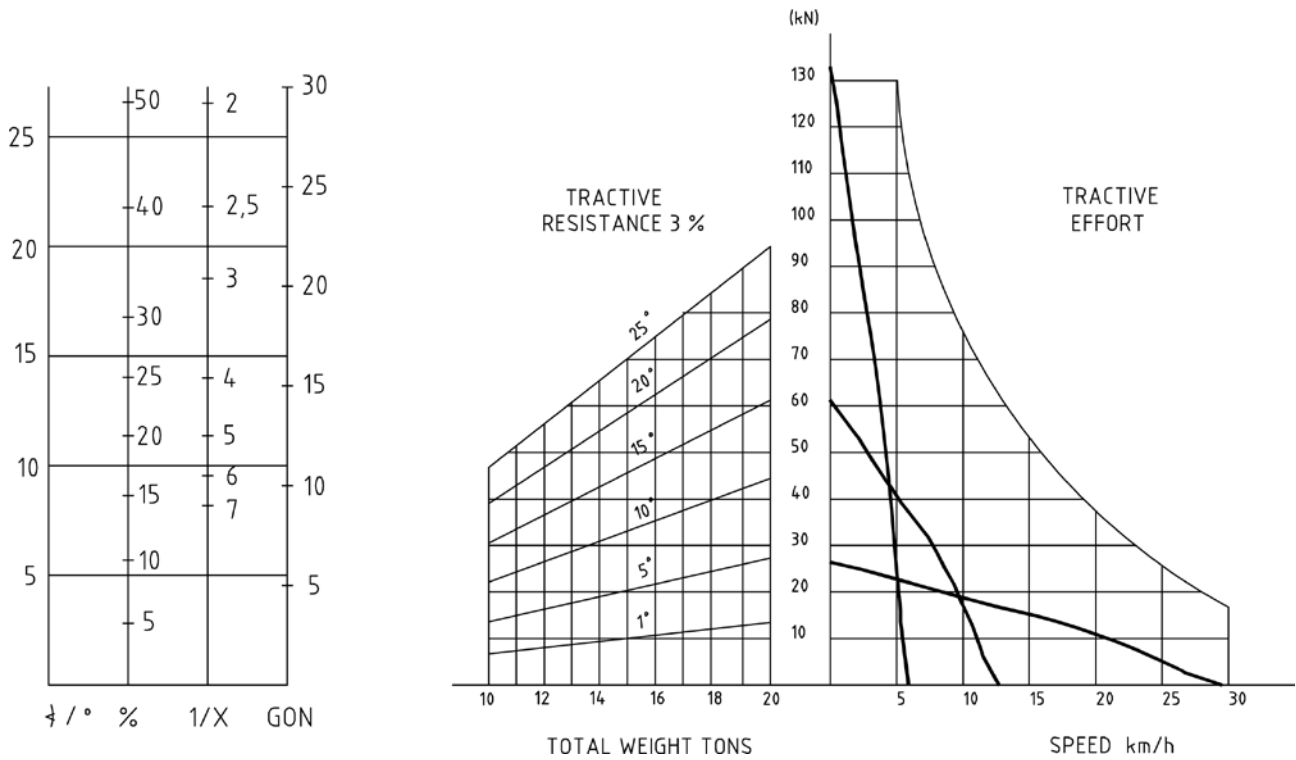
TURNING RADIUS

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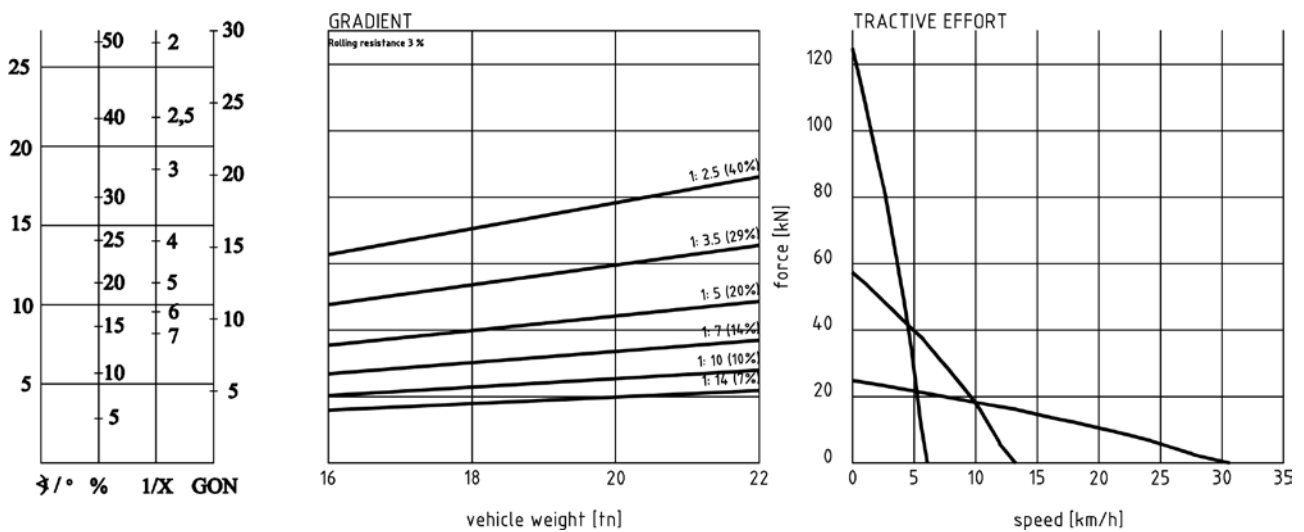
Dimensions**BOOM REACH**

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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