

The new Menzi Muck M3-series.

Technical description.

Engine
4-cyl. turbo Diesel-Engine / Commonrail
Deutz TCD 3.6 LA
Exhaust stage EU 97/98 IIIB (TIER 4 interim)
Integrated particle filter/catalyst (without additive)
Max. output 90 kW (120 HP) according to SAE J1995 / ISO 3046
Adjusted performance according to ISO 14396: = 80 kW (107 HP) at 2000 min-1
Maximum torque at 1600 min-1: 480 Nm
Capacity: 3600 ccm
Service interval: 500 hours

Cooling system
Generously dimensioned cooling system (pull).
Three separate coordinated cooler elements for hydraulic oil/ charge air/ water
Maximum cooling capacity through side-by-side arrangement of the cooling elements
Variable fan motor
Optional: swing condenser-element for air-conditioning

Hydraulic system
Sensitive LUDV Load Sensing hydraulic system
A high pressure piston pump for the working (P1), an axial piston variable pump (P2) in closed circuit for the driving and a gear pump (P3) for an auxiliary circuit
Capacities of the hydraulic pumps:
P1 = 210 L/min./ 55,4 US-gall. for working (working pressure: 280 bar / 4061 psi)
P2 = 150 L/min. / 39,6 US-gall. for driving (working pressure 400 bar / 5802 psi)
P3= 50 L/min. / 13.2 US-gall. @ 200 bar

Hydraulic cylinders
The hydraulic cylinders are again from our own design and manufacturing
Cylinders on the chassis are equipped with check valves (safety hose break)
All cylinders on the boom assembly are equipped with cushioning

Hydraulic circuits
Circuit 1 (on the boom assembly): up to 145 l/min./38.3 US-gall. through proportional foot pedal - double acting
Circuit 2 (on the boom assembly): up to 100 l/min./26.4 US-gall. through proportional-rocker switch on the right joystick – double acting
Circuit 3 (on the boom assembly): up to 40 l/min./10.6 US-gall. through switch on the left joystick - double acting (optional)
Circuit 4 (on the boom assembly): for hydraulic quick hitch from pilot pressure – double acting (optional)
Hydraulic preparation for winch (on the chassis): up to 120 l/min./31.7 US-gall. through proportional-rocker switch on the left joystick – double acting (optional)
Return line (on the boom assembly): for hydraulic hammer
Leakage line (optional)
The required liter /gallons quantities of the hydraulic auxiliary circuits can be selected on the color display

Menzi Powerboom
Patented boom
No collision possibility of the boom cylinder
Minimum swing radius through new boom concept
Menzi wide angle with constant force
The design allows close range operations
Hydraulic Telescope arm 1600 mm /62.9“
Telescope supported by 8 wear plates (front and back on all four sides)
Wear plates adjustable
Bucket pin diameter 60 mm

Forces
Ripping force: 53 kN
Breakout force: 66 kN
Lifting capacity at 3.0 m: 5800 kg / 12787 lb
Lifting capacity at 4.5 m: 3400 kg / 7496 lb
Lifting capacity at 6.0 m: 2400 kg / 5291 lb

Steel construction
Beside our know-how as years of market and technology leader all supported steelwork are statically charged per FEM (Finite-Elemente-Method) All moving parts are equipped with bushings.

Tank contents
Operating tank: 175 liters / 46.2 US-gall.
Additional fuel tank in the Chassis: 210 liters / 55.5 US-gall.

Rotation / Swivelling
Swivelling with momentary steering over the joysticks for proportional and demand control
Double supported slewing ring
Slewing ring, size modul 8 (same as Menzi Muck A91)
Maximum slewable speed up to 10 rpm
Axial pinion constant engine with high starting torque, integrated valves with ramp time for soft approaching and deceleration of the swing
Automatic acting disc brake
Swivelling radius 360° endless
Maximum swivelling moment 41'200 Nm

Electrical system
Voltage 24 volt
Starter 7.2 kW
Alternator 100 Amp
Total electrical power 2400 Watt

Drive M3-Serie
Hydrostatic drive in closed circuit
Separate Hydraulic pump – capacity 150 l/min; max. 400 bar / 5802 psi
Two stage travelling (up to type and tires up to max. 15 km/h / 9.32 mph possible)
Automatic parking brake
Automotive drive: Through the foot pedal the engine speed and drive are driven synchronously. Within both speed steps the foot pedal can be adjusted in a finer resolution by a pushbotton.

Panorama-Cockpit
Spacious and clear panorama-security-cockpit with „Roll-Over-Protection-SYSTEM“ – ROPS according to (DIN ISO 3471)
Vibration free and quiet cabin through hydromounts
Cabin can be tilted with a hydraulic hand pump
Air cushioned seat type „Klepp“
Radio with CD-Player, inclusive two speakers. Storage compartments, document compartment, bottle holder, cubbyholes, socket for charging mobil phones, coat hook etc.
8 spotlights standard (4 in the front / 4 in the back)
Powerful heating with seven individual adjustable air nuzzles
Standard equipped with pollen and recirculated air filter
Powerful air-conditioning with automatic climate control (optional)
Air-cushioned comfort seat type Grammer (optional)

Dashboard with LCD-Display
Clear and ergonomic arranged instrument panel
Analog controls with integrated color display to show the most important indicators: engine speed, hourmeter, day time counter, fuel gauge, dirty air filter, hydraulic oil temperature, water temperature, battery state of charge, engine oil pressure, pressure hydraulic return filter, alarm, service display, engine stop etc.
various control elements with toggles switches
optional: with rearview camera

Operation / Steering
Ergonomic multi function lever Menzi-Multiyosticks with each proportional rockers (with palmrest)
Foot pedals (Drive/ Telescope/ hydr.circuit / winch optional)
various toggle switches

Further Equipment
Diesel fuel pump with auto stop
Driving tires - quality Nokian forestry tires 600/50-22.5 (steel engraving protected)
Cyclone air filter
integrated tool box
Optional: additional external tool box

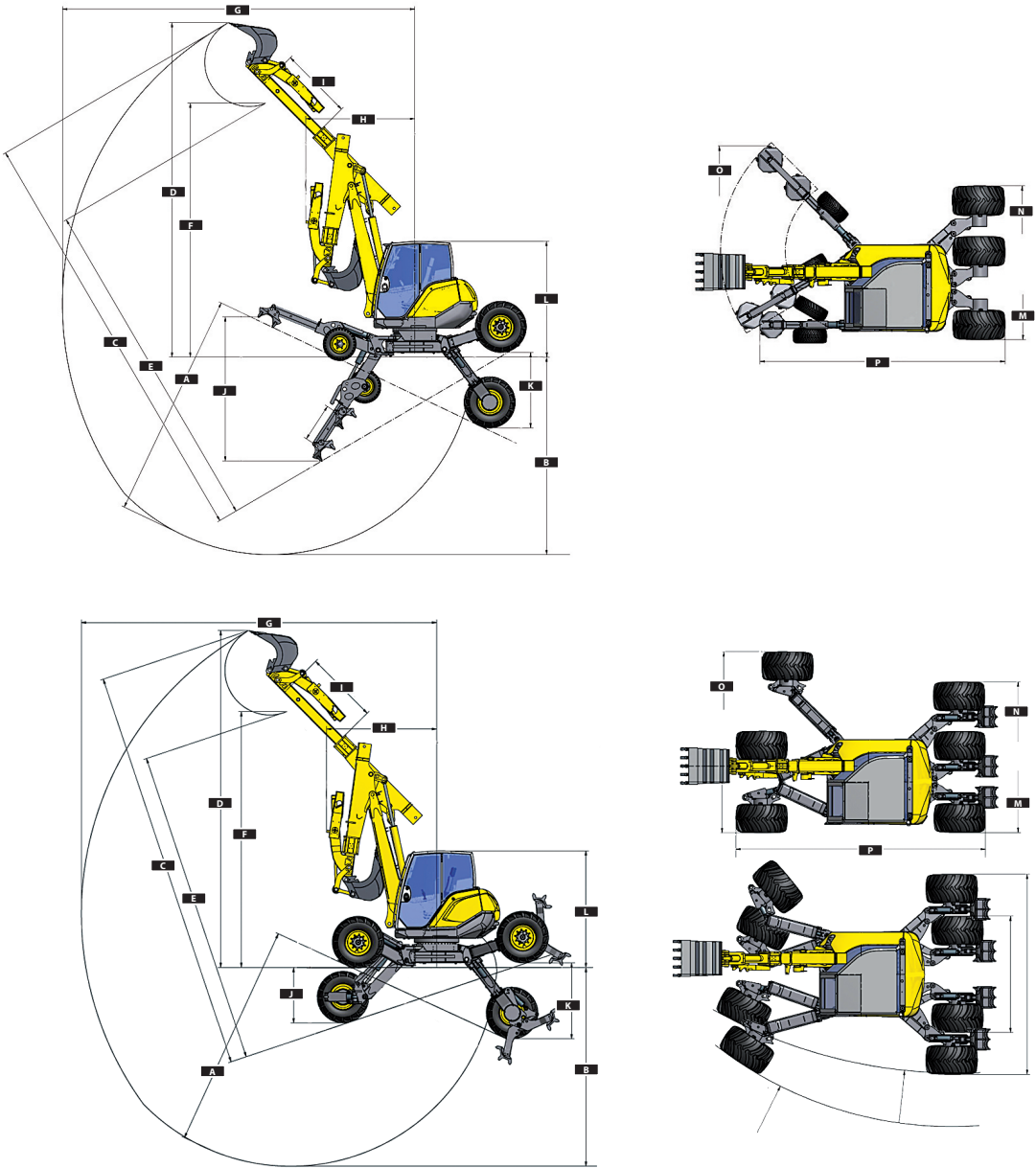
Optional Equipment
Equipment for heavy lifting
Biodegradable hydraulic oil
Road Equipment (country-specific)
Automatic central lubrication system
Additional safety valves on the dipper cylinder
Turning light on the roof
FOPS-roof
LED-additional light on the boom assembly (protected)
LED-lights
Xenon lights
Lightning system on the roof
Reversibal fan (reverse ventilation)
Additional external tool box

Options of hydraulic system
Hydraulic free wheel on driving wheels (M320 & M325)
Hydraulic preparation for winch
Circuit no. 3 for additional functions (40 l/min - digital - double acting)
Circuit no. 4 for hydraulic quick hitch
Hydraulic affluent filter
Leakage line
Electrically switchable check valves

Individual Options
Comfort seat Grammer (air-cushioned)
Three point safety belt (suspenders)
Air-conditioning with automatic climate control
Special color
Heater with time clock

Accessories
Digging buckets 400/600/800/1000 mm
Hydraulic grading bucket1400 mm
Grading bucket, rigid 1300/1500 mm
Hydraulic quick hitch
Powertilt with hydraulic quick hitch
Tiltrotator with/without grapple
Oil-Quick-Coupling system
Original Menzi Universalgrab type UG12
Hydraulic Hammer
Hydraulic hedge shear
Feller-Buncher unit
Mowers
Drill rigs
Hydraulic mowing bucket
Latticed bucket
Skimmer bucket
Crushing bucket
Stump cutter
Compression vibro plate
Winch
etc.

Dimensions



Dimensions in mm / "		M320		M325		M340	
A	Max. Excavation depth with adjusted chassis	5000	16'4"	5000	16'4"	4910	16'1"
B	Max. Excavation depth chassis horizontal	4350	14'3"	4350	14'3"	4350	14'3"
C	Max. Excavation height with adjusted chassis	9390	30'9"	9450	31'	8830	28'11"
D	Max. Excavation height chassis horizontal	7380	24'2"	7380	24'2"	7380	24'2"
E	Max. Discharge height with adjusted chassis	7440	24'4"	7500	24'7"	6890	22'7"
F	Max. Discharge height chassis horizontal	5600	18'4"	5600	18'4"	5600	18'4"
G	Max. Jib Range	7770	25'5"	7770	25'5"	7770	25'5"
H	Min. Swivelling radius	2410	7'10"	2410	7'10"	2410	7'10"
I	Dipper length	1600	5'3"	1600	5'3"	1600	5'3"
J	Positioning range stabilizers (M340: front wheels)	3180	10'5"	3180	10'5"	1220	4'
K	Positioning range hub drive (M340: rear wheels)	1660	5'5"	1670	5'5"	1660	5'5"
L	Transport height	2550	8'4"	2550	8'4"	2550	8'4"
M	Minimum width hub drive, transport width	2220	7'3"	2350	7'8"	2220	7'3"
N	Max. positioning width hub drive (M340: rear wheels)	4380	14'4"	4600	15'1"	5700	18'8"
O	Max. positioning width stabilizers (M340: front wheels)	6100	20'	6100	20'	5460	17'11"
P	Chassis length	5275	17'3"	5500	18'	5880	19'3"



Menzi Muck **M320**
Menzi Muck **M325**
Menzi Muck **M340**



The Highlights:

- Wide angle kinematics
- Force multiplier
- APM steering
- Panoramic view cab
- low fuel consumption

The models of the new M3-series

The three different types of the new M3 serie are different in the undercarriage (Drive, tires, steering and support).

Menzi Muck M320

Hydrostatic two wheel drive over the two big tires
Two removable shafts with steering wheels 300-15
Hydraulic telescope support

Menzi Muck M325

Hydrostatic two wheel drive over the two big tires
Two removable shafts with steering wheels 300-15
Hydraulic telescope support
Hydraulic rear steering

Menzi Muck M340

Menzi H-Drive hydrostactic all wheel drive
P-Matic parallel-support
Four equal big tires
Hydraulic mountain steel claws (optional)
Road Traction Modul

