# The new Menzi Muck M5-series. **Technical description.**

### Engine

4-cyl. Turbo Diesel-Engine / Commonrail
Deutz TCD 4.1 L4
Exhaust stage EU 97/98 IIIB (TIER 4 interim)
integrated particle filter/catalyst (without
additive)
max. output 115 kW (157 HP) according to
SAE J1995 / ISO 3046
adjusted performance according to ISO
14396: = 114 kW (155 HP) at 2000 min-1
Maximum torque at 1600 min-1: 610 Nm
Capacity 4100 ccm

#### Coolina

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 airconditioning

#### Hydraulic system

Sensitive LUDV Load Sensing hydraulic system Two capacity controlled swash plate axial piston pumps (P1/P2) Optional: third controlled swash plate axial pistom pump (P3) Gear pump for fan drive Operating pressure 300 bar/4351 psi Capacities of the hydraulic pumps: P1 = 280 l/min / 73,96 US-gall. for working(working pressure: 300 bar/4351 psi) P2 = 175 l/min. / 46,23 US-gall.for driving (working presssure 400 bar/5802 psi) P3= 190 l/min. / 50,19 US-gall. for powerline M5 (optional) (working pressure 350 bar/5076 psi)

# Hydraulic cylinder

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 190 l/min. / 50,19 US-gall. through proportional foot pedal- double acting Circuit 2 (on the boom assembly): up to 100 l/min./26.4 US-gall. through proportionalrocker 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 guick 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 liters/US-gallons of the auxiliary hydraulic circuits can be selected over the colored display.

#### Powerline M5 (optional)

The powerline M5 is recommanded for accessories, which demand a permanent specific high power output: As for example Mowers, harvester heads, drill rigs or stumpgrinders The option Powerline is composed as follows: 1 separate hydraulic pump (P3) with priority supply up to 190 l/min. / 50,19 US-gall. simple acting circuit 1 large hydraulic hose to the arm for pressure and return Pressure up to max. 350 bar/5076 psi, guantitiy of liters up to max. 190 l/min. / 50,19 US-gall. can be selected over the display Double acting circuit (optional)

#### **Electrical system**

Voltage 24 volts Starter 7.2 kW Alternator 100 Amp Total electrical power 2400 Watt **Rotation / Swivelling** 

Swivelling with momentary steering over the joysticks for proportional and demand control

Double supported slewing ring Slewing ring, size modul 10 Maximum slewable speed up to 10 rpm Axial pinion constant engine with high starting torque, integrated valves with ramp time for soft approaching and decelaration of the swing Automatic acting disc brake

Swivelling radius 360° endless Maximum swivelling moment 52'000 Nm

#### **Drive M5-Serie**

Hydrostatic drive in closed circuit Separate Hydraulic pump – capacity 175 l/ min./46.2 US-gall.; max. 400 bar/5802 psi Two stage travelling gear (according to type and tires up to max. 15 km/h/9.32 mph)

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.

#### Drive M540 & M545

All wheel drive Menzi H-Drive-System with torque overlay for maximum power conversion regarding traction / transmission Menzi Raod Traction Modul (RTM) switchable barrier for maximum drive or modus for maximum floor / tire-conserving

#### Tires big wheels

Quality forestry Nokian tires 600/50-22,5 with steel inserts (b=600 mm, d=1140 mm) Optional: Quality forestry tires Nokian 600/55-26,5 with steel inserts (b=600 mm, d= 1350 mm) other tires on inquiry

### **Tank contents**

Operating tank: 205 liters / 54.2 US-gall. Additional fuel tank in the chassis: 230 liters / 60.8 US-gall. Hydraulic oil system content: 220 liters / 58.1 US-gall.

#### **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 wear bushings.

#### Chassis / support

Proven construction with years of experience

Swivel feet in front are of unstressed steel casting

Construction with maximum ground clearance

Relevant moving parts are equipped with wear bushings

#### **Operation /Steering**

Ergonomic multi function lever Menzi ultijyostick with each two proportional rockers (with palmrest) Standard equipped with three foot pedals (drive, telescope and auxiliary circuit) Fourth foot pedal for winch (optional)

#### Menzi Powerboom

Various toggle switches

Patented boom No collison danger with boom cylinder Minimal turning radius through new arm concept Menzi wide angle for maximum working area Design allows close range operations

Hydraulic telescope 1800 mm Telescope supported by 8 wear plates (front and back on all four sides) Maximum lift capacity / larger cylinder diameter Bucket pin diameter 60 mm

#### Panorama-Cockpit

Spacious and clear panorama-securitycockpit with "Roll-Over-Protection-Security" - ROPS according to (DIN ISO 3471) Vibration free and quiet cabin through hydromounts Cabin can be tilted with a hydraulic hand pump Optimal view on all sides

View up by rounded and bent far back windscreen

Front and right side window hinged 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

**Further Equipment** 

Diesel fuel pump with auto stop integrated tool box

#### Individual options

Air-cushioned comfort seat, type Grammer Three point safety belt (suspenders) Air-conditioning with automatic climate control Special color Heater with time clock

# **Optional Equipment**

Equipment for heavy lifting Biodegradable hydraulic oil Road Equipment (country-specific) Automatic central lubrication system Safety valves on the dipper cylinder Turning light on the roof



Optional: with rearview camera

FOPS-roof

LED-additional light on the boom assembly LED-lights Xenon lights Lightining system on the roof Reversibal fan (reverse ventilation) Additional external tool box

# **Options Hydraulic**

Hydraulic preparation for winch Circuit No. 3 for additional functions (40 l/min/10.6 US-gall. - digital - double acting) Circuit No. 4 for hydraulic quick hitch Powerline M5 - for maximum efficiency for accessories which demand a high oil flow Hydraulic affluent filter Leakage line Electrically switchable check valves

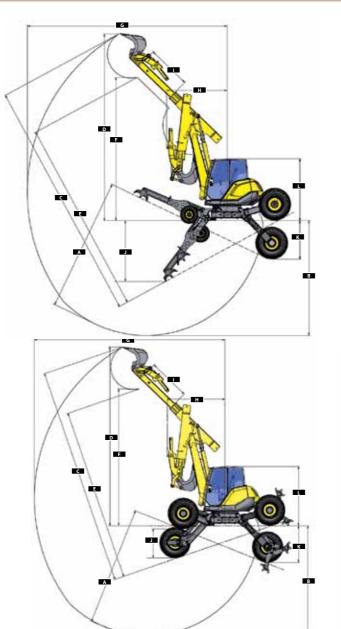
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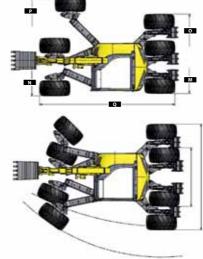
M520 & M525: Hydraulic free wheels on driving wheels M530 & M535: Mechanical or hydraulic lifting axle of small wheels M540 & M545: Hydraulic mountain steel claws (rigid, mechanically extendable or hydraulically telescoped)

# Accessories

Digging buckets 400/600/800/1000 mm
Hydraulic grading bucket1400 mm
Grading bucket, rigid 1300/1500 mm
Hydraulic quick hitch M5
Powertilt with hydraulic quick hitch
Tiltrotator with/without grapple
Oil-Quick-Coupling system
Original Menzi Universalgrab type UG12
Hydraulic Hammer / concrete crusher
Hydraulic hedge shear / Feller-Buncher
Mowers /hydr.mowing bucket
Drill rigs
Hydraulic Mowing bucket
Latticed bucket/ Skimmer bucket/ Crushing
bucket
Stump cutter / Compression vibro plate
Winch
other accessories on onquiry

# **Dimensions**





	Dimensionen in mm	M520		M525		M530		M535		M540		M545	
Α	Max. Excavation depth with adjusted chassis	5470	16'11″	5470	16'11″	5460	17′11"	5460	17'11″	5120	16'9"	5140	16′10"
В	Max. Excavation depth chassis horizontal	4730	15′6"	4730	15′6"	4730	15′6"	4730	15′6"	4730	15′6"	4730	15′6"
с	Max. Excavation height with adjusted chassis	9870	32'4″	9910	32'4″	9870	32'4″	9900	32′5″	9360	30'8"	9360	30′8"
D	Max. Excavation height chassis horizontal	7700	25′3"	7700	25′3"	7700	25′3"	7700	25′3"	7700	25′3"	7700	25′3"
Е	Max. Discharge height with adjusted chassis	7940	26′	7970	26′1″	7940	26′	7970	26'1"	7420	24′4"	7430	24′4"
F	Max. Discharge height chassis horizontal	5890	19′3"	5890	19′3"	5890	19′3"	5890	19′3"	5890	19′3"	5890	19'3"
G	Max. Jib Range	8210	26'11"	8210	26'11"	8210	26'11"	8210	26'11"	8210	26'11"	8210	26'11"
н	Min. Swivelling radius	2480	8′1″	2480	8′1″	2480	8′1″	2480	8′1″	2480	8′1"	2480	8′1"
1	Dipper length	1800	5′10"	1800	5′10"	1800	5′10"	1800	5'10"	1800	5′10"	1800	5′10"
J	Positioning range stabilizers (M340: front wheels)	2500	8′2″	2500	8′2″	2510	8′2"	2510	8′2″	1250	4′1"	1250	4′1"
к	Positioning range hub drive (M340: rear wheels)	1580	5′2″	1650	5′5″	1570	5′1″	1650	5′5″	1580	5′2"	1650	5′5"
L	Transport height	2550	8′4"	2550	8′4"	2550	8′4"	2550	8′4"	2550	8′4"	2550	8′4"
м	Minimum width hub drive, transport width	2230	7′3″	2370	7′9″	2230	7′3″	2370	7'9″	2300	7′6"	2380	7′9"
Ν	Max. positioning width hub drive / rear wheels	4530	14'10"	4680	15′4″	4530	14'10"	4680	15′4″	4600	15′1"	4690	15′4"
0	Max. positioning width stabilizers / front wheels	6730	22′1″	6720	22′	6730	22′1″	6730	22′1″	6140	20′1"	6140	20′1"
Ρ	Chassis length	5830	19′1″	5960	19'6″	5040	16'6″	5180	16'11"	5880	19′3"	6190	20′3"

Menzi Muck AG Maschinenfabrik · CH-9443 Widnau T +41 71 727 12 12 · info@menzimuck.com · menzimuck.com



**M5** 

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#### Hide angle kinematics Picke multiplier Picke m

# The models of the new M5-series

## Menzi Muck M520

Hydrostatic two wheel drive Two removable shafts with steering wheels Hydraulic telescope support

## Menzi Muck M525

Hydrostatic two wheel drive Two removable shafts with steering wheels Hydraulic telescope support Hydraulic rear steering **Menzi Muck M5**30 Hydrostactic all wheel drive over two big and two small tires Hydraulic telescope support

## Menzi Muck M535

Hydrostactic all wheel drive Two removable shafts with steering wheels Hydraulic telescope support Hydraulic rear steering





# Menzi Muck M540

Hydrostactic all wheel drive over four equal big tires P-Matic parallel-support

Menzi Muck M545 Hydrostactic all wheel drive over four equal big tires P-Matic parallel-support sensor steered all wheel steering

