

#### **TECHNICAL DATA AND INFORMATION**



RECYCI



## **TECHNICAL DATA MHL320 D**





OPERATING WEIGHT	
	17.8 - 19.0 t
DIESEL ENGINE	
MANUFACTURER AND MODEL	Deutz TCD 2012 L04 2V
DESIGN	4-cylinder inline
ENGINE CONTROL	EMR III
ТҮРЕ	4-stroke diesel, common rail direct injection, turbo-charger, charge air cooling
ENGINE OUTPUT	85 kW/114 hp
NOMINAL SPEED	2000 min <sup>-1</sup>
DISPLACEMENT	4038 cm <sup>3</sup>
COOLING SYSTEM	Liquid intercooling with temperature-controlled fan speed
EMISSION STANDARDS	COM III and EPA Tier III
AIR FILTER DESIGN	Two-stage filter with safety valve
FUEL CAPACITY (USABLE)	300 liters

ELECTRICAL SYSTEM	
OPERATING VOLTAGE	24 V
BATTERIES	2 x 12V / 100Ah / 850A (in accordance with EN)
LIGHTING SET	1 x H3 floodlight on upper carriage, 1 x H3 floodight on cab floor, turn signal and rear sidemarker lamps
OPTION	Generator system
<b>F</b> 1	
TRAVEL DRIVE	
	Hydrostatic drive through infinitely variable axial piston motor and directly mounted travel brake valves, two-speed shift gear, all-wheel drive
TRAVEL SPEED 1st GEAR	5 km/h (3.1 mph)
TRAVEL SPEED 2nd GEAR	20 km/h (12.4 mph)
GRADEABILITY	max. 55%
TURNING RADIUS	7.0 m
SWING SYSTEM	
RING GEAR	Internally toothed ball ring gear (double row)
DRIVE	Two-stage planetary gear with integrated multi-disc brake
UPPER CARRIAGE SWING SPEED	0 - 8 min <sup>-1</sup>
PIVOT BRAKE	Electrically operated
UNNDERCARRIAGE	
FRONT AXLE	Planetary drive axle with integrated drum brake, rigidly mounted, max. steering angle 30°
REAR AXLE	Oscillating planetary drive rear axle with integrated drum brake and selectable oscillating axle lock
STABILIZER VERSIONS	4-point stabilizers, 2-point stabilizers with stabilizing blade
TIRES	Pneumatic tires 9.00-20 Solideal
UNIT DRAKE STSTEM	
SERVICE BRAKE	Hydraulic single-circuit braking system acting on all four wheel pairs (drum brakes)
PARKING BRAKE	Electrically operated spring-loaded disc brake at transmission, acting on both front and rear axle



E1 F2 F3 F4 F5 F6

#### HYDRAULIC SYSTEM REXROTH mobile hydraulic system with optional load limit control and fuel-saving power demand control. Separate oil cooler, temperature-controlled fan speed. Hydraulic oil filter: filter elements integrated in the oil tank; maintenance interval 3000 operating hrs. Central lubrication system. MAX. PUMP CAPACITY 290 liters/min MAX. OPERATING PRESSURE 320/360 bar **HYDRAULIC OIL TANK** 300 liters OPERATOR'S CAB Cab: elastically supported, infinitely variable hydraulically height-adjustable with max. eye level of 5.2 m. Sound-deadened, heat-insulated panoramic windows for optimum all-around view, windshield with pull-down sunblind that slides under cab roof, visibility panel in cab roof, sliding window in cab door, steering column height and tilt adjustable. HEATING Infinitely variable hot water heating with 3-speed fan, 4 adjustable defroster nozzles **OPERATOR'S SEAT** Mechanically cushioned comfort-seat with integrated headrest, safety belt and lumbar support, seat heating with integrated a/c function optional. Seat position, seat inclination and seat cushion multi-adjustable in relation to position of armrests and pilot control units, allowing fatigue-free operation. MONITORING Ergonomic instrument layout, glare-free. Function monitoring; automatic warning and storage of deviating operating conditions, e.g. filter pressure w. warning indicator and shutdown of pilot controls, warning indicator or shutdown of pilot controls if hydraulic oil temperature limits are exceeded. AIR CONDITIONING Automatic **SAFETY INSTALLATIONS** For crane operations in accordance with EN 474-5. Cab protection by close proximity range limiter.

**OFFICIAL HOMOLOGATION** 

Certification in accordance with CE regulations.





## **EQUIPMENT MHL320 D**





$\frown$		
ENGINE	SERIES	OPTION
Exhaust gas turbocharger	•	
Intercooling	•	
Direct electronic fuel injection/ Common Rail	•	
Automatic idle	•	
Engine pre-heating		•
Interface for engine diagnosis	•	
Temperature-controlled fan drive	•	
	SERIES	OPTION
2-speed shift transmission	•	
2-speed power-shift transmission		•
4-point stabilizers	•	
2-point stabilizers and stabilizer blade		•
4-point stabilizers, individually controllable		•
Stabilizer cylinders with integrated two-way check valves	•	
All-wheel drive	•	
Piston rod protection on stabilizer cylinders	•	
Rear axle oscillating lock	•	
Dozer blade in addition to 4-point stabilizers		•
Special paint		•
Drum brakes	•	
Solid rubber tires 9.00 - 20 with spacer rings		•
Tool box on undercarriage		•
UPPER CARRIAGE	SERIES	OPTION

Electric refuelling pump		•
Lighting protection		•
Maintenance hood, actuated by gas strut, with mechanical locking device	•	
Lockable cleaning access openings on radiator	•	
Separate radiator system for ambient temperatures up to 50° C	•	
Separate oil cooler w. temperature- controlled fan drive	•	
Automatic central lubrication system	•	
Reversing alarm		•
Special paint		•
Quick-drain valve for fuel tank (supplied in tool box)	•	
Quick-drain valve on hydraulic oil tank	•	
Quick-drain valve on radiator	•	
Quick-drain valve on engine oil-pan	•	
Reversible fan for radiator and hydr. oil cooler		•
Tool box (small) in upper carriage	•	

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САВ	SERIES	OPTION
Lift-up skylight in cab roof	•	
Operator's seat mechanically cushioned	•	
Air cushioned operator's seat with headrest, safety belt and lumbar support		•
FOPS protective grating		•
Front/roof protective grating		•
Hinged front windshield	•	
Front windows break-resistant (LEXAN)		•
Bullet-proof safety glass, front and top		•
Cab elevation system	•	
Air conditioning	•	
Steering column, height and tilt adjustable	•	
Multi-function display	•	
Fire extinguisher, dry powder		•
Pre-equipped for radio		•
Radio cassette		•
Radio / CD player		•
Rotating beacon		•
Sliding window in cab door	•	
Safety glass	•	
Seat heating with integrated a/c function		•
Engine-independent heating		•
Windscreen washer system	•	
Dust protection system		•
Pressurized cabin system		•
EQUIPMENT	SERIES	OPTION
Floodlights attached to cab floor	•	
Floodlights, mounted to upper carriage	•	
Floodlight, stick mounted		•
Load limit control		•
Hydraulic oil preheating		•
Close proximity range limiter for stick	•	

Close proximity range limiter for stick	•	
Coolant and hydr. oil level monitoring system	•	
Hose rupture protection for lift cylinder		•
Hose rupture protection for stick cylinder		•
Stick shock protection	•	
Lubrication of the grab suspension by central lubrication system	•	
Overload warning / shutdown		•
XENON floodlight on stick		•
XENON floodlight on superstructure		•
XENON floodlight on cab roof		•
Quick-connect coupling on stick	•	
Ball-valve coupling		•
Filter system for attachments		•



### DIMENSIONS

MHL320 D 2-point stabilizers with support blade





### MHL320 D 4-point stabilizers



### MHL320 D Transport dimensions with stick



### MHL320 D Transport dimensions with multi-purpose stick



DIMENSIONS	REACH 8.5 m	REACH 9.5 m	REACH 10.4 m	REACH 8.2 m (MULTI-PURPOSE STICK)	REACH 9.2 m (MULTI-PURPOSE STICK)
Α	7.200 mm	8.350 mm	8.060 mm	7.360 mm	8.410 mm
В	3.650 mm	4.680 mm	3.960 mm	3.835 mm	4.365 mm
C	1.135 mm	1.135 mm	1.135 mm	1.135 mm	1.135 mm
D	3.175 mm / <i>*3.395 mm</i>	3.175 mm / <i>3.395 mm*</i>	3.175 mm / <i>3.395 mm*</i>	3.175 mm / <i>3.395 mm*</i>	3.175 mm / <i>3.395 mm*</i>
E	3.800 mm	3.240 mm	4.240 mm	3.095 mm	2.675 mm

\* with protective grating for cab roof



### Reach 8.5 m with stick

#### Work equipment:

Box-type boom 4.2 m; Stick 4.0 m; Cactus grab

RECOMMENDED ATTACHMENTS				
LIFT HOOKS	10 t			
TEREX® FUCHS CACTUS GRAB 0.4 m <sup>3</sup>	Open or half-closed shells			
TEREX® FUCHS CACTUS GRAB 0.6 m³	Open or half-closed shells			
GRAB FOR LIGHTWEIGHT MATERIALS 0.8 m <sup>3</sup>	Depending on density of goods			
MAGNET SYSTEM	Terex <sup>®</sup> Fuchs magnetic plate			

HEIGHT	UNDERCARRIAGE	REACHES m			
m	STABILIZERS	3	4.5	6	7.5
7.5	non supported		(6.2*)	(4.1)	
	4-pt. supported		6.2* (6.2*)	4.5* (4.5*)	
	2-pt. supported with blade		6.2* (6.2*)	4.5* (4.5*)	
	non supported			(4.1)	
6	4-pt. supported			5.4* (5.4*)	
	2-pt. supported with blade			5.4* (5.4*)	
	non supported		(6.2*)	(4.1)	(2.9)
4.5	4-pt. supported		6.2* (6.2*)	5.5* (5.5*)	4.6 (4.8*)
	2-pt. supported with blade		6.2* (6.2*)	5.4 (5.5*)	3.7 (4.8*)
	non supported		(6.2)	(4.0)	(2.9)
3	4-pt. supported		7.2* (7.2*)	5.8* (5.8*)	4.5 (4.8*)
	2-pt. supported with blade		7.2* (7.2*)	5.2 (5.8*)	3.7 (4.8*)
	non supported	(11.0)	(5.9)	(3.9)	(2.8)
1.5	4-pt. supported	13.5* (13.5*)	8.4* (8.4*)	6.2* (6.2*)	4.5 (4.7*)
	2-pt. supported with blade	13.5* (13.5*)	7.8 (8.4*)	5.0 (6.2*)	3.6 (4.7*)
	non supported	(5.0)	(5.6)	(3.8)	(2.8)
0	4-pt. supported	8.5* (8.5*)	8.7* (8.7*)	6.1* (6.1*)	4.4* (4.4*)
	2-pt. supported with blade	8.5* (8.5*)	7.5 (8.7*)	4.9 (6.1*)	3.6 (4.4*)
	non supported	(8.0*)	(5.5)	(3.7)	(2.8)
-1.5	4-pt. supported	8.0* (8.0*)	7.6* (7.6*)	5.2* (5.2*)	3.2* (3.2*)
	2-pt. supported with blade	8.0* (8.0*)	7.4 (7.6*)	4.9 (5.2*)	3.2* (3.2*)





### Reach 9.5 m with stick

#### Work equipment:

Box-type boom 5.2 m; Stick 4.0 m; Cactus grab

RECOMMENDED ATTACHMENTS				
LIFT HOOKS	10 t			
TEREX® FUCHS CACTUS GRAB 0.4 m³	Open or half-closed shells			
GRAB FOR LIGHTWEIGHT MATERIALS 0.6 m <sup>3</sup>	Depending on density of goods			
MAGNET SYSTEM	Terex <sup>®</sup> Fuchs magnetic plate			

HEIGHT	UNDERCARRIAGE	REACHES m			
m	STABILIZERS	4.5	6	7.5	9
9	non supported	(6.5*)			
	4-pt. supported	6.5* (6.5*)			
	2-pt. supported with blade	6.4* (6.4*)			
	non supported		(4.3)		
7.5	4-pt. supported		5.2* (5.2*)		
	2-pt. supported with blade		5.1* (5.1*)		
	non supported		(4.3)	(3.0)	
6	4-pt. supported		5.2* (5.2*)	4.5* (4.5*)	
	2-pt. supported with blade		5.1* (5.1*)	3.7 (4.5*)	
	non supported	(6.6)	(4.2)	(3.0)	(2.2)
4.5	4-pt. supported	6.8* (6.8*)	5.5* (5.5*)	4.6* (4.6*)	3.5 (3.8*)
	2-pt. supported with blade	6.7* (6.7*)	5.2 (5.4*)	3.7 (4.5*)	2.8 (3.7*)
	non supported	(6.1)	(4.0)	(2.9)	(2.2)
3	4-pt. supported	7.7* (7.7*)	5.8* (5.8*)	4.6* (4.6*)	3.5 (3.7*)
	2-pt. supported with blade	7.7* (7.7*)	5.0 (5.8*)	3.6 (4.6*)	2.8 (3.7*)
	non supported	(5.7)	(3.8)	(2.8)	(2.1)
1.5	4-pt. supported	8.4* (8.4*)	6.0* (6.0*)	4.5 (4.6*)	3.4 (3.5*)
	2-pt. supported with blade	7.4 (8.5*)	4.9 (6.0*)	3.5 (4.6*)	2.7 (3.5*)
	non supported	(5.4)	(3.6)	(2.7)	(2.1)
0	4-pt. supported	8.1* (8.1*)	5.8* (5.8*)	4.3* (4.3*)	3.0* (3.0*)
	2-pt. supported with blade	7.2 (8.2*)	4.7 (5.8*)	3.5 (4.3*)	2.7 (3.1*)
	non supported	(5.3)	(3.5)	(2.7)	
-1.5	4-pt. supported	6.7* (6.7*)	4.9* (4.9*)	3.6* (3.6*)	
	2-pt. supported with blade	6.9* (6.9*)	4.7 (5.0*)	3.4 (3.6*)	





HEIGHT	UNDERCARRIAGE	REACHES m			
m	STABILIZERS	4.5	6	7.5	9
	non supported		(4.1)		
9	4-pt. supported		4.7* (4.7*)		
	2-pt. supported with blade		4.7* (4.7*)		
	non supported		(4.1)	(2.9)	
7.5	4-pt. supported		4.5* (4.5*)	4.1* (4.1*)	
	2-pt. supported with blade		4.5* (4.5*)	3.7 (4.1*)	
	non supported		(4.1)	(2.9)	(2.1)
6	4-pt. supported		4.5* (4.5*)	4.1* (4.1*)	3.4 (3.6*)
	2-pt. supported with blade		4.5* (4.5*)	3.7 (4.1*)	2.7 (3.6*)
	non supported		(4.0)	(2.8)	(2.1)
4.5	4-pt. supported		4.8* (4.8*)	4.2* (4.2*)	3.3 (3.7*)
	2-pt. supported with blade		4.8* (4.8*)	3.6 (4.2*)	2.7 (3.7*)
	non supported	(6.0)	(3.8)	(2.7)	(2.0)
3	4-pt. supported	6.7* (6.7*)	5.3* (5.3*)	4.4* (4.4*)	3.3 (3.7*)
	2-pt. supported with blade	6.7* (6.7*)	5.0 (5.3*)	3.5 (4.4*)	2.7 (3.7*)
	non supported	(5.6)	(3.6)	(2.6)	(2.0)
1.5	4-pt. supported	8.0* (8.0*)	5.8* (5.8*)	4.3 (4.6*)	3.2 (3.7*)
	2-pt. supported with blade	7.5 (8.0*)	4.8* (5.8*)	3.4 (4.6*)	2.6 (3.7*)
	non supported	(5.2)	(3.5)	(2.5)	(1.9)
0	4-pt. supported	8.5* (8.5*)	5.8 (6.0*)	4.2 (4.5*)	3.2 (3.5*)
	2-pt. supported with blade	7.1 (8.5*)	4.6 (6.0*)	3.3 (4.5*)	2.6 (3.5*)
	non supported	(5.0)	(3.3)	(2.4)	(1.9)
-1.5	4-pt. supported	7.8* (7.8*)	5.6* (5.6*)	4.1* (4.1*)	3.0* (3.0*)
	2-pt. supported with blade	6.9 (7.8*)	4.5 (5.6*)	3.3 (4.1*)	2.5 (3.0*)
	non supported	(5.0)	(3.3)	(2.4)	
-3	4-pt. supported	6.2* (6.2*)	4.5* (4.5*)	3.2* (3.2*)	
	2-pt. supported with blade	6.2* (6.2*)	4.4 (4.5*)	3.2* (3.2*)	

RECOMMENDED ATTACHMENTS					
LIFT HOOKS	10 t				
TEREX® FUCHS CACTUS GRAB 0.4 m <sup>3</sup>	Open shells				
GRAB FOR LIGHTWEIGHT MATERIALS 0.5 m <sup>3</sup>	Depending on density of goods				
MAGNET SYSTEM	Terex <sup>®</sup> Fuchs magnetic plate				



#### Reach 8.2 m with multi-purpose stick

#### Work equipment:

Box-type boom 4.2 m; Multi-purpose stick 3.7 m; Sorting grab

HEIGHT	UNDERCARRIAGE	REACHES m			
m	STABILIZERS	3	4.5	6	7.5
	non supported	(6.9*)			
9	4-pt. supported	6.9* (6.9*)			
	2-pt. supported with blade	6.9* (6.9*)			
	non supported		(5.9*)		
7.5	4-pt. supported		6.3* (6.3*)		
	2-pt. supported with blade		6.3* (6.3*)		
	non supported		(5.9*)	(3.7)	
6	4-pt. supported		5.9* (5.9*)	5.3* (5.3*)	
	2-pt. supported with blade		5.9* (5.9*)	4.8 (5.3*)	
	non supported		(5.9)	(3.6)	(2.5)
4.5	4-pt. supported		6.3* (6.3*)	5.4* (5.4*)	4.1 (4.5*)
	2-pt. supported with blade		6.3* (6.3*)	4.8 (5.4*)	3.3 (4.5*)
	non supported	(8.9*)	(5.6)	(3.5)	(2.4)
3	4-pt. supported	8.9* (8.9*)	7.3* (7.3*)	5.7* (5.7*)	4.1 (4.5*)
	2-pt. supported with blade	7.4* (7.4*)	7.4* (7.4*)	4.7 (5.5*)	3.3 (4.3*)
	non supported	(10.4)	(5.3)	(3.4)	(2.4)
1.5	4-pt. supported	13.8* (13.8*)	8.3* (8.3*)	5.8 (5.9*)	4.0 (4.4*)
	2-pt. supported with blade	13.8* (13.8*)	7.3 (8.3*)	4.5 (5.9*)	3.2 (4.4*)
	non supported	(7.4*)	(5.1)	(3.3)	(2.4)
0	4-pt. supported	7.4* (7.4*)	8.3* (8.3*)	5.7 (5.7*)	3.8* (3.8*)
	2-pt. supported with blade	7.4* (7.4*)	7.0 (8.3*)	4.4 (5.7*)	3.1 (3.8*)
	non supported	(7.8*)	(5.0)	(3.2)	
-1.5	4-pt. supported	7.8* (7.8*)	6.9* (6.9*)	4.6* (4.6*)	
	2-pt. supported with blade	7.8* (7.8*)	6.9* (6.9*)	4.4 (4.6*)	





#### Reach 9.2 m with multi-purpose stick

#### Work equipment:

Box-type boom 5.2 m; Multi-purpose stick 3.7 m; Sorting grab

HEIGHT	UNDERCARRIAGE	REACHES m			
m	STABILIZERS	4.5	6	7.5	9
	non supported	(5.8)			
9	4-pt. supported	6.2* (6.2*)			
	2-pt. supported with blade	6.2* (6.2*)			
	non supported	(5.9*)	(3.6)		
7.5	4-pt. supported	5.9* (5.9*)	5.0* (5.0*)		
	2-pt. supported with blade	5.9* (5.9*)	4.8 (5.0*)		
	non supported	(5.9)	(3.6)	(2.4)	
6	4-pt. supported	6.0* (6.0*)	5.0* (5.0*)	4.1 (4.2*)	
	2-pt. supported with blade	6.0* (6.0*)	4.7 (5.0*)	3.2 (4.2*)	
	non supported	(5.7)	(3.5)	(2.3)	
4.5	4-pt. supported	6.6* (6.6*)	5.2* (5.2*)	4.1 (4.2*)	
	2-pt. supported with blade	6.6* (6.6*)	4.7 (5.2*)	3.2 (4.2*)	
	non supported	(5.3)	(3.3)	(2.3)	(1.7)
3	4-pt. supported	7.6* (7.6*)	5.5* (5.5*)	4.0 (4.3*)	2.9 (3.3*)
	2-pt. supported with blade	7.3 (7.6*)	4.5 (5.5*)	2.9 (4.3*)	2.3 (3.3*)
	non supported	(4.9)	(3.2)	(2.2)	(1.6)
1.5	4-pt. supported	8.2* (8.2*)	5.5* (5.7*)	3.6 (4.2*)	2.9 (3.0*)
	2-pt. supported with blade	6.8 (8.2*)	4.3 (5.7*)	3.0 (4.2*)	2.3 (3.0*)
	non supported	(4.7)	(3.0)	(2.2)	
0	4-pt. supported	7.6* (7.6*)	5.4* (5.4*)	3.8 (3.9*)	
	2-pt. supported with blade	6.6 (7.6*)	4.2 (5.4*)	3.0 (3.9*)	
	non supported	(4.6)	(3.0)	(2.1)	
-1.5	4-pt. supported	6.0* (6.0*)	4.4* (4.4*)	3.0* (3.0*)	
	2-pt. supported with blade	6.0* (6.0*)	4.1 (4.4*)	2.9 (3.0*)	





Compact, manoeuvrable, powerful - this is the mobile loading machine MHL320 D. With its reach of 10.4 metres and operating weight of 19 tonnes, this machine is the ideal solution for anyone who is looking for an entry-level machine but is not prepared to compromise on performance, efficiency or reliability.

# SIMPLY OUTSTANDING. VERSATILE IN USE.

With its seemingly inexhaustible reserves of power, the 85-kW/114-hp turbo diesel engine gets even weighty loads moving with speed

### MHL320 D. Outstanding visibility. Outstanding performance. Outstanding in use

and precision. Thanks to the sensitive hydraulics and the dependable mechanics, manoeuvring is smooth, straightforward and free of play even under load. The separate oil cooler with its large cooling surface helps to keep the operating temperature in the green range even when the machine is in constant use.

The cab is designed for excellent visibility – it can be elevated to an eye-level of 5.2 metres and is fitted with large panoramic windows. In addition, the MHL320 D offers special features such as air-conditioning fitted as standard, an optional reversible fan and even a pressurized cabin system for use in environments that could pose a risk to health.

MHL320 D valid from machine no. 0965. 05.2008-GB (1.5). Printed in Germany. For further information please contact your dealer or the Terex<sup>®</sup> Fuchs sales department. Terex<sup>®</sup> Fuchs reserves the right to continually improve its products. Product specifications are subject to change without notice or obligation. The photographs and drawings in this brochure are for illustrative purposes only. Refer to the appropriate Operator's Manual for instructions on the proper use of this equipment. Failure to follow the appropriate Operator's Manual when using our equipment, or to otherwise act irresponsibly may result in serious injury or death. Prices and specifications subject to change without notice. The only warranty applicable is the standard written warranty applicable to the particular product and sale. Terex<sup>®</sup> Fuchs provides no undertakings beyond the expressly agreed warranty conditions. © Terex Corporation 2008 – Terex is a registered trade mark of the Terex Corporation in the United States of America and many other countries.