

TECHNICAL DATA

MATERIAL HANDLER | F-SERIES

MHL320



95 kW



19.1–22.9t



up to **10.4 m**



FUCHS
A TEREX BRAND

THE ALLROUND MATERIAL HANDLER FOR VERSATILITY AT ITS BEST.

For More Than 20 Years.

Compact, manoeuvrable, powerful – the MHL320 F, mobile loading machine. With its maximum reach of 10.4 metres and an operating weight of up to 22.9 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.

The new MHL320 F brings this philosophy to the next level. A new engine optimized towards performance and fuel efficiency combined with a super sensitive load limit control delivers power when you need it where you need it. In order to be even more capable of today's demand in industrial recycling applications we equipped the new MHL320 F with enhanced features like joystick steering, a modified hydraulic and reversing fans as standard features. The MHL320 F is also capable to process light scrap with the solid steel structure, special kinematics and options like the genset.



PIONEERING IN EFFICIENCY.

Outstanding Visibility. Outstanding Performance.

Joystick Steering

- Improved visibility
- Enhanced legroom and comfort

Double Pivot Bearings

- Optimized application of force
- Excellent durability

Swiveling Ring with Double Roller Bearing

- Outstanding durability
- Sensitive response



AC Condenser

- Separated from the cooling system
- Dust protected
- Individual fans for power on demand

Service Platform

- Provides safe and comfortable access to engine, air filter, etc.
- Easy access for daily access and maintenance

Reversing Fan for Oil-Water and Intercooler

- Cleaner coolers
- High cooling capacity, particularly in dusty environments

New Power Plant

- Increased power (+10 kW)
- A leader in fuel economy

CAN Bus System and Rapid Fuse Tester

- State of the art technology
- Intelligent machine diagnostics
- Clever fuse test as a little helper, just in case

Modular Undercarriage

- 4-point-stabilizers for extra stability
- 2-point-outriggers and stabilizing blade
- 4-point-outriggers and dozer blade

EQUIPMENT AND OPTIONS.

Bespoke Technology, Tailored For You.



Joystick Steering

- Improved visibility
- Enhanced legroom and comfort



Multifunction Button and Power Modes

- Power on demand
- Fuel savings



7" Multi-Function Touch Display

- Easy and intuitive operation
- Monitoring of the machine data



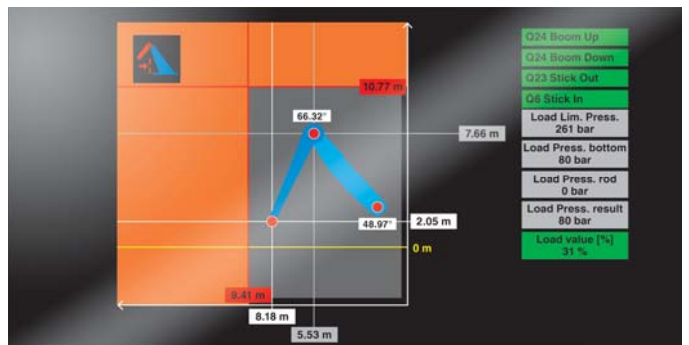
Rear View Cameras

- Nightvision for extra safety
- Additional travel alarm optional



Attachment Hydraulic Filtration*

- High pressure filter with electronic built in sensors
- Effective protection against hydraulic oil contamination



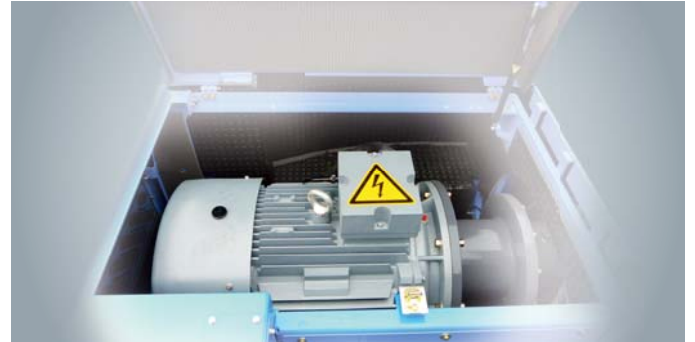
Overload Warning with Height and Reach Limiter*

- Enhanced control for heavy loads



Active Cyclone Prefilter*

- Reduced dust in your air filter, no loss of airflow and engine power
- Longer uptime of your air filter



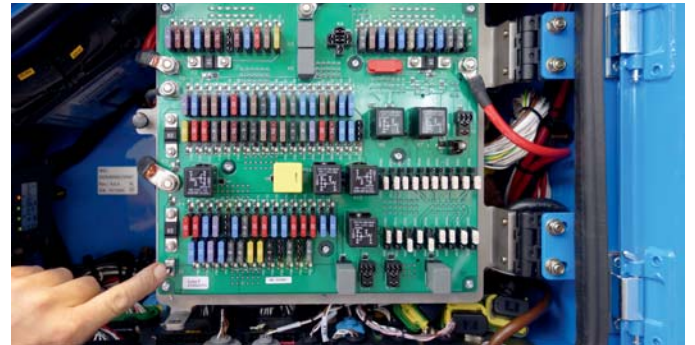
Electric Drive*

- Maximum efficiency
- Reduced service costs



Reversing Fan

- Reduced dust in intercooler-water and oilcooler
- Enhanced cooling performance



CAN BUS and Rapid Fuse Tester

- Innovative technology
- Fuse tester



Fuchs Service Platform

- Easy and safe access to engine oil dipstick, air filter, greasing system, etc.
- Unique in its class



Fuchs Telematics (Fox Box)*

- Optimize your machine use
- Check the most important machine data remotely

* special equipment on demand

TECHNICAL DATA

SERVICE WEIGHT WITHOUT ATTACHMENT

MHL320 F	19.1–22.9 t
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DIESEL ENGINE

Manufacturer and model	Deutz TCD 3.6 L04 2V
Design	4-cylinder inline
Engine control	EMR IV
Type	4-stroke diesel, common rail direct injection, turbo-charger, charge air cooling
Engine output	95 kW
Nominal speed	2000 min ⁻¹
Displacement	3621 cm ³
Cooling system	Liquid intercooling with temperature-controlled fan speed
Emission standard	Stage IV / EPA Tier 4 Final
Air filter design	Two-stage filter with safety valve
Usable tank capacity	305 l / 20 l DEF (AdBlue)

ELECTRICAL SYSTEM

Operating voltage	24 V
Battery	2 × 12 V / 100 Ah / 850 A (in accordance with EN)
Lighting set	1 × H3 floodlight on upper carriage, 1 × H3 floodlight on cab floor, turn signal and rear sidemarker lamps
Option	Generator system

TRANSMISSION

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
Travel speed 2nd gear	20 km/h
Gradeability	max. 55 %
Turning radius	7.0 m

SLEWING GEAR

Swing 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 ⁻¹
Swing lock	Electrically operated

UNDERCARRIAGE

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
Stabilizers	4-point stabilizers, 2-point stabilizers with stabilizing blade
Tyres	10.00-20 solid rubber with spacer rings

BRAKE SYSTEM

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

HYDRAULIC SYSTEM

REXROTH mobile hydraulic system with 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; central lubrication system.	
Max. pump capacity	290 liters/min
Max. operating pressure	320 / 360 bar
Hydraulic oil tank	300 liters
Hydraulic oil filter	Filter elements integrated into oil tank, maintenance interval 4000 hours
Available hydraulic oils	Hydraulic oil for low temperature Hydraulic oil Renolin B15 VG46 Hydraulic oil Panolin HLP Synth. 46 bio-degradable

OPERATOR CAB

Cab raising system	Cab: elastically supported, infinitely variable hydraulically height-adjustable with max. eye level of 5.3 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, 6 adjustable defroster nozzles
Operator's seat	Air-cushioned comfort-seat with integrated headrest, safety belt and lumbar support, seat heating with integrated A/C function optional. Comfortable operation with multi-purpose adjustment options for seat position, seat inclination, and seat cushion placement in relation to armrests and pilot control units.
Monitoring	Ergonomic layout; glare-free instrumentation. Multi-function touch display, automatic monitoring and recording of abnormal operating conditions (including all hydraulic oil filters, hydraulic oil temperature (cold / hot) coolant temperature and charge air temperature), visual and audible warning indication with shutdown of pilot controls/ engine power reduction. Diagnosis of individual sensors available via the multi-function touch display. Rear view camera.
Air conditioning	Automatic
Acoustic power level	Acoustic power level (outside) L _{WA} 100 dB(A) (guaranteed) according to guideline 2000/14/EG L _{WA} 102 dB(A) (valid) according to guideline 2000/14/EG Acoustic power level (inside the cabin) according to guideline ISO 6396 L _{PA} 72 dB(A)

OFFICIAL HOMOLOGATION

Certification according to EG machinery directive 2006/42/EG
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EQUIPMENT

ENGINE

	Standard	Option
Exhaust gas turbocharger	●	
Intercooling	●	
Direct electronic fuel injection / Common Rail	●	
Automatic idle	●	
Engine pre-heating		●
Interface for engine diagnosis	●	
Temperature-controlled fan drive	●	

UNDERCARRIAGE

2-speed shift transmission	●	
2-speed power-shift transmission		●
4-point stabilizers	●	
Dozer blade in addition to 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	●	
Drum brakes	●	
Solid rubber tyres 10.00-20 with spacer rings	●	
Tool box on undercarriage	●	

UPPERCARRIAGE

Electric refuelling pump		●
Lighting protection		●
Maintenance hood with mechanical locking device	●	
Lockable cleaning access openings on radiator	●	
Separate radiator system for ambient temperatures up to 50°C	●	
Separate oil cooler with temperature-controlled fan drive	●	
Automatic central lubrication system	●	
Reversing alarm		●
Special paint		●
Quick-drain valve on Diesel tank	●	
Quick-drain valve on hydraulic oil tank	●	
Quick-drain valve on radiator	●	
Quick-drain valve on engine oil-pan	●	
Reversible fan for radiator and hydraulic oil cooler	●	

CAB

	Standard	Option
Lift-up skylight in cab roof	●	
Air cushioned operator's seat with headrest, safety belt and lumbar support	●	
FOPS protective grating		●
Front / roof protective grating		●
Bullet-proof safety glass, front and top		●
Cab elevation system	●	
Air conditioning	●	
Joystick steering	●	
Steering column, height and tilt adjustable (instead of joystick steering)		●
Multi-function touch display	●	
Fire extinguisher, dry powder		●
Pre-equipped for radio		●
Radio CD / USB		●
Rotating beacon with travel alarm		●
Sliding window in cab door	●	
Safety glass	●	
Seat heating with integrated a/c function		●
Engine-independent heating		●
Windscreen washer system	●	
Windscreen washer for lower front window		●

EQUIPMENT

Spotlights attached to cab floor	●	
Spotlights mounted to superstructure	●	
Working light stick (1x)	●	
Load limit control	●	
Hydraulic oil preheating		●
Close proximity range limiter for dipper stick	●	
Coolant and hydraulic oil level monitoring system	●	
Hose rupture safety valves for lift cylinder		●
Hose rupture safety valves for dipper stick cylinder		●
Stick shock protection		●
Lubrication of the grab suspension by central lubrication system	●	
Overload warning / shutdown		●
H3 or LED worklights on boom		●
H3 or LED worklights on dipper stick		●
H3 or LED worklights on cab roof		●
Quick-connect coupling on dipper stick	●	
Filter system for attachments		●
Rear view camera (activated automatically once the machine starts to drive)	●	
Boom cylinder damping system		●
Height and reach limitation		●

Further optional equipment available on request!



MHIL320



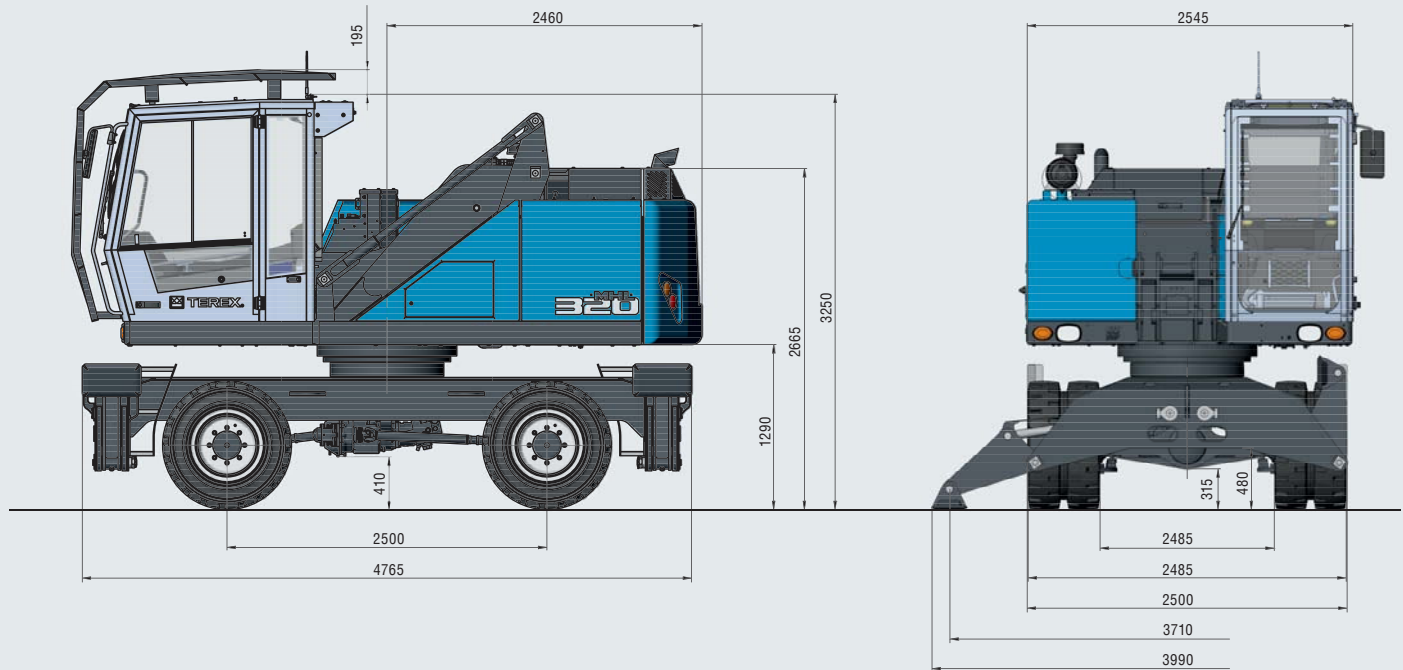
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DIMENSIONS

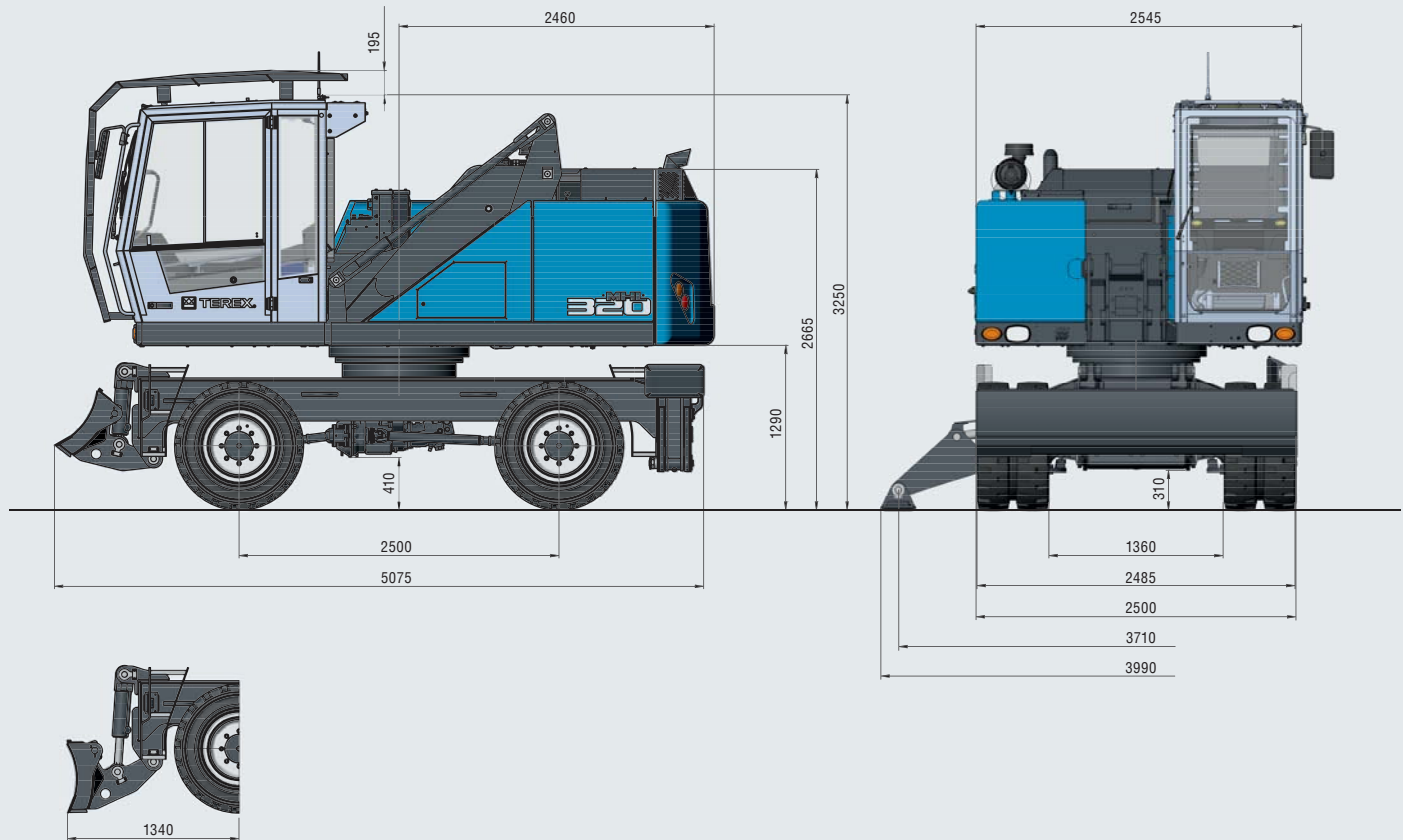
4-POINT STABILIZERS

All dimensions in mm

Maximum viewing height
5270 mm



STABILIZING BLADE

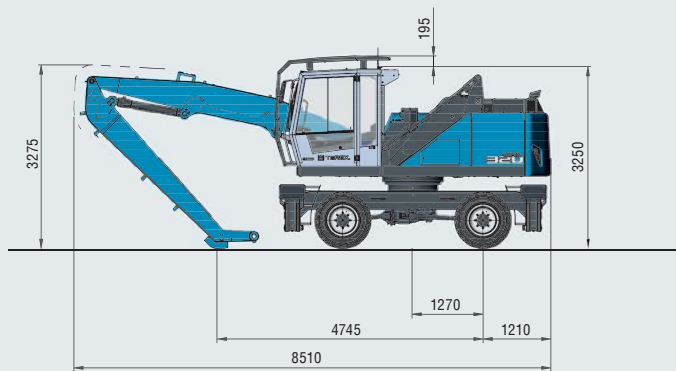




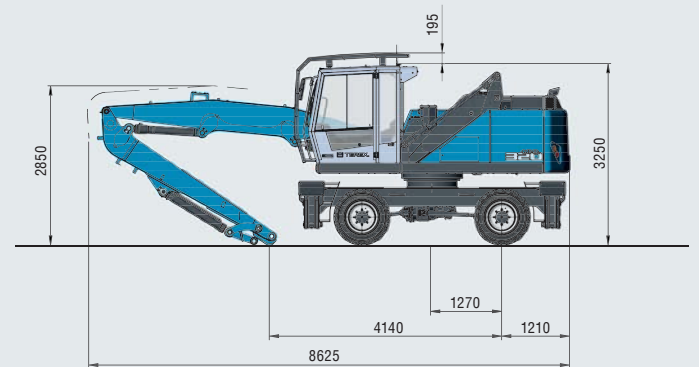
TRANSPORT DIMENSIONS

All dimensions in mm

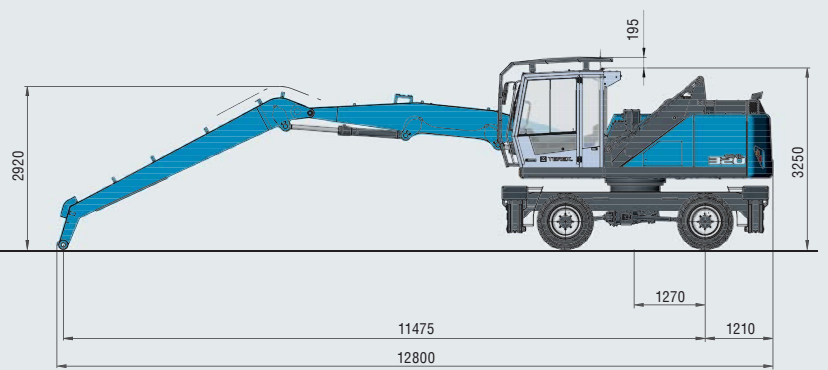
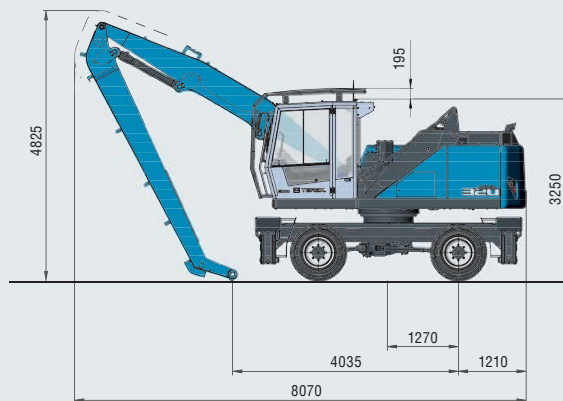
Reach 9.5 m



Reach 9.2 m | Multi-purpose stick



Reach 10.4 m



WORKING RANGE

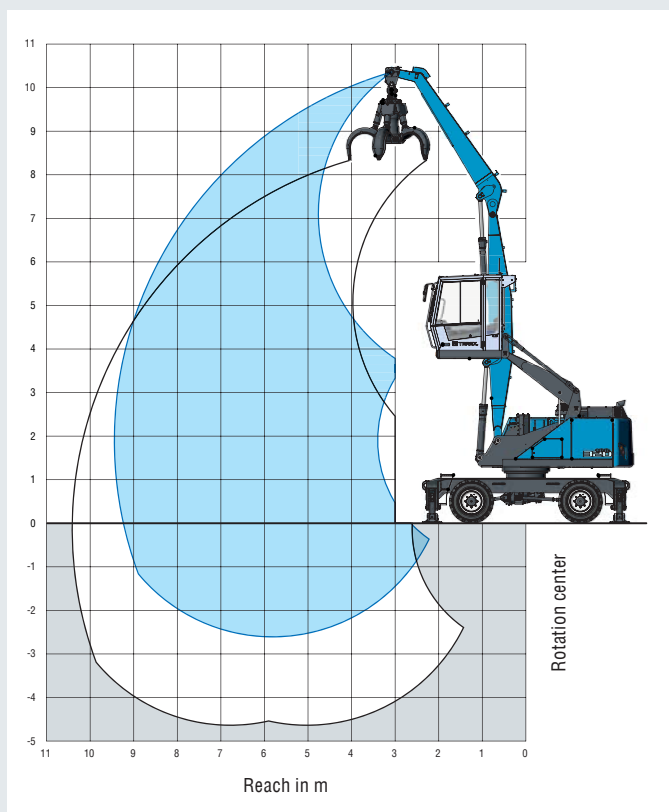
REACH 9.5 M WITH DIPPER STICK

Loading equipment	Boom 5.2 m Dipper stick 4.0 m Cactus grab
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RECOMMENDED ATTACHMENTS

Fuchs cactus grab 0.4 m³	Open or half-closed shells
Grab for lightweight materials 0.6 m³	Depending on density of goods
Magnetic system	Fuchs magnetic plate
Lift hook	10 t

The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked °). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hoisting equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift capacity table in the cab are required. For object handling application the machine has to be supported on a level ground.



LIFTING CAPACITY

Height [m]	Undercarriage outrigger	Reach [m]			
		4.5	6	7.5	9
9	not supported	(6.5°)			
	4-point supported	6.5° (6.5°)			
	2-point supported with blade	6.4° (6.4°)			
7.5	not supported		(4.3)		
	4-point supported		5.2° (5.2°)		
	2-point supported with blade		5.1° (5.1°)		
6	not supported		(4.3)	(3.0)	
	4-point supported		5.2° (5.2°)	4.5° (4.5°)	
	2-point supported with blade		5.1° (5.1°)	3.7 (4.5°)	
4.5	not supported	(6.6)	(4.2)	(3.0)	(2.2)
	4-point supported	6.8° (6.8°)	5.5° (5.5°)	4.6° (4.6°)	3.5 (3.8°)
	2-point supported with blade	6.7° (6.7°)	5.2 (5.4°)	3.7 (4.5°)	2.8 (3.7°)
3	not supported	(6.1)	(4.0)	(2.9)	(2.2)
	4-point supported	7.7° (7.7°)	5.8° (5.8°)	4.6° (4.6°)	3.5 (3.7°)
	2-point supported with blade	7.7° (7.7°)	5.0 (5.8°)	3.6 (4.6°)	2.8 (3.7°)
1.5	not supported	(5.7)	(3.8)	(2.8)	(2.1)
	4-point supported	8.4° (8.4°)	6.0° (6.0°)	4.5 (4.6°)	3.4 (3.5°)
	2-point supported with blade	7.4 (8.5°)	4.9 (6.0°)	3.5 (4.6°)	2.7 (3.1°)
0	not supported	(5.4)	(3.6)	(2.7)	(2.1)
	4-point supported	8.1° (8.1°)	5.8° (5.8°)	4.3° (4.3°)	3.0° (3.0°)
	2-point supported with blade	7.2 (8.2°)	4.7 (5.8°)	3.5 (4.3°)	2.7 (3.1°)
-1.5	not supported	(5.3)	(3.5)	(2.7)	
	4-point supported	6.7° (6.7°)	4.9° (4.9°)	3.6° (3.6°)	
	2-point supported with blade	6.9° (6.9°)	4.7 (5.0°)	3.4 (3.6°)	
		Max. reach 9.5 m			
1.8	not supported				(2.0)
	4-point supported				3.2 (3.4°)
	2-point supported with blade				2.6 (3.4°)



WORKING RANGE

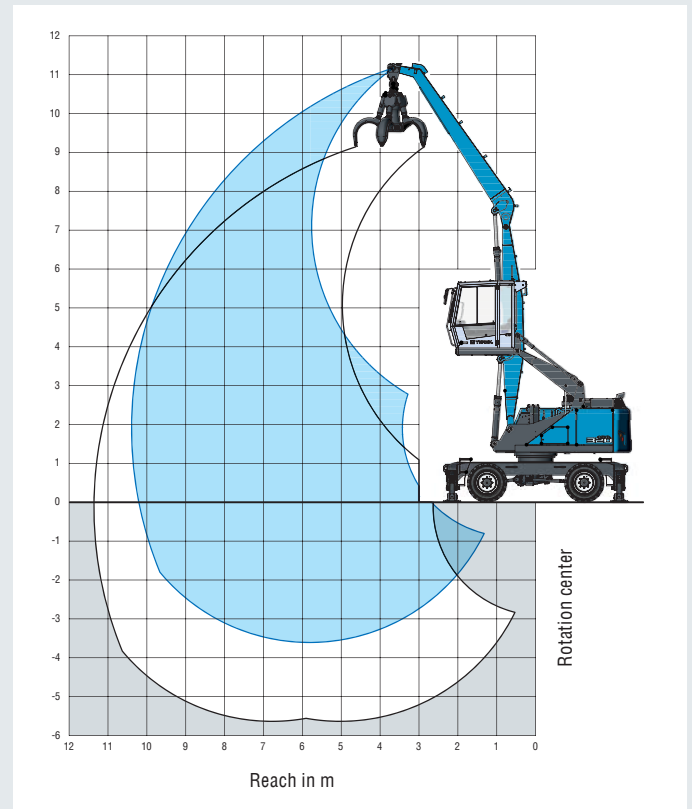
REACH 10.4 M WITH DIPPER STICK

Loading equipment	Boom 5.2 m
	Dipper stick 5.0 m
	Cactus grab

RECOMMENDED ATTACHMENTS

Fuchs cactus grab 0.4 m ³	Open shells
Grab for lightweight materials 0.5 m ³	Depending on density of goods
Magnetic system	Fuchs magnetic plate
Lift hook	10 t

The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked °). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hoisting equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift capacity table in the cab are required. For object handling application the machine has to be supported on a level ground.



LIFTING CAPACITY

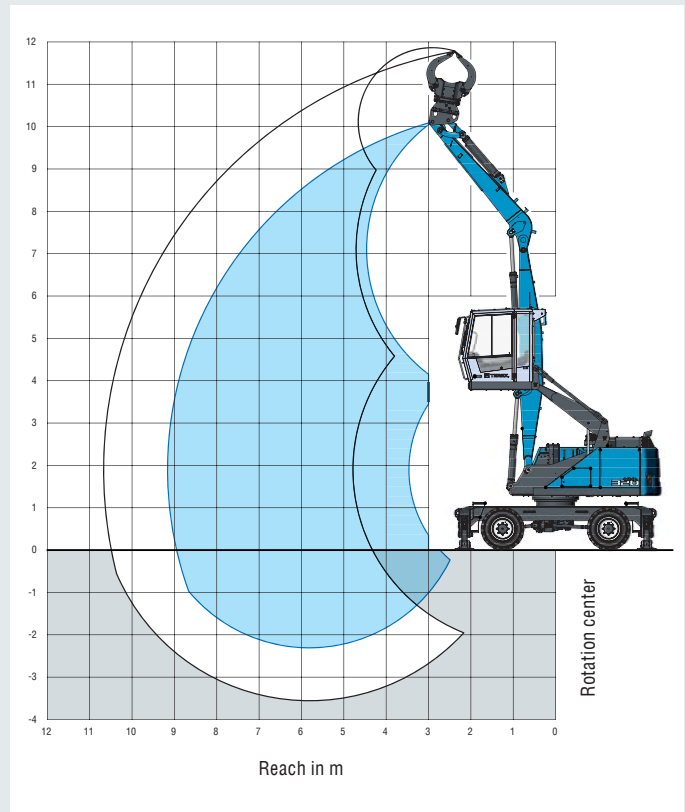
Height [m]	Undercarriage outrigger	Reach [m]			
		4.5	6	7.5	9
9	not supported		(4.4)		
	4-point supported		4.9° (4.9°)		
	2-point supported with blade		4.9° (4.9°)		
7.5	not supported		(4.4)	(3.1)	
	4-point supported		5.1° (5.1°)	4.5° (4.5°)	
	2-point supported with blade		5.1° (5.1°)	3.9 (4.5°)	
6	not supported		(4.4)	(3.1)	(2.2)
	4-point supported		5.1° (5.1°)	4.5° (4.5°)	3.6 (3.8°)
	2-point supported with blade		5.1° (5.1°)	3.9 (4.5°)	2.9 (3.8°)
4.5	not supported		(4.3)	(3.0)	(2.2)
	4-point supported		5.4° (5.4°)	4.6° (4.6°)	3.5 (4.0°)
	2-point supported with blade		5.4° (5.4°)	3.9 (4.6°)	2.9 (4.0°)
3	not supported	(6.4)	(4.1)	(2.9)	(2.2)
	4-point supported	7.5° (7.5°)	5.9° (5.9°)	4.6 (4.8°)	3.5 (4.0°)
	2-point supported with blade	7.5° (7.5°)	5.3 (5.9°)	3.7 (4.8°)	2.8 (4.0°)
1.5	not supported	(5.9)	(3.8)	(2.6)	(2.0)
	4-point supported	8.6° (8.6°)	6.3° (6.3°)	4.5 (4.9°)	3.4 (3.9°)
	2-point supported with blade	7.9 (8.6°)	5.0 (6.3°)	3.6 (4.9°)	2.7 (3.9°)
0	not supported	(5.4)	(3.6)	(2.6)	(2.0)
	4-point supported	9.0° (9.0°)	6.1 (6.4°)	4.4 (4.8°)	3.3 (3.7°)
	2-point supported with blade	7.4 (9.0°)	4.9 (6.4°)	3.5 (4.8°)	2.7 (3.7°)
-1.5	not supported	(5.2)	(3.5)	(2.6)	(2.0)
	4-point supported	8.1° (8.1°)	5.8° (5.8°)	4.3° (4.3°)	3.0° (3.0°)
	2-point supported with blade	7.1 (8.1°)	4.6 (5.8°)	3.4 (4.3°)	2.6 (3.0°)
-3	not supported	(5.1)	(3.4)	(2.5)	
	4-point supported	6.1° (6.1°)	4.5° (4.5°)	3.2° (3.2°)	
	2-point supported with blade	6.1° (6.1°)	4.5° (4.5°)	3.2° (3.2°)	
		Max. reach 10.4 m			
1.8	not supported				(1.7)
	4-point supported				2.8 (3.0°)
	2-point supported with blade				2.2 (3.0°)

WORKING RANGE

REACH 9.2 M WITH MULTI-PURPOSE STICK

Loading equipment	Boom 5.2 m
	Multi-purpose stick 3.7
	Sorting grapple

The lift capacity values are stated in metric tons (t). The pump pressure is 360 bar. In accordance with ISO 10567 the lift capacity values represents 75% of the static tipping loads or 87% of the hydraulic lifting force (marked °). On solid and level ground the values apply to a swing range of 360°. The (...) values apply in the longitudinal direction of the undercarriage. The values for "not supported" only apply via the steering axle or the locked oscillating axle. The weights of the attached load hoisting equipment (grab, load hock, etc.) must be deducted from the lift capacity values. The working load of the lifting device must be observed. In accordance with the EN 474-5 for object handling application hose rupture valves on the boom and stick cylinders, an overload warning device and the lift capacity table in the cab are required. For object handling application the machine has to be supported on a level ground.





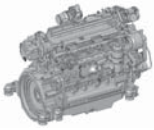

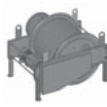

LIFTING CAPACITY





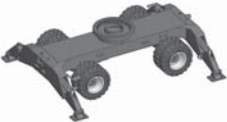



Height [m]	Undercarriage outrigger	Reach [m]			
		4.5	6	7.5	9
9	not supported	(6.3°)			
	4-point supported	6.3° (6.3°)			
	2-point supported with blade	6.3° (6.3°)			
7.5	not supported	(6.5)	(4.0)		
	4-point supported	6.8° (6.8°)	5.6° (5.6°)		
	2-point supported with blade	6.8° (6.8°)	5.6° (5.6°)		
6	not supported	(6.4)	(4.0)	(2.7)	
	4-point supported	6.8° (6.8°)	5.6° (5.6°)	4.4 (4.7°)	
	2-point supported with blade	6.8° (6.8°)	5.2 (5.6°)	3.6 (4.7°)	
4.5	not supported	(6.2)	(3.9)	(2.7)	
	4-point supported	7.4° (7.4°)	5.8° (5.8°)	4.4 (4.7°)	
	2-point supported with blade	7.4° (7.4°)	5.1 (5.8°)	3.5 (4.7°)	
3	not supported	(5.8)	(3.7)	(2.6)	(1.9)
	4-point supported	8.3° (8.3°)	6.1° (6.1°)	4.3 (4.7°)	3.2 (3.6°)
	2-point supported with blade	7.8 (8.3°)	4.9 (6.1°)	3.4 (4.7°)	2.5 (3.6°)
1.5	not supported	(5.3)	(3.5)	(2.5)	(1.9)
	4-point supported	8.8° (8.8°)	5.9 (6.2°)	4.2 (4.6°)	3.2 (3.3°)
	2-point supported with blade	7.3 (8.8°)	4.7 (6.2°)	3.3 (4.6°)	2.5 (3.3°)
0	not supported	(5.1)	(3.3)	(2.2)	
	4-point supported	8.1° (8.1°)	5.7° (5.7°)	3.8 (3.9°)	
	2-point supported with blade	7.0 (8.1°)	4.5 (5.7°)	3.2 (4.1°)	
-1.5	not supported	(5.0)	(3.3)	(2.4)	
	4-point supported	6.1° (6.1°)	4.5° (4.5°)	3.1° (3.1°)	
	2-point supported with blade	6.1° (6.1°)	4.4 (4.5°)	3.1° (3.1°)	
		Max. reach 9.2 m			
1.8	not supported				(1.8)
	4-point supported				3.1 (3.2°)
	2-point supported with blade				2.4 (3.2°)



MODULAR SYSTEM

Attachments		Work equipment	
Furthermore: Magnetic plate Load hook Cable shears	Cactus grab		Work equipment straight
	Sorting grapple		Work equipment with multipurpose stick

Engine		Options	
Diesel engine	Electric motor	Cable drum	Power Pack
			

Undercarriage			
Pylon up to max. 0.8 m	Pylon up to max. 1.4 m	Pylon up to max. 0.8 m	Pylon up to max. 3.7 m
			
			
Mobile: Standard-undercarriage	Mobile special: For extended undercarriage	Crawler: Standard-undercarriage	Pedestal undercarriage



MHL320 F: SELECT YOUR OPTIONS.

BASIC UNIT	Standard
Mobile basic unit MHL320 F	●
• Undercarriage with 2-point outriggers / support blade	
• Undercarriage with 4-point outriggers	
2-shift transmission	●
Cabin standard	●
Loading equipment 9.5 m reach	●
Standard colour	●
Solid rubber tyres, 8-fold 10.00-20 with intermediate rings	●
Automatic engine switch-off function	●
Reversing fan	●
Joystick steering	●
Load limit control	●
Air Conditioner	●
Air-cushioned comfort seat	●
Rearview camera	●
Toolbox small at undercarriage	●

ENGINE	Add option
Diesel engine	<input type="checkbox"/>
Electric engine	<input type="checkbox"/>
UNDERCARRIAGE	
Standard mobile	<input type="checkbox"/>
Crawler	<input type="checkbox"/>
Pylon	<input type="checkbox"/> m
4-point stabilizers, individually controllable	<input type="checkbox"/>
LOADING EQUIPMENTS	
Boom cylinder damping system (piston accumulator)	<input type="checkbox"/>
Loading equipment with universal stick 9.2 m reach (boom 5.2 m, stick 3.7 m) incl. boom cylinder damping system (piston accumulator)	<input type="checkbox"/>
Loading equipment 10.4 m reach (boom 5.2 m, stick 5.0 m)	<input type="checkbox"/>
LIGHTS	
Light package H3 or LED (for boom stick or cabin)	<input type="checkbox"/>
Lamp protection	<input type="checkbox"/>
CABIN	
Auxiliary heating with timer and temperature preselection	<input type="checkbox"/>
Cabin with bullet proof glass front and above	<input type="checkbox"/>
FOPS-top guard for the cab's roof	<input type="checkbox"/>
Front / roof protective grating	<input type="checkbox"/>
Powder fire extinguisher with holder inside the cab	<input type="checkbox"/>

CABIN	Add option
Windscreen washer for lower front window	<input type="checkbox"/>
Pedal for swingbreak lock	<input type="checkbox"/>
Voltage converter 12 V (incl. 2.5 m cable)	<input type="checkbox"/>
Radio CD / USB	<input type="checkbox"/>
Air-conditioned seat with heating	<input type="checkbox"/>
Socket 12 V	<input type="checkbox"/>
Steering wheel instead of joystick steering	<input type="checkbox"/>
Special joystick function (detailed plan for joystick functions necessary)	<input type="checkbox"/>
Mechanically switchable joystick functions	<input type="checkbox"/>
ASSISTANCE SYSTEMS	
Overload warning device basic (without angle sensors)	<input type="checkbox"/>
Italia package (deadman switch)	<input type="checkbox"/>
Rupture valves for lifting cylinders	<input type="checkbox"/>
Rupture valves for stick cylinders	<input type="checkbox"/>
Rotating beacon and travel alarm	<input type="checkbox"/>
FURTHER OPTIONS	
Additional suction box for oil and water cooler	<input type="checkbox"/>
Dozer blade additional to 4-point outriggers 2.6 m (without cutting edge)	<input type="checkbox"/>
Cutting edge hardox for dozer blade	<input type="checkbox"/>
Cutting edge synthetic material for dozer blade	<input type="checkbox"/>
Filtration system for attachments	<input type="checkbox"/>
Electric refuelling pump	<input type="checkbox"/>
Generator 9 kW	<input type="checkbox"/>
Generator 11 kW	<input type="checkbox"/>
Bio-hydraulic-oil PANOLIN HLP SYNTH 46 (first filling)	<input type="checkbox"/>
Hydraulic-oil RENOLIN for temperatures far below freezing point	<input type="checkbox"/>
Power shift transmission	<input type="checkbox"/>
Engine pre-heating*	<input type="checkbox"/>
Hydraulic oil pre-heating*	<input type="checkbox"/>
Stick shock protection	<input type="checkbox"/>
Fuchs Telematics "Fox Box" (2 years duration, renewable on demand)**	<input type="checkbox"/>
Prolongation Telematics for 1 additional year	<input type="checkbox"/>
Active cyclone dust separator for air filter	<input type="checkbox"/>
Central greasing system for undercarriage - manually	<input type="checkbox"/>
Central greasing system for undercarriage - automatic	<input type="checkbox"/>
Increased corrosion protection (cabin, covers, steel construction)	<input type="checkbox"/>

* (230V-50Hz by external power supply)

** for machines going to CIS countries please contact your business manager for more information



GET A HANDLE ON FLEET MANAGEMENT.

Fuchs Telematics System: Recognize and Optimize Potential.

The Fuchs Telematics system: know exactly how and where everything is running.

The system offers a modern solution to help you analyze and optimize the efficiency of your machines. It records and communicates valuable information on the operating status of each individual machine. Where are the machines? How are they working? Is a service check pending? Take advantage of this advanced software and get a handle on your fleet management with the tool that connects for you.

ALL-IN-ONE MACHINE MANAGEMENT. EVERYTHING AT A GLANCE: OPERATING DATA, MACHINE STATUS, GPS DATA

Record, display, and analyse data: high efficiency through precise information

- Available online anywhere and at any time*: comprehensive information on the GPS location, start and stop times, fuel consumption, operating hours, maintenance status, and much more.
- User-friendly interface: displays information clearly for at a glance metrics and diagnostics. Take action before damage occurs: predetermined maintenance intervals are signaled and error messages are displayed in plain text messages.
- The Fuchs Telematics system is optionally available or can be retrofitted into existing machines to help control your operating costs and keep your machines in top shape.

* Internet connection required

