US

Material Handler | F-Series

MHL 320

127 hp (Diesel)
75 kW (Electric)

max. 46,297 lbs

max. 34'1"

FUCHS®
A TEREX BRAND

TECHNICAL DATA

OPERATING WEIGHT WITHOUT ATTACHMENTS

MHL320 F	42,549–46,297 lbs

DIESEL ENGINE

	U.S. Tier 4 / EU Stage V	U.S. Tier 3 / EU Stage IIIA *
Manufacturer and model	Deutz TCD 3.6 L04	Deutz TCD 3.6 L04 EDG
Design	4-cylinder in-line engine	4-cylinder in-line engine
Functionality	4-cycle diesel, common rail direct injection, turbocharged with intercooler, controlled exhaust gas recirculation, diesel particulate filter with continuous regeneration and SCR catalytic converter	4-cycle diesel, common rail direct injection, turbocharged with intercooler
Engine power	127 hp (95 kW)	127 hp (95 kW)
Rated speed	2000 rpm	2000 rpm
Displacement	220 cui	220 cui
Cooling system	Water and charge air cooling with temperature controlled fan speed	Water and charge air cooling with temperature controlled fan speed
Exhaust emission standard	U.S. Tier 4 / EU Stage V	U.S. Tier 3 / EU Stage IIIA *
Fuel tank	81 gal Diesel	81 gal Diesel
DEF / Urea tank	5.3 gal AdBlue	■

ELECTRIC MOTOR

Power	75 kW
Total connected load	100 kW
Motor start	Via soft start
Optional cable reel	Up to 164 ft (other lengths on request)

ELECTRICAL SYSTEM

Alternator	28 V / 100 A
Operating voltage	24 V
Battery	2 × 12 V / 110 Ah/ 750 A (according to EN)
Lighting system	2 × LED headlamps, turn indicators and tail lights
Optional equipment	9 kW or 11 kW DC generator with controls and insulation monitoring

TRAVEL DRIVE

Hydrostatic travel drive via infinitely variable axial piston motor with directly mounted travel brake valve, two-speed manual gearshift, 4-wheel drive

Travel speed 1st gear	max. 3.1 mph
Travel speed 2nd gear	max. 11.8 mph
Gradeability	max. 40 %
Turning radius	23'3"
Turning radius with all-wheel steering	14'8"

SLEWING DRIVE

Slewing ring	Internally geared, double-row ball turning ring
Drive	2-stage planetary gear with integrated multi-disc brake
Uppercarriage swing speed	0–8 rpm variable
Slewing lock	Electrically activated

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 lock
Outrigger	4-point stabilizers 2-point-stabilizers with support blade
Tires	10.00-20 solid rubber with intermediate rings

BRAKES

Service brake	Hydraulic single-circuit braking system acting on all four wheel pairs (drum brakes)
Parking brake	Electrically operated spring-loaded drum brake at transmission, acting on both front and rear axle

HYDRAULIC SYSTEM

Max. pump capacity	77 gpm
Max. operating pressure	4641 / 5221 psi
Hydraulic oil tank	73 gal

OPERATOR'S CAB

Cab	Infinitely variable hydraulic height-adjustment with eye level up to 17'4" above ground Sound-deadened, heat-insulated windows, windshield with pull-down sunblind, viewing window on cab roof, sliding window in cab door, sliding door	
Air conditioning	Automatic air-conditioning. Hot water heating with variable temperature control and 8-speed fan, 10 adjustable air nozzles, including 4 in the roof lining, 3 defroster nozzles	
Operator's seat	Air-sprung comfort seat with integrated headrest, safety belt, and lower lumbar support, optional seat heating. Ilows comfortable working by offering universal adjustment possibilities of the seat position, the seat incline, and the position of the seat cushion in relation to the armrests and joysticks	
Monitoring	Ergonomic layout, anti-glare instrumentation. Multifunction 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, diesel particulate filter load, visual and audible warning indication with shutdown of pilot controls/engine power reduction. Diagnosis of individual sensors possible via the multi-function display. Rear view camera and side view camera	
	U.S. Tier 4 / EU Stage V	**U.S. Tier 3 / EU Stage IIIA ***
Noise level	Sound power level (ambience) L_{WA} 97.7 dB(A) (metered) acc. to directive 2000/14/EC L_{WA} 99 dB(A) (guaranteed) acc. to directive 2000/14/EC Sound pressure level (inside the cabin) acc. to standard ISO 6396 L_{pA} 72 dB(A)	Sound power level (ambience) L_{WA} 99.3 dB(A) (metered) acc. to directive 2000/14/EC L_{WA} 100 dB(A) (guaranteed) acc. to directive 2000/14/EC Sound pressure level (inside the cabin) acc. to standard ISO 6396 L_{pA} 69 dB(A)
Vibrations	Weighted r.m.s. value of acceleration of upper limbs under 2.5 m/s² (98 in/s²) Weighted effective value of acceleration for the seat and feet under 0.5 m/s² (20 in/s²)	
Certified in accordance with CE regulations		

* for low-regulated markets

EQUIPMENT

ENGINE

	Standard	Option
Intercooler and coolant radiator	●	
Direct electronic fuel injection / common rail	●	
Advanced automatic idle incl. engine shut-off function	●	
Engine diagnostics interface	●	
Temperature-dependent fan drive	●	

UNDERCARRIAGE

All-wheel drive	●	
Drum brake	●	
Rear axle oscillating lock	●	
2-speed powershift transmission		●
4-point stabilizers	●	
Dozer blade in addition to 4-point stabilizers		●
2-point stabilizers and support blade		●
Stabilizer cylinders with integrated two-way check valves	●	
Piston rod protection on stabilizer cylinders	●	
Tool box	●	
Special paint (customer paint work)		●
Solid rubber tires (10.00-20) with intermediate rings	●	

UPPERCARRIAGE

Separate cooling system for engine and hydraulic oil cooler	●	
Cooling system with temperature-dependent fan drive	●	
Fan drive reversing function	●	
Automatic central lubrication system	●	
Rear view camera	●	
Side view camera	●	
Travel alarm		●
Electric refuelling pump		●
Lighting protection		●
Special paint (customer paint work)		●

CAB

Hydraulically adjustable cab	●	
Safety glass	●	
Sliding window in cab door	●	
Reinforced glass P5A (windscreen and roof panel)		●
Windshield washer system (Windshield)	●	

CAB

	Standard	Option
Roof washer system (roof panel)		●
Air-cushioned operator seat with headrest, seatbelt, and lumbar support	●	
Seat heating		●
Joystick steering	●	
Steering column, height and tilt adjustable		●
Automatic air conditioning system	●	
Independent heating system		●
Multi-function display	●	
Document clip	●	
FOPS Guard		●
Front & FOPS Guard		●
12 V transformer		●
Radio USB & Bluetooth (EU & USA) Radio CD & USB (other countries)	●	
12 V socket		●
Fire extinguisher, dry powder		●
Travel alarm w/ rotating beacon		●

OTHER EQUIPMENT

9 kW DC generator with controls		●
11 kW DC generator with controls		●
Close proximity range limiter for dipperstick	●	
Coolant and hydraulic oil level monitoring system	●	
Overload and working range monitoring		●
Filter system for attachments		●
Hose rupture valves for boom cylinder		●
Hose rupture valves for stick cylinder		●
Overload warning device		●
Quick coupling on dipperstick	●	
Dipperstick impact protection		●
Active cyclone prefilter (TOP AIR)		●
Hydraulic oil preheating		●
Lubrication of the grab suspension by central lubrication system	●	
Light packages LED		●
LED front headlights	●	
LED working lights cabin roof front	●	
Boom cylinder damping system (piston accumulator)		●
Fuchs Telematics System, incl. 5 years contract	●	


FUCHS
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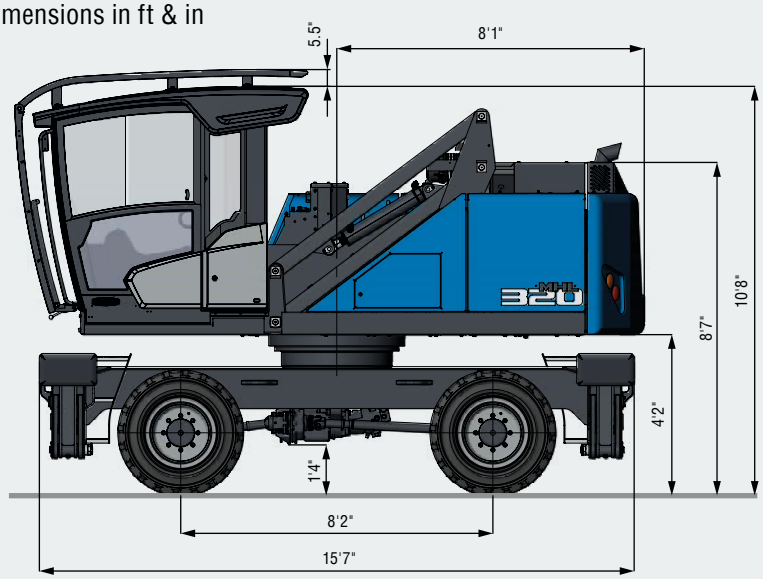
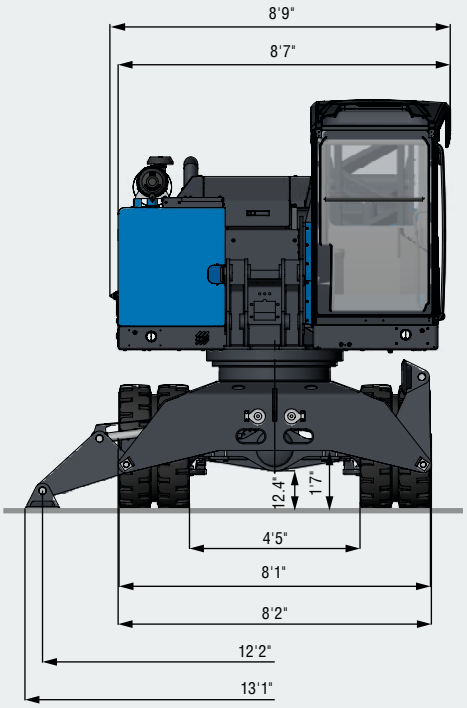
DIMENSIONS

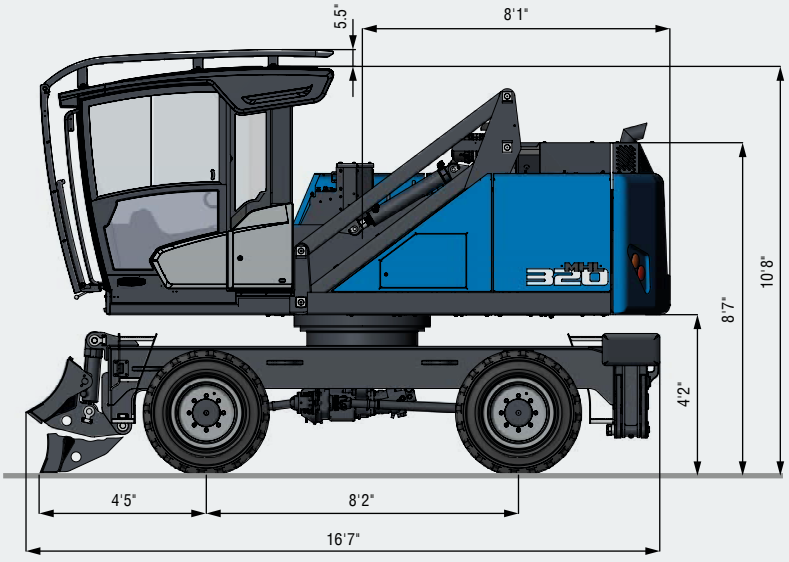
4-POINT STABILIZERS

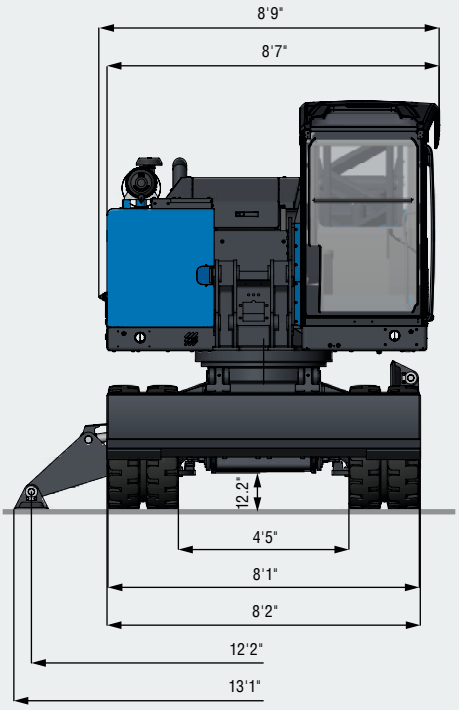
All dimensions in ft & in



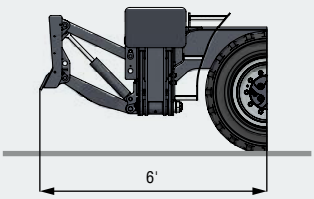


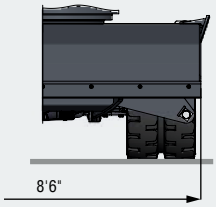
2-POINT STABILIZERS AND SUPPORT BLADE





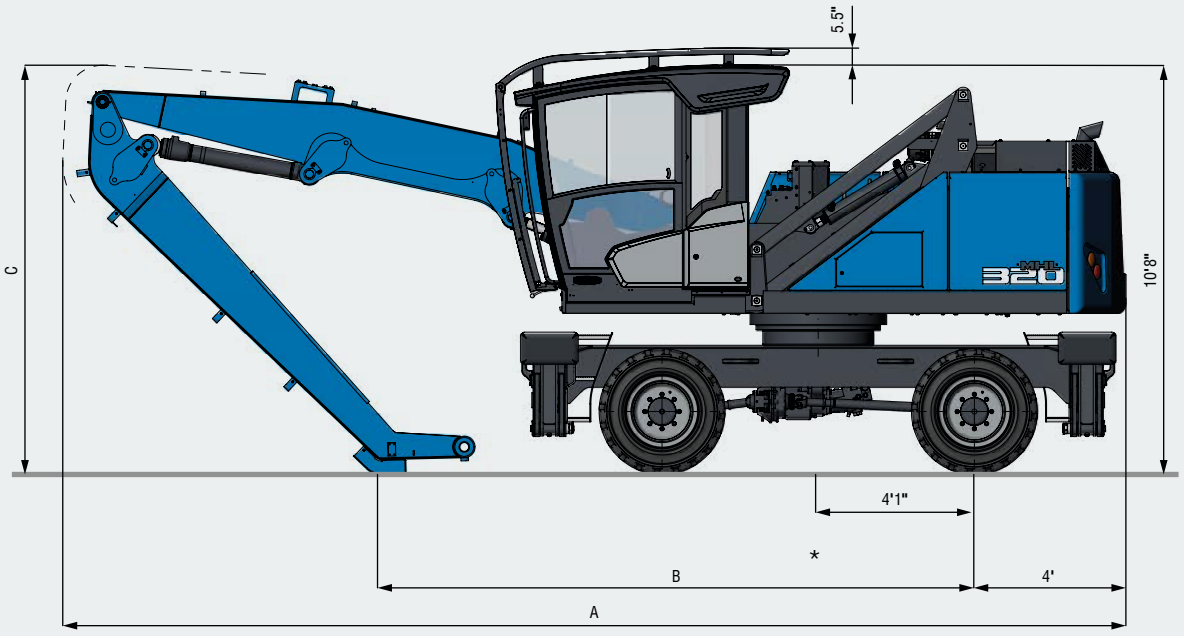
DOZER BLADE IN ADDITION TO 4-POINT STABILIZERS



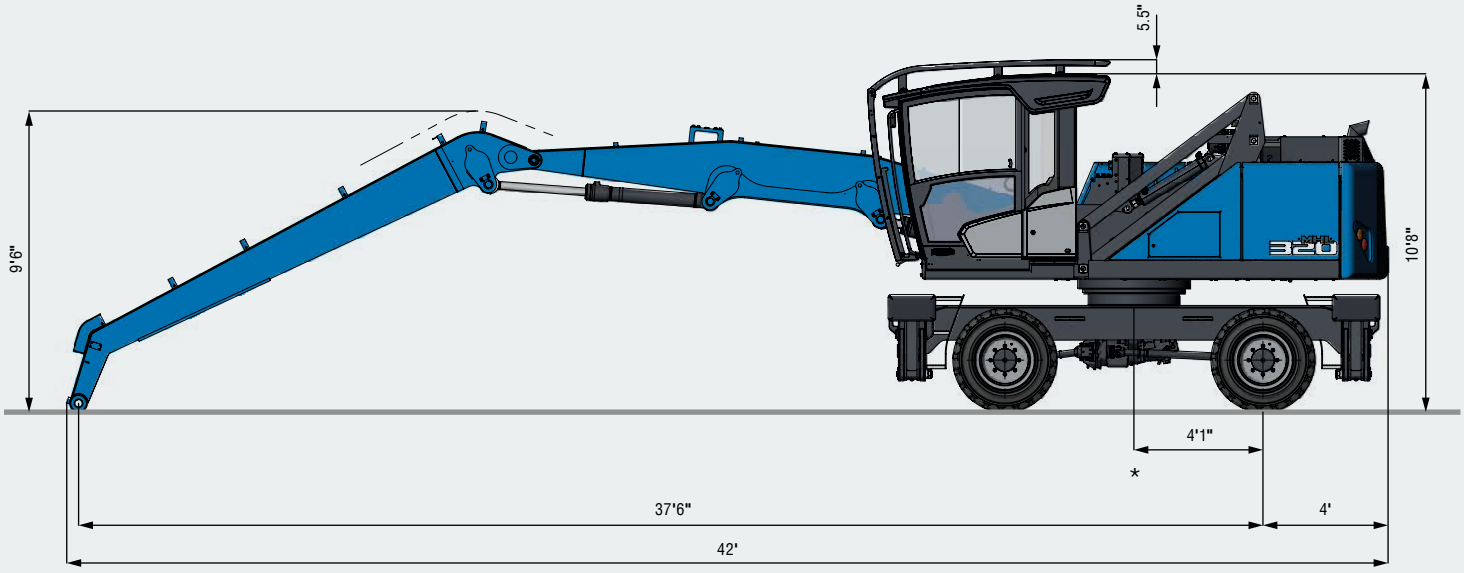


TRANSPORT DIMENSIONS

All dimensions in ft & in



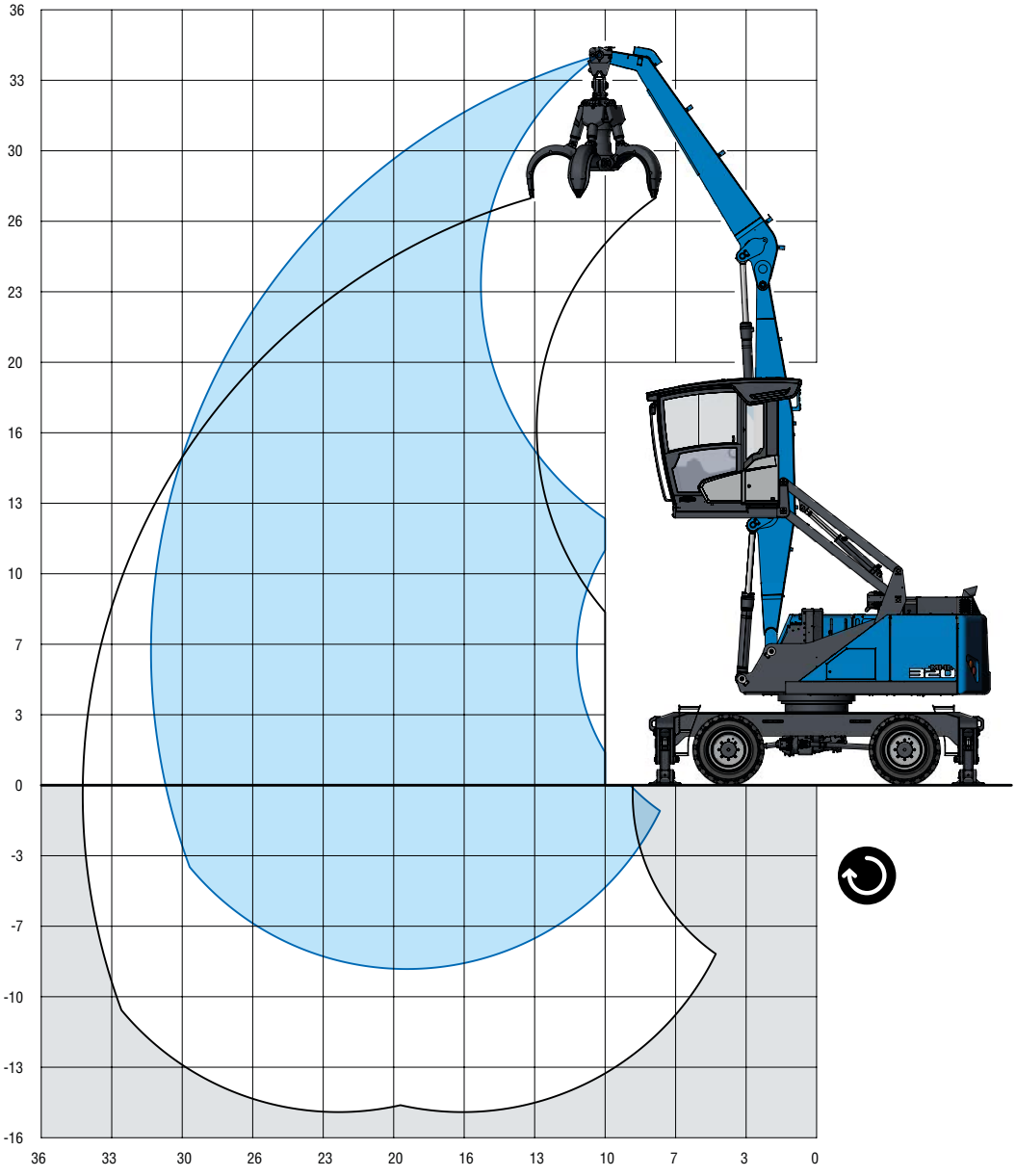
* Average center of gravity in transport position



	26'8" **	30'2" **	31'2"	34'1"
A	24'7	28'3"	28'	26'5"
B	11'4"	13'6"	15'6"	13'2"
C	10'3"	9'4"	10'7"	15'8"

** Multi-purpose stick

31'2" WITH DIPPER STICK



LOADING EQUIPMENT

Boom	17'1"
Dipper stick	13'1"
Cactus grab (open shells)	0.52 yd³

RECOMMENDED ATTACHMENTS

Recommended attachments upon request

LIFTING CAPACITY

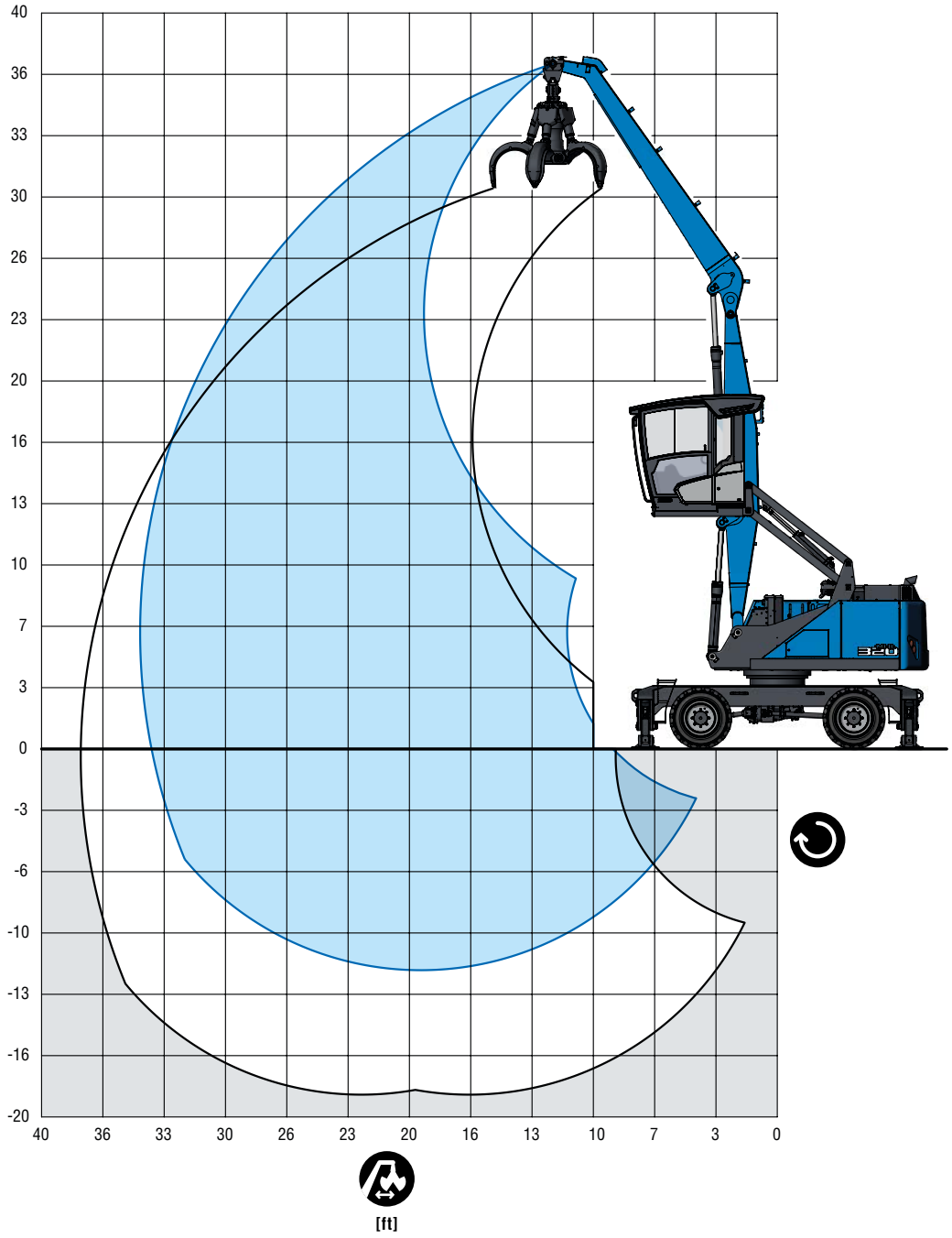
		15 ft	20 ft	25 ft	30 ft
30 ft	4-point	(14,500°)			
	Reach	14,500° (14,500°)			
	Undercarriage	14,500° (14,500°)			
25 ft	4-point		(10,100)		
	Reach		12,600° (12,600°)		
	Undercarriage		12,600° (12,600°)		
20 ft	4-point		(10,100)	(7,100)	
	Reach		12,700° (12,700°)	10,800° (10,800°)	
	Undercarriage		12,600 (12,700°)	8,900 (10,800°)	
15 ft	4-point	(15,300)	(9,800)	(7,000)	(5,300)
	Reach	16,600° (16,600°)	13,300° (13,300°)	11,000° (11,000°)	8,500 (8,900°)
	Undercarriage	16,600° (16,600°)	12,400 (13,300°)	8,800 (11,000°)	6,600 (8,900°)
10 ft	4-point	(14,500)	(9,400)	(6,800)	(5,200)
	Reach	18,900° (18,900°)	14,100° (14,100°)	11,000 (11,100°)	8,400 (8,800°)
	Undercarriage	18,700 (18,900°)	11,900 (14,100°)	8,600 (11,100°)	6,500 (8,800°)
5 ft	4-point	(13,600)	(9,000)	(6,600)	(5,100°)
	Reach	20,300° (20,300°)	14,400° (14,400°)	10,800 (11,000°)	8,200° (8,200°)
	Undercarriage	17,700 (20,300°)	11,500 (14,400°)	8,400 (11,000°)	6,500 (8,200°)
0 ft	4-point	(13,000)	(8,700)	(6,500)	(5,100)
	Reach	19,100° (19,100°)	13,600° (13,600°)	10,100° (10,100°)	6,900° (6,900°)
	Undercarriage	17,000 (19,100°)	11,200 (13,600°)	8,200 (10,100°)	6,400 (6,900°)
–5 ft	4-point	(12,800)	(8,600)	(6,400)	
	Reach	15,200° (15,200°)	11,200° (11,200°)	8,000° (8,000°)	
	Undercarriage	15,200° (15,200°)	11,000 (11,200°)	8,000° (8,000°)	
					max. reach 31'2"
6,2 ft	4-point				(4,800)
	Reach				7,500° (7,500°)
	Undercarriage				6,100 (7,500°)

Important notes regarding the load capacities

The lift capacity values are stated in imperial pounds (lbs). The pump pressure is 5,221 psi. 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 devise 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.

Reach · Engine power · Service weight without attachments · Center of rotation · Height · Undercarriage · 4-point supported

34'1" WITH DIPPER STICK



LOADING EQUIPMENT

Boom	17'1"
Dipper stick	16'4"
Cactus grab (open shells)	0.52 yd³

RECOMMENDED ATTACHMENTS

Recommended attachments upon request

LIFTING CAPACITY

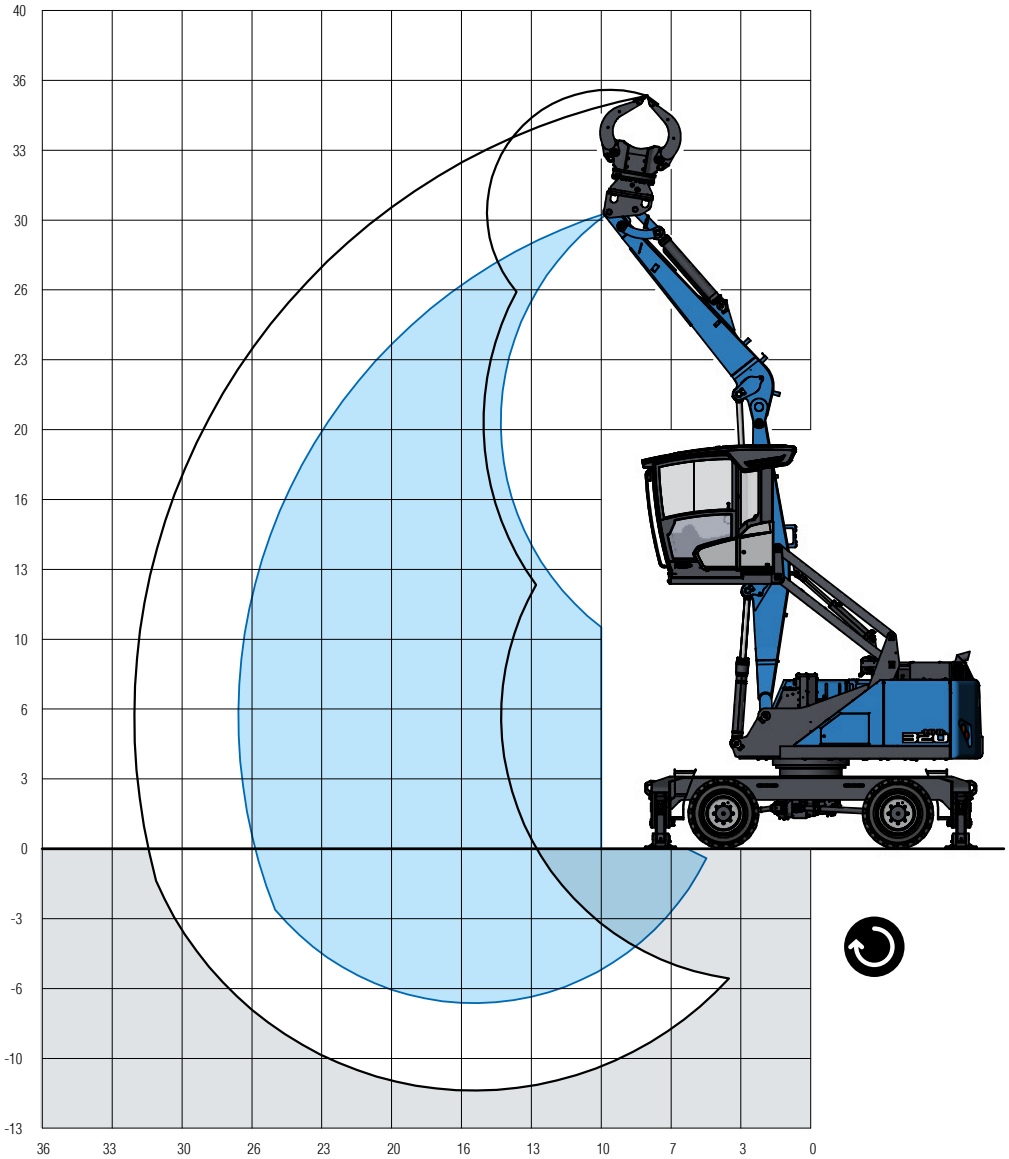
		15 ft	20 ft	25 ft	30 ft
35 ft	4-point supported	(11,500°)			
	Undercarriage	11,500° (11,500°)			
	Undercarriage	11,500° (11,500°)			
30 ft	4-point supported		(10,400)		
	Undercarriage		10,900° (10,900°)		
	Undercarriage		10,900° (10,900°)		
25 ft	4-point supported		(10,500)	(7,300)	
	Undercarriage		11,100° (11,100°)	10,000° (10,000°)	
	Undercarriage		11,100° (11,100°)	9,100 (10,000°)	
20 ft	4-point supported		(10,400)	(7,300)	(5,400)
	Undercarriage		11,300° (11,300°)	10,000° (10,000°)	8,600° (8,600°)
	Undercarriage		11,300° (11,300°)	9,100 (10,000°)	6,800 (8,600°)
15 ft	4-point supported		(10,200)	(7,200)	(5,400)
	Undercarriage		12,000° (12,000°)	10,300° (10,300°)	8,600 (8,900°)
	Undercarriage		12,000° (12,000°)	9,000 (10,300°)	6,700 (8,900°)
10 ft	4-point supported	(15,100)	(9,700)	(7,000)	(5,300)
	Undercarriage	16,700° (16,700°)	13,100° (13,100°)	10,700° (10,700°)	8,400 (8,900°)
	Undercarriage	16,700° (16,700°)	12,200 (13,100°)	8,700 (10,700°)	6,600 (8,900°)
5 ft	4-point supported	(14,000)	(9,200)	(6,700)	(5,100)
	Undercarriage	19,300° (19,300°)	14,000° (14,000°)	11,000° (11,000°)	8,300 (8,700°)
	Undercarriage	18,200 (19,300°)	11,700 (14,000°)	8,400 (11,000°)	6,500 (8,700°)
0 ft	4-point supported	(13,200)	(8,800)	(6,500)	(5,000)
	Undercarriage	20,000° (20,000°)	14,100° (14,100°)	10,700° (10,700°)	8,100° (8,100°)
	Undercarriage	17,200 (20,000°)	11,200 (14,100°)	8,200 (10,700°)	6,300 (8,100°)
–5 ft	4-point supported	(12,700)	(8,500)	(6,300)	(4,900)
	Undercarriage	17,900° (17,900°)	12,800° (12,800°)	9,500° (9,500°)	6,600° (6,600°)
	Undercarriage	16,700 (17,900°)	10,900 (12,800°)	8,000 (9,500°)	6,300 (6,600°)
–10 ft	4-point supported	(12,600)	(8,400)	(6,300)	
	Undercarriage	13,300° (13,300°)	9,800° (9,800°)	6,900° (6,900°)	
	Undercarriage	13,300° (13,300°)	9,800° (9,800°)	6,900° (6,900°)	
					max. reach 34'1"
6,2 ft	4-point supported				(4,200)
	Undercarriage				6,700° (6,700°)
	Undercarriage				5,300 (6,700°)

Important notes regarding the load capacities

The lift capacity values are stated in imperial pounds (lbs). The pump pressure is 5,221 psi. 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 devise 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.

Reach · Engine power · Service weight without attachments · Center of rotation · Height · Undercarriage · 4-point supported

26'8" WITH MULTI-PURPOSE STICK



LOADING EQUIPMENT

Boom	13'7"
Dipper stick	12'1"
Cactus grab (open shells)	0.59 yd³

RECOMMENDED ATTACHMENTS

Recommended attachments upon request

LIFTING CAPACITY

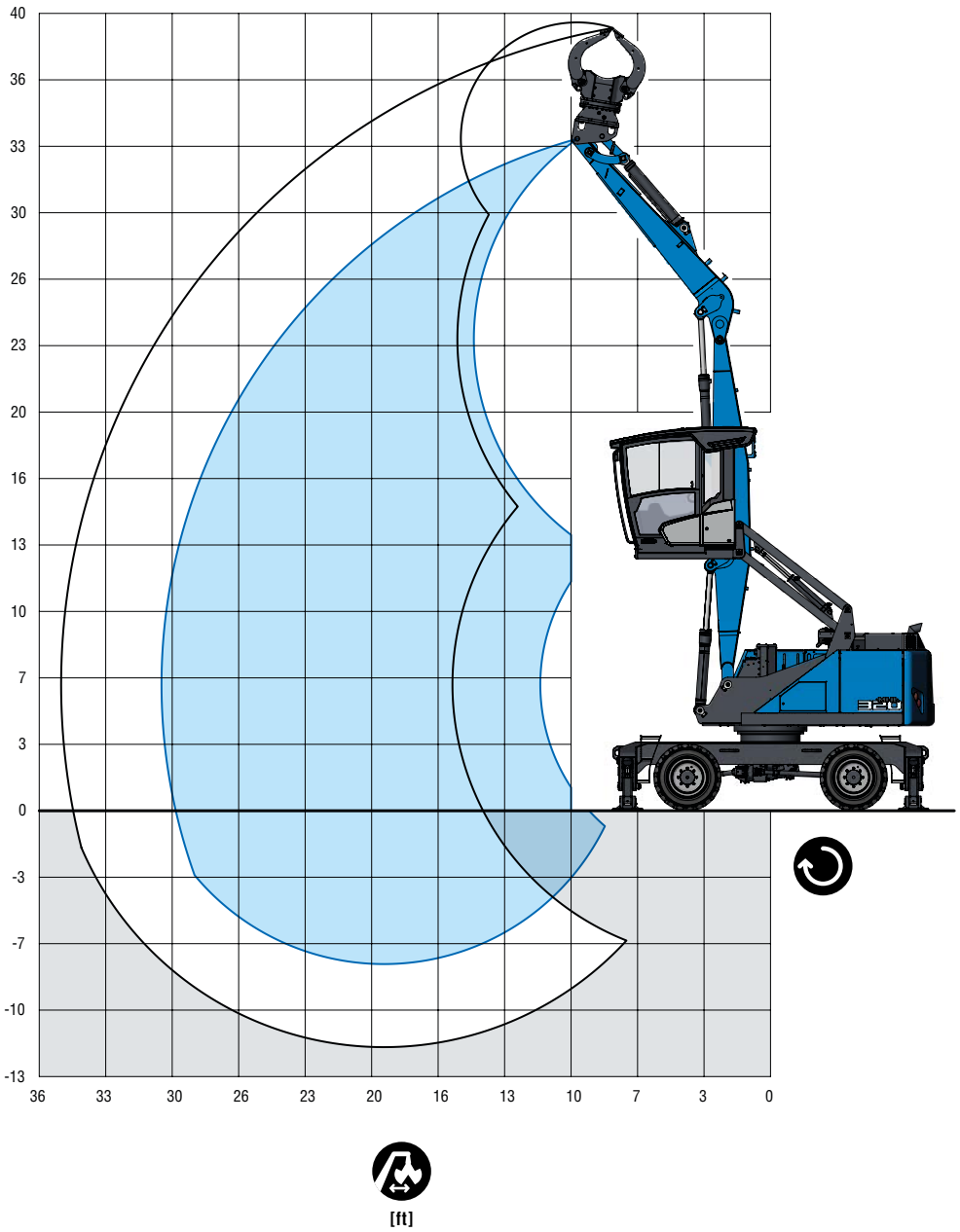
		10 ft	15 ft	20 ft	25 ft
25 ft			(15,000°)		
			15,000° (15,000°)		
			15,000° (15,000°)		
20 ft			(15,000°)	(9,600)	
			15,000° (15,000°)	13,000° (13,000°)	
			15,000° (15,000°)	12,200 (13,000°)	
15 ft			(15,100)	(9,500)	(6,600)
			15,900° (15,900°)	13,200° (13,200°)	10,700° (10,700°)
			15,900° (15,900°)	12,000 (13,200°)	8,400 (10,700°)
10 ft		(20,900°)	(14,500)	(9,200)	(6,500)
		20,900° (20,900°)	18,100° (18,100°)	13,900° (13,900°)	10,700 (10,900°)
		20,900° (20,900°)	18,100° (18,100°)	11,700 (13,900°)	8,300 (10,900°)
5 ft		(23,100)	(13,700)	(8,900)	(6,400)
		23,100 (23,100)	20,100° (20,100°)	14,300° (14,300°)	10,400° (10,400°)
		23,100 (23,100)	17,800 (20,100°)	11,400 (14,300°)	8,100 (10,400°)
0 ft		(16,400°)	(13,100)	(8,600)	(6,300)
		16,400° (16,400°)	19,500° (19,500°)	13,300° (13,300°)	8,800° (8,800°)
		16,400° (16,400°)	17,200 (19,500°)	11,100 (13,300°)	8,000 (8,800°)
–5 ft		(17,700°)	(12,900)	(8,500)	
		17,700° (17,700°)	15,200° (15,200°)	10,100° (10,100°)	
		17,700° (17,700°)	15,200° (15,200°)	10,100° (10,100°)	
					max. reach 26'8"
6 ft					(5,600)
					8,800° (8,800°)
					7,200 (8,800°)

Important notes regarding the load capacities

The lift capacity values are stated in imperial pounds (lbs). The pump pressure is 5,221 psi. 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 devise 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.

Reach · Engine power · Service weight without attachments · Center of rotation · Height · Undercarriage · 4-point supported

30'2" WITH MULTI-PURPOSE STICK



LOADING EQUIPMENT

Boom	17'1"
Universal stick	12'1"
Sorting grapple	0.59 yd³

RECOMMENDED ATTACHMENTS

Recommended attachments upon request

LIFTING CAPACITY

		15 ft	20 ft	25 ft	30 ft
30 ft		(14,300°)			
		14,300° (14,300°)			
		14,300° (14,300°)			
25 ft		(15,000°)	(9,600)		
		15,000° (15,000°)	12,400° (12,400°)		
		15,000° (15,000°)	12,200 (12,400°)		
20 ft		(15,200°)	(9,600)	(6,600)	
		15,200° (15,200°)	12,400° (12,400°)	10,400° (10,400°)	
		15,200° (15,200°)	12,100 (12,400°)	8,400 (10,400°)	
15 ft		(14,700)	(9,300)	(6,500)	
		16,700° (16,700°)	12,900° (12,900°)	10,500° (10,500°)	
		16,700° (16,700°)	11,800 (12,900°)	8,300 (10,500°)	
10 ft		(13,800)	(8,900)	(6,300)	(4,700)
		18,700° (18,700°)	13,600° (13,600°)	10,500° (10,500°)	7,900° (7,900°)
		18,000 (18,700)	11,400 (13,600°)	8,100 (10,500°)	6,100 (7,900°)
5 ft		(12,900)	(8,500)	(6,100)	(4,600)
		19,600° (19,600°)	13,700° (13,700°)	10,200° (10,200°)	7,200° (7,200°)
		17,000 (19,600°)	10,900 (13,700°)	7,800 (10,200°)	6,000 (7,200°)
0 ft		(12,300)	(8,200)	(6,000)	
		17,700° (17,700°)	12,600° (12,600°)	9,100° (9,100°)	
		16,400 (17,700°)	10,600 (12,600°)	7,700 (9,100°)	
–5 ft		(12,200)	(8,000)	(5,900)	
		13,300° (13,300°)	9,900° (9,900°)	6,600° (6,600°)	
		13,300° (13,300°)	9,900° (9,900°)	6,600° (6,600°)	
					max. reach 30'2"
6,2 ft					(4,500)
					7,100° (7,100°)
					5,800 (7,100°)

Important notes regarding the load capacities

The lift capacity values are stated in imperial pounds (lbs). The pump pressure is 5,221 psi. 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 devise 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.

Reach · Engine power · Service weight without attachments · Center of rotation · Height · Undercarriage · 4-point supported

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