

Material Handler


NET ENGINE POWER	153 hp (114 kW) @ 2,000 rpm
OPERATING WEIGHT	48,501 - 51,808 lbs (22 - 23.5 t)
MAX REACH	36' - 39' 4" (11.0 - 12.0 m)
MAX LIFTING CAPACITY	27,500 lbs (12,500 kg)

Specifications

Engine	
Manufacturer & type	Deutz TCD 2012 L06 2V
Design	6-cylinder, turbocharged diesel, charge air cooler
Engine output	153 hp (114 kW)
Nominal speed	2,000 rpm
Displacement	372 in ³ (6.1 L)
Cooling system	Liquid cooling, thermostatically controlled, and charge air cooling.
Emission standards	COM III and EPA TIER III
Air filter design	Two-stage filter with safety valve
Fuel tank	79 US gal (300 L)

Operating Weights	
Basic machine including work equipment and 4-point stabilizers - including 0.53 yd ³ (0.4 m ³) cactus grab:	
Reach 36' 1" (11.0 m)	48,500 lbs (22 t)
39' 5" (12.0 m)	51,808 lbs (23.5 t)

Electrical System	
Operating voltage	24 V
Batteries	2 x 12 V / 100 Ah/760 A (accord. to EN)
Lighting	1 dipper-stick-mounted floodlight, 1 headlight mounted to upper carriage, 1 floodlight attached to cabin floor, rear side-marker and turn signal lamps
Option	Magnet system 11 kW or 13 kW

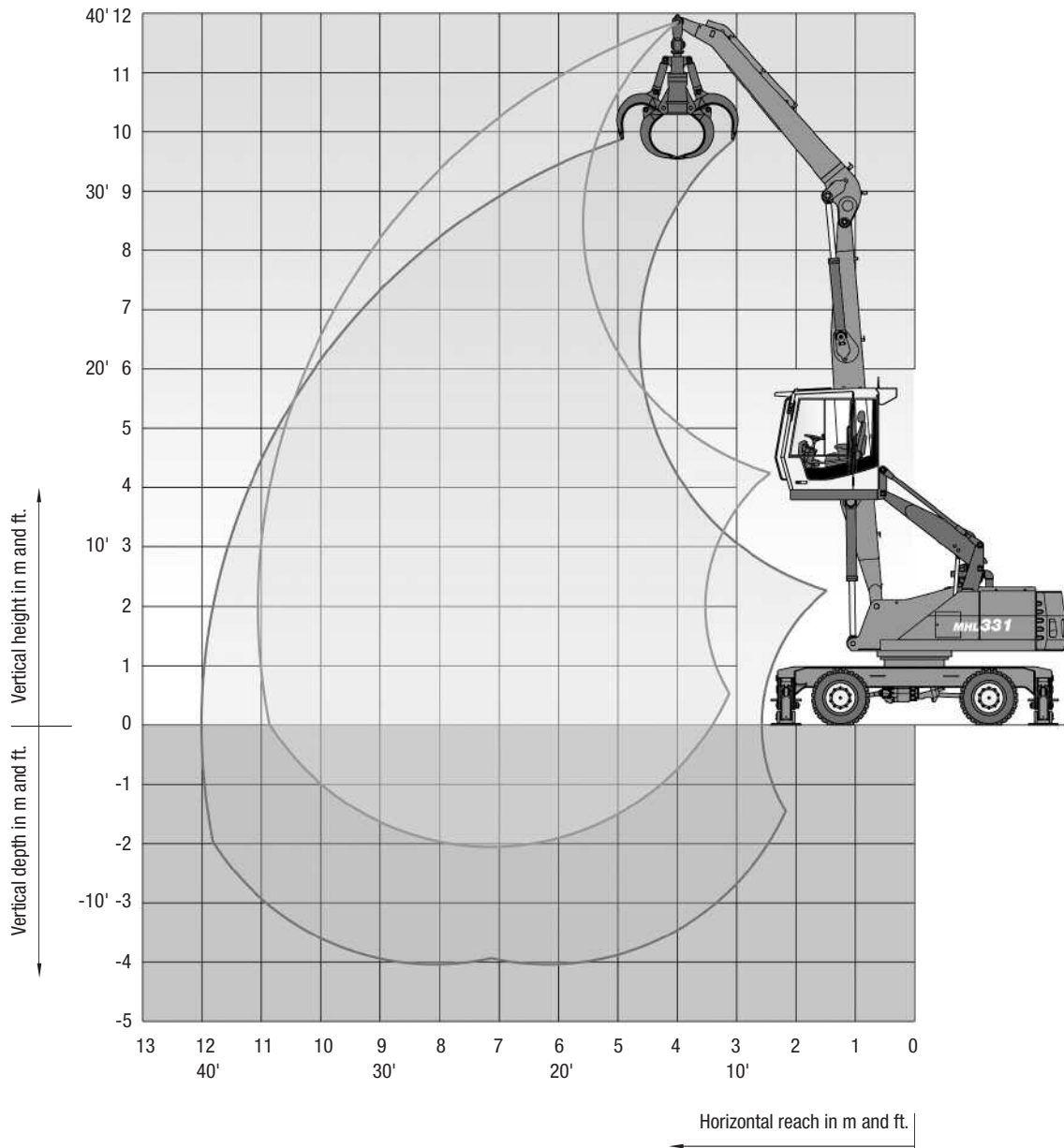
Travel Drive	
Hydrostatic drive through infinitely variable axial piston motor and directly mounted; travel brake valves, two-speed power shiftgear, 4-wheel drive	
Travel speed / maximum gradeability	0 - 12.4 mph (0 - 20 kmh) / 50%
Turning radius	22' 11" (7.0 m)

Swing System	
Internally toothed ball ring gear (double row)	
Drive 2-stage planetary gear with integrated multi-disc brake.	
Uppercarriage swing speed	0 - 6 rpm
Pivot Brake	Electrically operated

Working Range Diagram

MHL 331D reach 36' 1" (11.0 m)

Work equipment: box-type boom 21' 4" (6.5 m), dipperstick 14' 5" (4.4 m)



Lifting Capacities

MHL 331 reach 36' 1" (11.0 m)

Work equipment: box-type boom 21' 4" (6.5 m), dipperstick 14' 5" (4.4 m).

Height in ft.	Undercarriage stabilizers	Reach in ft.				
		15	20	25	30	35
35	non supported		(11,464)			
	4-pt. supported		12,345* (12,345*)			
30	non supported		(11,200)	(7,936)		
	4-pt. supported		12,700* (12,700*)	12,345* (12,345*)		
25	non supported		(11,200)	(8,157)	(5,952)	
	4-pt. supported		12,500* (12,500*)	12,556 (12,786*)	9,259 (10,802*)	
20	non supported		(11,243*)	(7,936)	(5,732)	
	4-pt. supported		14,991* (14,991*)	12,345 (13,227*)	9,259 (11,464)	
15	non supported	(16,200)	(10,532)	(7,495)	(5,732)	(4,409)
	4-pt. supported	21,164* (21,164*)	16,755* (16,755*)	12,125 (14,109*)	9,038 (11,243)	7,054 (8,818)
10	non supported	(15,000)	(9,820)	(7,275)	(5,511)	(4,409)
	4-pt. supported	25,573* (25,573*)	16,314 (18,739*)	11,684 (14,550)	8,818 (11,023)	7,054 (8,598)
5	non supported	(13,668)	(9,259)	(6,834)	(5,291)	(4,118)
	4-pt. supported	22,266* (22,266*)	15,652 (19,841)	11,243 (14,109)	8,598 (10,802)	6,834 (8,598)
0	non supported	(13,100)	(8,818)	(6,613)	(5,070)	(4,188)
	4-pt. supported	15,432* (15,432*)	14,991 (19,400)	11,023 (13,688)	8,377 (10,582)	6,834 (8,598)
-5	non supported		(8,598)	(6,393)	(5,070)	
	4-pt. supported		14,991 (19,180)	10,802 (13,688)	8,377 (10,361)	

Height (m)	Undercarriage stabilizers	Reach in (m)				
		4.5	6	7.5	9	10.5
10.5	non supported		(5.2)			
	4-pt. supported		5.6* (5.6*)			
9	non supported		(5.3)	(3.6)		
	4-pt. supported		6.3* (6.3*)	5.6* (5.6*)		
7.5	non supported		(5.2)	(3.7)	(2.7)	
	4-pt. supported		6.4* (6.4*)	5.7 (5.8*)	4.2 (4.9*)	
6	non supported		(5.1)	(3.6)	(2.6)	
	4-pt. supported		6.8* (6.8*)	5.6 (6.0*)	4.2 (5.2)	
4.5	non supported	(7.5)	(4.8)	(3.4)	(2.6)	(2.0)
	4-pt. supported	9.6* (9.6*)	7.6* (7.6*)	5.5 (6.4*)	4.1 (5.1)	3.2 (4.0)
3	non supported	(6.8)	(4.5)	(3.3)	(2.5)	(2.0)
	4-pt. supported	11.6* (11.6*)	7.4 (8.5*)	5.3 (6.6)	4.0 (5.0)	3.2 (3.9)
1.5	non supported	(6.2)	(4.2)	(3.1)	(2.4)	(1.9)
	4-pt. supported	10.1* (10.1*)	7.1 (9.0)	5.1 (6.4)	3.9 (4.9)	3.1 (3.9)
0	non supported	(5.9)	(4.0)	(3.0)	(2.3)	(1.9)
	4-pt. supported	7.0* (7.0*)	6.8 (8.8)	5.0 (6.2)	3.8 (4.8)	3.1 (3.9)
- 1.5	non supported		(3.9)	(2.9)	(2.3)	
	4-pt. supported		6.8 (8.7)	4.9 (6.2)	3.8 (4.7)	

Values are valid for working diagram on page 3.

The values are stated in lbs or tons (t). The pump pressure for this table is 5221 psi (360 bar). The values amount to 75% of the static tipping load or 87% of the hydraulic lifting force (marked *), in accordance with ISO 10567. When the machine is standing on solid and level ground, these values apply to slewing operations through 360°. The values in brackets apply in the lengthwise direction of the undercarriage. The values specified "non-supported" only apply when the load is hoisted above the front or rear axle. The weight of the attached load hoisting implement (grab, magnet, load hook, etc.) must be deducted from the carrying capacity values. If the Terex Fuchs quick-attach system is mounted on the boom, carrying capacity values are reduced by 661 lbs (300 kg). In accordance with EC guidelines, hose-rupture safety valves on the lift cylinders and an overload warning device are required for load hook operations.

Lifting Capacities

MHL 331D reach 39' 4" (12.0 m)

Work equipment: box-type boom 21' 4" (6.5 m), dipperstick 17' 11" (5.45 m)

Height in ft.	Undercarriage stabilizers	Reach in ft.					
		15	20	25	30	35	40
30	non supported			(8,377)	6,172		
	4-pt. supported			11,243 (11,243)	8,818 (8,818)		
25	non supported			(8,337)	(6,172)	(4,629)	
	4-pt. supported			12,243* (12,243*)	9,479 (10,58)	6,834 (6,834)	
20	non supported			(7,936)	(5,952)	(4,629)	
	4-pt. supported			12,345 (12,786*)	9,479 (10,802*)	7,275 (9,038)	
15	non supported		(11,243)	(7,495)	(5,732)	(4,409)	
	4-pt. supported		14,550* (14,900*)	11,904 (13,889*)	9,259 (11,464)	7,275 (8,818)	
10	non supported	(16,093)	(10,361)	(6,834)	(5,511)	(4,409)	(3,306)
	4-pt. supported	22,046* (22,400*)	16,755 (16,755*)	11,464 (14,330*)	9,038 (11,023)	7,054 (8,818)	5,732 (6,834)
5	non supported	(14,330)	(9,479)	(6,613)	(5,291)	(4,188)	(3,306)
	4-pt. supported	25,353 (26,675*)	15,873 (19,180*)	11,023 (13,889)	8,598 (10,802)	6,834 (8,598)	5,732 (6,834)
0	non supported	(13,448)	(9,038)	(6,393)	(5,070)	(4,188)	
	4-pt. supported	20,282 (23,300*)	15,211 (19,400)	10,802 (13,488)	8,377 (10,582)	6,834 (8,377)	
-5	non supported	(12,786)	(8,598)	(6,393)	(4,850)	(3,968)	
	4-pt. supported	16,314 (16,314)	14,770 (18,959)	10,802 (13,448)	8,377 (10,361)	6,613 (8,377)	
-10	non supported			(6,172)			
	4-pt. supported			10,582 (13,448)			

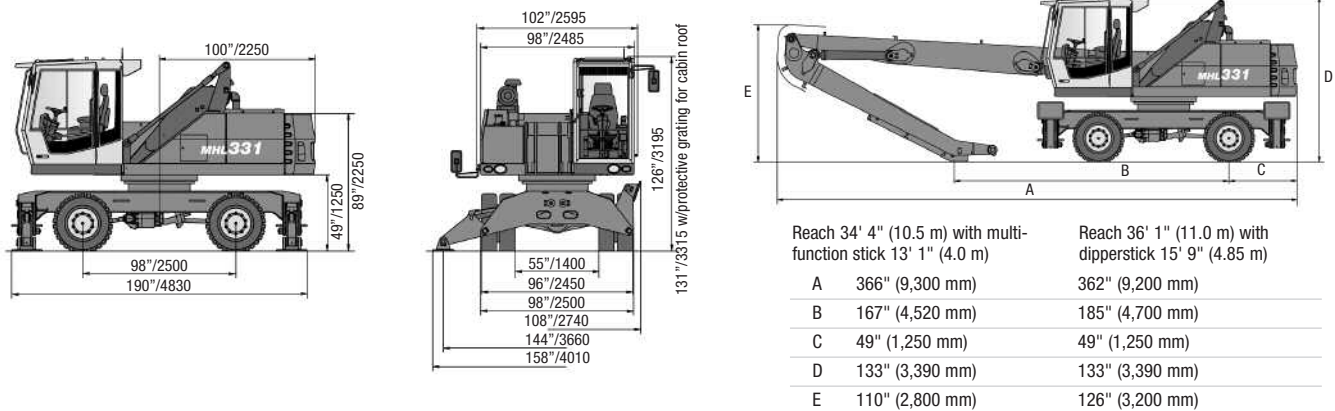
Height (m)	Undercarriage stabilizers	Reach in (m)					
		4.5	6	7.5	9	10.5	12
10.5	non supported			(3.7)			
	4-pt. supported			4.3* (4.3*)			
9	non supported			(3.8)	(2.8)		
	4-pt. supported			5.1* (5.1*)	4.0* (4.0*)		
7.5	non supported			(3.8)	(2.8)	(2.1)	
	4-pt. supported			5.1* (5.1*)	4.3 (4.8*)	3.1* (3.1*)	
6	non supported			(3.7)	(2.7)	(2.1)	
	4-pt. supported			5.3* (5.3*)	4.3 (4.9*)	3.3 (4.1)	
4.5	non supported		(5.1)	(3.6)	(2.6)	(2.0)	
	4-pt. supported		6.6* (6.6*)	5.6 (5.8*)	4.2 (5.2*)	3.3 (4.0)	
3	non supported	(7.3)	(4.7)	(3.4)	(2.5)	(2.0)	(1.5)
	4-pt. supported	10.0* (10.0*)	7.6* (7.6*)	5.4 (6.3*)	4.1 (5.0)	3.2 (4.0)	2.6 (3.1*)
1.5	non supported	(6.5)	(4.3)	(3.1)	(2.4)	(1.9)	(1.5)
	4-pt. supported	11.5* (12.1*)	7.2 (8.7*)	5.2 (6.5)	3.9 (4.9)	3.1 (3.9)	2.6 (3.1*)
0	non supported	(6.1)	(4.1)	(3.0)	(2.3)	(1.9)	
	4-pt. supported	9.2* (9.2*)	6.9 (8.8)	5.0 (6.3)	3.8 (4.8)	3.1 (3.8)	
- 1.5	non supported	(5.8)	(3.9)	(2.9)	(2.2)	(1.8)	
	4-pt. supported	7.4* (7.4*)	6.7 (8.6)	4.9 (6.1)	3.8 (4.7)	3.0 (3.8)	
-3	non supported			(2.8)			
	4-pt. supported			4.8 (6.1)			

Values are valid for working diagram on page 2.

The values are stated in lbs or tons (t). The pump pressure for this table is 5221 psi (360 bar). The values amount to 75% of the static tipping load or 87% of the hydraulic lifting force (marked *), in accordance with ISO 10567. When the machine is standing on solid and level ground, these values apply to slewing operations through 360°. The values in brackets apply in the lengthwise direction of the undercarriage. The values specified "non-supported" only apply when the load is hoisted above the front or rear axle. The weight of the attached load hoisting implement (grab, magnet, load hook, etc.) must be deducted from the carrying capacity values. If the Terex Fuchs quick-attach system is mounted on the boom, carrying capacity values are reduced by 661 lbs (300 kg). In accordance with EC guidelines, hose-rupture safety valves on the lift cylinders and an overload warning device are required for load hook operations.

Material Handler MHL 331D

Dimensions/Transport Dimensions



Specifications

Hydraulic System

REXROTH mobile hydraulic system with load limit control, automatic idle and fuel conserving power demand control. Separate oil cooler, temperature controlled fan speed. Hydraulic fluid filter: integrated in the oil tank; maintenance interval: 3,000 operating hrs. Central lubrication system. Option: Load limit sensing control.

Maximum pump capacity	84 gpm (380 Lpm) at 2,000 rpm
Maximum operating pressure	5,221 psi (360 bar)
Maximum pump capacity - swing circuit	26 gpm (95 Lpm)
Maximum operating pressure - swing circuit	3,408 psi (235 bar)
Hydraulic oil tank	90 US gal (340 L)

Brakes

Service brake: Hydraulically operated single circuit brake system acting on all four wheel pairs

Parking brake: Hydraulic disc brake on gear box acting on both front and rear axle.

Grabs

0.53 yd³ (0.4 m³) - 0.78 yd³ (0.6 m³) cactus grabs (optional) with cast central case and enclosed swing drive, grab jaws with wear-resistant grab liners and tips.

Option

Reversible intake direction of engine and oil cooler.

Cab

Cab: ergonomically shaped driver's cab with functional design and excellent all-round visibility; infinitely variable, hydraulically height-adjustable cab with maximum eye level of 17' 6" (5.2m).

Driver's seat: air-cushioned comfort seat with pneumatically adjustable lumbar support, safety belt and integrated headrest, seat heating available on request. Seat position, seat inclination and seat cushion multi-adjustable in line with position of armrests and pilot control units.

Monitoring: Function monitoring; automatic warning and storage of deviating operating conditions, e.g. filter pressure w. warning indicator and shutdown of pilot controls, warning indicator resp. shutdown of pilot controls when exceeding hydraulic oil temperature limits

Steering wheel: inclinable and height-adjustable, rigid steering post.

Heating: infinitely variable hot water heating with 3-speed fan, 4 adjustable defroster nozzles.

Air conditioning as standard.

Option: cab with bullet-proof glass.

Sound power level (guaranteed) LW(A) = 103 dB(A)

Undercarriage

Front axle: Planetary drive axle with integrated drum brake, rigidly mounted max steering angle: 28°

Rear axle: Oscillating planetary drive rear axle with integrated drum brake and selectable oscillating axle lock

Stabilizers 4-point stabilizers

Tires Solid rubber, elastic tires 8-fold 9.00 - 20



Terex Fuchs

8800 Rostin Road
Southaven, MS 38671
USA

TEL 662-393-1800
SALES 866-837-3923
FAX 662-393-1700
WEB www.terex.com
EMAIL sales@terexca.com

Effective Date: April 1, 2007. Product specifications and prices are subject to change without notice or obligation. The photographs and/or drawings in this document 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. The only warranty applicable to our equipment is the standard written warranty applicable to the particular product and sale and Terex makes no other warranty, express or implied. Products and services listed may be trademarks, service marks or trade-names of Terex Corporation and/or its subsidiaries in the USA and other countries and all rights are reserved. Terex® is a registered trademark of Terex Corporation in the USA and many other countries. Copyright © 2007 Terex Corporation.