

MATERIAL HANDLER



#### **Features**

- Fuel saving ECO & ECO+ operating modes enhance flexibility while reducing operating costs
- Powerful, fuel efficient 255 hp | 190 kW engine matched with hydraulic functions delivers loading cycles with speed and precision while reducing emissions in compliance with Tier 4 Final standards
- Dedicated slewing circuit for enhanced operating efficiency
- Hydraulic oil cooler with temperature controlled fan speed is arranged separately from engine cooling systems to optimize performance
- High resolution, color display with a combination of text and symbols delivers operator comfort and convenience allowing easy monitoring of operating data and conditions

#### **Specifications**

Standard Machine Weight Engine Output Reach 102,600 lbs | 46.5 t 255 hp | 190 kW Up to 59 ft | 18 m

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## **SPECIFICATIONS**

#### **ENGINE**

Manufacturer and model	Deutz TCD 7.8 L6 4V
Configuration	6-cylinder inline
Engine control	EMR IV
,,	4-stroke diesel, common rail direct injection, turbocharger, controlled exhaust gas recirculation, diesel particulate filter with automatic regeneration and SCR-CAT
Engine output power	255 hp   190 kW
Nominal speed	2000 rpm
Displacement	476 in³   7.8 L
Cooling system C	Coolant / charge air cooling with fan speed control system; including reversing function
Emission standard	EPA Tier 4 Final / Stage IV
Air filter design	Two-stage filter with safety cartridge and pre-separator with discharge valve
Fuel tank capacity	153 gal   580 L
Diesel Exhaust Fluid (DEF) capacity	13 gal   50 L
Operating Modes:	
Power Mode ECO Mode ECO+ Mode	Optimal power and speed for heavy duty applications Fuel consumption reduced for medium duty applications Fuel consumption optimized for light duty applications

#### **ELECTRICAL SYSTEM**

Alternator	28 V / 100 A
Operating voltage	24 V
Battery	2x 12 V / 110 Ah / 750 A (in accordance with EN)
Lighting set	2 x H3 headlamps, turn indicators and tail lights
Generator	25 - 30 kW DC generator with controls and insulation monitoring, driven by V-belt direct from diesel engine

#### TRAVEL DRIVE

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

Maximum speed, 1st gear	3.1 mph   5 kph
Maximum speed, 2nd gear	9.3 mph   15 kph
Gradeability	30% max
Turning radius	26 ft   8 m

### **SWING SYSTEM**

Swing gear	Internally toothed double-row ball ring gear
Drive	3-stage planetary gear with integrated multi-disc brake
Upper carriage swing speed	Infinitely variable from 0 - 6 rpm
Swing brake	Electrically operated

#### **BRAKE SYSTEM**

Service Brake	Hydraulic single circuit braking system acting on all four wheel pairs
Parking Brake	Electrically operated disc brake at transmission, acting on both axles



#### **ELECTRIC DRIVE**

Electric drive machine options are available in a variety of stationary or semi-mobile configurations tailored according to customer requirements

#### **HYDRAULIC SYSTEM**

REXROTH mobile hydraulic system with load limit control and fuel-saving power demand control; closed swing circuit; hose rupture valves with regeneration on the lift and stick cylinders for efficient work. Hydraulic oil filter elements integrated in the tank; maintenance interval up to 3,000 operating hours.

Maximum Pump Capacity	2 x 74 g/min   280 L/min & 37 g/min   140 L/min for swing operation
Maximum Operating Pressure	4,641/5,221 psi   320/360 bar
Hydraulic Oil Tank	141 gal   535 L

#### **UNDERCARRIAGE**

Front axle	Planetary drive axle with integrated drum brake, rigidly mounted, max. steering angle 27°
Rear axle	Oscillating planetary drive rear axle with integrated drum brake and selectable oscillating axle lock
Stabilizers	4-point stabilizers
Tires	Solid rubber, 8-ply 12.00 - 24

#### **OPERATOR'S CAB**

Elastically supported, infinitely variable hydraulically elevatable with max. eye level of 20 ft  $\mid$  6.1 m; independent forward movement of up to 7 ft  $\mid$  2.2 m; Sound-deadened; heat-insulated windows for optimum view; windshield with pull-down sunblind that slides under the cab roof; viewing window on cab roof; sliding window in cab door; height and tilt-adjustable steering column

Heating Infinitely variable hot water heating 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. Seat position, seat inclination and seat cushion multi-adjustable in line with position of armrests and pilot control units, allowing comfortable operation

Monitoring Ergonomic, glare-free instrument layout, multi-function display; automatic monitoring; warning and storage of deviating operating conditions, e.g. filter pressure monitoring with warning indicator or shutdown of pilot controls, warning or shutdown of pilot controls when exceeding maximum hydraulic fluid temperature, diesel particulate filter indicator, rear-view camera

Air conditioning Automatic

Noise level  $L_{W(A)} = 102 \text{ dB(A)}$  (guaranteed) in accordance with directive 2000/14 FC

Vibrations: Weighted r.m.s. value of acceleration of upper limbs is below 8.2 f/s $^2$  | 2.5 m/s $^2$ . Weighted r.m.s. value of acceleration for seat area and feet is below 1.6 f/s $^2$  | 0.5 m/s $^2$ .



# UNDERCARRIAGE 2-speed power-shift transmission 4-point stabilizers 4-point stabilizers 4-point stabilizers, individually controllable Stabilizer cylinders with integrated two-way check valves All-wheel drive Piston rod protection on stabilizer cylinders Stabilizer plates 20 in x 26 in | 510 mm x 665 mm Rear axle oscillating lock Blade in addition to 4-point stabilizers Special paint

Drum brakes Tool box

UPPERCARRIAGE	<b>SERIES</b>	<b>OPTION</b>
Electric refuelling pump		•
Lighting protection		•
Maintenance hood, actuated by gas strut, with mechanical locking device	•	
Lockable cleaning access openings on radiators	•	
Separate radiator system for ambient temperatures up to 122° F $\mid$ 50°C	•	
Separate oil cooler with temperature-controlled fan drive	•	
Automatic central lubrication system	•	
Backup alarm	•	
Special paint		•
Quick-drain valve for fuel tank (delivered in tool box)	•	
Quick-drain valve on hydraulic oil tank	•	
Quick-drain valve on radiator	•	
Quick-drain valve on engine oil-pan	•	

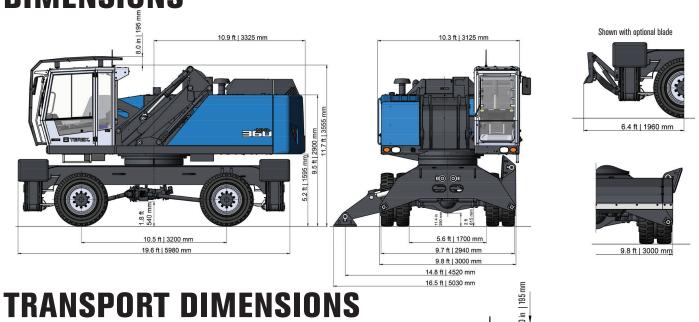
<b>EQUIPMENT</b>	<b>SERIES OPTION</b>
H3 headlights	•
H3 light, mounted on left side of stick	•
Close proximity range limiter for stick	•
Coolant and hydraulic oil level monitoring system	•
Hose rupture protection for lifting cylinders	•
Hose rupture protection for stick cylinders	•
Joystick steering	•
Lubrication of the grab suspension by central lubrication system	•
Overload warning device	•
XENON lights on boom and stick	•
XENON lights on cabin roof	•

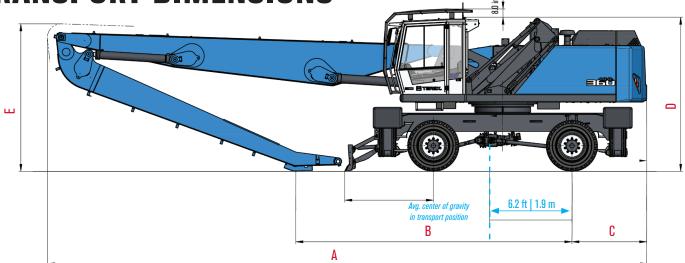
ENGINE	SERIES	OPTION
Turbocharger	•	
Charge air cooling	•	
Direct electronic fuel injection/ Common Rail	•	
Interface for engine diagnosis	•	
System controlled fan drive with fan speed monitoring	•	

CAB	SERIES	OPTION
Lift-up skylight in cabin roof	•	
Air cushioned operator's seat with headrest, safety belt and lumbar-support	•	
Protective grating for cabin, front and top		•
Height and forward adjustable cabin system	•	
Air conditioning	•	
Steering column, height and tilt adjustable	•	
Multi-functional color display	•	
Bulletproof glass, front and top		•
Fire extinguisher, dry powder		•
Flashing beacon	•	
Sliding window in cab door	•	
Safety glass	•	
Seat heating		•
Radio / CD Player	•	
Windshield washer system	•	

ATTACHMENTS	SERIES	OPTION
Open-tine grapple		•
Half-closed grapple		•
Mag grapple combination		•
Magnet plate		•
Scrap shear		•
Clamshell bucket		•
Log heel		•
Log grapple		•
Pipe handler		•
Load hook		•

# **DIMENSIONS**





Dimensions	Reach 54 ft   16.5 m	Reach 59 ft   18 m	Reach 59 ft   18m with cranked boom
Α	45.4 ft   13.8 m	48.0 ft   14.6 m	48.0 ft   14.6 m
В	20.9 ft   6.4 m	21.0 ft   6.4 m	19.4 ft   5.9 m
С	5.7 ft   1.7 m	5.7 ft   1.7 m	5.7 ft   1.7 m
D	11.7 ft / 12.3 ft*   3.5 m / 3.7 m*	11.7 ft / 12.3 ft*   3.5 m / 3.7 m*	11.7 ft / 12.3 ft*   3.5 m / 3.7 m*
E	11.2 ft   3.4 m	12.0 ft   3.7 m	12.3 ft   3.8 m

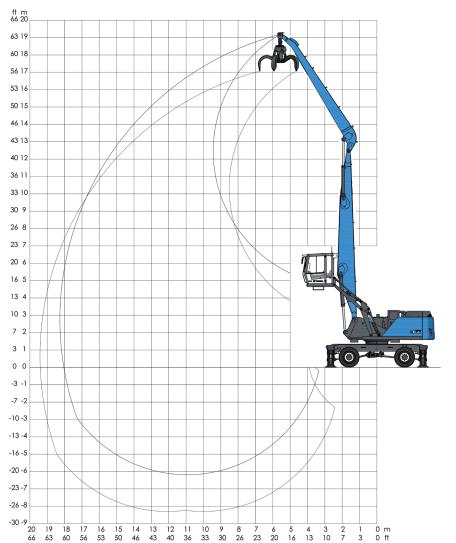
<sup>\*</sup> with a protective mesh for the cab roof

## **LOADING EQUIPMENT MHL360 F**

Configuration	Reach 54 ft   16.5 m	Reach 59 ft   18 m	Reach 59 ft   18 m with cranked boom
Straight boom 29.2 ft   8.9 m	•		
Straight boom 31.8 ft   9.7 m			
Cranked boom 31.8 ft   9.7 m			
Dipperstick 23.0 ft   7.0 m			
Dipperstick 25.6 ft   7.8 m			



# **WORKING RANGES AND LIFTING CAPACITIES MHL360 F**



#### Reach 59 ft | 18 m

Work equipment: Box-type boom 31.8 ft | 9.7 m Dipperstick 25.6 ft | 7.8 m

Attachment options:



Open-tine grapple



Half-closed grapple



Magnet plate



Clamshell bucket



Log grapple



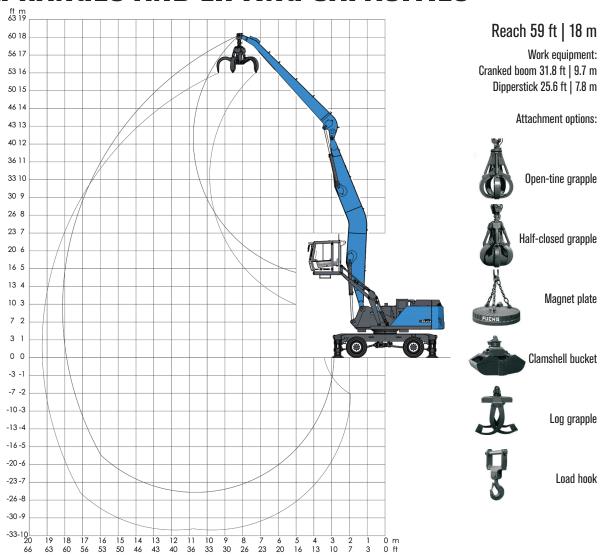
Load hook

HEIGHT ft	HEIGHT m	REACH ft 14.8	19.7	24.6	29.5	34.4	39.4	44.3	49.2	54.1	59.0
		REACH m 4.5	6	7.5	9	10.5	12	13.5	15	16.5	18
49.2	15				19,401*   8.8*	17,417*   7.9*	13,889*   6.3*				
44.3	13.5					16,976*   7.7*	15,432*   7.0*	13,007*   5.9*			
39.4	12					16,976*   7.7*	15,212*   6.9*	13,889*   6.3*	11,244*   5.1*		
34.4	10.5					16,976*   7.7*	15,212*   6.9*	13,889*   6.3*	11,905   5.4		
29.5	9				19,842*   9.0*	17,417*   7.9*	15,432*   7.0*	13,889*   6.3*	11,905   5.4	9,921   4.5	
24.6	7.5				20,503*   9.3*	17,857*   8.1*	15,873*   7.2*	14,110*   6.4*	11,684   5.3	9,921   4.5	
19.7	6			26,015*   11.8*	21,605*   9.8*	18,519*   8.4*	16,094*   7.3*	13,669   6.2	11,464   5.2	9,700   4.4	
14.8	4.5	48,502*   22*	36,376*   16.5*	27,778*   12.6*	22,708*   10.3*	18,960*   8.6*	16,094   7.3	13,228   6.0	11,244   5.1	9,700   4.4	8,157   3.7
9.8	3		39,242*   17.8*	29,321*   13.3*	23,369*   10.6*	18,960   8.6	15,432   7.0	13,007   5.9	11,023   5.0	9,480   4.3	8,157   3.7
4.9	1.5		20,062*   9.1*	29,101   13.2	22,487   10.2	18,078   8.2	14,771   6.7	12,566   5.7	10,582   4.8	9,259   4.2	8,157*   3.7*
0	0		15,212*   6.9*	27,778   12.6	21,385   9.7	17,417   7.9	14,330   6.5	12,125   5.5	10,362   4.7	9,039   4.1	7,275*   3.3*
-4.9	-1.5		15,212*   6.9*	26,676*   12.1*	20,723   9.4	16,755   7.6	14,110   6.4	11,905   5.4	10,362   4.7	8,598*   3.9*	
-9.8	-3		16,535*   7.5*	23,589*   10.7*	19,621*   8.9*	16,535*   7.5*	13,669*   6.2*	11,684*   5.3*	9,480*   4.3*	7,055*   3.2*	
-14.8	-4.5			19,401*   8.8*	16,755*   7.6*	14,110*   6.4*	11,905*   5.4*	9,700*   4.4*	7,496*   3.4*		
-19.7	-6					11,023*   5.0*	9,039*   4.1*				

Capacity values are stated in pounds I metric tons. The pump pressure is 5,221 psi I 360 bar. The values, in accordance with ISO 10567, represent 75% of the static tipping load or 87% of the hydraulic lifting force (marked \*). Values apply to 4-pt supported slewing operations over 360 degrees on a firm and level surface.

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## **WORKING RANGES AND LIFTING CAPACITIES**

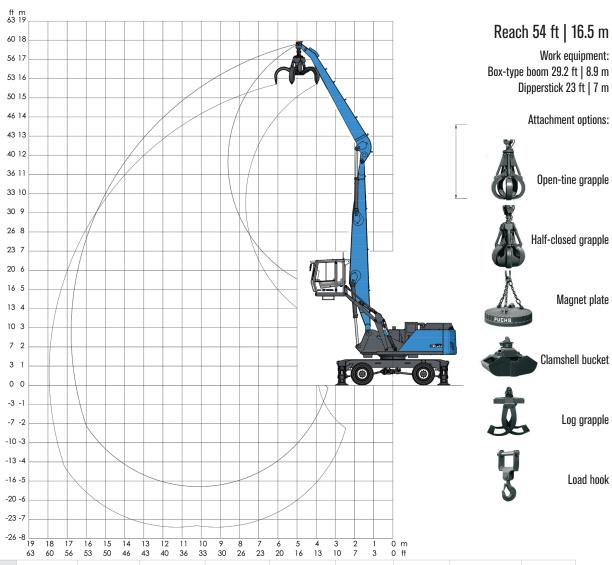


HEIGHT ft	HEIGHT m	REACH ft 14.8			44.0	44.0	19.7	24.6	29.5	34.4	39.4	44.3	49.2	54.1	59.0
		REACH m 4.5	6	7.5	9	10.5	12	13.5	15	16.5	18				
49.2	15					14,330*   6.5*	12,125*   5.5*								
44.3	13.5						13,007*   5.9*	11,464*   5.2*							
39.4	12						12,787*   5.8*	11,905*   5.4*	9,700*   4.4*						
34.4	10.5						13,007*   5.9*	11,905*   5.4*	11,023*   5.0*						
29.5	9					14,551*   6.6*	13,228*   6.0*	12,125*   5.5*	11,244*   5.1*	9,700*   4.4*					
24.6	7.5					14,991*   6.8*	13,448*   6.1*	12,346*   5.6*	11,244*   5.1*	9,700   4.4					
19.7	6				18,298*   8.3*	15,873*   7.2*	14,110*   6.4*	12,566*   5.7*	11,244*   5.1*	9,480   4.3					
14.8	4.5	44,092*   20*	30,865*   14.0*	23,810*   10.8*	19,621*   8.9*	16,755*   7.6*	14,551*   6.6*	13,007*   5.9*	11,023   5.0	9,480   4.3	7,937*   3.6*				
9.8	3		34,613*   15.7*	25,794*   11.7*	20,723*   9.4*	17,417*   7.9*	14,991*   6.8*	12,787   5.8	10,803   4.9	9,259   4.2	7,937   3.6				
4.9	1.5		23,369*   10.6*	27,337*   12.4*	21,605*   9.8*	17,637*   8.0*	14,551   6.6	12,346   5.6	10,362   4.7	9,039   4.1	7,937   3.6				
0	0		17,196*   7.8*	27,117   12.3	21,164   9.6	16,976   7.7	14,110   6.4	11,905   5.4	10,141   4.6	8,818   4.0					
-4.9	-1.5		16,755*   7.6*	26,235   11.9	20,283   9.2	16,535   7.5	13,669   6.2	11,684   5.3	9,921   4.5	8,818   4.0					
-9.8	-3		17,417*   7.9*	25,574*   11.6*	19,842   9.0	16,094   7.3	13,448   6.1	11,464   5.2	9,921   4.5	8,598*   3.9*					
-14.8	-4.5		18,960*   8.6*	22,928*   10.4*	18,960*   8.6*	15,873*   7.2*	13,228*   6.0*	11,244*   5.1*	9,259*   4.2*						
-19.7	-6		20,503*   9.3*	19,621*   8.9*	16,535*   7.5*	13,889*   6.3*	11,684*   5.3*	9,700*   4.4*	7,275*   3.3*						



Capacity values are stated in pounds I metric tons. The pump pressure is 5,221 psi I 360 bar. The values, in accordance with ISO 10567, represent 75% of the static tipping load or 87% of the hydraulic lifting force (marked \*). Values apply to 4-pt supported slewing operations over 360 degrees on a firm and level surface.

## **MHL360 F**



		REACH ft								
HEIGHT	HEIGHT m	14.8	19.7	24.6	29.5	34.4	39.4	44.3	49.2	54.1
ft		REACH m 4.5	6	7.5	9	10.5	12	13.5	15	16.5
49.2	15				18,519*   8.4*	12,787*   5.8*				
44.3	13.5				20,503*   9.3*	18,298*   8.3*	12,787*   5.8*			
39.4	12				20,283*   9.2*	18,078*   8.2*	16,535*   7.5*	11,023*   5.0*		
34.4	10.5				20,283*   9.2*	18,078*   8.2*	16,314*   7.4*	14,330   6.5		
29.5	9				20,723*   9.4*	18,298*   8.3*	16,535*   7.5*	14,110   6.4	11,684   5.3	
24.6	7.5			24,692*   11.2*	21,385*   9.7*	18,739*   8.5*	16,755*   7.6*	14,110   6.4	11,684   5.3	
19.7	6		32,628*   14.8*	26,896*   12.2*	22,487*   10.2*	19,401*   8.8*	16,755   7.6	13,889   6.3	11,464   5.2	
14.8	4.5	52,911*   24*	37,479*   17.0*	28,881*   13.1*	23,589*   10.7*	19,842*   9.0*	16,314   7.4	13,448   6.1	11,464   5.2	9,700   4.4
9.8	3		40,565*   18.4*	30,424*   13.8*	24,030*   10.9*	19,180   8.7	15,653   7.1	13,228   6.0	11,244   5.1	9,700   4.4
4.9	1.5		26,896*   12.2*	29,983   13.6	22,928   10.4	18,519   8.4	15,212   6.9	12,787   5.8	11,023   5.0	9,480   4.3
0	0		20,062*   9.1*	28,660   13.0	22,046   10.0	17,857   8.1	14,771   6.7	12,566   5.7	10,803   4.9	8,378*   3.8*
-4.9	-1.5		19,621*   8.9*	27,778*   12.6*	21,605   9.8	17,417   7.9	14,551   6.6	12,346   5.6	10,141*   4.6*	
-9.8	-3		21,164*   9.6*	24,030*   10.9*	20,062*   9.1*	16,535*   7.5*	13,669*   6.2*	11,023*   5.0*	7,937*   3.6*	
-14.8	-4.5			19,180*   8.7*	16,314*   7.4*	13,669*   6.2*	11,023*   5.0*			

Capacity values are stated in pounds I metric tons. The pump pressure is 5,221 psi I 360 bar. The values, in accordance with ISO 10567, represent 75% of the static tipping load or 87% of the hydraulic lifting force (marked \*). Values apply to 4-pt supported slewing operations over 360 degrees on a firm and level surface.

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## **CONNECTS FOR YOU**

The new Terex Fuchs Telematics system available on Tier 4 machines offers a modern solution to help you analyze and optimize the efficiency of your machines. The Terex Fuchs Telematics system 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.



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