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# R 938 Litronic

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## LIEBHERR

Crawler excavator



**Generation**

8

**Operating weight**

40,050 kg / 88,300 lb

**Motor**

295 HP / 220 kW

Tier 4 Final

**Bucket capacity**

1.90–3.00 m<sup>3</sup> / 2.48–3.92 yd<sup>3</sup>

# Experience the progress R 938

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## ① Safety

- Panoramic visibility with no obstructions and camera on the rear and the right side
- Tilttable console for easy and safe access to cab
- Rollover-resistant ROPS-certified cab structure
- Emergency exit via the rear cab window whatever the configuration of the excavator
- Right window and windshield in laminated and tinted glass

## ② Equipment

- Choice of 2 types of booms and multiple lengths of equipment
- Safety check valves for hoist and stick cylinders
- Long component life and increased productivity thanks to the automatic centralized lubrication (option)

## ③ Maintenance

- Innovative servicing concept, with service points accessible from ground level
- Lateral access to uppercarriage and large maintenance platform
- Engine oil, hydraulic oil, fuel and urea levels visible on the display

## ④ Comfort

- Spacious, air-conditioned work space
- Pneumatic seat with vertical and horizontal suspension
- Easy-to-use high resolution 9" color touchscreen
- Seat belt 3", orange color
- LED lighting as standard



## ⑤ Engine

- Liebherr engine that conforms with the US EPA Tier 4 Final exhaust emissions standard
- Automatic engine idling and engine stop

## ⑥ Undercarriage

- Choice of 2 reliable and robust X-shaped undercarriages with integrated eyes for secure transport
- Easy maintenance
- Maintenance-free track chains and track rollers with lifetime lubrication
- Extra storage (option)



# Technical data



## Engine

<b>Rating</b>	
per SAE J1349	295 HP (220 kW) at 1,800 rpm
per ISO 9249	299 HP (220 kW) at 1,800 rpm
<b>Torque</b>	1,421 Nm at 1,350 rpm / <b>1,048 lbf ft at 1,350 rpm</b>
<b>Model</b>	Liebherr D944 A7-24
<b>Type</b>	4 cylinder in-line
<b>Bore</b>	130 mm / <b>5.1 in</b>
<b>Stroke</b>	150 mm / <b>5.9 in</b>
<b>Displacement</b>	8.0 l / <b>488 in³</b>
<b>Engine operation</b>	4-stroke diesel Common-Rail Turbo-charged and after-cooler
<b>Exhaust gas treatment</b>	Tier 4 Final SCR Filter Passive regeneration by thermo management
<b>Cooling system</b>	Water-cooled and oil cooler, after-cooled and fuel cooled
<b>Air cleaner</b>	Dry-type air cleaner with pre-cleaner
<b>Fuel tank</b>	729 l / <b>193 gal</b>
<b>Urea tank</b>	90 l / <b>24 gal</b>
<b>Electrical system</b>	
Voltage	24 V
Batteries	2 x 135 Ah / 12 V
Alternator	Three-phase current 28 V / 140 A
Engine idling	Sensor controlled



## Hydraulic controls

<b>Power distribution</b>	Via control valves, simultaneous and independent actuation of undercarriage, swing drive and equipment
<b>Electric servo circuit</b>	Electro-hydraulic control
Equipment and swing	Proportional via joystick levers
Travel	- Proportional control via foot pedals or removable levers - Automatic or manual speed adjustment
<b>Additional functions</b>	Proportional regulation via foot pedals or mini-joystick



## Hydraulic system

<b>Hydraulic system</b>	Positive Control hydraulic system. Demand-based, double independent pump flows Features high system dynamics and sensitivity provided by integrated system controlling Independent circuit for rotation
<b>Hydraulic pumps</b>	
For equipment and travel drive	Liebherr, variable displacement, swashplate double pump
Max. flow	2 x 315 l/min. / <b>2 x 83 gpm</b>
Max. pressure	380 bar / <b>5,511 psi</b>
For swing drive	Swashplate pump, closed-loop circuit
Max. flow	205 l/min. / <b>54 gpm</b>
Max. pressure	400 bar / <b>5,802 psi</b>
<b>Pump management</b>	Electronic management synchronous to the control block
<b>Hydraulic tank</b>	239 l / <b>63 gal</b>
<b>Hydraulic system</b>	max. 475 l / <b>max. 126 gal</b>
<b>Filtration</b>	1 main return filter with integrated partial micro filtration (10 µm / <b>1,250 mesh</b> )
<b>Cooling system</b>	Compact cooler, consisting of a water cooler, with hydraulic oil cooler, gearbox oil cooler, fuel cooler and after-cooler cores and hydrostatically driven fan
<b>MODE selection</b>	Adjustment of engine and hydraulic performance via a mode pre-selector to match application, e.g. for especially economical and environmentally friendly operation or for maximum digging performance and heavy-duty jobs
<b>Engine speed and performance setting</b>	Stepless adjustment of engine output and hydraulic power via engine speed



## Swing drive

<b>Drive</b>	Liebherr swashplate motor with integrated brake valve and torque control
<b>Transmission</b>	Liebherr compact planetary reduction gears
<b>Swing ring</b>	Liebherr, sealed race ball bearing swing ring, internal teeth
<b>Swing speed</b>	0-8.6 rpm stepless
<b>Swing torque</b>	117 kNm / <b>86,295 lbf ft</b>
<b>Holding brake</b>	Wet multi-disc (spring applied, pressure released)



## Cab

<b>Cab</b>	ROPS safety cab structure (roll-over protection system according to ISO 12117-2:2008) with windscreen, totally or partially retractable (only upper part), under cab roof, LED work headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large storing box and several stowing possibilities, shock-absorbing suspension, laminated right hand side and roof windows, all windows tinted, separate extensible window shades for the sunroof window and windscreen, cigarette lighter and 24 V plug, 12 V plug, cup holder, mobile phone storage net
<b>Operator's seat</b>	Liebherr-Comfort seat, airsprung with automatic weight adjustment, vertical and longitudinal seat damping including consoles and joysticks. Seat and armrests adjustable separately and in combination (adjustable in length, height and inclination), seat heating as standard
<b>Arm consoles</b>	Oscillating consoles with seat, tiltable console left
<b>Operation and displays</b>	Large high-resolution operating unit, intuitive, color display with touchscreen, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and attachment parameters
<b>Air-conditioning</b>	Automatic air-conditioning, recirculated air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu. Recirculated air and fresh air filters can be easily replaced and are accessible from the outside. Heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures
<b>Noise emission</b>	
ISO 6396	72 dB(A) = $L_{pA}$ (inside cab)
2000/14/EC	105 dB(A) = $L_{WA}$ (surround noise)



## Undercarriage

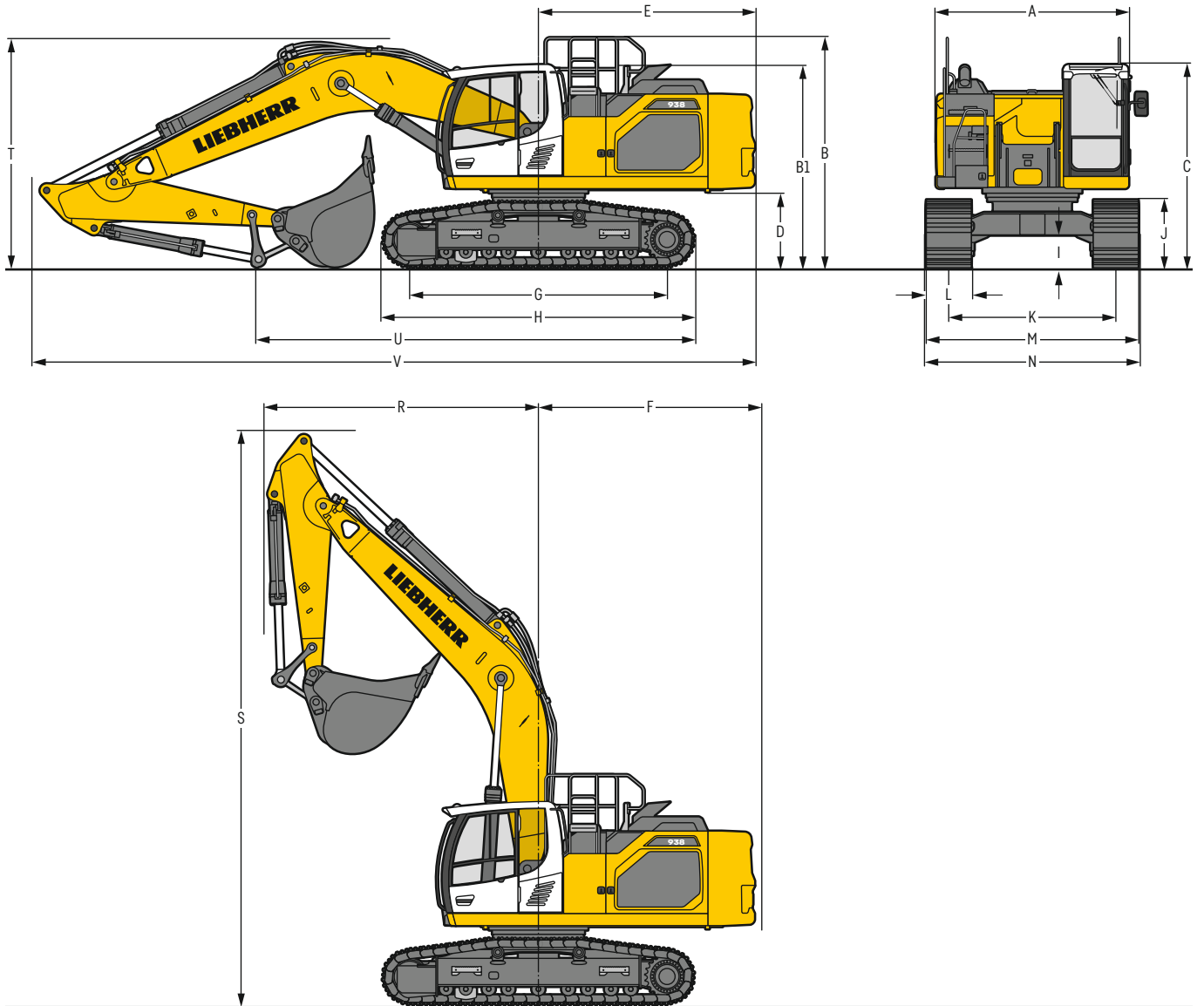
<b>Versions</b>	
LC	Gauge 2,590 mm / <b>8'6"</b>
WLC	Gauge 2,740 mm / <b>9'</b>
<b>Drive</b>	Liebherr swashplate motor with brake valves on both sides
<b>Transmission</b>	Liebherr planetary reduction gear
<b>Maximum travel speed</b>	3.3 km/h / <b>2.1 mph</b> low range 5.4 km/h / <b>3.4 mph</b> high range
<b>Drawbar pull on crawler</b>	325 kN / <b>73,060 lbf</b>
<b>Track components</b>	D7, D7G, maintenance-free
<b>Track rollers / Carrier rollers</b>	9 / 2
<b>Tracks</b>	Sealed and greased
<b>Track pads</b>	Triple grouser
<b>Holding brake</b>	Wet multi-disc (spring applied, pressure released)
<b>Brake valves</b>	Integrated into travel motor
<b>Lashing eyes</b>	Integrated



## Equipment

<b>Type</b>	Combination of resistant steel plates and cast steel components
<b>Hydraulic cylinders</b>	Liebherr cylinders with seal and guidance systems
<b>Bearings</b>	Sealed, low maintenance
<b>Lubrication</b>	Liebherr central lubrication system
<b>Hydraulic connections</b>	Pipes and hoses equipped with SAE split-flange connections
<b>Buckets</b>	Standard equipped with Liebherr tooth system

# Dimensions



	LC	mm / ft in				WLC	mm / ft in			
A	Uppercarriage width	2,990 <sup>2)</sup> / 9'10" <sup>2)</sup>				2,990 <sup>2)</sup> / 9'10" <sup>2)</sup>				
B	Uppercarriage height	3,570 / 11' 9"				3,570 / 11' 9"				
B1	Uppercarriage height (handrails folded)	3,130 / 10' 3"				3,130 / 10' 3"				
C	Cab height	3,150 / 10' 4"				3,150 / 10' 4"				
D	Counterweight ground clearance	1,175 / 3'10"				1,175 / 3'10"				
E	Rear-end length	3,350 / 11'				3,350 / 11'				
F	Tail swing radius	3,450 / 11' 4"				3,450 / 11' 4"				
G	Wheelbase	3,990 / 13' 1"				4,300 / 14' 1"				
H	Undercarriage length	4,840 / 15'11"				5,150 / 16'11"				
I	Undercarriage ground clearance	495 / 1' 7"				495 / 1' 7"				
J	Track height	1,055 / 3' 6"				1,055 / 3' 6"				
K	Track gauge	2,590 / 8' 6"				2,740 / 9'				
L	Track pad width	600 / 24"	700 / 28"	800 / 31"	900 / 35"	600 / 24"	700 / 28"	800 / 31"	900 / 35"	
M	Width over tracks	3,190 / 10' 6"	3,290 / 10'10"	3,390 / 11' 1"	3,490 / 11' 5"	3,340 / 10'11"	3,440 / 11' 3"	3,540 / 11' 7"	3,640 / 11'11"	
N	Width over steps	3,190 / 10' 6"	3,190 / 10' 6"	3,390 <sup>1)</sup> / 11' 1" <sup>1)</sup>	3,390 <sup>1)</sup> / 11' 1" <sup>1)</sup>	3,340 / 10'11"	3,340 / 10'11"	3,540 <sup>1)</sup> / 11' 7" <sup>1)</sup>	3,540 <sup>1)</sup> / 11' 7" <sup>1)</sup>	

<sup>1)</sup> width with removable steps

<sup>2)</sup> without door stop device and spacer

		Stick length m / ft in	Mono boom 6.45 m / 21'2" direct mounting			Mono boom SME 6.15 m / 20'2" direct mounting			
			LC	mm / ft in		WLC	LC	mm / ft in	
<b>R</b>	Front swing radius			4,250 / 13'11"			4,050 / 13'3"		
<b>S</b>	Height with boom up			8,990 / 29' 2"			8,700 / 28'7"		
<b>T</b>	Boom height	2.60 / 8'6"	3,550 / 11' 8"	3,550 / 11' 8"		3,550 / 11' 8"	-		
		2.90 / 9'6"	3,750 / 12' 4"	3,750 / 12' 4"		3,750 / 12' 4"	-		
		3.25 / 10'8"	3,800 / 12' 6"	3,800 / 12' 6"		3,800 / 12' 6"	-		
		3.95 / 13'	3,350 <sup>1)</sup> / 11' <sup>1)</sup>	3,350 <sup>1)</sup> / 11' <sup>1)</sup>		3,350 <sup>1)</sup> / 11' <sup>1)</sup>	-		
		2.15 / 7'1" SME	-	-		-	3,450 / 11'4" / 3,300 <sup>1)</sup> / 10'10" <sup>1)</sup>		3,350 / 11' / 3,300 <sup>1)</sup> / 10'10" <sup>1)</sup>
		2.60 / 8'6" SME	-	-		-	3,650 / 12' / 3,350 <sup>1)</sup> / 11' <sup>1)</sup>		3,950 / 13' / 3,350 <sup>1)</sup> / 11' <sup>1)</sup>
<b>U</b>	Length on ground	2.60 / 8'6"	6,800 / 22' 4"	6,950 / 22'10"		6,950 / 22'10"	-		
		2.90 / 9'6"	6,500 / 21' 4"	6,650 / 21'10"		6,650 / 21'10"	-		
		3.25 / 10'8"	6,050 / 19'10"	6,200 / 20' 4"		6,200 / 20' 4"	-		
		3.95 / 13'	7,800 <sup>1)</sup> / 25' 7" <sup>1)</sup>	7,950 <sup>1)</sup> / 26' 1" <sup>1)</sup>		7,950 <sup>1)</sup> / 26' 1" <sup>1)</sup>	-		
		2.15 / 7'1" SME	-	-		-	6,900 / 22'8" / 9,300 <sup>1)</sup> / 30'6" <sup>1)</sup>		7,000 / 23' / 9,450 <sup>1)</sup> / 31' <sup>1)</sup>
		2.60 / 8'6" SME	-	-		-	6,500 / 21'4" / 8,900 <sup>1)</sup> / 29'2" <sup>1)</sup>		6,800 / 22'4" / 9,050 <sup>1)</sup> / 29'8" <sup>1)</sup>
<b>V</b>	Overall length	2.60 / 8'6"	11,200 / 36'9"			-			
		2.90 / 9'6"	11,200 / 36'9"			-			
		3.25 / 10'8"	11,200 / 36'9"			-			
		3.95 / 13'	11,000 <sup>1)</sup> / 36'1" <sup>1)</sup>			-			
		2.15 / 7'1" SME	-			10,900 / 35'9" / 10,800 <sup>1)</sup> / 35'5" <sup>1)</sup>			
		2.60 / 8'6" SME	-			10,900 / 35'9" / 10,800 <sup>1)</sup> / 35'5" <sup>1)</sup>			
	Bucket		2.15m <sup>3</sup> / 2.81yd <sup>3</sup>			2.50m <sup>3</sup> / 3.27yd <sup>3</sup>			

<sup>1)</sup> without bucket

# Transport dimensions

## removable elements disassembled

	Undercarriage	Mono boom 6.45 m / 21'2"				Mono boom SME 6.15 m / 20'2"			
		mm / ft in				mm / ft in			
Pad width		600 / 24"	700 / 28"	800 / 31"	900 / 35"	600 / 24"	700 / 28"	800 / 31"	900 / 35"
Transport width	LC	3,190 / 10' 6"	3,290 / 10'10"	3,390 / 11' 1"	3,490 / 11' 5"	3,190 / 10' 6"	3,290 / 10'10"	3,390 / 11' 1"	3,490 / 11' 5"
	WLC	3,340 / 10'11"	3,440 / 11' 3"	3,540 / 11' 7"	3,640 / 11'11"	3,340 / 10'11"	3,440 / 11' 3"	3,540 / 11' 7"	3,640 / 11'11"
	Undercarriage / Stick m / ft in	LC		WLC		LC		WLC	
		mm / ft in				mm / ft in			
Transport length		11,200 <sup>2)</sup> / 36'9" <sup>2)</sup> / 11,000 <sup>1)</sup> / 36'1" <sup>1)</sup>				10,900 / 35'9" / 10,800 <sup>1)</sup> / 35'5" <sup>1)</sup>			
Transport height	2.60 / 8'6"	3,550 / 11'8"				-			
	2.90 / 9'6"	3,750 / 12'4"				-			
	3.25 / 10'8"	3,800 / 12'6"				-			
	3.95 / 13'	3,350 <sup>1)</sup> / 11' <sup>1)</sup>				-			
	2.15 / 7'1" SME	-				3,450 <sup>4)</sup> / 11'4" <sup>4)</sup> / 3,300 <sup>1)</sup> / 10'10" <sup>1)</sup>			
	2.60 / 8'6" SME	-				3,350 <sup>5)</sup> / 11' <sup>5)</sup> / 3,300 <sup>1)</sup> / 10'10" <sup>1)</sup>			
		-				3,650 <sup>4)</sup> / 12' <sup>4)</sup> / 3,350 <sup>1)</sup> / 11' <sup>1)</sup>			
		-				3,950 <sup>5)</sup> / 13' <sup>5)</sup> / 3,350 <sup>1)</sup> / 11' <sup>1)</sup>			
	Bucket	2.15m <sup>3</sup> / 2.81yd <sup>3</sup>				2.50m <sup>3</sup> / 3.27yd <sup>3</sup>			

<sup>1)</sup> without bucket

<sup>2)</sup> with sticks 2.60m / 8'6", 2.90m / 9'6" and 3.25m / 10'8"

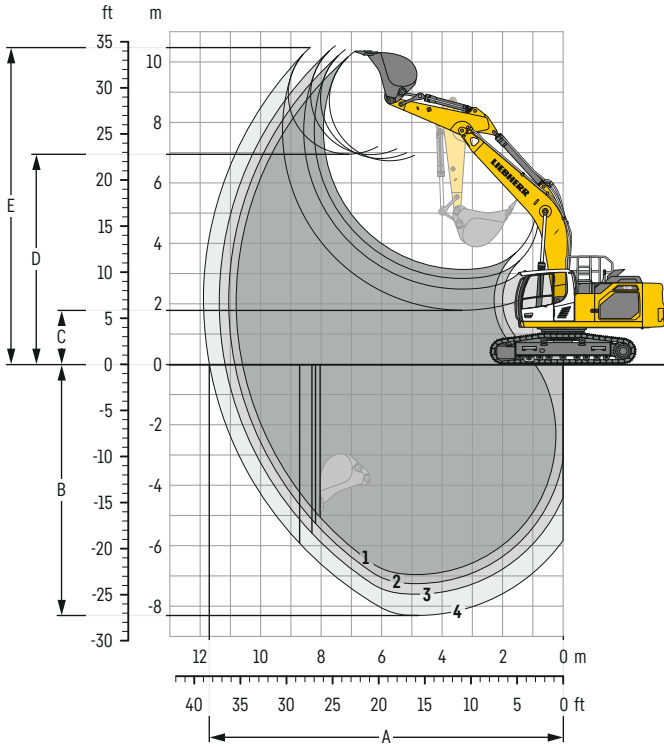
<sup>3)</sup> with stick 3.95m / 13'

<sup>4)</sup> with LC undercarriage

<sup>5)</sup> with WLC undercarriage

# Backhoe bucket

with mono boom 6.45 m / 21'2"



## Digging envelope

without quick coupler		1	2	3	4
Stick length	m / ft in	2.60 / 8' 6"	2.90 / 9' 6"	3.25 / 10' 8"	3.95 / 13'
A Max. reach at ground level	m / ft in	10.60 / 34' 9"	10.85 / 35' 7"	11.17 / 36' 8"	11.70 / 38' 5"
B Max. digging depth	m / ft in	6.95 / 22' 10"	7.25 / 23' 9"	7.60 / 24' 11"	8.30 / 27' 3"
C Min. dumping height	m / ft in	3.14 / 10' 4"	2.84 / 9' 4"	2.49 / 8' 2"	1.79 / 5' 10"
D Max. dumping height	m / ft in	6.73 / 22' 1"	6.80 / 22' 4"	6.93 / 22' 9"	6.95 / 22' 10"
E Max. cutting height	m / ft in	10.35 / 33' 11"	10.40 / 34' 1"	10.53 / 34' 7"	10.47 / 34' 4"

## Forces

without quick coupler		1	2	3	4
Stick digging force (ISO 6015)	kN / lbf	212 / 47,660	198 / 44,510	183 / 41,140	159 / 35,750
Bucket digging force (ISO 6015)	kN / lbf	238 / 53,510	238 / 53,510	238 / 53,510	238 / 53,510
Stick digging force (SAE J1179)	kN / lbf	202 / 45,410	189 / 42,490	176 / 39,570	154 / 34,620
Bucket digging force (SAE J1179)	kN / lbf	210 / 47,210	210 / 47,210	210 / 47,210	210 / 47,210

## Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 8.4 t / 18,520 lb, mono boom 6.45 m / 21'2", stick 3.25 m / 10'8" and bucket 2.15 m<sup>3</sup> / 2.81 yd<sup>3</sup> (1,730 kg / 3,810 lb).

Undercarriage		LC			
Pad width	mm / in	600 / 24"	700 / 28"	800 / 31"	900 / 35"
Weight	kg / lb	37,200 / 82,010	37,550 / 82,780	37,900 / 83,560	38,250 / 84,330
Ground pressure	kg/cm <sup>2</sup> / psi	0.72 / 10.2	0.63 / 9.0	0.55 / 7.8	0.50 / 7.1

Undercarriage		WLC			
Pad width	mm / in	600 / 24"	700 / 28"	800 / 31"	900 / 35"
Weight	kg / lb	37,750 / 83,230	38,100 / 84,000	38,450 / 84,770	38,850 / 85,650
Ground pressure	kg/cm <sup>2</sup> / psi	0.68 / 9.7	0.59 / 8.4	0.52 / 7.4	0.47 / 6.7

The operating weight includes the basic machine with counterweight 9.4 t / 20,720 lb, mono boom 6.45 m / 21'2", stick 3.25 m / 10'8" and bucket 2.15 m<sup>3</sup> / 2.81 yd<sup>3</sup> (1,730 kg / 3,810 lb).

Undercarriage		LC			
Pad width	mm / in	600 / 24"	700 / 28"	800 / 31"	900 / 35"
Weight	kg / lb	38,200 / 84,220	38,550 / 84,990	38,900 / 85,760	39,250 / 86,530
Ground pressure	kg/cm <sup>2</sup> / psi	0.74 / 10.5	0.64 / 9.1	0.57 / 8.1	0.51 / 7.3

Undercarriage		WLC			
Pad width	mm / in	600 / 24"	700 / 28"	800 / 31"	900 / 35"
Weight	kg / lb	38,750 / 85,430	39,100 / 86,200	39,450 / 86,970	39,850 / 87,850
Ground pressure	kg/cm <sup>2</sup> / psi	0.70 / 10.0	0.61 / 8.7	0.54 / 7.7	0.48 / 6.8



## Buckets Machine stability per ISO 10567\* (75% of tipping capacity)

Cutting width	Capacity ISO 7461	Weight <sup>3)</sup>	Weight <sup>4)</sup>	LC undercarriage (with track pads 800 mm / 31")								WLC undercarriage (with track pads 800 mm / 31")							
				Stick length (m / ft in)				Stick length (m / ft in)				Stick length (m / ft in)				Stick length (m / ft in)			
				without quick coupler		with quick coupler		without quick coupler		with quick coupler		without quick coupler		with quick coupler		without quick coupler		with quick coupler	
				2.60	2.90	3.25	3.95	2.60	2.90	3.25	3.95	2.60	2.90	3.25	3.95	2.60	2.90	3.25	3.95
mm	m <sup>3</sup>	kg	kg	8'6"	9'6"	10'8"	13'	8'6"	9'6"	10'8"	13'	8'6"	9'6"	10'8"	13'	8'6"	9'6"	10'8"	13'
ft in	yd <sup>3</sup>	lb	lb																
<b>with counterweight 8.4t / 18,520 lb</b>																			
STD <sup>1)</sup>	1,600	1.90	1,700	1,660	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	■
	5'3"	2.48	3,750	3,660	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	■
	1,650	2.00	1,730	1,690	▲	▲	■	▲	▲	▲	■	■	▲	▲	▲	▲	▲	▲	■
	5'5"	2.62	3,810	3,730	▲	▲	■	▲	▲	▲	■	■	▲	▲	▲	▲	▲	▲	■
	1,600	2.15	1,770	1,730	▲	■	■	■	▲	■	■	▲	■	▲	▲	▲	▲	■	▲
	5'3"	2.81	3,900	3,810	▲	■	■	■	▲	■	■	▲	■	▲	▲	▲	▲	■	▲
	1,650	2.25	1,810	1,770	▲	■	▲	■	■	■	▲	▲	■	▲	▲	▲	▲	■	■
	5'5"	2.94	3,990	3,900	▲	■	▲	■	■	■	▲	▲	■	▲	▲	▲	▲	■	■
	1,800	2.50	1,900	1,860	▲	▲	■	▲	▲	■	▲	▲	■	▲	▲	▲	■	▲	▲
	5'11"	3.27	4,190	4,100	▲	▲	■	▲	▲	■	▲	▲	■	▲	▲	▲	■	▲	▲
	1,800	2.75	1,970	1,930	■	■	▲	-	■	▲	▲	-	■	■	■	▲	▲	■	▲
	5'11"	3.60	4,340	4,260	■	■	▲	-	■	▲	▲	-	■	■	■	▲	▲	■	▲
1,850	3.00	2,020	1,980	▲	▲	▲	-	▲	▲	-	-	■	▲	▲	-	■	▲	▲	-
6'1"	3.92	4,450	4,370	▲	▲	▲	-	▲	▲	-	-	■	▲	▲	-	■	▲	▲	-
<b>with counterweight 9.4t / 20,720 lb</b>																			
STD <sup>1)</sup>	1,600	1.90	1,700	1,660	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	5'3"	2.48	3,750	3,660	▲	▲	▲	▲	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲
	1,650	2.00	1,730	1,690	▲	▲	▲	■	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲
	5'5"	2.62	3,810	3,730	▲	▲	▲	■	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲
	1,600	2.15	1,770	1,730	▲	▲	▲	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	■
	5'3"	2.81	3,900	3,810	▲	▲	▲	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	■
	1,650	2.25	1,810	1,770	▲	▲	■	▲	▲	▲	■	■	▲	▲	▲	▲	▲	▲	▲
	5'5"	2.94	3,990	3,900	▲	▲	■	▲	▲	▲	■	■	▲	▲	▲	▲	▲	▲	▲
	1,800	2.50	1,900	1,860	■	■	▲	▲	■	▲	▲	■	■	▲	▲	▲	▲	■	■
	5'11"	3.27	4,190	4,100	■	■	▲	▲	■	▲	▲	■	■	▲	▲	▲	▲	■	■
	1,800	2.75	1,970	1,930	▲	▲	■	▲	▲	■	▲	▲	■	■	■	▲	▲	■	▲
	5'11"	3.60	4,340	4,260	▲	▲	■	▲	▲	■	▲	▲	■	■	■	▲	▲	■	▲
1,850	3.00	2,020	1,980	■	■	▲	▲	■	▲	▲	-	▲	▲	▲	▲	▲	■	▲	▲
6'1"	3.92	4,450	4,370	■	■	▲	▲	■	▲	▲	-	▲	▲	▲	▲	▲	■	▲	▲
HD <sup>2)</sup>	1,600	1.90	1,800	1,760	▲	▲	▲	▲	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲
	5'3"	2.48	3,970	3,880	▲	▲	▲	▲	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲
	1,650	2.00	1,830	1,790	▲	▲	▲	■	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	■
	5'5"	2.62	4,030	3,950	▲	▲	▲	■	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	■
	1,600	2.15	1,870	1,830	▲	▲	■	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	■
	5'3"	2.81	4,120	4,030	▲	▲	■	▲	▲	▲	■	▲	▲	▲	▲	▲	▲	▲	■
	1,650	2.25	1,910	1,870	▲	▲	■	▲	▲	■	■	■	▲	▲	▲	▲	▲	▲	▲
	5'5"	2.94	4,210	4,120	▲	▲	■	▲	▲	■	■	■	▲	▲	▲	▲	▲	▲	▲
	1,800	2.50	2,000	1,960	■	■	▲	▲	■	▲	▲	■	■	▲	▲	▲	▲	■	■
	5'11"	3.27	4,410	4,320	■	■	▲	▲	■	▲	▲	■	■	▲	▲	▲	▲	■	■
	1,800	2.75	2,080	2,040	▲	▲	■	▲	▲	■	▲	▲	■	■	■	▲	▲	■	▲
	5'11"	3.60	4,590	4,500	▲	▲	■	▲	▲	■	▲	▲	■	■	■	▲	▲	■	▲
1,850	3.00	2,130	2,090	■	▲	▲	-	■	▲	▲	-	▲	■	▲	▲	▲	■	▲	-
6'1"	3.92	4,700	4,610	■	▲	▲	-	■	▲	▲	-	▲	■	▲	▲	▲	■	▲	-

\* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

<sup>1)</sup> Standard bucket with Liebherr teeth Z 50

<sup>2)</sup> HD bucket with Liebherr teeth Z 50

<sup>3)</sup> Bucket for direct mounting

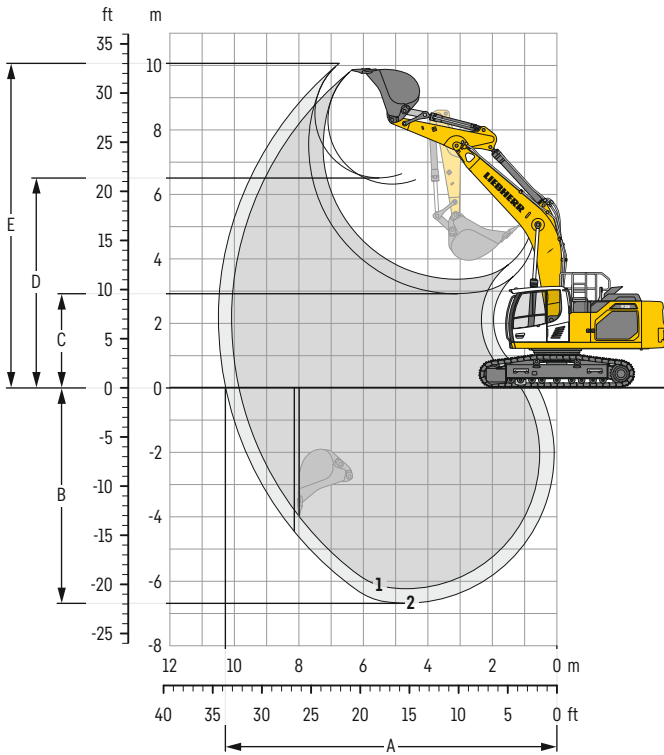
<sup>4)</sup> Bucket for mounting to quick coupler SWA 66 (430 kg / 950 lb)

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0t/m<sup>3</sup> / 3,400lb/yd<sup>3</sup>, ■ = ≤ 1.8t/m<sup>3</sup> / 3,000lb/yd<sup>3</sup>, ▲ = ≤ 1.65t/m<sup>3</sup> / 2,800lb/yd<sup>3</sup>, ■ = ≤ 1.5t/m<sup>3</sup> / 2,500lb/yd<sup>3</sup>, ▲ = ≤ 1.2t/m<sup>3</sup> / 2,000lb/yd<sup>3</sup>, - = not authorized

# Backhoe bucket

with mono boom SME 6.15 m / 20'2"



## Digging envelope

without quick coupler		1	2
Stick length	m / ft in	2.15 / 7'1"	2.60 / 8' 6"
		SME	SME
A Max. reach at ground level	m / ft in	9.86 / 32'4"	10.28 / 33' 9"
B Max. digging depth	m / ft in	6.23 / 20'5"	6.68 / 21'11"
C Min. dumping height	m / ft in	3.37 / 11'1"	2.92 / 9' 7"
D Max. dumping height	m / ft in	6.32 / 20'9"	6.61 / 21' 8"
E Max. cutting height	m / ft in	9.86 / 32'4"	10.06 / 33'

## Forces

without quick coupler		1	2
Stick digging force (ISO 6015)	kN / lbf	238 / 53,510	212 / 47,660
Bucket digging force (ISO 6015)	kN / lbf	264 / 59,350	264 / 59,350
Stick digging force (SAE J1179)	kN / lbf	226 / 50,810	202 / 45,410
Bucket digging force (SAE J1179)	kN / lbf	233 / 52,380	233 / 52,380

## Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 8.4 t / 18,520 lb, mono boom SME 6.15 m / 20'2", stick SME 2.15 m / 7'1" and HD bucket 2.50 m<sup>3</sup> / 3.27 yd<sup>3</sup> (2,000 kg / 4,410 lb).

Undercarriage		LC			
Pad width	mm / in	600 / 24"	700 / 28"	800 / 31"	900 / 35"
Weight	kg / lb	37,400 / 82,450	37,750 / 83,230	38,100 / 84,000	38,450 / 84,770
Ground pressure	kg/cm <sup>2</sup> / psi	0.73 / 10.4	0.63 / 9.0	0.56 / 8.0	0.50 / 7.1

Undercarriage		WLC			
Pad width	mm / in	600 / 24"	700 / 28"	800 / 31"	900 / 35"
Weight	kg / lb	37,950 / 83,670	38,300 / 84,440	38,650 / 85,210	39,050 / 86,090
Ground pressure	kg/cm <sup>2</sup> / psi	0.69 / 9.8	0.60 / 8.5	0.53 / 7.5	0.47 / 6.7

The operating weight includes the basic machine with counterweight 9.4 t / 20,720 lb, mono boom SME 6.15 m / 20'2", stick SME 2.15 m / 7'1" and HD bucket 2.50 m<sup>3</sup> / 3.27 yd<sup>3</sup> (2,000 kg / 4,410 lb).

Undercarriage		LC			
Pad width	mm / in	600 / 24"	700 / 28"	800 / 31"	900 / 35"
Weight	kg / lb	38,400 / 84,660	38,750 / 85,430	39,100 / 86,200	39,450 / 86,970
Ground pressure	kg/cm <sup>2</sup> / psi	0.75 / 10.7	0.65 / 9.2	0.57 / 8.1	0.51 / 7.3

Undercarriage		WLC			
Pad width	mm / in	600 / 24"	700 / 28"	800 / 31"	900 / 35"
Weight	kg / lb	38,950 / 85,870	39,300 / 86,640	39,650 / 87,410	40,050 / 88,300
Ground pressure	kg/cm <sup>2</sup> / psi	0.71 / 10.1	0.61 / 8.7	0.54 / 7.7	0.48 / 6.8

## Buckets Machine stability per ISO 10567\* (75% of tipping capacity)

Cutting width mm ft in	Capacity ISO 7461 m <sup>3</sup> yd <sup>3</sup>	Weight <sup>3)</sup> kg lb	Weight <sup>4)</sup> kg lb	LC undercarriage (with track pads 800 mm / 31")				WLC undercarriage (with track pads 800 mm / 31")			
				Stick length (m / ft in)				Stick length (m / ft in)			
				without quick coupler		with quick coupler		without quick coupler		with quick coupler	
				2.15 7'1"	2.60 8'6"	2.15 7'1"	2.60 8'6"	2.15 7'1"	2.60 8'6"	2.15 7'1"	2.60 8'6"
<b>with counterweight 8.4t / 18,520 lb</b>											
1,600 5'3"	2.15 2.81	1,870 4,120	1,830 4,030	▲	▲	▲	▲	▲	▲	▲	
1,650 5'5"	2.25 2.94	1,910 4,210	1,870 4,120	▲	▲	▲	▲	▲	▲	▲	
1,800 5'11"	2.50 3.27	2,000 4,410	1,960 4,320	▲	■	▲	▲	▲	■	■	
1,800 5'11"	2.75 3.60	2,080 4,590	2,040 4,500	■	■	■	■	▲	▲	▲	
1,850 6'1"	3.00 3.92	2,130 4,700	2,090 4,610	▲	△	■	△	■	■	■	
1,650 5'5"	2.00 2.62	2,490 5,490	2,530 5,580	▲	▲	▲	▲	▲	▲	▲	
1,650 5'5"	2.25 2.94	2,570 5,670	2,610 5,750	▲	■	▲	▲	▲	■	▲	
1,650 5'5"	2.50 3.27	2,660 5,860	2,700 5,950	■	■	▲	■	▲	■	▲	
<b>with counterweight 9.4t / 20,720 lb</b>											
1,600 5'3"	2.15 2.81	1,870 4,120	1,830 4,030	▲	▲	▲	▲	▲	▲	▲	
1,650 5'5"	2.25 2.94	1,910 4,210	1,870 4,120	▲	▲	▲	▲	▲	▲	▲	
1,800 5'11"	2.50 3.27	2,000 4,410	1,960 4,320	▲	▲	▲	■	▲	▲	▲	
1,800 5'11"	2.75 3.60	2,080 4,590	2,040 4,500	▲	■	▲	▲	▲	■	■	
1,850 6'1"	3.00 3.92	2,130 4,700	2,090 4,610	■	▲	■	■	▲	■	▲	
1,650 5'5"	2.00 2.62	2,490 5,490	2,530 5,580	▲	▲	▲	▲	▲	▲	▲	
1,650 5'5"	2.25 2.94	2,570 5,670	2,610 5,750	▲	▲	▲	■	▲	▲	■	
1,650 5'5"	2.50 3.27	2,660 5,860	2,700 5,950	▲	■	▲	▲	▲	▲	■	

\* Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

<sup>1)</sup> HD bucket with Liebherr teeth Z 50

<sup>2)</sup> HDR bucket with teeth Z 70

<sup>3)</sup> Bucket for direct mounting

<sup>4)</sup> Bucket for mounting to quick coupler SWA 66 (430 kg / 950 lb)

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0t/m<sup>3</sup> / 3,400lb/yd<sup>3</sup>, ■ = ≤ 1.8t/m<sup>3</sup> / 3,000lb/yd<sup>3</sup>, ▲ = ≤ 1.65t/m<sup>3</sup> / 2,800lb/yd<sup>3</sup>, ■ = ≤ 1.5t/m<sup>3</sup> / 2,500lb/yd<sup>3</sup>, △ = ≤ 1.2t/m<sup>3</sup> / 2,000lb/yd<sup>3</sup>

# Lift capacities

with mono boom 6.45 m / 21'2", counterweight 8.4 t / 18,520 lb and track pads 800 mm / 31"

## Stick 2.60 m / 8'6"

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		9.0m 30ft		m ft in
7.5m t					10.0*	10.0*			8.6	9.9*	6.9
25ft lb					22.0*	22.0*			19.5	21.8*	22.5"
6.0m t					10.6*	10.6*	7.5	9.7*	6.8	9.6*	7.9
20ft lb					23.1*	23.1*	16.2	21.3*	15.4	21.2*	25.8"
4.5m t		15.2*	15.2*		10.1	11.8*	7.2	10.2*	6.0	8.8	8.5
15ft lb		32.7*	32.7*		22.0	25.6*	15.8	22.2*	13.4	19.7	27.10"
3.0m t		14.1	18.4*		9.5	13.3*	6.9	10.4	5.5	8.2	8.8
10ft lb		30.7	39.6*		20.7	28.7*	15.2	22.6	12.3	18.3	28.10"
1.5m t		13.3	16.5*		9.0	14.0	6.7	10.1	5.4	8.0	8.8
5ft lb		29.0	40.4*		19.7	30.5	14.6	22.0	12.0	17.9	28.11"
0m t		13.1	19.6*		8.8	13.7	6.5	9.9	5.5	8.2	8.6
0ft lb		28.6	42.6*		19.1	29.9	14.2	21.6	12.3	18.4	28.1"
-1.5m t	15.0*	15.0*	13.2	18.4*	8.7	13.7	6.5	9.9	6.0	9.0	8.0
-5ft lb	34.0*	34.0*	28.7	40.0*	19.0	29.7	14.2	21.5	13.3	20.1	26.4"
-3.0m t	20.1*	20.1*	13.4	16.2*	8.8	12.6*			7.0	10.1*	7.1
-10ft lb	43.8*	43.8*	29.1	35.0*	19.3	27.2*			15.8	22.3*	23.4"
-4.5m t			12.2*	12.2*					9.4*	9.4*	5.7
-15ft lb			25.9*	25.9*					20.6*	20.6*	18.7"
-6.0m t											
-20ft lb											

## Stick 2.90 m / 9'6"

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		9.0m 30ft		m ft in		
7.5m t											8.0	9.3*	7.2
25ft lb											18.3	20.5*	23.6"
6.0m t							7.5	9.3*	10.2*	10.2*	6.5	9.1*	8.2
20ft lb							16.3	20.4*	22.1*	22.1*	14.6	20.0*	26.7"
4.5m t			14.5*	14.5*					10.2	11.4*	5.7	8.4	8.7
15ft lb			31.2*	31.2*					22.1	24.7*	12.8	18.8	28.7"
3.0m t			14.3	17.7*			7.0	10.4	9.5	12.9*	5.3	7.8	9.0
10ft lb			31.1	38.1*			15.2	22.6	20.8	27.9*	11.8	17.5	29.7"
1.5m t			13.4	19.6*			6.7	10.1	9.0	14.1	5.1	7.7	9.0
5ft lb			29.2	42.4*			14.6	22.0	19.7	30.5*	11.5	17.1	29.8"
0m t			13.1	19.7*			6.5	9.9	8.7	13.7	5.2	7.9	8.8
0ft lb			28.5	42.8*			14.2	21.5	19.0	29.8	11.7	17.5	28.11"
-1.5m t	15.0*	15.0*	13.1	18.7*			6.4	9.8	8.6	13.6	5.7	8.5	8.3
-5ft lb	34.0*	34.0*	28.4	40.7*			14.0	21.4	18.8	29.6	12.6	19.0	27.2"
-3.0m t	21.6*	21.6*	13.3	16.7*					8.7	13.0*	6.6	9.9*	7.5
-10ft lb	47.0*	47.0*	28.8	36.3*					19.0	28.0*	14.8	21.9*	24.4"
-4.5m t			16.5*	16.5*					13.1*	13.1*	8.8	9.5*	6.1
-15ft lb			35.4*	35.4*					9.1	9.8*	20.1	20.9*	19.10"
-6.0m t													
-20ft lb													

Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

The load values are quoted in tons (t) / lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 800 mm / 31" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Without bucket cylinder, link and lever the lift capacities will increase by 495 kg / 1,090 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

**Stick 3.25 m / 10'8"**

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		9.0m 30ft		m ft in	
7.5m t							7.4	8.1*	7.6			
25ft lb							16,8	18,0*	24'10"			
6.0m t							6.1	8.0*	8.5			
20ft lb							13,7	17,6*	27'10"			
4.5m t		13.6* 13.6*	10.2	10.9*	7.3	9.5*	5.4	8.0	9.1			
15ft lb		29,2* 29,2*	22,3	23,6*	15,8	20,6*	12,0	17,7	29'8"			
3.0m t		14.4	16.9*	9.6	12.4*	6.9	10.2*	5.3	7.8	5.0	7.4	9.3
10ft lb		31,5	36,3*	20,9	26,9*	15,1	22,3*	11,5	17,1	11,1	16,5	30'7"
1.5m t		13.4	19.1*	9.0	13.7*	6.6	10.0	5.1	7.7	4.8	7.2	9.4
5ft lb		29,2	41,3*	19,7	29,7*	14,5	21,9	11,2	16,7	10,8	16,2	30'8"
0m t		13.0	19.7*	8.7	13.6	6.4	9.8	5.0	7.6	4.9	7.4	9.1
0ft lb	16,7*	16,7*	28,2	42,6*	18,9	29,7	14,0	21,3		11,0	16,5	30'
-1.5m t	14.5*	14.5*	12.9	19.0*	8.5	13.5	6.3	9.7		5.3	8.0	8.6
-5ft lb	32,9*	32,9*	28,1	41,2*	18,6	29,3	13,8	21,1		11,8	17,8	28'4"
-3.0m t	22.8*	22.8*	13.0	17.3*	8.6	13.2*	6.4	9.7		6.0	9.2	7.8
-10ft lb	50,2*	50,2*	28,4	37,4*	18,7	28,6*	13,9	21,3		13,6	20,6	25'7"
-4.5m t	18.3*	18.3*	13.4	14.1*	8.8	10.7*				7.8	9.4*	6.6
-15ft lb	39,3*	39,3*	29,2	30,3*	19,3	22,8*				17,8	20,7*	21'4"
-6.0m t												
-20ft lb												

**Stick 3.95 m / 13'**

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		9.0m 30ft		m ft in			
7.5m t							7.7*	7.7*		6.4*	6.4*	8.3		
25ft lb							16,9	17,0*		14,1*	14,1*	26'11"		
6.0m t							7.6	8.0*		5.6	6.7*	5.5	6.3*	9.1
20ft lb							16,6	17,5*		12,3	13,9*	29'8"		
4.5m t							9.8*	9.8*		5.4	8.0*	4.9	6.4*	9.6
15ft lb							21,2*	21,2*		11,8	17,5	10,9	14,2*	31'5"
3.0m t	14.0*	14.0*	14.9	15.1*	9.7	11.4*	7.0	9.5*	5.3	7.8	4.5	6.8	9.9	
10ft lb	35,7*	35,7*	32,5	32,6*	21,2	24,7*	15,2	20,7*	11,4	17,0	10,1	14,9*	32'4"	
1.5m t	7.0*	7.0*	13.6	17.9*	9.1	13.0*	6.6	10.0	5.1	7.6	4.4	6.6	9.9	
5ft lb	16,5*	16,5*	29,7	38,7*	19,8	28,0*	14,4	21,8	11,0	16,6	9,8	14,7	32'5"	
0m t	9.9*	9.9*	12.9	19.3*	8.6	13.6	6.3	9.7	4.9	7.4	4.4	6.7	9.7	
0ft lb	22,4*	22,4*	28,1	41,7*	18,8	29,6	13,8	21,2	10,7	16,2	9,9	15,0	31'8"	
-1.5m t	14.5*	14.5*	12.7	19.2*	8.4	13.3	6.2	9.5	4.8	7.4	4.7	7.1	9.2	
-5ft lb	32,7*	32,7*	27,5	41,7*	18,2	29,0	13,4	20,8	10,5	16,0	10,4	15,9	30'2"	
-3.0m t	20.4*	20.4*	12.7	18.1*	8.3	13.3	6.1	9.5			5.3	8.1	8.4	
-10ft lb	46,0*	46,0*	27,6	39,2*	18,1	28,9	13,4	20,7			11,8	18,1	27'7"	
-4.5m t	21.4*	21.4*	13.0	15.7*	8.5	11.9*					6.5	9.3*	7.3	
-15ft lb	46,1*	46,1*	28,2	33,8*	18,5	25,6*					14,7	20,4*	23'10"	
-6.0m t			11.2*	11.2*							9.0*	9.0*	5.5	
-20ft lb			23,5*	23,5*							19,6*	19,6*	17'8"	

Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

The load values are quoted in tons (t) / lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 800mm / 31" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Without bucket cylinder, link and lever the lift capacities will increase by 495kg / 1,090lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity. Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

# Lift capacities

with mono boom 6.45 m / 21'2", counterweight 9.4 t / 20,720 lb and track pads 800 mm / 31"

## Stick 2.60 m / 8'6"

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		9.0m 30ft		m ft in
7.5m t					10.0*	10.0*			9.2	9.9*	6.9
25ft lb					22.0*	22.0*			20.9	21.8*	22.5"
6.0m t					10.6*	10.6*	8.0	9.7*	7.4	9.6*	7.9
20ft lb					23.1*	23.1*	17.4	21.3*	16.5	21.2*	25.8"
4.5m t		15.2*	15.2*		10.8	11.8*	7.8	10.2*	6.4	9.4	8.5
15ft lb		32.7*	32.7*		23.5	25.6*	16.9	22.2*	14.4	20.9	27.10"
3.0m t		15.1	18.4*		10.2	13.3*	7.5	10.8*	6.0	8.7	8.8
10ft lb		33.0	39.6*		22.3	28.7*	16.3	23.5*	13.3	19.5	28.10"
1.5m t		14.4	16.5*		9.7	14.3*	7.2	10.8	5.8	8.6	8.8
5ft lb		31.3	40.4*		21.2	31.0*	15.8	23.4	13.0	19.1	28.11"
0ft lb		14.2	19.6*		9.5	14.7*	7.1	10.6	6.0	8.8	8.6
-1.5m t	15.0*	15.0*	14.2	18.4*	9.4	14.2*	7.0	10.5	6.5	9.6	8.0
-5ft lb	34.0*	34.0*	30.9	40.0*	20.5	30.7*	15.4	23.0	14.4	21.5	26.4"
-3.0m t	20.1*	20.1*	14.5	16.2*	9.5	12.6*			7.6	10.1*	7.1
-10ft lb	43.8*	43.8*	31.4	35.0*	20.8	27.2*			17.1	22.3*	23.4"
-4.5m t			12.2*	12.2*					9.4*	9.4*	5.7
-15ft lb			25.9*	25.9*					20.6*	20.6*	18.7"
-6.0m t											
-20ft lb											

## Stick 2.90 m / 9'6"

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		9.0m 30ft		m ft in		
7.5m t											8.6	9.3*	7.2
25ft lb											19.5	20.5*	23.6"
6.0m t							10.2*	10.2*	8.0	9.3*	7.0	9.1*	8.2
20ft lb							22.1*	22.1*	17.5	20.4*	15.7	20.0*	26.7"
4.5m t			14.5*	14.5*			10.9	11.4*	7.8	9.9*	6.2	8.9	8.7
15ft lb			31.2*	31.2*			23.7	24.7*	17.0	21.5*	13.8	20.0	28.7"
3.0m t			15.3	17.7*			10.3	12.9*	7.5	10.6*	5.7	8.4	9.0
10ft lb			33.4	38.1*			22.4	27.9*	16.3	23.0*	12.8	18.7	29.7"
1.5m t			14.4	19.6*			9.7	14.1*	7.2	10.8	5.6	8.2	9.0
5ft lb			31.4	42.4*			21.3	30.5*	15.7	23.4	12.4	18.3	29.8"
0ft lb			14.1	19.7*			9.4	14.6*	7.0	10.5	5.7	8.4	8.8
-1.5m t	15.0*	15.0*	14.1	18.7*			9.3	14.3*	7.0	10.5	6.1	9.1	8.3
-5ft lb	34.0*	34.0*	30.7	40.7*			20.4	30.9*	15.2	22.8	13.7	20.4	27.2"
-3.0m t	21.6*	21.6*	14.3	16.7*			9.4	13.0*			7.1	9.9*	7.5
-10ft lb	47.0*	47.0*	31.1	36.3*			20.6	28.0*			16.0	21.9*	24.4"
-4.5m t			16.5*	16.5*			13.1*	13.1*	9.8	9.8*	9.5	9.5*	6.1
-15ft lb			35.4*	35.4*			28.1*	28.1*			20.9*	20.9*	19.10"
-6.0m t													
-20ft lb													

Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

The load values are quoted in tons (t) / lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 800 mm / 31" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Without bucket cylinder, link and lever the lift capacities will increase by 495 kg / 1,090 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

**Stick 3.25 m / 10'8"**

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		9.0m 30ft		m ft in
	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	
7.5m t							8.2	8.8*			7.9 8.1* 7.6
25ft lb							18.0	18.0*			24'10"
6.0m t							8.1	8.9*			6.5 8.0* 8.5
20ft lb							17.5	19.4*			27'10"
4.5m t			13.6*	13.6*	10.9*	10.9*	7.8	9.5*	5.9	8.5	5.8 8.1* 9.1
15ft lb			29.2*	29.2*	23.6*	23.6*	17.0	20.6*			13.0 17.8* 29.8"
3.0m t			15.5	16.9*	10.3	12.4*	7.5	10.2*			5.4 7.9 9.3
10ft lb			33.8	36.3*	22.4	26.9*	16.3	22.3*	12.4	18.2	12.0 17.7 30.7"
1.5m t			14.5	19.1*	9.7	13.7*	7.2	10.7	5.6	8.2	5.3 7.8 9.4
5ft lb			31.5	41.3*	21.2	29.7*	15.6	23.3	12.1	17.9	11.7 17.3 30.8"
0m t			14.0	19.7*	9.4	14.4*	7.0	10.5	5.5	8.1	5.3 7.9 9.1
0ft lb	16.7*	16.7*	30.5	42.6*	20.4	31.2*	15.2	22.8			11.9 17.7 30'
-1.5m t	14.5*	14.5*	14.0	19.0*	9.2	14.3*	6.9	10.4			5.7 8.5 8.6
-5ft lb	32.9*	32.9*	30.3	41.2*	20.1	30.9*	15.0	22.6			12.8 19.0 28.4"
-3.0m t	22.8*	22.8*	14.1	17.3*	9.3	13.2*	6.9	10.2*			6.6 9.6* 7.8
-10ft lb	50.2*	50.2*	30.7	37.4*	20.2	28.6*	15.1	21.9*			14.7 21.1* 25.7"
-4.5m t	18.3*	18.3*	14.1*	14.1*	9.5	10.7*					8.5 9.4* 6.6
-15ft lb	39.3*	39.3*	30.3*	30.3*	20.9	22.8*					19.2 20.7* 21.4"
-6.0m t											
-20ft lb											

**Stick 3.95 m / 13'**

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		9.0m 30ft		m ft in
	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	Height	Can be slewed through 360°	
7.5m t											7.7* 7.7*
25ft lb											17.0* 17.0*
6.0m t											8.0* 8.0*
20ft lb											17.5* 17.5*
4.5m t											9.8* 9.8*
15ft lb											21.2* 21.2*
3.0m t	14.0*	14.0*	15.1*	15.1*	10.4	11.4*	7.5	9.5*			8.0* 8.0*
10ft lb	35.7*	35.7*	32.6*	32.6*	22.7	24.7*	16.3	20.7*	12.4	18.2	12.8 17.5* 11.8 14.2* 11.8 14.2* 26'11"
1.5m t	7.0*	7.0*	14.7	17.9*	9.8	13.0*	7.1	10.4*	5.5	8.1	5.3 6.4* 5.3 6.4* 9.6
5ft lb	16.5*	16.5*	32.0	38.7*	21.3	28.0*	15.6	22.6*	11.9	17.7	10.6 15.8 10.6 15.8 32'5"
0m t	9.9*	9.9*	14.0	19.3*	9.3	13.9*	6.9	10.4	5.3	8.0	4.8 7.2 4.8 7.2 9.7
0ft lb	22.4*	22.4*	30.4	41.7*	20.3	30.2*	15.0	22.6	11.6	17.4	10.7 16.0 10.7 16.0 31'8"
-1.5m t	14.5*	14.5*	13.7	19.2*	9.1	14.2*	6.7	10.2	5.2	7.9	5.1 7.6 5.1 7.6 9.2
-5ft lb	32.7*	32.7*	29.8	41.7*	19.8	30.8*	14.6	22.2	11.5	17.2	11.4 17.1 11.4 17.1 30'2"
-3.0m t	20.4*	20.4*	13.7	18.1*	9.0	13.6*	6.7	10.2			5.7 8.6 5.7 8.6 8.4
-10ft lb	46.0*	46.0*	29.9	39.2*	19.7	29.5*	14.6	22.2			12.8 19.3 12.8 19.3 27'7"
-4.5m t	21.4*	21.4*	14.0	15.7*	9.2	11.9*					7.1 9.3* 7.1 9.3* 7.3
-15ft lb	46.1*	46.1*	30.5	33.8*	20.1	25.6*					16.0 20.4* 16.0 20.4* 23'10"
-6.0m t			11.2*	11.2*							9.0* 9.0*
-20ft lb			23.5*	23.5*							19.6* 19.6*

Height 
 Can be slewed through 360° 
 In longitudinal position of undercarriage 
 Max. reach 
 \* Limited by hydr. capacity

The load values are quoted in tons (t) / lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 800 mm / 31" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Without bucket cylinder, link and lever the lift capacities will increase by 495 kg / 1,090 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

# Lift capacities

with mono boom SME 6.15 m / 20'2", counterweight 8.4 t / 18,520 lb and track pads 800 mm / 31"

## Stick SME 2.15 m / 7'1"

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		9.0m 30ft		m ft in	
7.5m t											10.7 11.3*	6.0
25ft lb											24.5 25.0*	19'4"
6.0m t					10.4 11.4*						8.0 10.8*	7.1
20ft lb					22.7 24.9*						18.1 23.8*	23'
4.5m t			15.3 16.0*		10.0 12.4*	7.1 10.6					6.8 10.1 7.7	
15ft lb			33.3 34.3*		21.7 26.9*	15.5 23.0					15.2 22.6	25'4"
3.0m t			13.9 18.9*		9.4 13.7*	6.9 10.3					6.2 9.3 8.0	
10ft lb			30.5 40.6*		20.5 29.6*	15.0 22.5					13.9 20.7	26'5"
LC												
1.5m t			13.3 19.1*		9.0 14.0	6.7 10.1					6.0 9.1 8.1	
5ft lb			29.0 43.2*		19.6 30.5	14.6 21.9					13.5 20.2	26'6"
0m t			13.2 19.3*		8.8 13.8	6.6 9.9					6.2 9.4 7.8	
0ft lb			28.7 42.0*		19.1 30.0	14.3 21.7					13.9 21.0	25'7"
-1.5m t	19.0* 19.0*		13.3 17.7*		8.8 13.7*						6.9 10.5 7.2	
-5ft lb	43.4* 43.4*		28.9 38.5*		19.2 29.7*						15.4 23.5	23'8"
-3.0m t	17.6* 17.6*		13.6 14.8*		9.0 11.3*						8.6 10.7*	6.2
-10ft lb	38.4* 38.4*		29.6 31.9*		19.7 24.0*						19.4 23.4*	20'4"
-4.5m t												
-15ft lb												
7.5m t											11.3* 11.3*	6.0
25ft lb											25.0* 25.0*	19'4"
6.0m t					11.1 11.4*						8.5 10.8*	7.1
20ft lb					24.2 24.9*						19.3 23.8*	23'
4.5m t			16.0* 16.0*		10.7 12.4*	7.6 10.8*					7.3 10.6*	7.7
15ft lb			34.3* 34.3*		23.2 26.9*	16.6 23.5*					16.3 23.4*	25'4"
3.0m t			15.1 18.9*		10.1 13.7*	7.4 11.2*					6.6 10.3 8.0	
10ft lb			32.9 40.6*		22.0 29.6*	16.1 24.4*					14.8 23.0	26'5"
LC												
1.5m t			14.4 19.1*		9.7 14.5*	7.1 11.2					6.5 10.1 8.1	
5ft lb			31.4 43.2*		21.1 31.5*	15.6 24.5					14.4 22.5	26'6"
0m t			14.3 19.3*		9.4 14.6*	7.0 11.1					6.7 10.5 7.8	
0ft lb			31.1 42.0*		20.6 31.7*	15.4 24.2					14.9 23.4	25'7"
-1.5m t	19.0* 19.0*		14.4 17.7*		9.4 13.7*						7.4 11.0*	7.2
-5ft lb	43.4* 43.4*		31.3 38.5*		20.6 29.7*						16.6 24.2*	23'8"
-3.0m t	17.6* 17.6*		14.7 14.8*		9.7 11.3*						9.2 10.7*	6.2
-10ft lb	38.4* 38.4*		31.9* 31.9*		21.2 24.0*						20.8 23.4*	20'4"
-4.5m t												
-15ft lb												

## Stick SME 2.60 m / 8'6"

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		9.0m 30ft		m ft in	
7.5m t											10.3* 10.3*	6.5
25ft lb											22.8* 22.8*	21'1"
6.0m t					10.6 10.7*		7.3 10.0*				10.6 10.7*	7.5
20ft lb					22.9 23.3*		16.4 22.0*				22.9 23.3*	24'7"
4.5m t			14.9* 14.9*		10.1 11.8*	7.2 10.3*					10.1 11.8*	8.2
15ft lb			49.8* 49.8*		32.1* 32.1*	15.6 22.4*					32.1* 32.1*	26'8"
3.0m t			14.2 18.0*		9.5 13.2*	6.9 10.3					9.5 13.2*	8.5
10ft lb			31.1 38.7*		20.7 28.5*	15.0 22.5					31.1 38.7*	27'8"
LC												
1.5m t			13.4 19.7*		9.0 14.0	6.6 10.0					9.0 14.0	8.5
5ft lb			29.2 42.6*		19.6 30.6	14.5 21.9					19.6 30.6	27'10"
0m t			13.1 19.7*		8.7 13.7	6.5 9.9					8.7 13.7	8.2
0ft lb			28.5 42.7*		19.0 29.9	14.1 21.5					28.5 42.7*	27'
-1.5m t	18.0* 18.0*		13.1 18.4*		8.7 13.7	6.5 9.8					13.1 19.7*	7.7
-5ft lb	40.8* 40.8*		28.6 39.9*		18.9 29.7	14.1 21.5					28.6 39.9*	25'2"
-3.0m t	20.2* 20.2*		13.4 15.9*		8.8 12.2*						13.4 15.9*	6.8
-10ft lb	43.8* 43.8*		29.1 34.4*		19.3 26.1*						29.1 34.4*	22'
-4.5m t			11.1* 11.1*								11.1* 11.1*	5.2
-15ft lb			23.4* 23.4*								23.4* 23.4*	16'11"
7.5m t											10.3* 10.3*	6.5
25ft lb											22.8* 22.8*	21'1"
6.0m t					10.7* 10.7*		7.8 10.0*				10.7* 10.7*	7.5
20ft lb					23.3* 23.3*		17.5 22.0*				23.3* 23.3*	24'7"
4.5m t			14.9* 14.9*		10.8 11.8*	7.6 10.3*					10.8 11.8*	8.2
15ft lb			49.8* 49.8*		32.1* 32.1*	16.6 22.4*					32.1* 32.1*	26'8"
3.0m t			15.4 18.0*		10.2 13.2*	7.4 10.9*					10.2 13.2*	8.5
10ft lb			33.6 38.7*		22.2 28.5*	16.1 23.6*					33.6 38.7*	27'8"
LC												
1.5m t			14.5 19.7*		9.7 14.2*	7.1 11.2					9.7 14.2*	8.5
5ft lb			31.6 42.6*		21.1 30.8*	15.5 24.4					31.6 42.6*	27'10"
0m t			14.2 19.7*		9.4 14.6*	6.9 11.0					9.4 14.6*	8.2
0ft lb			30.9 42.7*		20.5 31.6*	15.2 24.0					30.9 42.7*	27'
-1.5m t	18.0* 18.0*		14.2 18.4*		9.3 14.0*	6.9 10.8*					14.2 18.4*	7.7
-5ft lb	40.8* 40.8*		31.0 39.9*		20.4 30.4*	15.2 23.3*					31.0 39.9*	25'2"
-3.0m t	20.2* 20.2*		14.5 15.9*		9.5 12.2*						14.5 15.9*	6.8
-10ft lb	43.8* 43.8*		31.5 34.4*		20.7 26.1*						31.5 34.4*	22'
-4.5m t			11.1* 11.1*								11.1* 11.1*	5.2
-15ft lb			23.4* 23.4*								23.4* 23.4*	16'11"

Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

The load values are quoted in tons (t) / lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 800mm / 31" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated by \*). Without bucket cylinder, link and lever the lift capacities will increase by 590 kg / 1,300 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.



# Lift capacities

with mono boom SME 6.15 m / 20'2", counterweight 9.4 t / 20,720 lb and track pads 800 mm / 31"

## Stick SME 2.15 m / 7'1"

Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		9.0m 30ft		m ft in	
7.5m t											11.3* 11.3*	6.0
25ft lb											25.0* 25.0*	19'4"
6.0m t					11.2 11.4*						8.6 10.8*	7.1
20ft lb					24.3 24.9*						19.3 23.8*	23'
4.5m t			16.0* 16.0*		10.7 12.4*		7.7 10.8*				7.3 10.6*	7.7
15ft lb			34.3* 34.3*		23.3 26.9*		16.7 23.5*				16.4 23.4*	25'4"
3.0m t			15.0 18.9*		10.1 13.7*		7.4 11.0				6.7 9.9	8.0
10ft lb			32.7 40.6*		22.1 29.6*		16.2 23.9				15.0 22.0	26'5"
1.5m t			14.4 19.1*		9.7 14.5*		7.2 10.7				6.5 9.7	8.1
5ft lb			31.3 43.2*		21.2 31.5*		15.7 23.4				14.5 21.5	26'6"
0m t			14.2 19.3*		9.5 14.6*		7.1 10.6				6.7 10.0	7.8
0ft lb			30.9 42.0*		20.7 31.7*		15.5 23.2				15.0 22.4	25'7"
-1.5m t	19.0* 19.0*	14.3 17.7*			9.5 13.7*						7.5 11.0*	7.2
-5ft lb	43.4* 43.4*	31.2 38.5*			20.7 29.7*						16.7 24.2*	23'8"
-3.0m t	17.6* 17.6*	14.6 14.8*			9.7 11.3*						9.3 10.7*	6.2
-10ft lb	38.4* 38.4*	31.9 31.9*			21.3 24.0*						20.9 23.4*	20'4"
-4.5m t												
-15ft lb												

## Stick SME 2.60 m / 8'6"

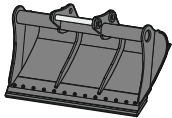
Under-carriage	3.0m 10ft		4.5m 15ft		6.0m 20ft		7.5m 25ft		9.0m 30ft		m ft in	
7.5m t											10.3* 10.3*	6.5
25ft lb											22.8* 22.8*	21'1"
6.0m t							7.9 10.0*				10.7* 10.7*	7.5
20ft lb											23.3* 23.3*	24'7"
4.5m t						14.9* 14.9*					10.8 11.8*	8.2
15ft lb						32.1* 32.1*					23.5 25.6*	26'8"
3.0m t						15.3 18.0*					10.2 13.2*	8.5
10ft lb						33.4 38.7*					22.2 28.5*	27'8"
1.5m t						14.5 19.7*					9.7 14.2*	8.5
5ft lb						31.5 42.6*					21.2 30.8*	27'10"
0m t						14.2 19.7*					15.6 23.3	8.2
0ft lb						30.8 42.7*					15.3 23.0	27'
-1.5m t	18.0* 18.0*	14.2 18.4*			9.4 14.0*						15.3 23.0	7.7
-5ft lb	40.8* 40.8*	30.9 39.9*			20.5 30.4*						15.3 23.0	25'2"
-3.0m t	20.2* 20.2*	14.4 15.9*			9.5 12.2*						8.2 10.3*	6.8
-10ft lb	43.8* 43.8*	31.4 34.4*			20.8 26.1*						18.4 22.8*	22'
-4.5m t											11.1* 11.1*	5.2
-15ft lb											20.3* 20.3*	16'11"

Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

The load values are quoted in tons (t) / lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 800mm / 31" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated by \*). Without bucket cylinder, link and lever the lift capacities will increase by 590 kg / 1,300 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

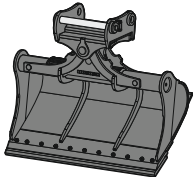
# Attachments



## Rigid ditch cleaning bucket

GRL 06, for mounting to quick coupler SWA 66

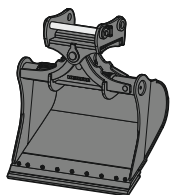
Cutting width	mm / ft in	2,000 / 6'7"	2,200 / 7'3"	2,400 / 7'10"	2,800 / 9'2"	2,800 / 9'2"
Capacity	m <sup>3</sup> / yd <sup>3</sup>	1.45 / 1.90	1.65 / 2.16	1.50 / 1.96	2.60 / 3.40	2.90 / 3.79
Weight	kg / lb	994 / 2,190	1,048 / 2,310	930 / 2,050	1,522 / 3,360	1,561 / 3,440



## Tiltable ditch cleaning bucket

GRL 100, 2 x 50° tiltable, for mounting to quick coupler SWA 66

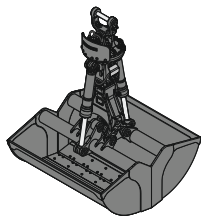
Cutting width	mm / ft in	2,000 / 6'7"	2,000 / 6'7"	2,000 / 6'7"	2,200 / 7'3"	2,400 / 7'10"	2,400 / 7'10"
Capacity	m <sup>3</sup> / yd <sup>3</sup>	0.70 / 0.92	1.20 / 1.57	1.45 / 1.90	1.65 / 2.16	0.85 / 1.11	1.45 / 1.90
Weight	kg / lb	1,375 / 3,030	1,520 / 3,350	1,595 / 3,520	1,660 / 3,660	1,475 / 3,250	1,610 / 3,550



## Tilt bucket

SL 100, 2 x 50° tiltable, for mounting to quick coupler SWA 66

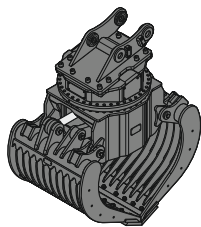
Cutting width	mm / ft in	1,600 / 5'3"	1,600 / 5'3"	1,700 / 5'7"	1,800 / 5'11"	1,800 / 5'11"	1,800 / 5'11"	1,800 / 5'11"
Capacity	m <sup>3</sup> / yd <sup>3</sup>	1.45 / 1.90	1.75 / 2.29	1.85 / 2.42	1.60 / 2.09	2.00 / 2.62	1.60 / 2.09	2.00 / 2.62
Weight	kg / lb	1,520 / 3,350	1,635 / 3,610	1,695 / 3,740	1,620 / 3,570	1,690 / 3,730	1,749 / 3,860	1,757 / 3,870
HD version						X		X



## Clamshell grab

GMZ 80, clamshell buckets, for mounting to quick coupler SWA 66

Cutting width	mm / ft in	1,200 / 3'11"	1,400 / 4'7"	1,650 / 5'5"	2,000 / 6'7"
Capacity	m <sup>3</sup> / yd <sup>3</sup>	1.40 / 1.83	1.70 / 2.22	2.00 / 2.62	2.50 / 3.27
Weight	kg / lb	1,452 / 3,200	1,558 / 3,440	1,693 / 3,730	1,877 / 4,140



## Sorting grab

ribbed

perforated

SG 40, for mounting to quick coupler SWA 66

Cutting width	mm / ft in	1,100 / 3'7"	1,300 / 4'3"	1,100 / 3'7"	1,300 / 4'3"
Capacity	m <sup>3</sup> / yd <sup>3</sup>	1.10 / 1.44	1.40 / 1.83	1.30 / 1.70	1.60 / 2.09
Weight	kg / lb	2,320 / 5,120	2,895 / 6,380	2,230 / 4,920	2,800 / 6,170

# Serial equipment



## Undercarriage

Lashing eyes  
Sprocket with dirt ejector  
Track and carrier rollers, sealed and lifetime-lubricated



## Uppercarriage

Access platforms without protruding parts  
Anti-skid surfaces  
Automatic swing brake lock  
DEF tank filling indicator  
DEF tank lockable access hatch  
Engine hood with gas spring opening  
Filters accessible from ground level  
Handrails  
Hydraulic oil level, visible from ground level  
Lockable service doors  
Lockable storage and accessories compartment  
Lockable storage box  
Main switch, accessible from ground level  
Main switch, electric, with timer  
Main switch, manual, lockable  
Positioning swing brake manual  
Protection grid on radiator fan  
Safe uppercarriage side access platform  
Sound insulation  
Swing-out radiators  
Windshield washer fluid tank, accessible from ground level



## Hydraulic system

Dedicated swing circuit  
Filter with integrated fine filters  
Hydraulic pressure measuring ports  
Liebherr Positive Control system with 2 independent circuits  
Magnetic rod  
Pressure accumulator for controlled lowering of equipment with engine turned off



## Engine

Air filter with automatic dust ejector  
Automatic engine idling / speed increase, controlled via joystick sensors  
Common-Rail injection system  
Engine oil dipstick  
Exhaust gas after-treatment system – SCR  
Fixed geometry turbocharger  
Fuel fine filter  
Fuel pre-filter and water separator  
Fuel priming pump  
Intercooler  
Power Pack US EPA Tier 4 Final



## Cab

9" multifunction color touchscreen  
Air conditioning, automatic, tri-zone, controlled via display  
Armrests adjustable in length, height and inclination  
Bottle holder  
Cab air filters housing, accessible from ground level  
Cab door sliding windows  
Cigarette lighter  
Coat hook  
DEF consumption on touchscreen  
DEF level on touchscreen  
Electric socket in cabin (12V)  
Electric socket in cabin (24V)  
Emergency hammer  
Engine coolant level, visible from the cab  
Engine oil level on touchscreen  
Fuel consumption on touchscreen  
Fuel level on touchscreen  
Hydraulic oil level on touchscreen  
Interior lighting  
Laminated right hand side window  
LiDAT Plus (Liebherr data transfer system)  
Mechanical hour meter, visible from ground level  
Mobile phone storage net  
Movement priority between swing and boom, adjustable via touchscreen  
Movement priority for stick-in, adjustable via touchscreen  
Operating modes  
Power modes  
Rain hood over front window opening  
Rearview mirror  
Rear view monitoring camera  
Rear window emergency exit  
Right hand side view monitoring camera  
Roll-down sun blinds for windscreen and roof window  
ROPS safety cab structure (ISO 12117-2)  
Rubber floor mat, fixed on floor and removable  
Shortcut buttons on joystick configurable  
Stepless adjustable engine speed  
Storage box  
Storage nets  
Storage spaces  
Swing braking torque adjustable via touchscreen  
Swing drive gearbox oil level, visible from the cab  
Tilttable console left  
Tinted windows  
Visco-elastic damping  
Windscreen wiper and washer



## Equipment

Anti-drift system boom cylinders  
Anti-drift system stick cylinder  
Boom cylinders regeneration  
Pipe fracture safety valve for stick cylinder  
Pipe fracture safety valves for boom cylinders  
Pivot points made of cast steel  
SAE split flanges on high pressure lines  
Stick cylinder regeneration

# Equipment standard / option

## Undercarriage

Chain guide 1 piece	●
Chain guide 2 pieces	+
Chain guide 3 pieces	+
Chain guide 4 pieces	+
Chain guide full length	+
Cover and base plate for undercarriage center section	●
Reinforced cover and base plate for undercarriage center section	+
Special painting	+
Steps	●
Steps wide	+
Track chains cleaner	+
Track pads triple grouser 600 mm / 24" / 700 mm / 28" / 900 mm / 35"	+
Track pads triple grouser 800 mm / 31"	●
Track pads triple grouser reinforced 600 mm / 24" / 700 mm / 28" / 800 mm / 31"	+
Tracks, sealed and greased	●
Tracks, sealed and greased, reinforced	+
Undercarriage LC	+
Undercarriage WLC	+
Undercarriage storage compartment	+

## Uppercarriage

Batteries high capacity	+
Batteries standard capacity	●
Boxing ring	+
Catwalk tiltable front left	+
Centralized lubrication system (automatic)	●
Centralized lubrication system (manual)	+
Counterweight heavy 9.4 t / 20,720 lb	+
Counterweight standard 8.4 t / 18,520 lb	●
Electric socket on uppercarriage (24 V)	+
Extended tool set including tool box	+
External starting aid (24 V)	+
Front right rearview mirror	+D
Fuel anti-theft protection	+
Headlight on uppercarriage, front left, LED+, 1 piece, protection included	+D
Headlight on uppercarriage, front right, LED, 1 piece, protection included	●D
Headlight on uppercarriage, front right, LED+, 1 piece, protection included	+D
Headlight on uppercarriage, lateral left, LED+, 1 piece	+D
Headlight on uppercarriage, lateral right, LED+, 1 piece	+D
Headlights on uppercarriage, rear, LED+, 2 pieces	+D
Lighting for tank area	+D
Lighting for uppercarriage access	+D
Lockable fuel tank cap	●
Lockable fuel tank cap with padlock	+
Reflective warning stickers	+
Rotating beacons on uppercarriage, rear, LED, 2 pieces	+
Skyview 360°	+
Special painting	+
Tank refilling pump fuel	+
Tool set including storage case	●
Uppercarriage bottom and side protection	+
Uppercarriage bottom closure sheets	●

## Hydraulic system

Bypass filter for hydraulic oil	+
Filter for hydraulic hammer return flow	+
High pressure circuit bypass	+
High pressure circuit flow summation	+
High pressure circuit switchable on pedals or mini-joystick	+
High pressure circuit with Tool Control (20 attachment adjustments on display)	+
Leak oil line for attachment	+
Liebherr hydraulic oil	●
Liebherr hydraulic oil, adapted for extreme climate conditions	+
Liebherr hydraulic oil, biodegradable	+
Medium pressure circuit	+

## Engine

Air pre-filter with cyclonical dust trap	+
Automatic engine shutdown after idling	+
Engine shut-down with overrun	+
Lighting for engine compartment	+D
Pre-heating system for fuel	+
Radiator fine mesh protection grid	+
Reversible fan drive	+



## Cab

3" seat belt with retractor, orange color	●
4-points seat belt	+
Acoustic travel alarm deactivatable	+
Auxiliary heater programmable	+
Bottom windscreen wiper	+
Coming / Leaving Home	+ <sup>1)</sup>
Cool box (12V)	+
Dark tinted windows	+
Electrically adjustable and heated outside rear-view mirrors	+ <sup>1)</sup>
Electronic immobilizer	+
Emergency stop in cab	+
FGPS front guard	+
FGPS front guard tiltable	+
Fire extinguisher	+
First-aid box	+
Footrest	+
FOPS top guard	+
FOPS top guard flat	+
Handrests elevated for joysticks	+
Headlights on cab, front, LED, 2 pieces	● <sup>1)</sup>
Headlights on cab, front, LED+, 2 pieces	+ <sup>1)</sup>
Headlights on cab roof, front, LED+, 2 pieces	+ <sup>1)</sup>
Impact resistant one-piece windscreen	+
Impact resistant roof window	+
Independent travel	+ <sup>1)</sup>
Integral protection guard	+
Laminated roof window	●
Lightbar on cabin	+
Lighting for cabin access	+ <sup>1)</sup>
Luminosity control (LED+ headlights)	+
Mini-joysticks proportional	●
Movement restriction for boom	+
Movement restriction for stick	+
Operator seat Comfort	●
Operator seat Premium	+
Overload warning system	+
Personalized operator profile	+
Preparation for tiltrotator	+
Radio Comfort	+
Radio pre-installation	●
Remote cab lock	+ <sup>1)</sup>
Retractable laminated two-piece windscreen	●
Roof sun shield	+
Roof window wiper	+
Rotating beacon on cabin, LED, 1 piece	+
Seat belt reminder	+
Smart Key	+ <sup>1)</sup>
Special painting	+
Straight travel via mini-joystick	+ <sup>1)</sup>
Sun visor	+
Switch between high pressure and bucket cylinder controls	+
Travel speed management	+ <sup>1)</sup>
Windscreen bottom protection grid	+



## Equipment

Boom bottom protection	+
Boom cylinders rod protection	+
Bucket cylinder rod protection	+
Centralized lubrication extended for connecting link	+
Floating boom	+
Grapple hydraulic lines (bucket cylinder inactive)	+
Headlight guard on boom, right	+
Headlight guards on boom, right and left	+
Headlight on boom, left, LED+, 1 piece	+ <sup>1)</sup>
Headlight on boom, right, LED, 1 piece	● <sup>1)</sup>
Headlight on boom, right, LED+, 1 piece	+ <sup>1)</sup>
Headlight on stick, bottom, LED+, 1 piece	+ <sup>1)</sup>
Hose protection for Solidlink	+
Liebherr bucket range	+
Liebherr tooth system	+
Load holding valve for bucket cylinder	+
Lubrication hoses protection on stick	+
Mono boom 6.45 m / 21'2"	+
Mono boom SME 6.15 m / 20'2"	+
Quick coupler SWA 66 hydraulic	+
Quick coupler SWA 66 mechanical	+
Solidlink electric signal plug	+
Solidlink for quick coupler SWA 66 hydraulic	+
Special painting	+
Stick 2.60 m / 8'6"	+
Stick 2.90 m / 9'6"	+
Stick 3.25 m / 10'8"	+
Stick 3.95 m / 13'	+
Stick bottom protection	+
Stick SME 2.15 m / 7'1"	+
Stick SME 2.60 m / 8'6"	+
Tool Management	+



## Assistance system

Machine guidance system Leica 2D passive - "3D ready"	+
Machine guidance system Leica 2D semi-automatic - "3D ready"	+
Machine guidance system Leica 3D passive	+
Machine guidance system Leica 3D semi-automatic	+
Preparation for machine guidance system	+
Preparation for weighing system	+

● = Standard, + = Option

<sup>1)</sup> Equipment not individually available, but only as predefined packages

Non-exhaustive list, please contact us for further information.

Options and / or special equipment, supplied by vendors other than Liebherr, are only to be installed with the knowledge and approval of Liebherr in order to retain warranty.





# The Liebherr Group



## Global and independent: more than 70 years of success

Liebherr was founded in 1949. With the development of the world's first mobile tower crane, Hans Liebherr laid the foundations of a successful family business which today comprises more than 140 companies on all continent and employs nearly 51,000 people. The parent company of the Group is Liebherr-International AG in Bulle (Switzerland), whose associates are exclusively members of the Liebherr family.

## Technology leadership and pioneering spirit

Liebherr regards itself as a pioneer. This spirit has enabled the company to make a decisive contribution to the technological history of many industries. Today, employees around the world still share the courage of the company founder to take new paths. They are all united by a passion for technology and fascinating products and the determination to perform outstanding work for their customers.

## Widely diversified product portfolio

Not only is Liebherr one of the biggest construction equipment manufacturers in the world, it also provides high-quality, user-oriented products and services in a wide range of other areas. The product portfolio includes the segments earthmoving, material handling technology, deep foundation machines, mining, mobile and crawler cranes, tower cranes, concrete technology, maritime cranes, aerospace and transportation systems, gear technology and automation systems, refrigeration and freezing, components and hotels.

## Customized solutions and maximum customer benefit

Liebherr solutions are characterized by maximum precision, outstanding implementation and exceptional longevity. Its mastery of key technologies enables the company to offer its customers customized solutions. For Liebherr, customer focus does not end with the product; it also encompasses a wide range of services that make a real difference.

[www.liebherr.us](http://www.liebherr.us)

## WARNING

Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with exhaust system.
- Do not idle the engine except as necessary.

For more information go to [www.P65warnings.ca.gov/diesel](http://www.P65warnings.ca.gov/diesel).

## WARNING

This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information go to [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov).

## Liebherr USA, Co.

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