

Product Information Crawler Excavator

R 920 Compact

Litronic®



Generation

6.1

Engine

148 HP / 110 kW

Tier 4 Final

Operating Weight

21,300 kg / 46,960 lb

Bucket Capacity

0.30 – 0.95 m³ / 0.39 – 1.24 yd³

LIEBHERR

Experience the Progress

R 920 Compact

Maintenance

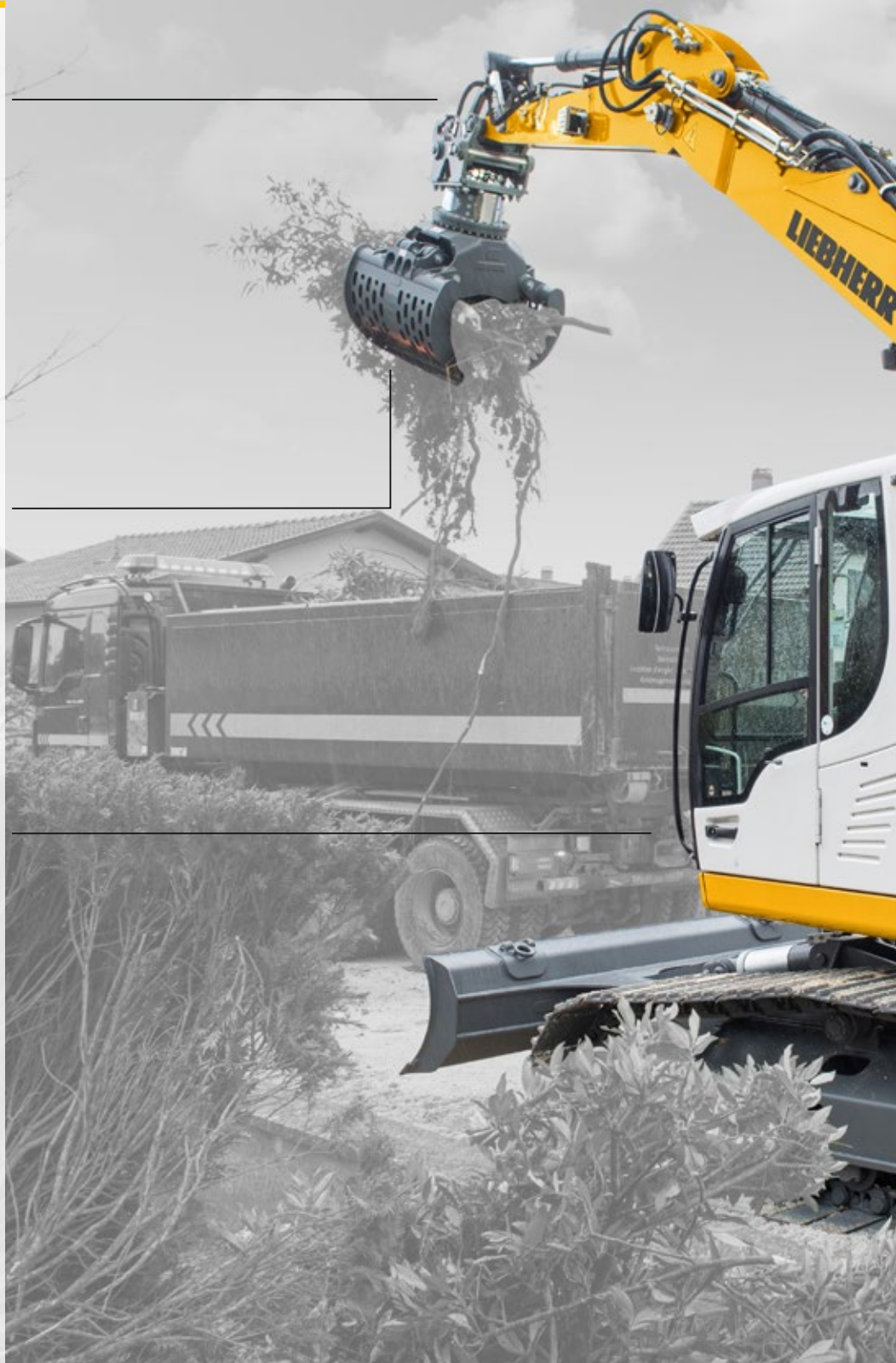
- Servicing concept, with service points accessible from ground level
- Engine oil level and filling nozzle accessible from ground level
- Standard shut-off valve on hydraulic tank outlet

Equipment

- Longer lifespan of components and higher productivity thanks to automatic centralised lubrication system
- Safety check valves for hoist and stick cylinders

Safety

- Panoramic visibility with no obstructions and camera on the rear and the right side equipment for enhanced safety
- Lifiable console for easy and safe access to cab
- ROPS-certified cab structure: rollover protection
- Emergency exit via the rear cab window
- Right window and windshield in laminated and tinted glass





Comfort

- Spacious, air-conditioned work space
- Airsprung seat with vertical and horizontal suspension
- Easy-to-use high resolution 7" colour touchscreen
- 3" orange seat belt

Compactness

- Short tail swing radius of 6' 1" for increased safety and flexibility on work sites
- The perfect machine for narrow sites – ideal for urban applications and on motorways

Engine

- US EPA Tier 4 Final engine with SCR system and diesel oxidation catalyst
- Automatic idle-stop

Undercarriage

- Robust, reliable X-frame undercarriage, easy to secure thanks to its integrated eyelets
- Easy maintenance
- Several combinations of undercarriage and blades / support blades available
- Optional rubber track pads for urban application
- Extra storage as an option
- Maintenance-free travel gear and track rollers with lifetime lubrication

Technical Data



Engine

Rating	
per SAE J1349	148 HP (110 kW) at 1,800 rpm
per ISO 9249	150 HP (110 kW) at 1,800 rpm
Torque	682 Nm at 1,400 rpm / 503 lbf ft at 1,400 rpm
Model	Liebherr D924 A7-04
Type	4 cylinder in-line
Bore	104 mm / 4.1 in
Stroke	132 mm / 5.2 in
Displacement	4.5 l / 275 in³
Engine operation	4-stroke diesel Common-Rail Turbo-charged and after-cooler
Exhaust gas treatment	Tier 4 Final SCR Filter Passive regeneration by thermo management
Cooling system	Water-cooled and integrated motor oil cooler
Air cleaner	Dry-type air cleaner with pre-cleaner, primary and safety elements
Fuel tank	250 l / 66 gal
Urea tank	46 l / 12 gal
Electrical system	
Voltage	24 V
Batteries	2 x 135 Ah/12 V
Alternator	Three-phase current 28 V/140 A
Engine idling	Sensor controlled



Hydraulic Controls

Power distribution	Via control valves with integrated safety valves, simultaneous and independent actuation of undercarriage, swing drive and equipment
Servo circuit	
Equipment and swing	Proportional via joystick levers
Travel	– Proportional control via foot pedals or removable levers – Speed pre-selection
Additional functions	Proportional regulation via foot pedals or mini-joystick



Hydraulic System

Hydraulic pump	Liebherr, variable displacement, swashplate pump
Max. flow	300 l/min. / 2 x 79 gpm
Max. pressure	350 bar / 5,076 psi
Hydraulic pump regulation and control	Liebherr-Synchron-Comfort-system (LSC) with electronic engine speed sensing regulation, pressure and flow compensation, torque controlled swing drive priority
Hydraulic tank	130 l / 34 gal
Hydraulic system	max. 300 l / max. 79 gal
Hydraulic oil filter	1 main return filter with integrated partial micro filtration (5 µm / 2,500 mesh)
Cooling system	Compact cooling system comprising cooling unit for water, hydraulic oil and charge air with stepless, thermostatically controlled fan
MODE selection	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
Engine speed and performance setting	Stepless adjustment of engine output and hydraulic power via engine speed



Swing Drive

Drive	Liebherr swashplate motor with integrated brake valve and torque control
Transmission	Liebherr compact planetary reduction gears
Swing ring	Liebherr, sealed race ball bearing swing ring, internal teeth
Swing speed	0 – 10.0 rpm stepless
Swing torque	51 kNm / 37,616 lbf ft
Holding brake	Wet multi-disc (spring applied, pressure released)



Operator's Cab

Cab	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, 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
Operator's seat	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 width, height and inclination), seat heating as standard
Arm consoles	Oscillating consoles with seat, tilttable console left
Operation and displays	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
Air-conditioning	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
Noise emission	
ISO 6396	L_{pA} (inside cab) = 68 dB(A)
2000/14/EC	L_{WA} (surround noise) = 102 dB(A)



Undercarriage

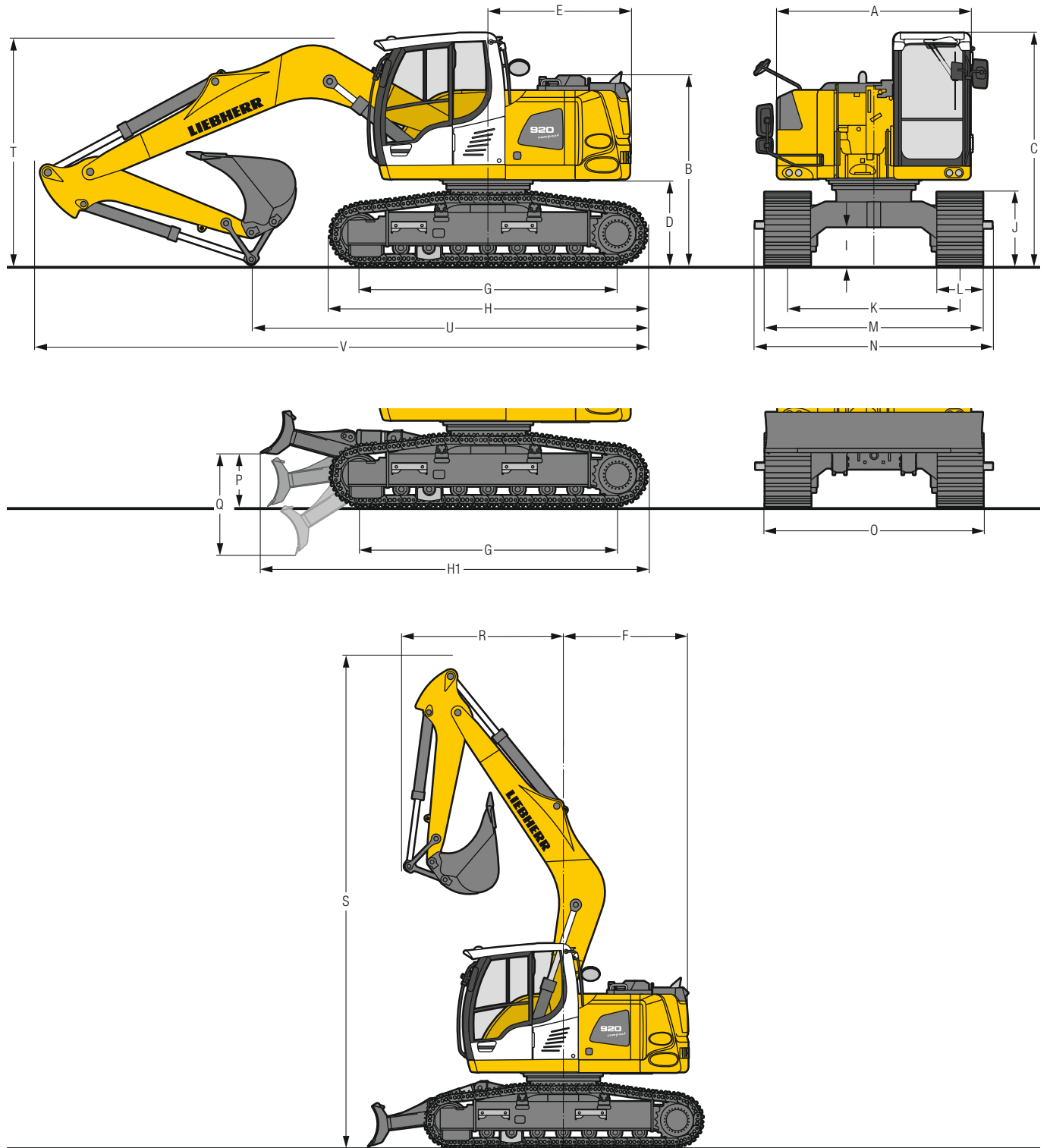
LC	Gauge 2,250 mm / 7'5"
Drive	Liebherr swashplate motor with brake valves on both sides
Transmission	Liebherr compact planetary reduction gear
Maximum travel speed	Low range 2.6 km/h / 1.6 mph High range 5.7 km/h / 3.5 mph
Drawbar pull on crawler	192 kN / 43,163 lbf
Track components	B60, maintenance-free
Track rollers / Carrier rollers	7 / 2
Tracks	Sealed and greased
Track pads	Triple grouser
Holding brake	Wet multi-disc (spring applied, pressure released)
Brake valves	Integrated into travel motor
Lashing eyes	Integrated



Equipment

Hydraulic cylinders	Liebherr cylinders with seal and guidance systems and shock protection
Bearings	Sealed, low maintenance
Lubrication	Liebherr central lubrication system

Dimensions



	LC	mm/ft in		LC with blade	mm/ft in	
A	Upper-carriage width	2,525 / 8' 3"		2,525 / 8' 3"		
B	Upper-carriage height	2,470 / 8' 1"		2,470 / 8' 1"		
C	Cab height	3,035 / 9'11"		3,035 / 9'11"		
D	Counterweight ground clearance	1,100 / 3' 7"		1,100 / 3' 7"		
E	Rear-end length	1,850 / 6' 1"		1,850 / 6' 1"		
F	Tail swing radius	1,850 / 6' 1"		1,850 / 6' 1"		
G	Wheelbase	3,370 / 11' 1"		3,370 / 11' 1"		
H	Undercarriage length	4,150 / 13' 7"		4,150 / 13' 7"		
H1	Undercarriage length with blade	-		5,040 / 16' 6"		
I	Undercarriage ground clearance	490 / 1' 7"		490 / 1' 7"		
J	Track height	955 / 3' 2"		955 / 3' 2"		
K	Track gauge	2,250 / 7' 5"		2,250 / 7' 5"		
L	Track pad width	600 / 24"	750 / 30"	900 / 35"	600 / 24"	750 / 30"
M	Width over tracks	2,850 / 9' 4"	3,000 / 9'10"	3,150 / 10' 4"	2,850 / 9' 4"	3,000 / 9'10"
N	Width over steps	2,800 / 9' 2"	3,000* / 9'10**	3,100* / 10' 2**	2,800 / 9' 2"	3,000* / 9'10**
O	Blade width	-		-		
P	Max. blade height	-		685 / 2' 3"		
Q	Max. blade depth	-		1,320 / 4' 4"		

* width with removable steps

	Stick length m/ft in	Mono boom 5.00 m/16'5" direct mounting mm/ft in
R	Front swing radius	2,225 / 7'5"
		2,400 / 7'10"
		2,450 / 8'
S	Height with boom up	7,300 / 23'11"
	T Boom height	2,225 / 7'5"
		2,400 / 7'10"
U	Length on ground	3,050 / 10'
		3,150 / 10' 4"
		2,225 / 7'5"
V	Overall length	5,050 / 16' 7"
		4,850 / 15'11"
		2,225 / 7'5"
	2,400 / 7'10"	
	2,450 / 8'	
	2,650 / 8'8"	
	8,100 / 26' 7"	
	8,100 / 26' 7"	
	8,100 / 26' 7"	
Bucket	0.80 m ³ / 1.05 yd ³	

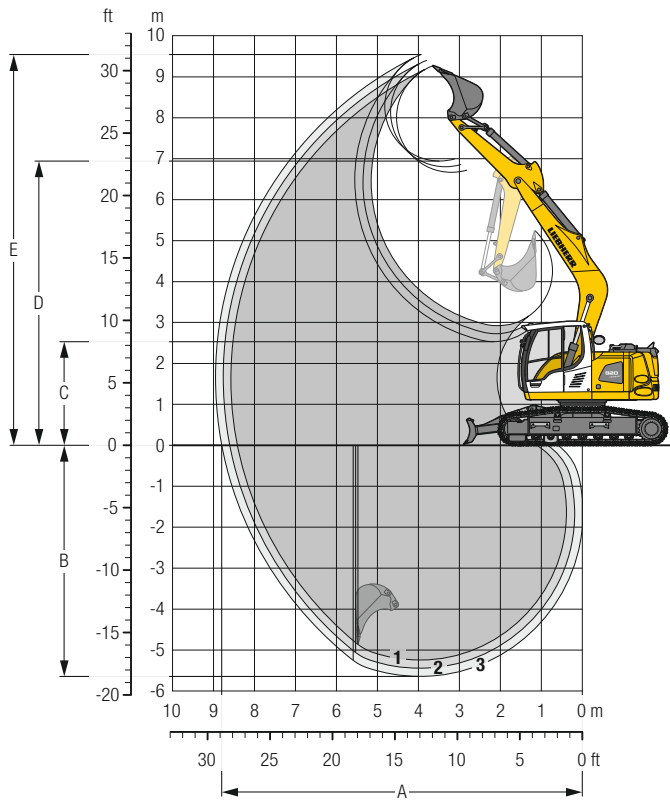
Transport Dimensions

removable elements disassembled

	Stick m/ft in	Mono boom 5.00 m/16'5" mm/ft in		
Pad width		600 / 24"	750 / 30"	900 / 35"
Transport width		2,850 / 9' 4"	3,000 / 9'10"	3,150 / 10' 4"
Transport length	2.25 / 7'5"	8,100 / 26' 7"		
	2.45 / 8'	8,100 / 26' 7"		
	2.65 / 8'8"	8,100 / 26' 7"		
Transport height	2.25 / 7'5"	3,035 / 9'11"		
	2.45 / 8'	3,050 / 10'		
	2.65 / 8'8"	3,150 / 10' 4"		
Bucket		0.80 m ³ / 1.05 yd ³		

Backhoe Bucket

with Mono Boom 5.00 m / 16'5" and Counterweight 3.9 t / 8,600 lb



Digging Envelope

without quick coupler		1	2	3
Stick length	m/ft in	2.25 / 7' 5"	2.45 / 8'	2.65 / 8' 8"
A Max. reach at ground level	m/ft in	8.40 / 27' 7"	8.60 / 28' 3"	8.80 / 28' 10"
B Max. digging depth	m/ft in	5.25 / 17' 3"	5.45 / 17' 11"	5.65 / 18' 6"
C Min. dumping height	m/ft in	2.90 / 9' 6"	2.70 / 8' 10"	2.55 / 8' 4"
D Max. dumping height	m/ft in	6.65 / 21' 10"	6.80 / 22' 4"	6.95 / 22' 10"
E Max. cutting height	m/ft in	9.25 / 30' 4"	9.40 / 30' 10"	9.55 / 31' 4"

Forces

without quick coupler		1	2	3
Stick digging force (ISO 6015)	kN/lbf	83 / 18,660	78 / 17,540	74 / 16,640
Bucket digging force (ISO 6015)	kN/lbf	98 / 22,030	98 / 22,030	98 / 22,030
Stick digging force (SAE J1179)	kN/lbf	79 / 17,760	75 / 16,860	71 / 15,960
Bucket digging force (SAE J1179)	kN/lbf	89 / 20,010	89 / 20,010	89 / 20,010

Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 3.9 t / 8,600 lb, mono boom 5.00 m / 16'5", stick 2.65 m / 8'8" and bucket 0.80 m³ / 1.05 yd³ (480 kg / 1,060 lb).

Undercarriage		LC		
Pad width	mm/in	600 / 24"	750 / 30"	900 / 35"
Weight	kg/lb	18,900 / 41,670	19,300 / 42,550	19,700 / 43,430
Ground pressure	kg/cm ² / psi	0.43 / 6.1	0.35 / 5.0	0.30 / 4.3

Undercarriage		LC with blade		
Pad width	mm/in	600 / 24"	750 / 30"	900 / 35"
Weight	kg/lb	20,500 / 45,200	20,900 / 46,080	21,300 / 46,960
Ground pressure	kg/cm ² / psi	0.47 / 6.7	0.38 / 5.4	0.33 / 4.7

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

	Cutting width mm in	Capacity ISO 7451 m ³ yd ³	Weight ²⁾ kg lb	LC-Undercarriage (with track pads 750 mm/30")						LC-Undercarriage with blade (with track pads 750 mm/30")					
				Stick length (m/ft in)						Stick length (m/ft in)					
				without quick coupler			with quick coupler			without quick coupler			with quick coupler		
	2.25 7'5"	2.45 8'	2.65 8'8"	2.25 7'5"	2.45 8'	2.65 8'8"	2.25 7'5"	2.45 8'	2.65 8'8"	2.25 7'5"	2.45 8'	2.65 8'8"	2.25 7'5"	2.45 8'	2.65 8'8"
STD ¹⁾	500 20"	0.30 0.39	290 640	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	650 26"	0.42 0.55	350 770	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	850 34"	0.60 0.78	400 880	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	1,050 41"	0.80 1.05	480 1,060	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	1,250 49"	0.95 1.24	525 1,160	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	HD ²⁾	500 20"	0.30 0.39	320 710	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
650 26"		0.42 0.55	390 860	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
850 34"		0.60 0.78	450 990	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
1,050 41"		0.80 1.05	540 1,190	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
1,250 49"		0.95 1.24	595 1,310	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

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

¹⁾ Standard bucket with teeth Uni 35-3

²⁾ HD bucket with teeth Uni 35-3

³⁾ Bucket for direct mounting or mounting to quick coupler

Other buckets available upon request

Max. material weight ▲ = ≤ 2.0 t/m³/3,400 lb/yd³

Lift Capacities

with Mono Boom 5.00 m/16'5", Counterweight 3.9 t/8,600 lb and Track Pads 750 mm/30"

Stick 2.25 m / 7'5"

Under-carriage	Height	3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft		Max. reach		
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	m	ft	in
LC	7.5 m t									3.7*	3.7*	4.1
	25 ft lb									8.3*	8.3*	12'10"
	6.0 m t			4.8*	4.8*					3.1*	3.1*	5.7
	20 ft lb			10.6*	10.6*					6.9*	6.9*	18'6"
	4.5 m t	6.6*	6.6*	5.4*	5.4*	3.7	4.9*			2.9*	2.9*	6.6
	15 ft lb	14.2*	14.2*	11.8*	11.8*	8.0	10.7*			6.5*	6.5*	21'8"
	3.0 m t			5.5	6.6*	3.6	5.3*			2.8	3.0*	7.1
	10 ft lb	22.0*	22.0*	11.9	14.3*	7.7	11.5*			6.1	6.5*	23'4"
	1.5 m t			5.1	7.7*	3.4	5.3			2.6	3.2*	7.2
	5 ft lb			11.1	16.7*	7.4	11.4			5.8	7.0*	23'8"
LC Blade up	0 m t	5.7*	5.7*	4.9	8.0	3.3	5.2			2.7	3.6*	7.0
	0 ft lb	13.3*	13.3*	10.6	17.2	7.2	11.1			5.9	7.9*	23'1"
	-1.5 m t	9.2	10.4*	4.9	7.9*	3.3	5.1			3.0	4.4*	6.5
	-5 ft lb	19.7	23.8*	10.5	17.1	7.1	11.1			6.6	9.8*	21'4"
	-3.0 m t	9.4	9.4*	5.0	6.7*					3.8	5.1*	5.5
	-10 ft lb	20.1	20.2*	10.7	14.3*					8.5	11.2*	17'11"
	7.5 m t									3.7*	3.7*	4.1
	25 ft lb									8.3*	8.3*	12'10"
	6.0 m t			4.8*	4.8*					3.1*	3.1*	5.7
	20 ft lb			10.6*	10.6*					6.9*	6.9*	18'6"
4.5 m t	6.6*	6.6*	5.4*	5.4*	4.0	4.9*			2.9*	2.9*	6.6	
15 ft lb	14.2*	14.2*	11.8*	11.8*	8.7	10.7*			6.5*	6.5*	21'8"	
3.0 m t			5.9	6.6*	3.9	5.3*			3.0*	3.0*	7.1	
10 ft lb	22.0*	22.0*	12.8	14.3*	8.4	11.5*			6.5*	6.5*	23'4"	
1.5 m t			5.6	7.7*	3.7	5.4			2.9	3.2*	7.2	
5 ft lb			12.0	16.7*	8.1	11.6			6.3	7.0*	23'8"	
0 m t	5.7*	5.7*	5.4	8.2	3.6	5.3			2.9	3.6*	7.0	
0 ft lb	13.3*	13.3*	11.6	17.6	7.8	11.3			6.5	7.9*	23'1"	
-1.5 m t	10.0	10.4*	5.3	7.9*	3.6	5.2			3.2	4.4*	6.5	
-5 ft lb	21.4	23.8*	11.4	17.2*	7.8	11.3			7.2	9.8*	21'4"	
-3.0 m t	9.4*	9.4*	5.4	6.7*					4.1	5.1*	5.5	
-10 ft lb	20.2*	20.2*	11.6	14.3*					9.2	11.2*	17'11"	
LC Blade down	7.5 m t									3.7*	3.7*	4.1
	25 ft lb									8.3*	8.3*	12'10"
	6.0 m t			4.8*	4.8*					3.1*	3.1*	5.7
	20 ft lb			10.6*	10.6*					6.9*	6.9*	18'6"
	4.5 m t	6.6*	6.6*	5.4*	5.4*	4.3	4.9*			2.9*	2.9*	6.6
	15 ft lb	14.2*	14.2*	11.8*	11.8*	9.2	10.7*			6.5*	6.5*	21'8"
	3.0 m t			6.3	6.6*	4.1	5.3*			3.0*	3.0*	7.1
	10 ft lb	22.0*	22.0*	13.6	14.3*	8.9	11.5*			6.5*	6.5*	23'4"
	1.5 m t			5.9	7.7*	4.0	5.8*			3.0	3.2*	7.2
	5 ft lb			12.8	16.7*	8.6	12.6*			6.7	7.0*	23'8"
0 m t	5.7*	5.7*	5.7	8.2*	3.9	6.0*			3.1	3.6*	7.0	
0 ft lb	13.3*	13.3*	12.4	17.8*	8.3	13.1*			6.8	7.9*	23'1"	
-1.5 m t	10.4*	10.4*	5.7	7.9*	3.8	5.8*			3.5	4.4*	6.5	
-5 ft lb	23.2	23.8*	12.2	17.2*	8.3	12.5*			7.6	9.8*	21'4"	
-3.0 m t	9.4*	9.4*	5.8	6.7*					4.4	5.1*	5.5	
-10 ft lb	20.2*	20.2*	12.4	14.3*					9.8	11.2*	17'11"	

Stick 2.45 m / 8'

Under-carriage	Height	3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft		Max. reach		
		Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	Can be slewed through 360°	In longitudinal position of undercarriage	m	ft	in
LC	7.5 m t									3.3*	3.3*	4.4
	25 ft lb									7.4*	7.4*	13'11"
	6.0 m t			4.6*	4.6*					2.8*	2.8*	6.0
	20 ft lb			10.1*	10.1*					6.2*	6.2*	19'4"
	4.5 m t			5.2*	5.2*	3.7	4.7*			2.7*	2.7*	6.8
	15 ft lb			11.2*	11.2*	8.0	10.3*			5.9*	5.9*	22'4"
	3.0 m t	9.7*	9.7*	5.5	6.4*	3.6	5.2*			2.6	2.7*	7.3
	10 ft lb	20.7*	20.7*	11.9	13.8*	7.7	11.2*			5.9	5.9*	23'11"
	1.5 m t			5.1	7.6*	3.4	5.3			2.5	2.9*	7.4
	5 ft lb			11.1	16.4*	7.4	11.4			5.5	6.3*	24'5"
LC Blade up	0 m t	6.0*	6.0*	4.9	8.0	3.3	5.1			2.6	3.2*	7.2
	0 ft lb	13.9*	13.9*	10.6	17.2	7.1	11.1			5.6	7.1*	23'8"
	-1.5 m t	9.1	10.0*	4.8	7.9	3.3	5.1			2.8	3.9*	6.7
	-5 ft lb	19.5	22.8*	10.4	17.0	7.0	11.0			6.2	8.6*	22'
	-3.0 m t	9.3	9.7*	4.9	6.9*					3.5	5.0*	5.7
	-10 ft lb	19.9	21.1*	10.6	14.8*					7.9	11.0*	18'8"
	7.5 m t									3.3*	3.3*	4.4
	25 ft lb									7.4*	7.4*	13'11"
	6.0 m t			4.6*	4.6*					2.8*	2.8*	6.0
	20 ft lb			10.1*	10.1*					6.2*	6.2*	19'4"
4.5 m t			5.2*	5.2*	4.0	4.7*			2.7*	2.7*	6.8	
15 ft lb			11.2*	11.2*	8.7	10.3*			5.9*	5.9*	22'4"	
3.0 m t	9.7*	9.7*	6.0	6.4*	3.9	5.2*			2.7*	2.7*	7.3	
10 ft lb	20.7*	20.7*	12.9	13.8*	8.4	11.2*			5.9*	5.9*	23'11"	
1.5 m t			5.6	7.6*	3.7	5.4			2.7	2.9*	7.4	
5 ft lb			12.0	16.4*	8.0	11.6			6.1	6.3*	24'5"	
0 m t	6.0*	6.0*	5.3	8.2	3.6	5.2			2.8	3.2*	7.2	
0 ft lb	13.9*	13.9*	11.5	17.5	7.8	11.3			6.2	7.1*	23'8"	
-1.5 m t	9.9	10.0*	5.3	8.0*	3.6	5.2			3.1	3.9*	6.7	
-5 ft lb	21.3	22.8*	11.4	17.3*	7.7	11.2			6.8	8.6*	22'	
-3.0 m t	9.7*	9.7*	5.3	6.9*					3.9	5.0*	5.7	
-10 ft lb	21.1*	21.1*	11.5	14.8*					8.6	11.0*	18'8"	
LC Blade down	7.5 m t									3.3*	3.3*	4.4
	25 ft lb									7.4*	7.4*	13'11"
	6.0 m t			4.6*	4.6*					2.8*	2.8*	6.0
	20 ft lb			10.1*	10.1*					6.2*	6.2*	19'4"
	4.5 m t			5.2*	5.2*	4.3	4.7*			2.7*	2.7*	6.8
	15 ft lb			11.2*	11.2*	9.2	10.3*			5.9*	5.9*	22'4"
	3.0 m t	9.7*	9.7*	6.3	6.4*	4.1	5.2*			2.7*	2.7*	7.3
	10 ft lb	20.7*	20.7*	13.7	13.8*	8.9	11.2*			5.9*	5.9*	23'11"
	1.5 m t			6.0	7.6*	4.0	5.7*			2.9*	2.9*	7.4
	5 ft lb			12.8	16.4*	8.5	12.4*			6.3*	6.3*	24'5"
0 m t	6.0*	6.0*	5.7	8.2*	3.8	6.0*			3.0	3.2*	7.2	
0 ft lb	13.9*	13.9*	12.3	17.7*	8.3	13.0*			6.6	7.1*	23'8"	
-1.5 m t	10.0*	10.0*	5.6	8.0*	3.8	5.8*			3.3	3.9*	6.7	
-5 ft lb	22.8*	22.8*	12.1	17.3*	8.2	12.6*			7.2	8.6*	22'	
-3.0 m t	9.7*	9.7*	5.7	6.9*					4.1	5.0*	5.7	
-10 ft lb	21.1*	21.1*	12.3	14.8*					9.1	11.0*	18'8"	

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 750 mm/30" 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 230 kg/510 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

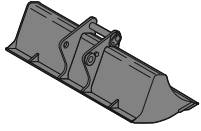
Stick 2.65 m / 8'8"

Under-carriage	Height	3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft		Max. reach		m ft in
		LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	
LC	7.5 m t			3.7*	3.7*					2.9*	2.9*	4.7
	25 ft lb			6,6*	6,6*					6,6*	6,6*	15'
	6.0 m t			4.3*	4.3*	3.4*	3.4*			2.5*	2.5*	6.2
	20 ft lb			9,5*	9,5*	5,9*	5,9*			5,6*	5,6*	20'1"
	4.5 m t			4.9*	4.9*	3.7	4.5*			2.4*	2.4*	7.0
	15 ft lb			10,7*	10,7*	8,1	9,9*			5,3*	5,3*	23'
	3.0 m t	9.1*	9.1*	5.5	6.1*	3.6	5.0*			2.4*	2.4*	7.5
	10 ft lb	19,5*	19,5*	12,0	13,3*	7,8	10,9*			5,4*	5,4*	24'6"
	1.5 m t			5.2	7.4*	3.4	5.3	2.5	3.4*	2.4	2.6*	7.6
	5 ft lb			11,1	16,0*	7,4	11,4			5,3	5,7*	25'
LC Blade up	0 m t	6.3*	6.3*	4.9	8.0	3.3	5.1			2.4	2.9*	7.4
	0 ft lb	14,4*	14,4*	10,5	17,2	7,1	11,1			5,4	6,4*	24'5"
	-1.5 m t	9.0	9.6*	4.8	7.9	3.2	5.1			2.7	3.5*	6.9
	-5 ft lb	19,4	22,0*	10,3	16,9	7,0	10,9			5,9	7,7*	22'7"
	-3.0 m t	9.2	10.1*	4.8	7.1*					3.3	4.8*	6.0
	-10 ft lb	19,7	21,8*	10,4	15,2*					7,3	10,7*	19'6"
	7.5 m t			3.7*	3.7*					2.9*	2.9*	4.7
	25 ft lb			6,6*	6,6*					6,6*	6,6*	15'
	6.0 m t			4.3*	4.3*	3.4*	3.4*			2.5*	2.5*	6.2
	20 ft lb			9,5*	9,5*	5,9*	5,9*			5,6*	5,6*	20'1"
4.5 m t			4.9*	4.9*	4.0	4.5*			2.4*	2.4*	7.0	
15 ft lb			10,7*	10,7*	8,7	9,9*			5,3*	5,3*	23'	
3.0 m t	9.1*	9.1*	6.0	6.1*	3.9	5.0*			2.4*	2.4*	7.5	
10 ft lb	19,5*	19,5*	12,9	13,3*	8,4	10,9*			5,4*	5,4*	24'6"	
1.5 m t			5.6	7.4*	3.7	5.4	2.7	3.4*	2.6*	2.6*	7.6	
5 ft lb			12,1	16,0*	8,0	11,6			5,7*	5,7*	25'	
0 m t	6.3*	6.3*	5.3	8.1*	3.6	5.2			2.7	2.9*	7.4	
0 ft lb	14,4*	14,4*	11,5	17,5	7,7	11,3			5,9	6,4*	24'5"	
-1.5 m t	9.6*	9.6*	5.2	8.0*	3.5	5.2			2.9	3.5*	6.9	
-5 ft lb	21,1	22,0*	11,3	17,3	7,6	11,1			6,5	7,7*	22'7"	
-3.0 m t	10.0	10.1*	5.3	7.1*					3.6	4.8*	6.0	
-10 ft lb	21,4	21,8*	11,4	15,2*					8,0	10,7*	19'6"	
LC Blade down	7.5 m t			3.7*	3.7*					2.9*	2.9*	4.7
	25 ft lb			6,6*	6,6*					6,6*	6,6*	15'
	6.0 m t			4.3*	4.3*	3.4*	3.4*			2.5*	2.5*	6.2
	20 ft lb			9,5*	9,5*	5,9*	5,9*			5,6*	5,6*	20'1"
	4.5 m t			4.9*	4.9*	4.3	4.5*			2.4*	2.4*	7.0
	15 ft lb			10,7*	10,7*	9,2	9,9*			5,3*	5,3*	23'
	3.0 m t	9.1*	9.1*	6.1*	6.1*	4.1	5.0*			2.4*	2.4*	7.5
	10 ft lb	19,5*	19,5*	13,3*	13,3*	8,9	10,9*			5,4*	5,4*	24'6"
	1.5 m t			6.0	7.4*	4.0	5.6*	2.9	3.4*	2.6*	2.6*	7.6
	5 ft lb			12,9	16,0*	8,5	12,1*			5,7*	5,7*	25'
0 m t	6.3*	6.3*	5.7	8.1*	3.8	5.9*			2.8	2.9*	7.4	
0 ft lb	14,4*	14,4*	12,3	17,5*	8,2	12,9*			6,3	6,4*	24'5"	
-1.5 m t	9.6*	9.6*	5.6	8.0*	3.8	5.9*			3.1	3.5*	6.9	
-5 ft lb	22,0*	22,0*	12,1	17,3*	8,1	12,7*			6,9	7,7*	22'7"	
-3.0 m t	10.1*	10.1*	5.6	7.1*					3.8	4.8*	6.0	
-10 ft lb	21,8*	21,8*	12,2	15,2*					8,5	10,7*	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 750 mm/30" 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 230 kg/510 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

Available Attachments



Rigid Ditch Cleaning Bucket

GRL 90, for direct mounting

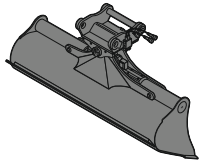
Cutting width	mm/in	1,500/59"	2,000/79"	2,000/79"		
Capacity	m ³ /yd ³	0.35/0.46	0.48/0.63	0.65/0.85		
Weight	kg/lb	275/610	350/770	390/860		

GRL 90, for mounting to quick coupler SWA 33

Cutting width	mm/in	1,500/59"	2,000/79"	2,000/79"		
Capacity	m ³ /yd ³	0.50/0.65	0.48/0.63	0.65/0.85		
Weight	kg/lb	360/790	350/770	390/860		

GRL 90, for mounting to quick coupler SWA 48

Cutting width	mm/in	1,500/59"	1,500/59"	2,000/79"	2,400/95"	2,400/95"
Capacity	m ³ /yd ³	0.50/0.65	0.95/1.24	0.70/0.92	0.85/1.11	1.15/1.50
Weight	kg/lb	430/950	560/1,240	400/880	600/1,320	650/1,430



Tiltable Ditch Cleaning Bucket

GRL 90, 2 x 50° tiltable, for direct mounting

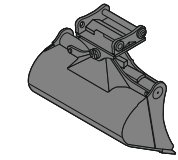
Cutting width	mm/in	1,600/63"	1,600/63"	2,000/79"	2,000/79"	2,200/87"	2,400/95"
Capacity	m ³ /yd ³	0.55/0.72	0.80/1.05	0.50/0.65	0.70/0.92	0.80/1.05	0.85/1.11
Weight	kg/lb	640/1,410	770/1,700	650/1,430	790/1,740	800/1,760	850/1,870

GRL 90, 2 x 50° tiltable, for mounting to quick coupler SWA 33

Cutting width	mm/in	1,600/63"	1,600/63"	2,000/79"	2,000/79"	2,000/79"	2,200/87"
Capacity	m ³ /yd ³	0.55/0.72	0.80/1.05	0.50/0.65	0.70/0.92	1.00/1.31	0.80/1.05
Weight	kg/lb	650/1,430	770/1,700	660/1,460	780/1,720	880/1,940	800/1,760

GRL 90, 2 x 50° tiltable, for mounting to quick coupler SWA 48

Cutting width	mm/in	1,600/63"	1,600/63"	2,000/79"	2,000/79"	2,000/79"	2,200/87"	2,400/95"
Capacity	m ³ /yd ³	0.55/0.72	0.80/1.05	0.50/0.65	0.70/0.92	1.00/1.31	0.80/1.05	0.85/1.11
Weight	kg/lb	730/1,610	850/1,870	740/1,630	870/1,920	940/2,070	870/1,920	930/2,050



Tilt Bucket

SL 90, 2 x 50° tiltable, for direct mounting

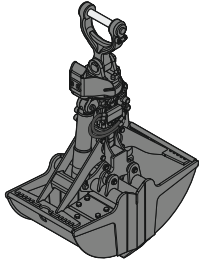
Cutting width	mm/in	1,500/59"	1,600/63"			
Capacity	m ³ /yd ³	0.60/0.78	0.80/1.05			
Weight	kg/lb	650/1,430	740/1,630			

SL 90, 2 x 50° tiltable, for mounting to quick coupler SWA 33

Cutting width	mm/in	1,500/59"	1,600/63"	1,600/63"		
Capacity	m ³ /yd ³	0.60/0.78	0.80/1.05	1.00/1.31		
Weight	kg/lb	660/1,460	740/1,630	740/1,630		

SL 90, 2 x 50° tiltable, for mounting to quick coupler SWA 48

Cutting width	mm/in	1,500/59"	1,600/63"	1,600/63"	1,600/63"	
Capacity	m ³ /yd ³	1.20/1.57	0.80/1.05	0.60/0.78	1.00/1.31	1.00/1.31
Weight	kg/lb	870/1,920	820/1,810	950/2,090	870/1,920	1,000/2,210
HD-version		X		X		X



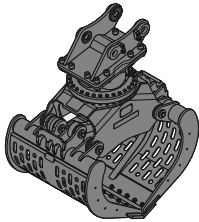
Clamshells

GMZ 22, earthmoving shell, for mounting to quick coupler SWA 33

Cutting width	mm / in	600 / 24"	800 / 31"	1,000 / 39"
Capacity	m ³ / yd ³	0.30 / 0.39	0.42 / 0.55	0.54 / 0.71
Weight	kg / lb	860	930	1,000

GMZ 24, earthmoving shell, for mounting to quick coupler SWA 48

Cutting width	mm / in	600 / 24"	800 / 31"	1,000 / 39"
Capacity	m ³ / yd ³	0.34 / 0.44	0.46 / 0.60	0.60 / 0.78
Weight	kg / lb	890 / 1,960	970 / 2,140	1,040 / 2,290



Sorting Grab

ribbed

perforated

closed

stone tong

SG 20B, for mounting to quick coupler SWA 33

Cutting width	mm / in			800 / 32"	1,000 / 39"	1,200 / 47"	800 / 32"	1,000 / 39"	1,200 / 47"	
Capacity	m ³ / yd ³			0.40 / 0.52	0.50 / 0.65	0.60 / 0.78	0.40 / 0.52	0.50 / 0.65	0.60 / 0.78	
Weight	kg / lb			750 / 1,650	795 / 1,750	840 / 1,850	765 / 1,690	810 / 1,790	850 / 1,870	

SG 20B, for mounting to quick coupler SWA 48

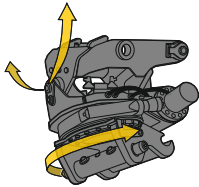
Cutting width	mm / in			800 / 32"	1,000 / 39"	1,200 / 47"	800 / 32"	1,000 / 39"	1,200 / 47"	
Capacity	m ³ / yd ³			0.40 / 0.52	0.50 / 0.65	0.60 / 0.78	0.40 / 0.52	0.50 / 0.65	0.60 / 0.78	
Weight	kg / lb			750 / 1,650	795 / 1,750	840 / 1,850	765 / 1,690	810 / 1,790	850 / 1,870	

SG 25, for mounting to quick coupler SWA 33

Cutting width	mm / in	800 / 32"	1,000 / 39"	1,200 / 47"	800 / 32"	1,000 / 39"	1,200 / 47"	800 / 32"	1,000 / 39"	1,200 / 47"	800 / 32"
Capacity	m ³ / yd ³	0.50 / 0.65	0.65 / 0.85	0.80 / 1.05	0.55 / 0.72	0.75 / 0.98	0.90 / 1.18	0.55 / 0.72	0.75 / 0.98	0.90 / 1.18	0.55 / 0.72
Weight	kg / lb	1,225 / 2,700	1,310 / 2,890	1,400 / 3,090	1,180 / 2,600	1,245 / 2,750	1,310 / 2,890	1,200 / 2,650	1,270 / 2,800	1,340 / 2,950	1,365 / 3,010

SG 25, for mounting to quick coupler SWA 48

Cutting width	mm / in	800 / 32"	1,000 / 39"	1,200 / 47"	800 / 32"	1,000 / 39"	1,200 / 47"	800 / 32"	1,000 / 39"	1,200 / 47"	800 / 32"
Capacity	m ³ / yd ³	0.50 / 0.65	0.65 / 0.85	0.80 / 1.05	0.55 / 0.72	0.75 / 0.98	0.90 / 1.18	0.55 / 0.72	0.75 / 0.98	0.90 / 1.18	0.55 / 0.72
Weight	kg / lb	1,225 / 2,700	1,310 / 2,890	1,400 / 3,090	1,180 / 2,600	1,245 / 2,750	1,310 / 2,890	1,200 / 2,650	1,270 / 2,800	1,340 / 2,950	1,365 / 3,010



Tiltrotator

LH-TR 20, for mounting to quick coupler SWA 33

Weight	kg / lb	470 / 1,040
Rotation		360°
Tilt		2 x 50°

Serial Equipment

Undercarriage

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

Uppercarriage

- Anti-skid surfaces
- Centralized lubrication system (automatic)
- Engine hood with gas spring opening
- Filters accessible from ground level
- Front right rearview mirror(s)
- Handrails
- Hydraulic oil level, visible from ground level
- Lockable fuel tank cap
- Lockable service doors
- Lockable storage box
- Main switch, manual, lockable
- Protection grid on radiator fan
- Sound insulation
- Swing drive gearbox oil level, visible from the cab
- Swing-out fan
- Windshield washer fluid tank

Hydraulic System

- Filter with integrated fine filters
- Hydraulic pressure measuring ports
- Hydraulic tank shut-off valve
- Liebherr Synchron Comfort System (LSC)
- 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
- Exhaust gas after-treatment system – DOC + SCR
- Fixed geometry turbocharger
- Fuel fine filter
- Fuel pre-filter and water separator
- Fuel priming pump
- Intercooler
- Power Pack US EPA Tier 4 Final
- Stepless adjustable engine speed

Operator's Cab

- 7" multifunction color touchscreen
- Air conditioning, automatic, tri-zone, controlled via display
- Armrests adjustable in width, height and inclination
- Bottle holder
- Cab air filters housing, accessible from ground level
- Cab door sliding windows
- Coat hook
- DEF consumption on touchscreen
- DEF level on touchscreen
- Electric socket in cabin (12 V)
- Electric socket in cabin (24 V)
- Emergency hammer
- Fuel consumption on touchscreen
- Fuel level on touchscreen
- Impact resistant roof window
- Interior lighting
- Laminated right hand side window
- LIDAT Plus (Liebherr data transfer system)*
- Mechanical hour meters, visible from ground level
- Rain hood over front window opening
- Rearview mirror
- Rear view monitoring camera
- Rear window emergency exit
- 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 button on joystick configurable
- Storage nets
- Storage spaces
- Tilttable console left
- Tinted windows
- Visco-elastic damping
- Windscreen wiper and washer
- Work mode selector

Equipment

- Boom cylinders regeneration
- Pipe fracture safety valve for stick cylinder
- Pipe fracture safety valves for boom cylinders
- SAE split flanges on high pressure lines
- Stick cylinder regeneration

* optionally extendable after one year

Equipment Standard/Option

Undercarriage

Chain guide 1 piece	•
Chain guide 3 pieces	+
Dozer and stabilizer blade 2,850 mm/9'4"	+
Dozer and stabilizer blade 3,000 mm/9'10"	+
Reinforced cover and base plate for undercarriage center section	+
Rubber track pads 600 mm/24"	+
Special painting	+
Standard cover plate for undercarriage center section	•
Steps	+
Steps wide	•
Track pads triple grouser 600 mm/24" / 900 mm/35"	+
Track pads triple grouser 750 mm/30"	•
Tracks, sealed and greased	•
Undercarriage LC	•
Undercarriage storage compartment	+

Uppercarriage

Air pre-filter with cyclonical dust trap	+
Counterweight standard 3.9 t/8,600 lb	•
Electric socket on uppercarriage (24 V)	+
Extended tool set including tool box	+
Flashing beacon on uppercarriage, rear, LED, 1 piece	+
Fuel anti-theft protection	+
Headlight on uppercarriage, lateral right, LED+, 1 piece	+1)
Headlights on uppercarriage, front, halogen, 2 pieces, protections included	•1)
Headlights on uppercarriage, front, LED+, 2 pieces, protections included	+1)
Headlights on uppercarriage, rear, LED+, 2 pieces	+1)
Pre-heating system for fuel	+
Reflective warning stickers	+
Reversible fan drive	+
Skyview 360°	+
Special painting	+
Tank refilling pump fuel	+
Tool set including storage case	•

Hydraulic System

Bypass filter for hydraulic oil	+
Liebherr hydraulic oil	•
Liebherr hydraulic oil, adapted for extreme climate conditions	+
Liebherr hydraulic oil, biodegradable	+

Engine

Automatic engine shutdown after idling	+
--	---

Equipment Standard/Option



Operator's Cab

3" seat belt with retractor, orange color	•
4-points seat belt	+
Acoustic travel alarm deactivatable	+
Attachment continuous operation system	+
Auxiliary heater programmable	+
Bottom windscreen wiper	+
Cool box (12 V)	+
Dark tinted windows	+
Electronic immobilizer	+
Emergency stop in cab	+
FGPS front guard	+
Filter for hydraulic hammer return flow	+
Fire extinguisher	+
First-aid box	+
Flashing beacon on cabin, LED, 1 piece	+
Footrest	+
FOPS top guard	+
Handrests elevated for joysticks	+
Headlights on cab, front, halogen, 2 pieces	•1)
Headlights on cab, front, LED+, 2 pieces	+1)
Headlights on cab roof, front, LED+, 2 pieces	+1)
High pressure circuit switchable on pedals or mini-joystick	+
High pressure circuit with Tool Control (20 attachment adjustments on display)	+
Impact resistant one-piece windscreen	+
Lightbar on cabin	+
Medium pressure circuit	+
Mini-joysticks proportional	•
Movement restriction for stick	+
Operator seat Comfort	•
Operator seat Premium	+
Overload warning system	+
Preparation for machine guidance system	+
Radio Comfort	+
Radio pre-installation	•
Retractable laminated two-piece windscreen	•
Right hand side view monitoring camera	•
Roof sun shield	+
Roof window wiper	+
Special painting	+
Sun visor	+
Switch between high pressure and bucket cylinder controls	+
Windscreen bottom protection grid	+



Equipment

Bucket cylinder rod protection	+
Centralized lubrication extended for connecting link	+
Centralized lubrication extended for quick coupler	+
Grapple hydraulic lines (bucket cylinder inactive)	+
Headlight guards on boom	+
Headlights on boom, halogen, 2 pieces	•1)
Headlights on boom, LED+, 2 pieces	+1)
Headlights on stick, right and left, LED+, 2 pieces, protections included	+1)
Leak oil line for attachment	+
Liebherr bucket range	+
Liebherr tooth system	+
LIKUFIX electric signal plug	+
LIKUFIX for quick coupler SWA 33 hydraulic	+
LIKUFIX for quick coupler SWA 48 hydraulic	+
Load holding valve for bucket cylinder	+
Mono boom 5.00 m / 16'5"	•
Quick coupler SWA 33 hydraulic	+
Quick coupler SWA 33 mechanical	+
Quick coupler SWA 48 hydraulic	+
Quick coupler SWA 48 mechanical	+
Security for hoist cylinders	+
Special painting	+
Stick 2.25 m / 7'5"	+
Stick 2.45 m / 8'	+
Stick 2.65 m / 8'8"	+
Stick bottom protection	+
Tool Management	+
Working envelope height limitation	+

• = Standard, + = Option

¹⁾ Equipment not individually available, but only as predefined lighting packages
Non-exhaustive list, please contact us for further information.

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

Liebherr USA, Co.

Construction Equipment Division
4100 Chestnut Avenue, Newport News, VA 23607, USA
☎ +1 (757) 245 5251, Fax +1 (757) 928 8701
www.liebherr.us, E-Mail: Construction.USA@liebherr.com
www.facebook.com/LiebherrConstruction