

# **Experience the progress** R 924

# Safety

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

# 2 Equipment

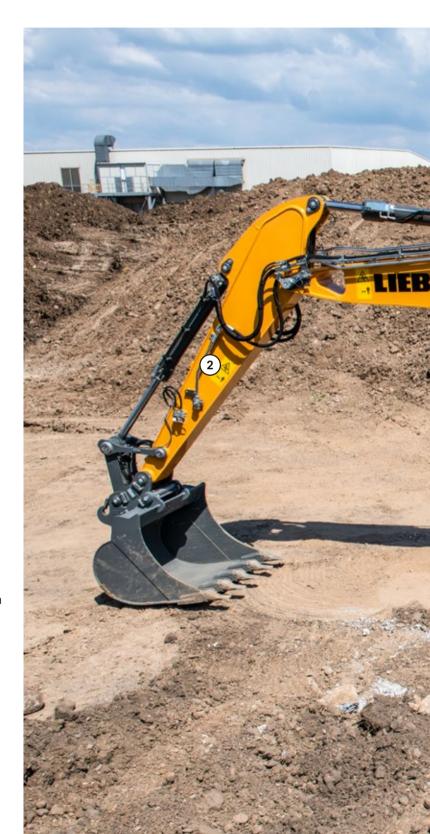
- Large choice of types and sizes of equipment
- Safety check valves for hoist and stick cylinders
- Guaranteed maintenance thanks to automatic centralized lubrication system (option)

# **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

- Robust, reliable X-frame undercarriage, easy to secure thanks to its integrated eyelets
- Easy maintenance
- Maintenance-free travel gear and track rollers with lifetime lubrication
- Extra storage as an option



# **Technical data**



•	
Rating	
per SAE J1349	173 HP (129 kW) at 1,800 rpm
per ISO 9249	175 HP (129 kW) at 1,800 rpm
Torque	682 Nm at 1,400 rpm / 503 lbf ft at 1,400 rpm
Model	D924 A7-04 - FPT motor designed for Liebherr
Туре	4 cylinder in-line
Bore	104 mm / <b>4.1 in</b>
Stroke	132 mm / <b>5.2 in</b>
Displacement	4.51/ <b>275 in</b> <sup>3</sup>
Engine operation	4-stroke diesel
	Common-Rail
	Turbo-charged and after-cooler
Exhaust gas treatment	Tier 4 Final
	DOC + SCR
	Passive regeneration by thermo management
Cooling system	Water-cooled and oil cooler, after-cooled and fuel cooled
Air cleaner	Dry-type air cleaner with pre-cleaner
Fuel tank	400 l / <b>106 gal</b>
Urea tank	461 / <b>12 gal</b>
Electrical system	
Voltage	24V
Batteries	2 x 135 Ah / 12 V
Alternator	Three-phase current 28 V / 140 A
Engine idling	Sensor controlled



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

# Hydraulic system

Hydraulic system	Positive Control hydraulic system. Demand-based, double inde- pendent pump flows Features high system dynamics and sensitivity provided by inte- grated system controlling
Hydraulic pump	
For equipment and travel drive	Liebherr, variable displacement, swashplate double pump
Max. flow	2 x 210l/min. / <b>2 x 55 gpm</b>
Max. pressure	380 bar / <b>5,511 psi</b>
Pump management	Electronic management synchronous to the control block. Open circuit for the rotation
Hydraulic tank	155l / <b>41gal</b>
Hydraulic system	max. 3201 / <b>max. 85 gal</b>
Filtration	1 main return filter with integrated partial micro filtration (10 µm / 1,250 mesh)
Cooling system	Compact cooler, consisting of a water cooler, sandwiched with hydraulic oil cooler and fuel and after-cooler cores and hydrostatically driven 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

# $\bigcirc$ Swing drive

C Owning unive	
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	0-12.9 rpm stepless
Swing torque	74.3 kNm / <b>54,801 lbf ft</b>
Holding brake	Wet multi-disc (spring applied, pressure released)



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, 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
Operator's seat	Liebherr-Comfort seat, airsprung with automatic weight adjust- ment, 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
Arm consoles	Oscillating consoles with seat, tiltable 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	, and a position
ISO 6396	70 dB(A) = L <sub>pA</sub> (inside cab)
2000/14/EC	102 dB(A) = L <sub>WA</sub> (surround noise)

### Undercarriage

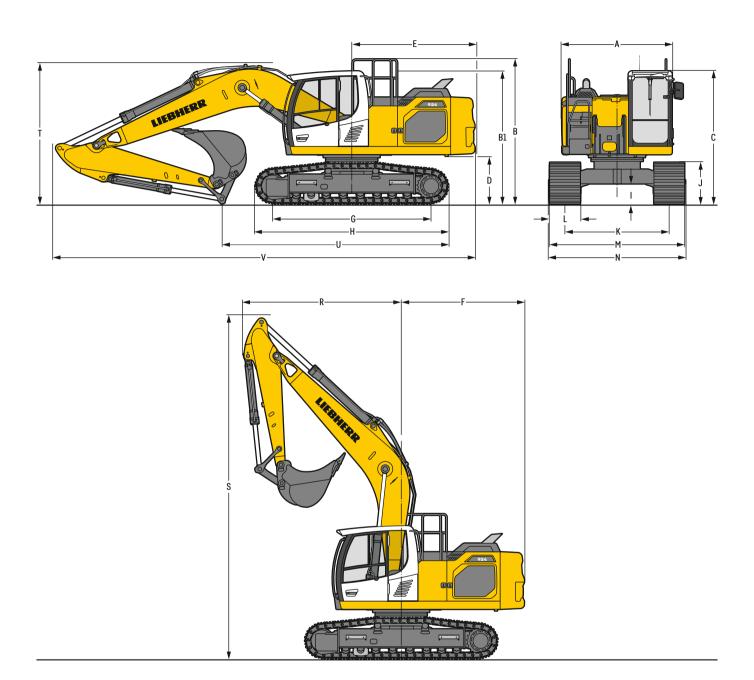
LC	Gauge 2,390 mm / <b>7'10"</b>
Drive	Liebherr swashplate motor with brake valves on both sides
Transmission	Liebherr planetary reduction gear
Maximum travel speed	3.1 km/h / <b>1.9 mph</b> low range
	5.9 km/h / 3.7 mph high range
Drawbar pull on crawler	236kN / <b>53,060 lbf</b>
Track components	B60, D6C, maintenance-free
Track rollers / Carrier rollers	8/2
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**

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

# **Dimensions**



		LC			mm/ft in
Α	Uppercarriage width				2,545 <sup>2</sup> )/ <b>8' 4"2</b> )
В	Uppercarriage height				3,335 / <b>10'11"</b>
B1	Uppercarriage height (handrails folded)				3,060 / <b>10'</b>
С	Cab height				3,060 / <b>10'</b>
D	Counterweight ground clearance				1,100 / 3' 7"
E	Rear-end length				2,830 / <b>9' 3"</b>
F	Tail swing radius				2,880 / <b>9' 5"</b>
G	Wheelbase				3,640 /11'11"
Н	Undercarriage length				4,435 / <b>14' 7"</b>
1	Undercarriage ground clearance				485 / <b>1' 7"</b>
J	Track height				960 / <b>3' 2"</b>
K	Track gauge				2,390 / <b>7'10"</b>
L	Track pad width	600/ 24"	700 / <b>28"</b>	800 / 31"	900 / 35"
М	Width over tracks	2,990/9'10"	3,090 / <b>10' 2"</b>	3,190 / <b>10' 6"</b>	3,290 / <b>10'10"</b>
N	Width over steps	2,925/ <b>9' 7"</b>	3,1251)/ <b>10' 3"1</b> )	3,1251)/ <b>10' 3"1</b> )	3,2251)/ <b>10' 7"</b> 1)

<sup>&</sup>lt;sup>1)</sup> width with removable steps <sup>2)</sup> without door stop device and spacer

		Stick length	Mono boom 5.70 m/18'8" direct mounting
		m/ft in	mm/ft in
R	Front swing radius	2.50/ <b>8'2"</b>	3,650/ <b>12'</b>
		2.90 / <b>9'6"</b>	3,650/ <b>12'</b>
		3.50/ <b>11'6"</b>	3,600/ <b>11'10"</b>
S	Height with boom up		7,900/ <b>25'11"</b>
T	Boom height	2.50/ <b>8'2"</b>	3,250/ <b>10' 8"</b>
		2.90 / <b>9'6"</b>	3,250/ <b>10' 8"</b>
		3.50/ <b>11'6"</b>	3,150/ <b>10' 4"</b>
U	Length on ground	2.50/ <b>8'2"</b>	6,200/ <b>20' 4"</b>
		2.90 / <b>9'6"</b>	5,900/ <b>19' 4"</b>
		3.50/11'6"	4,450/ <b>14' 7"</b>
٧	Overall length		9,700/ <b>31'10"</b>
	Bucket		1.25 m <sup>3</sup> / <b>1.63 yd<sup>3</sup></b>

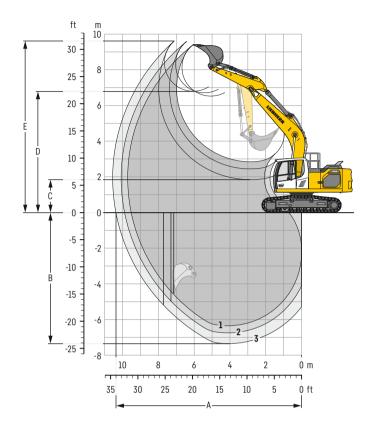
# **Transport dimensions**

### removable elements disassembled

		Mono boom 5.70 m / 18'8"			
		mm/ft in			
Pad width		600/ 24"	700/ <b>28"</b>	800/ 31"	900/ 35"
Transport width		2,990/9'10"	3,090/10' 2"	3,190/ <b>10' 6"</b>	3,290/10'10"
	Stick				
	m/ft in		mm/	ft in	
Transport length		9,700/ <b>31'10"</b>			
	2.50/ 8'2"		3,250/	10' 8"	
Transport height	2.90/ 9'6"		3,250/	10' 8"	
	3.50/11'6"		3,150/	10' 4"	
Bucket			1.25 m <sup>3</sup> /	′1.63 yd³	

# **Backhoe bucket**

### with mono boom 5.70 m / 18'8"



### Digging envelope

without quick coupler		1	2	3
Stick length	m/ft in	2.50/ 8' 2"	2.90/ <b>9'6"</b>	3.50/ <b>11'6"</b>
A Max. reach at ground level	m/ft in	9.51/ <b>31' 2"</b>	9.89/32'5"	10.37/34'
B Max. digging depth	m/ft in	6.35/ <b>20'10"</b>	6.75/22'2"	7.35/24'1"
C Min. dumping height	m/ft in	2.85/ 9' 4"	2.45/8'	1.85/ 6'1"
D Max. dumping height	m/ft in	6.53/ <b>21' 5"</b>	6.71/ <b>22'</b>	6.80/22'4"
E Max. cutting height	m/ft in	9.40 / 30'10"	9.59/31'6"	9.61 / 31'6"

### **Forces**

without quick coupler		1	2	3
Stick digging force (ISO 6015)	kN/ <b>lbf</b>	135/ <b>30,350</b>	122/27,430	106/23,830
Bucket digging force (ISO 6015)	kN/ <b>lbf</b>	173/38,890	173/38,890	173/38,890
Stick digging force (SAE J1179)	kN/ <b>lbf</b>	129/29,000	117/26,300	103/23,160
Bucket digging force (SAE J1179)	kN/ <b>lbf</b>	151/33,950	151/33,950	151/33,950

### Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 5.0 t/11,020 lb, mono boom 5.70 m/18'8'', stick 2.90 m/9'6'' and bucket 1.25 m $^{2}$ /1.63 yd $^{3}$  (890 kg/1,960 lb).

Undercarriage			L	С	
Pad width	mm/in	600/24"	700/ <b>28"</b>	800/31"	900/35"
Weight	kg/ <b>lb</b>	23,600/ <b>52,030</b>	23,850/52,580	24,250/53,460	24,550/ <b>54,120</b>
Ground pressure	ka/cm <sup>2</sup> / <b>psi</b>	0.50 / 7.1	0.43/6.1	0.39 / 5.5	0.35 / 5.0

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

	idth						LC under (with track pad				
	Cutting width	Capacity ISO 7451	Weight <sup>3)</sup>	Weight <sup>4)</sup>		with and anifely and a	Stick length (m / ft in)				
	mm ft in	س <sup>3</sup> yd³	kg <b>lb</b>	kg <b>lb</b>	2.50 <b>8'2"</b>	without quick coupler 2.90 <b>9'6"</b>	3.50 <b>11'6"</b>	2.50 <b>8'2"</b>	with quick coupler 2.90 <b>9'6"</b>	3.50 <b>11'6"</b>	
	650 <b>2'2"</b>	0.55 <b>0.72</b>	580 <b>1,280</b>	590 <b>1,300</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	
	850 <b>2'9"</b>	0.75 <b>0.98</b>	620 <b>1,370</b>	630 <b>1,390</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	
	1,050 <b>3'5"</b>	0.95 1.24	700 <b>1,540</b>	710 <b>1,570</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	
STD11	1,250 <b>4'1"</b> 1,250	1.15 <b>1.50</b> 1.25	810 <b>1,790</b> 890	830 <b>1,830</b> 910	<b>A</b>	<b>A</b>	<b>A</b> .	<b>A</b>	<b>A</b>	<b>A</b> .	
S	1,250 <b>4'1"</b> 1,400	1.25 1.63 1.35	<b>1,960</b> 850	<b>2,010</b> 880	<b>A</b>	<b>A</b>	•	<b>A</b>	<b>A</b>	•	
	1,400 <b>4'7"</b> 1,400	1.55 1.77 1.50	1,870 950	1,940 980	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	•	<b>A</b>	
	4'7"	1.96 1.65	<b>2,090</b> 1,020	2,160	•	<b>A</b>			<b>A</b>	Δ	
_	1,500 <b>4'11"</b>	2.16	2,250	1,030 <b>2,270</b>	<b>A</b>		Δ	<b>A</b>	Δ	Δ	
	650 <b>2'2"</b> 850	0.55 <b>0.72</b> 0.75	640 <b>1,410</b> 695	650 <b>1,430</b> 705	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	
	2'9"	0.98	1,530 790	1,550 800	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	
	1,050 <b>3'5"</b>	0.95 1.24	1,740	<b>1,760</b> 940	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	
HD <sup>23</sup>	1,250 <b>4'1"</b> 1,250	1.15 <b>1.50</b> 1.25	910 <b>2,010</b> 1,010	<b>2,070</b> 1,030	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	•	
_	4'1"	1.63	2,230	<b>2,270</b> 990	<b>A</b>	<b>A</b>		<b>A</b>	•	<b>A</b>	
	1,400 <b>4'7"</b>	1.35 1.77	970 <b>2,140</b>	2,180	<b>A</b>	•	<b>A</b> .	<b>A</b>	•		
	1,400 <b>4'7"</b>	1.50 1.96	1,090 <b>2,400</b>	1,120 <b>2,470</b>	•	<b>A</b>	Δ	•		Δ	
	1,500 <b>4'11"</b>	1.65 <b>2.16</b>	1,160 <b>2,560</b>	1,160 <b>2,560</b>	<b>A</b>		Δ	-	Δ	Δ	

 $<sup>^{\</sup>star}$  Indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

 $\text{Max. material weight } \blacktriangle = \text{$<$} 2.0 \text{$t/m}^3/3,400 \text{$lb/yd}, \blacksquare = \text{$<$} 1.8 \text{$t/m}^3/3,000 \text{$lb/yd}^3, \triangleq \text{$<$} 1.65 \text{$t/m}^3/2,800 \text{$lb/yd}^3, \blacksquare = \text{$<$} 1.5 \text{$t/m}^3/2,500 \text{$lb/yd}^3, \triangleq \text{$<$} 1.2 \text{$t/m}^3/2,000 \text{$lb/yd}^$ 

<sup>1)</sup> Standard bucket with teeth Z 40

<sup>&</sup>lt;sup>2)</sup> HD bucket with teeth Z 40

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

<sup>4)</sup> Bucket for mounting to quick coupler SWA 48 (250 kg / **550 lb**) Other buckets available upon request

# **Lift capacities**

# with mono boom 5.70 m / 18'8", counterweight 5.0 t / 11,020 lb and track pads 800 mm / 31"

Sti	ick	2	.50	m	/ 8	3'2"

	Î		3.0		4.5		6.0			m	/	otin  oti	₽
r- age	180		10	π -	15	π	20	lft □	25	ft p			_
Under- carriage			<del>-</del>	밤	<b>⊶</b> ∰	ď	<b>⊶</b>	Ь	-5	밤	<b>⊶</b> ∰	Ė	m ft in
	7.5 m	t									6.0*	6.0*	5.8
	25 ft	lb									13,3*	13,3*	18'7"
	6.0 m	t					5.8	6.1*			4.5	5.6*	7.0
	20 ft	lb					12,4	13,3*			10,1	12,3*	22'7"
	4.5 m	t			7.8*	7.8*	5.6	6.7*	3.9	5.8	3.8	5.5*	7.7
	15ft	lb			16,9*	16,9*	12,0	14,5*	8,5	12,5*	8,5	12,1*	25'1"
	3.0 m	t			8.0	10.0*	5.3	7.6*	3.8	5.7	3.5	5.1	8.0
	10ft	lb			17,2	21,5*	11,5	16,5*	8,3	12,3	7,7	11,3	26'4"
2	1.5 m	t			7.5	11.7*	5.1	7.7	3.7	5.6	3.4	5.0	8.1
_	5ft	lb			16,1	25,3*	10,9	16,6	8,0	12,0	7,4	11,0	26'6"
	0 m	t			7.3	11.9	4.9	7.5	3.6	5.5	3.4	5.1	7.9
	0ft	lb			15,7	25,5	10,6	16,3	7,9	11,8	7,6	11,3	25'10"
	$-1.5\mathrm{m}$	t	12.0*	12.0*	7.2	11.8	4.9	7.5			3.8	5.7	7.3
	-5ft	lb	27,3*	27,3*	15,6	25,4	10,5	16,2			8,3	12,5	24'
	$-3.0\mathrm{m}$	t	14.3	15.4*	7.4	11.1*	4.9	7.6			4.6	7.0	6.4
	-10ft	lb	30,6	33,4*	15,9	24,0*	10,7	16,4			10,2	15,5	20'10"
	$-4.5\mathrm{m}$	t			7.7	8.2*					7.0	7.5*	4.8
	-15ft	lb			16,6	17,2*					16,0	16,5*	15'5"

### Stick 2.90 m / 9'6"

9	[D		3.0 <b>10</b>	) m ) <b>ft</b>	4.5 <b>15</b>		6.0 <b>20</b>	) m ) <b>ft</b>	7.5 <b>25</b>	ft	0	<u></u>	3
Under- carriage	•••		<b>-</b> -∰	Ď	<b>⊶</b> 5⊃	Å	<b>⊶</b> ∰	Ġ	<b>⊶</b> ∰	Ď	5	Ď	m ft in
	7.5 m <b>25 ft</b>	t lb					5.6* <b>11,8</b> *	5.6* <b>11,8*</b>			5.0* <b>11,1</b> *	5.0* <b>11,1*</b>	6.3 <b>20'4"</b>
	6.0 m <b>20 ft</b>	t lb					5.6* <b>12,2</b> *	5.6* <b>12,2*</b>			4.1 9,2	4.7* <b>10,4</b> *	7.4 <b>24'</b>
	4.5 m 15 ft	t lb			7.1* <b>15,4</b> *	7.1* <b>15,4</b> *	5.6 <b>12,1</b>	6.2* <b>13.5</b> *	4.0 <b>8.5</b>	5.8* <b>12,5</b>	3.5 <b>7,8</b>	4.6* <b>10,2*</b>	8.1 <b>26'4"</b>
	3.0 m 10 ft	t lb			8.1 <b>17,4</b>	9.3* <b>20,0</b> *	5.3 <b>11,5</b>	7.2* <b>15,6*</b>	3.8 <b>8,2</b>	5.7 <b>12,2</b>	3.2 <b>7,1</b>	4.8 <b>10,5</b>	8.4 <b>27'6"</b>
2	1.5 m 5ft	t			7.5 <b>16,2</b>	11.2* <b>24,2</b> *	5.0 <b>10,9</b>	7.7 <b>16,6</b>	3.7 <b>8,0</b>	5.5 <b>11,9</b>	3.1 6,8	4.6 <b>10,2</b>	8.5 <b>27'8"</b>
	0 m 0 ft	t lb	6.1* <b>14,1</b> *	6.1* <b>14,1</b> *	7.2 <b>15,5</b>	11.8 <b>25,4</b>	4.8 <b>10,5</b>	7.5 <b>16,2</b>	3.6 <b>7,7</b>	5.4 <b>11,7</b>	3.2 <b>7,0</b>	4.8 <b>10,5</b>	8.2 <b>27</b> '
	-1.5 m -5 ft	t lb	11.3* <b>25,7</b> *	11.3* <b>25,7</b> *	7.1 <b>15,4</b>	11.7 <b>25,2</b>	4.8 <b>10,3</b>	7.4 <b>16,0</b>	3.6 <b>7,7</b>	5.4 <b>11,6</b>	3.4 <b>7,6</b>	5.2 <b>11,5</b>	7.7 <b>25'4"</b>
	-3.0 m - <b>10 ft</b>	t lb	14.0 <b>30,1</b>	16.3* <b>35,3</b> *	7.2 <b>15,6</b>	11.5* <b>24,8</b> *	4.8 <b>10,4</b>	7.5 <b>16,1</b>		·	4.1 9,1	6.2 <b>13,8</b>	6.8 <b>22'4"</b>
	-4.5 m - <b>15 ft</b>		12.9* <b>27,7</b> *	12.9* <b>27,7</b> *	7.5 <b>16,2</b>	9.2* <b>19,7*</b>					5.8 <b>13,1</b>	7.3* <b>16,2*</b>	5.4 <b>17'6"</b>

### Stick 3.50 m / 11'6"

ø	[A		3.0 <b>10</b>	) m I ft	4.5 <b>15</b>	im ift	6.0 <b>20</b>		7.5 <b>25</b>		/	<u></u>	3
Under- carriage	**		-5	Ŀ	- <del>-</del>	Ŀ			- <del>-</del>	Ġ	5	Ŀ	m ft in
	7.5 m <b>25 ft</b>	t lb									3.9* <b>8,6</b> *	3.9* <b>8,6</b> *	6.9 <b>22'4"</b>
	6.0 m <b>20 ft</b>	t lb							4.1 <b>8,7</b>	4.8* <b>9,7</b> *	3.7* <b>8,1</b> *	3.7* <b>8,1</b> *	7.9 <b>25'10"</b>
	4.5 m <b>15 ft</b>	t lb					5.5* <b>12,1*</b>	5.5* <b>12,1</b> *	4.0 <b>8,6</b>	5.3* <b>11,5</b> *	3.2 <b>7,1</b>	3.7* <b>8,1</b> *	8.5 <b>27'11"</b>
	3.0 m <b>10 ft</b>	t lb	12.8* <b>27,2</b> *	12.8* <b>27,2</b> *	8.2* <b>17,8</b> *	8.2* <b>17,8</b> *	5.4 <b>11,6</b>	6.6* <b>14,3</b> *	3.8 <b>8,2</b>	5.7 <b>12,3</b>	2.9 <b>6,5</b>	3.8* <b>8,4</b> *	8.9 <b>29'1"</b>
2	1.5 m <b>5ft</b>	t lb	6.7* <b>15,9</b> *	6.7* <b>15,9</b> *	7.6 <b>16,4</b>	10.4* <b>22,5</b> *	5.0 <b>10,9</b>	7.7* <b>16,7</b> *	3.7 <b>7,9</b>	5.5 <b>11,9</b>	2.8 <b>6,2</b>	4.1* <b>9,0</b> *	8.9 <b>29'4"</b>
	0 m <b>0 ft</b>	t lb	7.8* <b>17,7</b> *	7.8* <b>17,7</b> *	7.2 <b>15,5</b>	11.8* <b>25,3</b>	4.8 <b>10,4</b>	7.5 <b>16,1</b>	3.5 <b>7,6</b>	5.4 <b>11,6</b>	2.9 <b>6,3</b>	4.3 <b>9,5</b>	8.7 <b>28'7"</b>
	-1.5 m -5ft	t lb	11.2* <b>25,3</b> *	11.2* <b>25,3</b> *	7.0 <b>15,1</b>	11.6 <b>24,9</b>	4.7 <b>10,1</b>	7.3 <b>15,8</b>	3.5 <b>7,5</b>	5.3 <b>11,4</b>	3.1 <b>6,8</b>	4.7 <b>10,3</b>	8.2 <b>27</b> '
	-3.0 m -10ft		13.7 <b>29,3</b>	16.2* <b>36,7</b> *	7.0 <b>15,2</b>	11.6 <b>25,0</b>	4.7 <b>10,1</b>	7.3 <b>15,8</b>			3.6 <b>7,9</b>	5.4 <b>12,0</b>	7.4 <b>24'2"</b>
	-4.5 m -15ft		14.1 <b>30,2</b>	14.7* <b>31,5</b> *	7.2 <b>15,6</b>	10.3* <b>22,0</b> *	4.8	7.4*			4.7 <b>10,6</b>	7.2* <b>15,8</b> *	6.1 <b>19'10"</b>



The load values are quoted in tons (t)/lb x1,000 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 325 kg/720 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 04, for direct m	ounting							
Cutting width	mm/ft in	1,500/4'11"	2,000/6'7"	2,010/6'7"	2,400/ <b>7'10"</b>			
Capacity	m³/ <b>yd³</b>	0.50/0.65	0.70/0.92	0.85/1.11	0.85/1.11			
Weight	kg/ <b>lb</b>	400/ <b>880</b>	500/ <b>1,100</b>	530/ <b>1,170</b>	580/ <b>1,280</b>			
GRL 04, for mounting	ng to quick couple	er SWA 48						
Cutting width	mm/ft in	1,500/4'11"	1,500/4'11"	2,000/6'7"	2,000/6'7"	2,000/6'7"	2,400/ <b>7'10"</b>	2,400/ <b>7'10"</b>
Capacity	m³/ <b>yd³</b>	0.50/ <b>0.65</b>	0.95/1.24	0.70/ <b>0.92</b>	1.20/1.57	1.25/ <b>1.63</b>	0.85/1.11	1.15/ <b>1.50</b>
Weight	kg/ <b>lb</b>	430/ <b>950</b>	560/ <b>1,240</b>	400/880	640/ <b>1,410</b>	600/ <b>1,320</b>	600/ <b>1,320</b>	650/ <b>1,430</b>



### Tiltable ditch cleaning bucket

GRL 90, 2 x 50° tiltable, for direct mounting												
Cutting width	mm/ft in	1,600/5'3"	2,000/6'7"	2,000/6'7"	2,000/6'7"	2,200/7'3"	2,400/ <b>7'10"</b>	2,800/9'2"				
Capacity	m <sup>3</sup> / <b>yd<sup>3</sup></b>	0.80/1.05	0.50/0.65	0.70/ <b>0.92</b>	1.00/1.31	1.15/ <b>1.50</b>	0.85/1.11	1.45/1.90				
Weight	kg/ <b>lb</b>	798 / <b>1,760</b>	686/ <b>1,510</b>	819/1,810	883/ <b>1,950</b>	920/ <b>2,030</b>	885/ <b>1,950</b>	1,009/2,220				
GRL 90, 2 x 50° tilta	GRL 90, 2 x 50° tiltable, for mounting to quick coupler SWA 48											
Cutting width	mm/ft in	1,600/5'3"	2,000/6'7"	2,000/6'7"	2,000/6'7"	2,200/7'3"	2,200/7'3"	2,200/7'3"	2,400/7'10"	2,400/7'10"	2,800/9'2"	
Capacity	m <sup>3</sup> / <b>yd<sup>3</sup></b>	0.80/1.05	0.50/0.65	0.70/ <b>0.92</b>	1.00/1.31	0.80/1.05	1.15/1.50	1.40/1.83	0.85/1.11	1.25/1.63	1.85/2.42	
Weight	kg/ <b>lb</b>	850 / <b>1.870</b>	690/ <b>1.520</b>	880/1.940	940/2.070	880 / <b>1.940</b>	980 / 2.160	1.000/2.210	890/1.960	1.000/2.210	1.088/2.400	



### Tilt bucket

01.00.0 5001111.11											
SL 90, 2 x 50° tiltable, for direct mounting											
Cutting width	mm/ft in	1,600/5'3"	1,600/5'3"	1,600/5'3"							
Capacity	m <sup>3</sup> / <b>yd<sup>3</sup></b>	0.80/1.05	1.00/1.31	1.35/1.77							
Weight	kg/ <b>lb</b>	768/ <b>1,690</b>	820/ <b>1,810</b>	918/2,020							
SL 90, 2 x 50° tiltable	e, for mounting t	to quick coupler	SWA 48								
Cutting width	mm/ft in	1,500/4'11"	1,600/5'3"	1,600/5'3"	1,600/5'3"	1,600/5'3"	1,600/5'3"	1,600/5'3"	1,600/5'3"	1,600/5'3"	
Capacity	m <sup>3</sup> / <b>yd<sup>3</sup></b>	1.20/1.57	0.80/1.05	1.00/1.31	1.35/1.77	1.55/2.03	0.80/1.05	1.00/1.31	1.35/1.77	1.55/2.03	
Weight	kg/ <b>lb</b>	970/ <b>2,140</b>	820/ <b>1,810</b>	890/ <b>1,960</b>	970/ <b>2,140</b>	1,035/2,280	820/ <b>1,810</b>	1,006/2,220	1,184/2,610	1,550/3,420	
HD version							Χ	Χ	Χ	Χ	



### Clamshell grab

GMZ 30, clamshell buckets, for mounting to quick coupler SWA 48 (exists for direct mounting)										
Cutting width	mm/ft in	600/ <b>2'</b>	800/ <b>2'7"</b>	1,000/3'3"	1,200/ <b>3'11"</b>					
Capacity	m <sup>3</sup> / <b>yd<sup>3</sup></b>	0.45 / <b>0.59</b>	0.60/0.78	0.75/ <b>0.98</b>	0.90/1.18					
Weight	kg/ <b>lb</b>	575/ <b>1,270</b>	625/ <b>1,380</b>	700/ <b>1,540</b>	765/ <b>1,690</b>					



Sorting grad	b	ribbed		perforated		stone tong
SG 30, for direct mo	unting					
Cutting width	mm/ft in	1,000/3'3"	1,150/3'9"	1,000/3'3"	1,150/3'9"	1,020/3'4"
Capacity	m <sup>3</sup> / <b>yd</b> <sup>3</sup>	0.75 / <b>0.98</b>	0.90/1.18	0.85/1.11	1.00/1.31	0.85/1.11
Weight	kg/ <b>lb</b>	1,510/3,330	1,590/ <b>3,510</b>	1,490/3,290	1,570/3,460	1,765/ <b>3,890</b>
SG 30, for mounting	to quick coupler	SWA 48				
Cutting width	mm/ft in	1,000/3'3"	1,150/3'9"	1,000/3'3"	1,150/3'9"	1,020/3'4"
Capacity	m³/ <b>yd³</b>	0.75/ <b>0.98</b>	0.90/1.18	0.85/1.11	1.00/1.31	0.85/1.11
Weight	kg/ <b>lb</b>	1,510/ <b>3,330</b>	1,590/3,510	1,490/3,290	1,570/ <b>3,460</b>	1,765/ <b>3,890</b>



### Tiltrotator

TR 25, for mounting to quick coupler SWA 48								
Weight	kg/ <b>lb</b>	720/1,590						
Rotation		360°						
Tilt		2 x 50°						

# **Serial equipment**



### Undercarriage

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

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

Filter with integrated fine filters

Hydraulic pressure measuring ports

Liebherr Positive Control system with 2 independent circuits

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 - 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



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

DFF level on touchscreen

Electric socket in cabin (12 V)

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 Shortkey 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

Tiltable 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 3 pieces	+
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"	+
Tracks, sealed and greased	•
Tracks, sealed and greased, reinforced	+
Undercarriage LC	+
Undercarriage storage compartment	+

### **Uppercarriage**

Batteries high capacity	+
Batteries fight capacity  Batteries standard capacity	T
. ,	
Boxing ring Catwalk tiltable front left	+
***************************************	+
Centralized lubrication system (automatic)	•
Centralized lubrication system (manual)	+
Counterweight standard 5.0t/11,020lb	•
Electric socket on uppercarriage (24V)	+
Extended tool set including tool box	+
External starting aid (24V)	+
Front right rearview mirror	+1)
Fuel anti-theft protection	+
Headlight on uppercarriage, front left, LED+, 1 piece, protection included	+1)
Headlight on uppercarriage, front right, LED, 1 piece, protection included	●1)
Headlight on uppercarriage, front right, LED+, 1 piece, protection included	+1)
Headlight on uppercarriage, lateral left, LED+, 1 piece	+1)
Headlight on uppercarriage, lateral right, LED+, 1 piece	+1)
Headlights on uppercarriage, rear, LED+, 2 pieces	+1)
Lighting for tank area	+1)
Lighting for uppercarriage access	+1)
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	+1)
Pre-heating system for fuel	+
Radiator fine mesh protection grid	+
Reversible fan drive	+

# **Equipment standard / option**





# **Equip**

### **Equipment**

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	+1)
Headlight on boom, right, LED, 1 piece	•1)
Headlight on boom, right, LED+, 1 piece	+1)
Headlight on stick, bottom, LED+, 1 piece	+1)
Hose protection for Solidlink	+
Liebherr bucket range	+
Liebherr tooth system	+
Load holding valve for bucket cylinder	+
Lubrication hoses protection on stick	+
Mono boom 5.70 m/18'8"	+
Quick coupler SWA 48 hydraulic	+
Quick coupler SWA 48 mechanical	+
Solidlink electric signal plug	+
Solidlink for quick coupler SWA 48 hydraulic	+
Special painting	+
Stick 2.50 m / 8'2"	+
Stick 2.90 m / 9'6"	+
Stick 3.50 m / 11'6"	+
Stick bottom protection	+
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

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.

 $<sup>^{1\!\!1}</sup>$  Equipment not individually available, but only as predefined packages Non-exhaustive list, please contact us for further information.

# **Notes**

# All illustrations and data may differ from standard equipment. Subject to change without notice. All indicated loads are based in accordance with ISO 9248. Printed in the USA·RG-BK·LFR/SP-12237875-02.24\_enUS

# 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



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.



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.

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