

**Machine for
Industrial Applications.**

A 904 C
Litronic

Operating Weight: 19.000 - 23.500 kg
Engine Output: 99 kW / 135 HP



LIEBHERR

A 904 C

Litronic

Technical Data:

Operating Weight: 19.000 - 23.500 kg
Engine Output: 99 kW / 135 HP

Performance

Liebherr wheeled excavators are designed for maximum production. High lift capacities and quick work cycles are prerequisites for convincing performance in industrial load handling. A variety of attachment options allow the excavator to be tailored for all types of applications.

Reliability

Liebherr hydraulic excavators are designed and manufactured to meet the toughest application requirements. Rugged design, high tensile materials and Liebherr components ensure maximum availability and long life expectancy.

Comfort

Liebherr excavator cabs feature large dimensions and ergonomic layout. The operator's seat can be adjusted individually, the control instruments are arranged within easy view of the operator and perfect all-around-visibility is ensured. An automatic air conditioner always provides the ideal temperature in the "Liebherr comfort cab".

Economy

The Liebherr-Litronic-System increases the performance of the machine and reduces fuel consumption as well as service and maintenance costs. Due to a well-balanced range of models, Liebherr always offers the right machine for each application.



Performance

The A904 C Litronic has been designed for maximum production! Perfectly harmonized, the Liebherr-developed and Liebherr-manufactured components including diesel engine, hydraulic pump and motor, as well as swing gear and cylinders, guarantee maximum performance. Tremendous digging and breakout forces, extensive lifting capacities and quick working and travel movements are thus resulted.

Innovative solutions

Wide range of attachments

Liebherr's customized applications program offers a wide variety of attachments. Straight or angled industrial gooseneck booms can be combined with various industrial sticks to suit the machines for any application.

High lift capacities

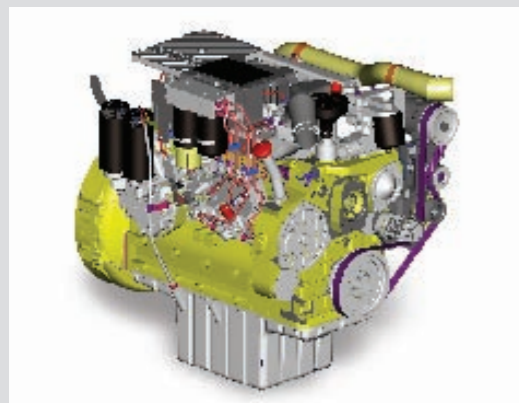
Handling various kinds of materials such as scrap, wood or bulk material is part of a material handler's daily tasks. Separate hoist cylinder bearing points in the uppercarriage increase the lift forces even further.

Quick working cycles

High swing torque – attained as a result of the Liebherr swing ring featuring internal teeth and swing drive, specially designed to increase the torque.

Performance without compromise

Maximum performance and maximum forces are available to the operator at all times.



Liebherr diesel engine

- Long life-expectancy, expansive cylinder capacity and increased weight
- Complies with exhaust emission standards, Tier 2 and 97/68/CEE
- Specially designed for construction machinery operation
- Oil supply even with 100 % tilt angle



Rugged undercarriage

- Various undercarriage designs featuring welded, durable outriggers allow safe positioning, optimum stability, and long life-expectancy of the machine for every application.
- Prop-up blade / dozing blade in box-type design



Litronic

- Increases productivity of the excavator
- Reduces fuel consumption,
- Reduces service costs and eases operation.
- Allows maximum sensitivity and as many overlapping movements as are required

Reliability

Liebherr material handlers prove themselves daily in the most varied industrial applications around the world. Many years of experience as the world's largest manufacturer of rubber-tyre excavators, continuous development and the introduction of the latest technology are evident in every machine, guaranteeing absolute safety during applications. With its rugged design, and featuring Liebherr components, the A904 C Litronic has been designed for extremely long life-expectancy.

Quality in detail

Liebherr components

Components such as engine, hydraulic cylinders, swing gear and electric parts have been specially designed, tested and manufactured by Liebherr for construction machinery. Parts including engines and pumps for example, are already being synchronized with each other as early as the construction phase, yielding a constant standard of quality.

Functional safety

Safety-orientated components, fitted as standard, allow high availability. The operator can thus concentrate fully on the task at hand, due to the integrated on-board electronics performing a constant balancing of pre-defined set data. Filtering of metallic filings by the magnetic rod, fitted in the hydraulic system as standard, increases life-expectancy of the hydraulic components and the oil.

Rugged attachments

Working attachment

The durable attachments have been designed for the toughest of applications. All components are optimised to the FEM methods and the hoist cylinders feature bearings on both sides.

Piping

The hydraulic lines are arranged optimally to safeguard against damage. The electric cabling is made with high-grade materials, thus guaranteeing a reliable supply to the consumer.



Features

- High-tensile steel plates in high-stress areas for the toughest of applications
- Well-thought-out and secure bearings for attachments and cylinders
- Maximum resistance, even when lifting heavy loads



Liebherr hydraulic cylinders

- Specific size for each machine
- High-grade surface coating of the piston rods
- All Liebherr cylinders feature special long-life sealing systems
- Shock absorption at both sides in the working cylinders



Functional safety

- Essential operating data is stored and can be recalled at any time.
- Control and monitoring functions increase functional safety of the machine.
- Four fixed working modes for output discharge facilitate an effective and efficient operation:
 - Eco-Mode: for high output at big fuel savings
 - Power-Mode: for heavy-duty material handling performance under severe conditions
 - Lift-Mode: for precise handling of heavy loads
 - Fine-Mode: for fine control at precision work



Comfort

The excavator operator is provided with an ergonomically-arranged working area within Liebherr hydraulic excavator cabs. All switches and functions are logically laid out, and operator's seat, steering column and consoles can be adjusted individually. Conditioning and concentration can thus be maintained throughout the entire working day, guaranteeing constant, maximum productivity of the operator.

Mobile comfort

Easy access

Wide steps, ergonomically-positioned handles and adjustable steering column allow an easy access into the Liebherr operator's cab.

Optimum visibility

A well-thought-out design of the uppercarriage, featuring large glass panels and rounded edges, increase overall visibility and guarantees a safe overview of the entire working area.

Pleasant surroundings

Reduced engine speed together with elaborate sound insulation, as well as optimised hydraulic components, allow a comfortable noise level both inside and out. The noise level is comparable with that of a diesel car.

Maintenance features

Easy maintenance

A central lubrication point for swing gear and main parts of the attachment

Ease of operation

A shut-off valve, fitted to the hydraulic tank as standard, disconnects the system and guarantees ease of maintenance to the hydraulic system.

Easy access

Large maintenance flaps allow comfortable and safe access to all maintenance points.



Large-sized cab

- Adjustable steering column
- Operator's seat, adjustable in height and can also be adapted to the individual weight of the operator.
- Consoles with or without possibility of horizontal adjustment.
- Large roof window
- Sun blinds



Storage compartment – Everything has its place

- Sufficient storage space for a commercially-approved cooler box behind the operator's seat.
- Drinks holder and storage compartment in operator's cab
- Large storage box behind the operator's cab
- Two standard tool boxes in the undercarriage



Fully-automatic air-conditioning system

- The air-conditioning system, fitted as standard, offers the same comfort as that of a regular car
- Two sensors for precise temperature regulation
- Ventilation flaps are controlled via keys
- Reheat function for quick dehumidifying / defrosting of the windshield



Economy

Liebherr offer a wide range of models, guaranteeing optimum suitability for every application. Easy access to components, as well as the proven service offer allows maintenance tasks to be performed in the shortest of times, thus reducing operating costs considerably.

Low operating costs

Liebherr engine

Maximum power of the engine is generated even when running at minimum speed. This allows the necessary output without limitation, whereby the torque which is available is ample for the level required, resulting high productivity with low consumption.

Automatic idle

If no working or travel movements are being performed, the shiftable function reduces the engine speed to idle, which in turn reduces fuel consumption and emission levels.

Intelligent hydraulic management

The state-of-the-art hydraulic system allows conversion of the maximum engine output into high force or speed, as required. The maximum possible forces are available at all times.

Hydraulically adjustable cab

The operator can position the cab in optimum view for superior load handling performance due to the hydraulically adjustable cab.

Investment for the future

Extensive service offer

Proven service offers assured by our service personnel trained directly at the manufacturing plants, and endorsed by our tight-knit network of dealers, provide services in all required areas. Direct contact to Liebherr is guaranteed via complete integration of all service points in our own Liebherr logistics system. Electronic access to our global spare-parts management allows a 98% availability of spare-parts 24 hours a day.

High resale values

Liebherr excavators are built with high-grade materials and quality production to provide a long-term operational life-span, thus guaranteeing maximum resale values.



Hydrostatic fan drive

- Accelerated warm-up period
- Guaranteed constant oil quality as a result of constant oil temperature
- Increased life-expectancy of drive components
- The fan only runs at the output required, thus conserving fuel and reducing the noise level considerably



Service-orientated

- Service points of the engine – such as filter or filling amount displays are easily accessible and can be easily reached from the maintenance platform
- The magnetic rod on the hydraulic oil return flow increases life-expectancy of the oil
- Central lubricating point for swing gear and main parts of the attachment allowing quicker maintenance



Grapples and quick change adapters

- maximum productivity due to tool change being performed in a matter of seconds
- Your machine is a multi-functional tool carrier and will pay for itself very quickly indeed.
- Mechanic and hydraulic Liebherr quick-change adapter

Technical Data



Engine

Rating per ISO 9249	99 kW (135 HP) at 2000 RPM
Model	Liebherr D 924 TI-E
Type	4 cylinder in-line
Bore/Stroke	122/142 mm
Displacement	6,6 l
Engine operation	4-stroke diesel direct injection turbo-charged after-cooled reduced emissions
Cooling system	water-cooled and integrated motor oil cooler
Air cleaner	dry-type air cleaner with pre-cleaner, primary and safety elements
Fuel tank	340 l
Engine idling	sensor controlled
Electrical system	
Voltage	24 V
Batteries	2 x 92 Ah/12 V
Alternator	24 V/55 A



Hydraulic System

Hydraulic pump	Liebherr, variable displacement, swash-plate pump
Max. flow	330 l/min.
Max. hydr. pressure	350 bar
Hydraulic pump regulation and control	Liebherr-Synchron-Comfort-system (LSC) with electronic engine speed sensing regulation, pressure and flow compensation, load sensing and torque controlled swing drive priority
Hydraulic tank capacity	175 l
Hydraulic system capacity	max. 330 l
Filtration	one main return filter with integrated partial micro filtration (5 µm)
Cooling system	compact cooler, consisting of a water cooler, sandwiched with hydraulic oil cooler and after-cooler cores and hydrostatically driven fan
Modes	can also be adjusted by the operator to adjust engine and hydraulic performance to match job conditions (Note: All modes provide full max. power)
LIFT	for precise lifting tasks
FINE	for precision work at high speed i.e. grading
ECO	for most economic performance at best environmental conditions
POWER	for max. output
Super-Finish	additional operator adjustable work speed function for further increased feathering. Applies to all modes and all control functions
R.P.M. adjustment	stepless adjustment of engine output via the r.p.m.
Optional add on circuits	four preadjustable pump flows for add on tools



Hydraulic Controls

Power distribution	via control valve with integrated safety valves, simultaneous and independent operation of travel drive, swing drive and all attachment functions
Control type	
Attachment and swing	proportional via joystick levers
Travel	proportional via foot pedal
Additional functions	via switch and/or proportional foot pedals



Swing Drive

Drive	Liebherr swashplate motor with torque control and integrated brake valve
Transmission	Liebherr compact planetary reduction gear
Swing ring	Liebherr sealed single race ball bearing swing ring, internal teeth
Swing speed	0–9,0 RPM
Swing torque	46 kNm
Holding brake	wet discs (spring applied – pressure released)
Option	pedal controlled positioning brake



Operator's Cab

Cab	resiliently mounted, sound insulated, tinted windows, front window stores overhead, door with sliding window
Operator's seat	fully adjustable, shockabsorbing suspension, adjustable to operator's weight and size, 6-way adjustable Liebherr seat
Joysticks	integrated into adjustable consoles
Monitoring	menu driven query of current operating conditions via the LCD display. Automatic monitoring, display, warning (acoustical and optical signal) and saving machine data, for example, engine overheating, low engine oil pressure or low hydraulic oil level
Air conditioning	standard air conditioning, combined cooler/heater, additional dust filter in fresh air/recirculated
Noise emission	
ISO 6396	L_{pA} (inside cab) = 73 dB(A)
2000/14/EC	L_{wA} (surround noise) = 100 dB(A)



Undercarriage

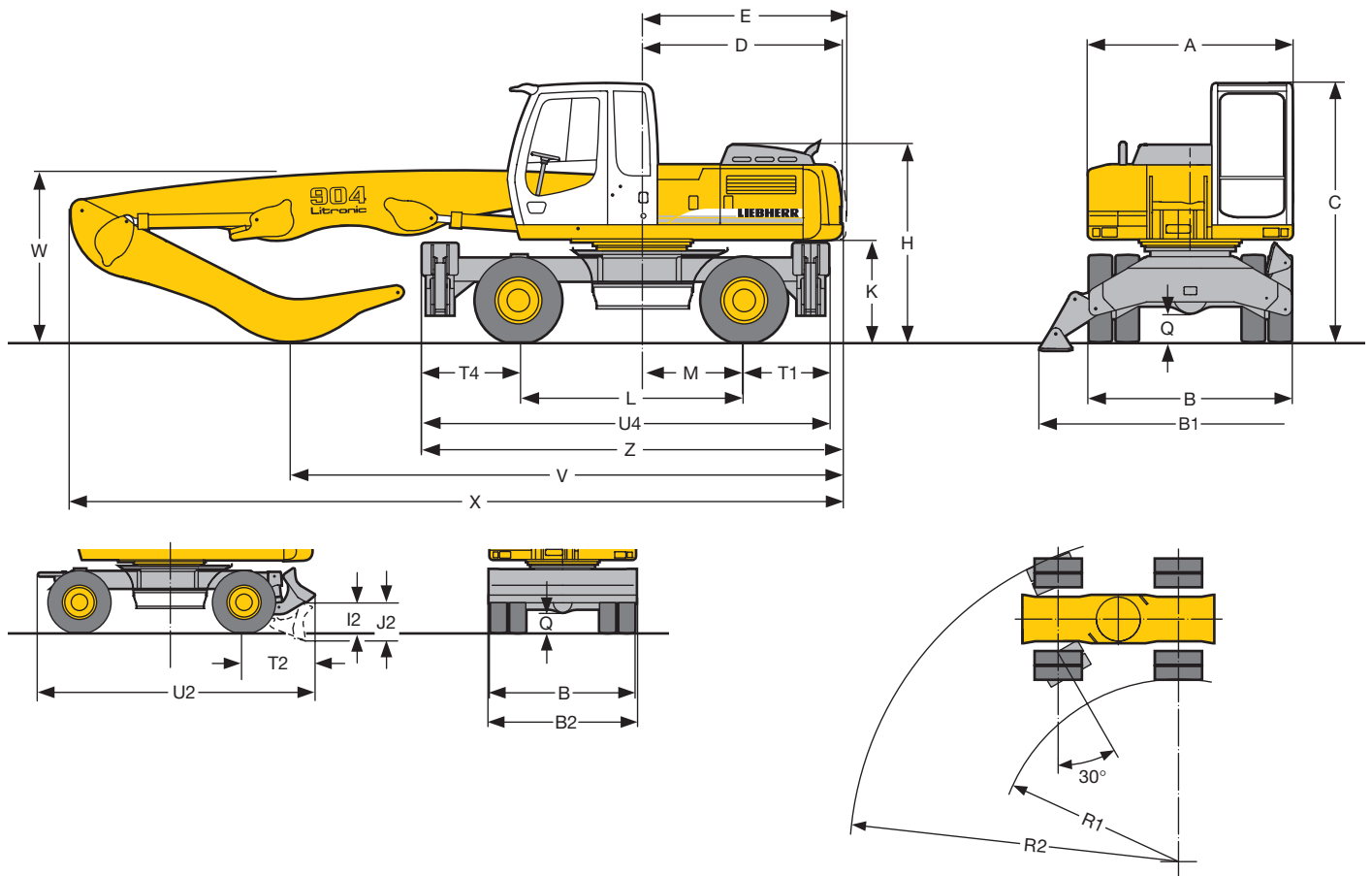
Drive	variable flow swashplate motor with automatic brake valve
Transmission	oversized two speed power shift transmission with additional creeper speed
Travel speed	0– 2,5 km/h (creeper speed off road) 0– 5,0 km/h (off road) 0– 9,0 km/h (creeper speed on road) 0–20,0 km/h (road travel) 0–30,0 km/h "Speeder" (option)
Drawbar pull, max.	100 kN
Axles	40 t excavator axles; automatic or operator controlled front axle oscillation lock
Brakes	wet, maintenance-free multi disc brakes, opt: rigid axle with drum brakes. Spring applied/pressure released parking brake integrated into gear box
Stabilization	stabilizing blade (adjustable during travel for dozing) 2 point outriggers stabilizing blade + 2 pt. outriggers 4 point outriggers



Attachment

Hydraulic cylinders	Liebherr cylinders with special seal system. Shock absorption
Pivots	sealed, low maintenance
Lubrication	via grease distributor and a grease nipple installed on the uppercarriage

Dimensions



	mm
A	2550
B	2480
B1	3965
B2	2550
C	3160
D	2455
E	2485
H	2405
I2	515
J2	645
K	1235
L	2750
M	1250
Q	350
R1	4300
R2	7380
T1	1040
T2	1265
T4	1190
U2	4970
U4	4980
Z	5145

E = Tail radius

Tires 10.00-20

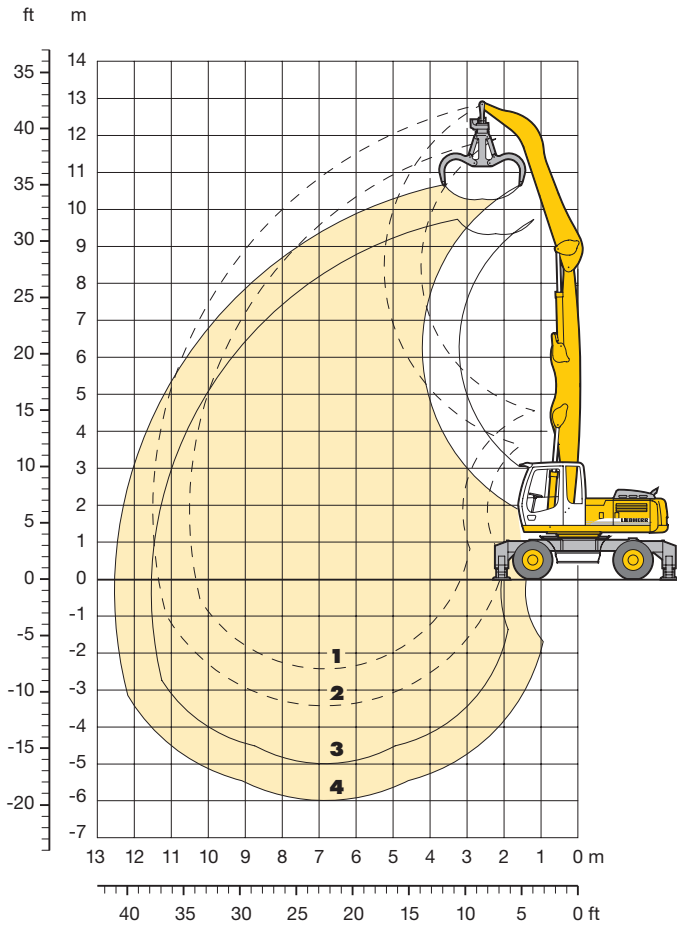
	Industrial Stick	Industrial-Type Straight Boom 6,60 m		Industrial-Type Gooseneck Boom 6,00 m	
		Prop up blade mm	4 pt. outr. mm	Prop up blade mm	4 pt. outr. mm
V	4,00	6800	6750	6200	6300
	5,00	5900	6050*	5500	5700*
W	4,00	2250	2250	2600	2900
	5,00	2400	2950*	3200	3250*
X	4,00	9650	9600	9050	9050
	5,00	9650	9850*	9050	9250*

Dimensions are with attachment over steering axle

* Attachment over digging axle for shorter transport dimensions

Industrial Attachment

for Scrap Handling with Straight Boom 6,60 m



Attachment Envelope

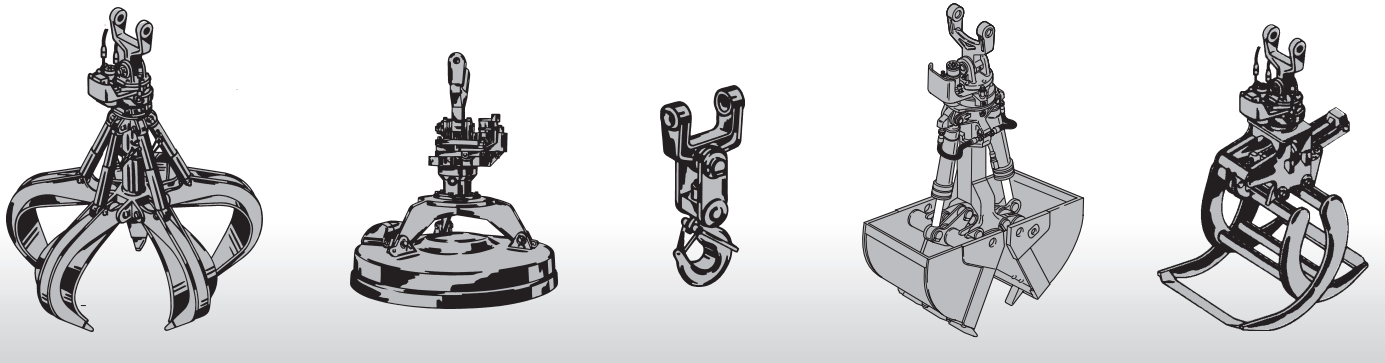
Industrial-type straight boom pinned in rear bearing of boom foot bracket

- 1 with industrial stick 4,00 m
- 2 with industrial stick 5,00 m
- 3 with industrial stick 4,00 m and grapple model 65
- 4 with industrial stick 5,00 m and grapple model 65

Operating Weight

The operating weight includes basic machine A 904 C Litronic with 4 pt. outriggers, hydr. cab elevation, 8 solid tires plus spacer rings and industrial application with industrial-type straight boom 6,60 m.

with grapple model 65/0,60 m ³ semi-closed tines and industrial stick 4,00 m and industrial stick 5,00 m	Weight
and industrial stick 4,00 m	23350 kg
and industrial stick 5,00 m	23500 kg



Lift Capacities

for Scrap Handling with Straight Boom 6,60 m

Industrial Stick 4,00 m

Height (m)	Undercarriage	Radius of load from centerline of machine (m)					
		3,0	4,5	6,0	7,5	9,0	10,5
12,0	Stabilizers raised 4 pt. outriggers down						
10,5	Stabilizers raised 4 pt. outriggers down		5,6 (8,2#) 8,2# (8,2#)				
9,0	Stabilizers raised 4 pt. outriggers down		5,7 (8,9#) 8,9# (8,9#)	3,5 (5,8) 7,4# (7,4#)	2,3 (3,9) 5,4 (5,6#)		
7,5	Stabilizers raised 4 pt. outriggers down		5,7 (9,0#) 9,0# (9,0#)	3,5 (5,7) 7,4# (7,4#)	2,4 (3,9) 5,4 (6,3#)		
6,0	Stabilizers raised 4 pt. outriggers down		5,4 (9,1) 9,5# (9,5#)	3,4 (5,6) 7,6# (7,6#)	2,3 (3,8) 5,3 (6,3#)	1,6 (2,8) 3,9 (5,3#)	
4,5	Stabilizers raised 4 pt. outriggers down	9,1 (15,5#) 15,5# (15,5#)	4,8 (8,4) 10,4# (10,4#)	3,1 (5,3) 7,4 (7,9#)	2,2 (3,7) 5,2 (6,4#)	1,6 (2,7) 3,9 (5,3#)	
3,0	Stabilizers raised 4 pt. outriggers down	2,2# (2,2#) 2,2# (2,2#)	4,2 (7,6) 11,2 (11,2#)	2,8 (4,9) 7,0 (8,2#)	2,0 (3,5) 5,0 (6,5#)	1,5 (2,6) 3,8 (5,2#)	
1,5	Stabilizers raised 4 pt. outriggers down		3,6 (6,9) 10,1# (10,1#)	2,5 (4,6) 6,7 (8,2#)	1,8 (3,3) 4,8 (6,3#)	1,4 (2,6) 3,7 (5,0#)	1,1 (2,0) 2,9 (3,7#)
0	Stabilizers raised 4 pt. outriggers down		3,3 (6,6) 7,5# (7,5#)	2,3 (4,4) 6,4 (7,5#)	1,7 (3,2) 4,7 (5,8#)	1,3 (2,5) 3,6 (4,5#)	
-1,5	Stabilizers raised 4 pt. outriggers down		3,3 (6,6) 7,5# (7,5#)	2,2 (4,3) 6,2# (6,2#)	1,7 (3,1) 4,6 (4,9#)	1,3 (2,5) 3,6# (3,6#)	
-3,0	Stabilizers raised 4 pt. outriggers down						

Industrial Stick 5,00 m

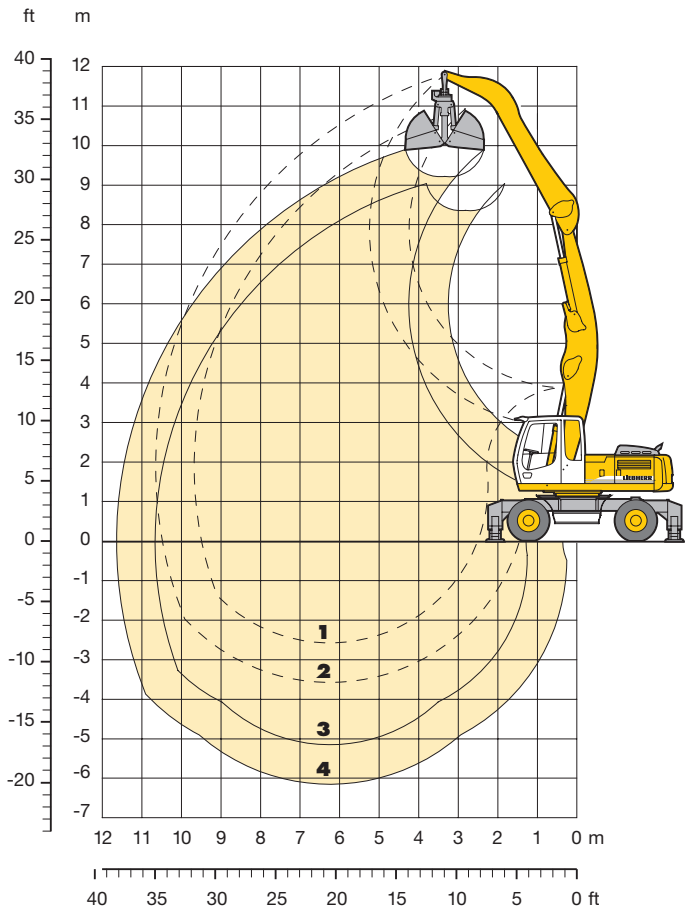
Height (m)	Undercarriage	Radius of load from centerline of machine (m)					
		3,0	4,5	6,0	7,5	9,0	10,5
12,0	Stabilizers raised 4 pt. outriggers down		5,6 (6,5#) 6,5# (6,5#)				
10,5	Stabilizers raised 4 pt. outriggers down			3,7 (5,9) 6,4# (6,4#)	2,4 (3,9) 4,3# (4,3#)		
9,0	Stabilizers raised 4 pt. outriggers down			3,8 (6,0) 6,7# (6,7#)	2,5 (4,1) 5,6 (5,9#)	1,7 (2,9) 3,8# (3,8#)	
7,5	Stabilizers raised 4 pt. outriggers down			3,7 (6,0) 6,8# (6,8#)	2,5 (4,1) 5,6 (5,9#)	1,7 (2,9) 4,1 (5,1#)	
6,0	Stabilizers raised 4 pt. outriggers down			3,6 (5,8) 7,0# (7,0#)	2,4 (4,0) 5,5 (6,0#)	1,7 (2,9) 4,0 (5,1#)	1,2 (2,2) 3,1 (4,2#)
4,5	Stabilizers raised 4 pt. outriggers down		5,3 (9,0) 9,5# (9,5#)	3,3 (5,5) 7,4# (7,4#)	2,3 (3,8) 5,3 (6,1#)	1,6 (2,8) 3,9 (5,2#)	1,2 (2,1) 3,0 (4,4#)
3,0	Stabilizers raised 4 pt. outriggers down	8,3 (16,3#) 16,3# (16,3#)	4,5 (8,1) 10,6# (10,6#)	2,9 (5,1) 7,2 (7,9#)	2,1 (3,6) 5,1 (6,3#)	1,5 (2,7) 3,8 (5,2#)	1,1 (2,1) 3,0 (4,3#)
1,5	Stabilizers raised 4 pt. outriggers down	2,7# (2,7#) 2,7# (2,7#)	3,8 (7,2) 10,8 (11,1#)	2,6 (4,7) 6,8 (8,1#)	1,8 (3,4) 4,8 (6,3#)	1,4 (2,5) 3,7 (5,1#)	1,0 (2,0) 2,9 (4,1#)
0	Stabilizers raised 4 pt. outriggers down	2,6# (2,6#) 2,6# (2,6#)	3,3 (6,6) 9,3# (9,3#)	2,3 (4,4) 6,4 (7,9#)	1,7 (3,2) 4,6 (6,1#)	1,3 (2,4) 3,6 (4,8#)	1,0 (1,9) 2,9 (3,7#)
-1,5	Stabilizers raised 4 pt. outriggers down	3,7# (3,7#) 3,7# (3,7#)	3,1 (6,4) 8,2# (8,2#)	2,1 (4,2) 6,3 (7,0#)	1,6 (3,1) 4,5 (5,4#)	1,2 (2,4) 3,5 (4,2#)	1,0 (1,9) 2,8 (2,9#)
-3,0	Stabilizers raised 4 pt. outriggers down			2,1 (4,1) 5,5# (5,5#)	1,5 (3,0) 4,3# (4,3#)		

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface with closed steering axle. Capacities shown in brackets are valid when the undercarriage is in longitudinal position and are established over the steering axle (travel position) with stabilizers raised, and over rigid axle with stabilizers down. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (#). Lift capacities do not include the weight of a grapple, clamshells, magnet or other lifting devices, which must be deducted from the above figures. Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

Industrial Attachment

for Loose Material with Gooseneck Boom 6,00 m



Attachment Envelope

Industrial-type gooseneck boom pinned in rear bearing of boom foot bracket

- 1 with industrial stick 4,00 m
- 2 with industrial stick 5,00 m
- 3 with industrial stick 4,00 m and clamshell model 10 B
- 4 with industrial stick 5,00 m and clamshell model 10 B

Operating Weight

The operating weight includes basic machine A 904 C Litronic with 4 pt. outriggers, 8 tires plus spacer rings and industrial application with industrial-type gooseneck boom 6,00 m.

with clamshell model 10 B/1,00 m ³ shells for loose material and industrial stick 4,00 m and industrial stick 5,00 m	Weight
and industrial stick 4,00 m	20700 kg
and industrial stick 5,00 m	20850 kg

Lift Capacities

for Loose Material with Gooseneck Boom 6,00 m

Industrial Stick 4,00 m

Height (m)	Undercarriage	Radius of load from centerline of machine (m)					
		3,0	4,5	6,0	7,5	9,0	10,5
12,0	Stabilizers raised 4 pt. outriggers down						
10,5	Stabilizers raised 4 pt. outriggers down						
9,0	Stabilizers raised 4 pt. outriggers down		5,4 (8,0#) 8,0# (8,0#)	3,3 (5,4) 5,9# (5,9#)			
7,5	Stabilizers raised 4 pt. outriggers down		5,4 (7,9#) 7,9# (7,9#)	3,4 (5,4) 6,9# (6,9#)	2,3 (3,7) 5,1 (5,5#)		
6,0	Stabilizers raised 4 pt. outriggers down		5,3 (8,4#) 8,4# (8,4#)	3,3 (5,3) 7,1# (7,1#)	2,2 (3,6) 5,0 (6,2#)		
4,5	Stabilizers raised 4 pt. outriggers down	9,3 (12,9#) 12,9# (12,9#)	4,9 (8,2) 9,4# (9,4#)	3,1 (5,1) 7,0 (7,5#)	2,1 (3,5) 4,9 (6,4#)	1,5 (2,6) 3,6 (5,2)	
3,0	Stabilizers raised 4 pt. outriggers down	7,7 (15,3) 16,7# (16,7#)	4,3 (7,5) 10,7# (10,7#)	2,8 (4,8) 6,7 (8,1#)	2,0 (3,4) 4,7 (6,6#)	1,5 (2,5) 3,6 (5,1)	
1,5	Stabilizers raised 4 pt. outriggers down	4,7# (4,7#) 4,7# (4,7#)	3,7 (6,8) 10,1 (11,6#)	2,5 (4,5) 6,4 (8,4#)	1,8 (3,2) 4,6 (6,6#)	1,4 (2,4) 3,5 (5,0)	
0	Stabilizers raised 4 pt. outriggers down	4,8# (4,8#) 4,8# (4,8#)	3,4 (6,4) 9,7 (11,2#)	2,3 (4,2) 6,1 (8,3#)	1,7 (3,1) 4,4 (6,4#)	1,3 (2,4) 3,4 (5,0)	
-1,5	Stabilizers raised 4 pt. outriggers down		3,3 (6,3) 9,5 (9,8#)	2,2 (4,1) 6,0 (7,5#)	1,7 (3,0) 4,4 (5,7#)		
-3,0	Stabilizers raised 4 pt. outriggers down						

Industrial Stick 5,00 m

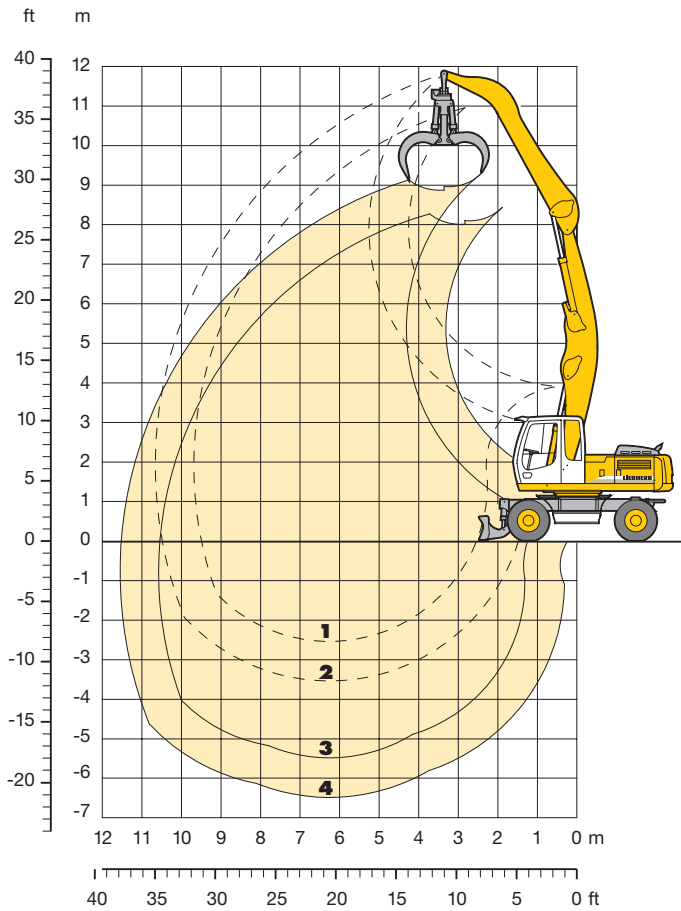
Height (m)	Undercarriage	Radius of load from centerline of machine (m)					
		3,0	4,5	6,0	7,5	9,0	10,5
12,0	Stabilizers raised 4 pt. outriggers down						
10,5	Stabilizers raised 4 pt. outriggers down			3,4 (4,4#) 4,4# (4,4#)			
9,0	Stabilizers raised 4 pt. outriggers down			3,6 (5,6) 6,2# (6,2#)	2,4 (3,8) 4,4# (4,4#)		
7,5	Stabilizers raised 4 pt. outriggers down			3,6 (5,6) 6,1# (6,1#)	2,4 (3,8) 5,2 (5,6#)	1,6 (2,7) 3,5# (3,5#)	
6,0	Stabilizers raised 4 pt. outriggers down			3,5 (5,5) 6,3# (6,3#)	2,3 (3,8) 5,2 (5,7#)	1,6 (2,7) 3,8 (5,1#)	
4,5	Stabilizers raised 4 pt. outriggers down		5,3 (8,1#) 8,1# (8,1#)	3,3 (5,3) 6,8# (6,8#)	2,2 (3,6) 5,0 (5,9#)	1,6 (2,7) 3,7 (5,2#)	
3,0	Stabilizers raised 4 pt. outriggers down	8,8 (13,8#) 13,8# (13,8#)	4,7 (7,9) 9,6# (9,6#)	3,0 (4,9) 6,9 (7,5#)	2,1 (3,5) 4,8 (6,2#)	1,5 (2,6) 3,6 (5,2)	1,1 (2,0) 2,8 (3,8#)
1,5	Stabilizers raised 4 pt. outriggers down	7,0 (10,9#) 10,8# (10,8#)	4,0 (7,1) 10,5 (10,9#)	2,6 (4,6) 6,5 (8,1#)	1,9 (3,3) 4,6 (6,5#)	1,4 (2,4) 3,5 (5,0)	1,0 (1,9) 2,8 (4,0)
0	Stabilizers raised 4 pt. outriggers down	5,6# (5,6#) 5,6# (5,6#)	3,5 (6,5) 9,8 (11,4#)	2,4 (4,3) 6,2 (8,3#)	1,7 (3,1) 4,4 (6,5#)	1,3 (2,3) 3,4 (4,9)	
-1,5	Stabilizers raised 4 pt. outriggers down	5,7 (5,8#) 5,8# (5,8#)	3,2 (6,2) 9,4 (10,7#)	2,2 (4,1) 6,0 (7,9#)	1,6 (3,0) 4,3 (6,1#)	1,2 (2,3) 3,3 (4,8#)	
-3,0	Stabilizers raised 4 pt. outriggers down		3,1 (6,1) 9,1# (9,1#)	2,1 (4,0) 5,9 (6,9#)	1,6 (2,9) 4,3 (5,3#)		

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface with closed steering axle. Capacities shown in brackets are valid when the undercarriage is in longitudinal position and are established over the steering axle (travel position) with stabilizers raised, and over rigid axle with stabilizers down. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (#). Lift capacities do not include the weight of a grapple, clamshells, magnet or other lifting devices, which must be deducted from the above figures. Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

Industrial Attachment

for Wood Handling with Gooseneck Boom 6,00 m



Attachment Envelope

Industrial-type gooseneck boom pinned in rear bearing of boom foot bracket

- 1 with industrial stick 4,00 m
- 2 with industrial stick 5,00 m
- 3 with industrial stick 4,00 m and wood grapple
- 4 with industrial stick 5,00 m and wood grapple

Operating Weight

The operating weight includes basic machine A 904 C EW **Litronic** with prop-up blade, 8 tires plus spacer rings and industrial application with industrial-type gooseneck boom 6,00 m.

	Weight
with wood grapple 0,80 m ² rotary drive with 2 motors	
with industrial stick 4,00 m	18900 kg
with industrial stick 5,00 m	19050 kg

Lift Capacities

for Wood Handling with Gooseneck Boom 6,00 m

Industrial Stick 4,00 m

Height (m)	Undercarriage	Radius of load from centerline of machine (m)					
		3,0	4,5	6,0	7,5	9,0	10,5
12,0	Stabilizers raised						
	Prop up blade down 2 pt. outriggers down						
10,5	Stabilizers raised						
	Prop up blade down 2 pt. outriggers down						
9,0	Stabilizers raised		5,8 (8,0#)	3,5 (5,4)			
	Prop up blade down 2 pt. outriggers down		6,3 (8,0#) 7,3 (8,0#)	3,9 (5,9#) 4,5 (5,9#)			
7,5	Stabilizers raised		5,8 (7,9#)	3,6 (5,5)	2,4 (3,7)		
	Prop up blade down 2 pt. outriggers down		6,4 (7,9#) 7,3 (7,9#)	4,0 (6,9#) 4,5 (6,9#)	2,7 (5,5#) 3,1 (5,5#)		
6,0	Stabilizers raised		5,6 (8,4#)	3,5 (5,4)	2,4 (3,7)		
	Prop up blade down 2 pt. outriggers down		6,2 (8,4#) 7,1 (8,4#)	3,9 (7,1#) 4,4 (7,1#)	2,6 (6,2#) 3,1 (6,2)		
4,5	Stabilizers raised	10,1 (12,9#)	5,2 (8,2)	3,3 (5,1)	2,3 (3,6)	1,6 (2,6)	
	Prop up blade down 2 pt. outriggers down	11,3 (12,9#) 12,9# (12,9#)	5,8 (9,4#) 6,7 (9,4#)	3,6 (7,5#) 4,2 (7,5#)	2,5 (6,3) 2,9 (6,0)	1,8 (4,6) 2,2 (4,4)	
3,0	Stabilizers raised	8,4 (15,5)	4,6 (7,6)	3,0 (4,8)	2,1 (3,4)	1,6 (2,6)	
	Prop up blade down 2 pt. outriggers down	9,6 (16,7#) 11,6 (16,7#)	5,2 (10,7#) 6,1 (10,7#)	3,4 (8,1#) 3,9 (8,1#)	2,4 (6,1) 2,8 (5,8)	1,8 (4,5) 2,1 (4,3)	
1,5	Stabilizers raised	4,7# (4,7#)	4,0 (6,9)	2,7 (4,5)	2,0 (3,3)	1,5 (2,5)	
	Prop up blade down 2 pt. outriggers down	4,7# (4,7#) 4,7# (4,7#)	4,6 (11,6#) 5,5 (11,6#)	3,1 (8,4#) 3,6 (8,2)	2,2 (5,9) 2,6 (5,7)	1,7 (4,4) 2,0 (4,3)	
0	Stabilizers raised	4,8# (4,8#)	3,7 (6,5)	2,5 (4,3)	1,9 (3,1)	1,4 (2,4)	
	Prop up blade down 2 pt. outriggers down	4,8# (4,8#) 4,8# (4,8#)	4,2 (11,2#) 5,1 (11,2#)	2,9 (8,3) 3,4 (7,9)	2,1 (5,7) 2,5 (5,5)	1,6 (4,3) 2,0 (4,2)	
-1,5	Stabilizers raised		3,6 (6,4)	2,4 (4,2)	1,8 (3,1)		
	Prop up blade down 2 pt. outriggers down		4,1 (9,8#) 5,0 (9,8#)	2,8 (7,5#) 3,3 (7,5#)	2,1 (5,7) 2,5 (5,4)		
-3,0	Stabilizers raised						
	Prop up blade down 2 pt. outriggers down						

Industrial Stick 5,00 m

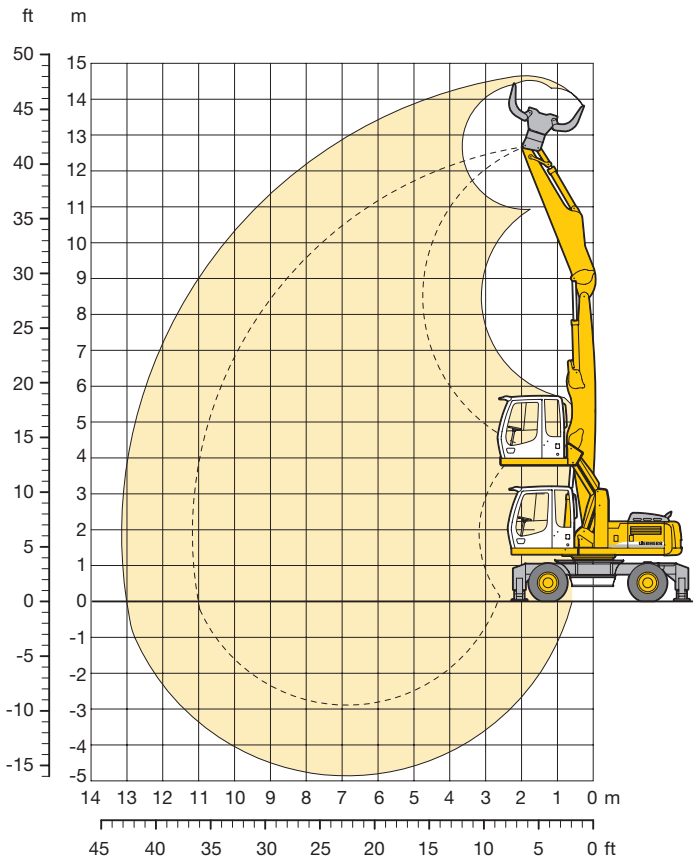
Height (m)	Undercarriage	Radius of load from centerline of machine (m)					
		3,0	4,5	6,0	7,5	9,0	10,5
12,0	Stabilizers raised						
	Prop up blade down 2 pt. outriggers down						
10,5	Stabilizers raised			3,6 (4,4#)			
	Prop up blade down 2 pt. outriggers down			4,0 (4,4#) 4,4# (4,4#)			
9,0	Stabilizers raised			3,8 (5,7)	2,5 (3,8)		
	Prop up blade down 2 pt. outriggers down			4,2 (6,2#) 4,7 (6,2#)	2,8 (4,4#) 3,2 (4,4#)		
7,5	Stabilizers raised			3,8 (5,7)	2,5 (3,9)	1,7 (2,8)	
	Prop up blade down 2 pt. outriggers down			4,2 (6,1#) 4,8 (6,1#)	2,8 (5,6#) 3,2 (5,6#)	1,9 (3,5#) 2,3 (3,5#)	
6,0	Stabilizers raised			3,7 (5,6)	2,5 (3,8)	1,7 (2,8)	
	Prop up blade down 2 pt. outriggers down			4,1 (6,3#) 4,7 (6,3#)	2,8 (5,7#) 3,2 (5,7#)	1,9 (4,7) 2,3 (4,6)	
4,5	Stabilizers raised		5,6 (8,1#)	3,5 (5,3)	2,4 (3,7)	1,7 (2,7)	
	Prop up blade down 2 pt. outriggers down		6,2 (8,1#) 7,1 (8,1#)	3,8 (6,8#) 4,4 (6,8#)	2,6 (5,9#) 3,0 (5,9#)	1,9 (4,7) 2,2 (4,5)	
3,0	Stabilizers raised	9,6 (13,8#)	5,0 (8,0)	3,2 (5,0)	2,2 (3,5)	1,6 (2,6)	1,2 (2,0)
	Prop up blade down 2 pt. outriggers down	10,8 (13,8#) 12,9 (13,8#)	5,5 (9,6#) 6,5 (9,6#)	3,5 (7,5#) 4,1 (7,5#)	2,5 (6,2) 2,9 (6,0)	1,8 (4,6) 2,1 (4,4)	1,3 (3,5) 1,6 (3,4)
1,5	Stabilizers raised	7,7 (10,8#)	4,3 (7,2)	2,8 (4,6)	2,0 (3,3)	1,5 (2,5)	1,1 (1,9)
	Prop up blade down 2 pt. outriggers down	8,8 (10,8#) 10,7 (10,8#)	4,8 (10,9#) 5,7 (10,9#)	3,2 (8,1#) 3,7 (8,1#)	2,3 (6,0) 2,7 (5,7)	1,7 (4,4) 2,0 (4,3)	1,3 (3,5) 1,6 (3,3)
0	Stabilizers raised	5,6# (5,6#)	3,8 (6,6)	2,5 (4,3)	1,8 (3,1)	1,4 (2,4)	
	Prop up blade down 2 pt. outriggers down	5,6# (5,6#) 5,6# (5,6#)	4,3 (11,4#) 5,2 (11,4#)	2,9 (8,3#) 3,4 (7,9)	2,1 (5,7) 2,5 (5,5)	1,6 (4,3) 1,9 (4,2)	
-1,5	Stabilizers raised	5,8# (5,8#)	3,5 (6,3)	2,4 (4,1)	1,7 (3,0)	1,3 (2,3)	
	Prop up blade down 2 pt. outriggers down	5,8# (5,8#) 5,8# (5,8#)	4,0 (10,7#) 4,9 (10,7#)	2,7 (7,9#) 3,3 (7,7)	2,0 (5,6) 2,4 (5,4)	1,5 (4,2) 1,9 (4,1)	
-3,0	Stabilizers raised		3,4 (6,2)	2,3 (4,0)	1,7 (2,9)		
	Prop up blade down 2 pt. outriggers down		3,9 (9,1#) 4,8 (9,1#)	2,6 (6,9#) 3,2 (6,9#)	1,9 (5,3#) 2,3 (5,3#)		

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface with closed steering axle. Capacities shown in brackets are valid when the undercarriage is in longitudinal position and are established over the steering axle (travel position) with stabilizers raised, and over rigid axle with stabilizers down. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (#). Lift capacities do not include the weight of a grapple, clamshells, magnet or other lifting devices, which must be deducted from the above figures. Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

Industrial Attachment

for Recycling with Gooseneck Boom 6,60 m



Attachment Envelope

Industrial-type gooseneck boom pinned in rear bearing of boom foot bracket

1 with industrial stick 4,50 m and sorting grab

Operating Weight

The operating weight includes basic machine A 904 C Litronic with 4 pt. outriggers, hydr. cab elevation, 8 solid tires plus spacer rings and industrial application with industrial-type gooseneck boom 6,60 m.

with sorting grab	Weight
with industrial stick 4,50 m	23500 kg

Lift Capacities

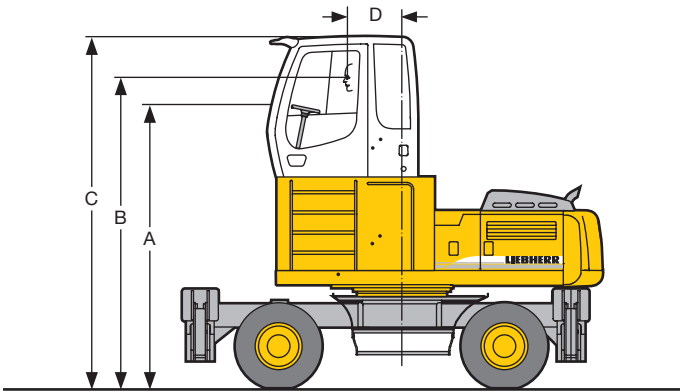
Industrial Stick 4,50 m

Height (m)	Undercarriage	Radius of load from centerline of machine (m)						
		3,0	4,5	6,0	7,5	9,0	10,5	
10,5	Stabilizers raised		5,7 (8,0#)	3,3 (5,6)				
	Blade + 2pt. down		8,0# (8,0#)	5,9 (6,7#)				
	4 pt. outriggers down		8,0# (8,0#)	6,7# (6,7#)				
9,0	Stabilizers raised			3,5 (5,8)	2,1 (3,8)			
	Blade + 2pt. down			6,1 (6,6#)	4,0 (5,6#)			
	4 pt. outriggers down			6,6# (6,6#)	5,2 (5,6#)			
7,5	Stabilizers raised			3,4 (5,8)	2,1 (3,8)	1,3 (2,6)		
	Blade + 2pt. down			6,1 (6,6#)	4,0 (5,5#)	2,7 (4,7#)		
	4 pt. outriggers down			6,6# (6,6#)	5,2 (5,5#)	3,6 (4,7#)		
6,0	Stabilizers raised		5,5 (8,4#)	3,2 (5,6)	2,0 (3,7)	1,3 (2,5)		
	Blade + 2pt. down		8,4# (8,4#)	5,8 (6,8#)	3,9 (5,6#)	2,7 (4,7#)		
	4 pt. outriggers down		8,4# (8,4#)	6,8# (6,8#)	5,1 (5,6#)	3,6 (4,7#)		
4,5	Stabilizers raised	7,5# (7,5#)	4,9 (8,6)	2,9 (5,2)	1,9 (3,5)	1,2 (2,5)	0,8 (1,8)	
	Blade + 2pt. down	7,5# (7,5#)	9,1 (9,4#)	5,5 (7,1#)	3,7 (5,7#)	2,6 (4,7#)	1,9 (3,7#)	
	4 pt. outriggers down	7,5# (7,5#)	9,4# (9,4#)	7,1# (7,1#)	4,9 (5,7#)	3,5 (4,7#)	2,6 (3,7#)	
3,0	Stabilizers raised	4,1# (4,1#)	4,0 (7,6)	2,5 (4,7)	1,6 (3,2)	1,1 (2,3)	0,7 (1,7)	
	Blade + 2pt. down	4,1# (4,1#)	8,0 (10,2#)	5,0 (7,4#)	3,4 (5,8#)	2,5 (4,6#)	1,8 (3,6#)	
	4 pt. outriggers down	4,0# (4,0#)	10,2# (10,2#)	6,7 (7,4#)	4,6 (5,8#)	3,4 (4,6#)	2,6 (3,6#)	
1,5	Stabilizers raised		3,2 (6,7)	2,1 (4,3)	1,4 (3,0)	1,0 (2,2)	0,7 (1,6)	
	Blade + 2pt. down		7,1 (10,3#)	4,6 (7,4#)	3,2 (5,7#)	2,4 (4,4#)	1,8 (3,3#)	
	4 pt. outriggers down		10,0 (10,3#)	6,2 (7,4#)	4,4 (5,7#)	3,2 (4,4#)	2,5 (3,3#)	
0	Stabilizers raised	1,1# (1,1#)	2,8 (6,1)	1,8 (3,9)	1,3 (2,8)	0,9 (2,1)	0,6 (1,6)	
	Blade + 2pt. down	1,1# (1,1#)	6,6 (6,6#)	4,2 (6,9#)	3,0 (5,3#)	2,3 (4,0#)	1,7 (2,7#)	
	4 pt. outriggers down	1,1# (1,1#)	6,6# (6,6#)	5,9 (6,9#)	4,2 (5,3#)	3,1 (4,0#)	2,4 (2,7#)	
-1,5	Stabilizers raised		2,6 (6,0)	1,7 (3,8)	1,2 (2,7)	0,8 (2,0)		
	Blade + 2pt. down		6,4 (6,9#)	4,1 (5,8#)	2,9 (4,4#)	2,2 (3,2#)		
	4 pt. outriggers down		6,9# (6,9#)	5,7 (5,8#)	4,0 (4,4#)	3,1 (3,2#)		

The lift capacities are stated in metric tonnes (t) on the lifting gear's stick tip, and can be lifted 360° on firm, level supporting surface with closed steering axle. Capacities shown in brackets are valid when the undercarriage is in longitudinal position and are established over the steering axle (travel position) with stabilizers raised, and over rigid axle with stabilizers down. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (#). Lift capacities do not include the weight of a grapple, clamshells, magnet or other lifting devices, which must be deducted from the above figures. Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device and automatic check valves on the hoist cylinders, when they are used for lifting operations which require the use of lifting accessories.

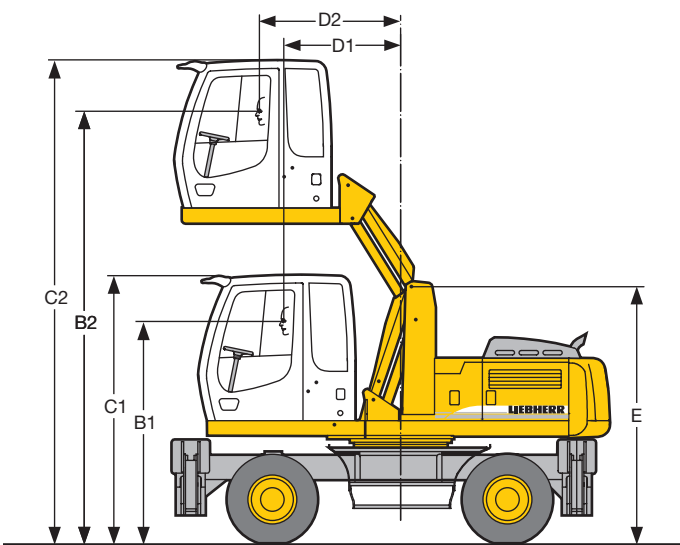
Choice of Cab Elevations and Cab Protections



Rigid Cab Elevation

Height	mm	800	1200	1500
A	mm	3120	3520	3820
B	mm	3460	3860	4160
C	mm	3960	4360	4660
D	mm	670	670	670

A rigid cab elevation has a fixed eye level height. For a lower transport height the shell of the cab can be removed. The overall height is then dimension A.

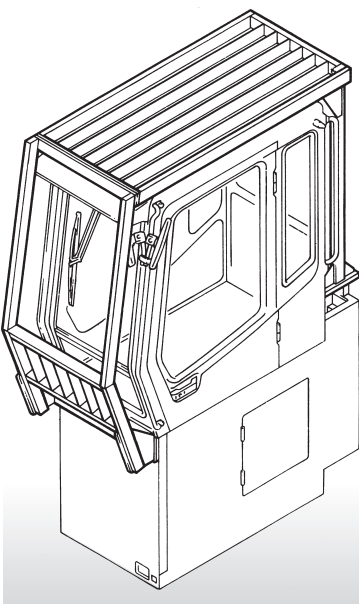


Hydraulic Cab Elevation (Parallelogram)

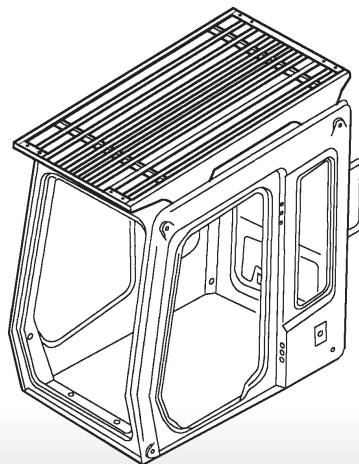
B1	2660 mm
B2	5160 mm
C1	3160 mm
C2	5660 mm
D1	1370 mm
D2	1615 mm
E	3075 mm

The parallelogram cab raiser allows the operator to choose his eye level between dimensions B1 and B2. For a transport height lower than C1 the shell of the cab can be removed. The overall height is then E.

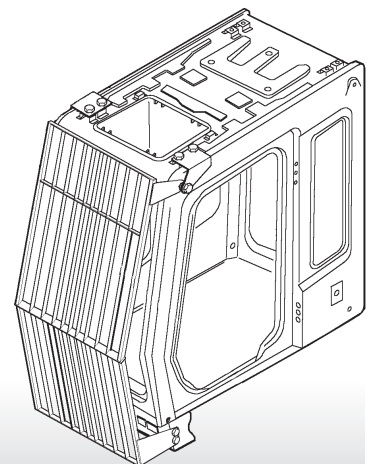
Cab guard for cab with elevation



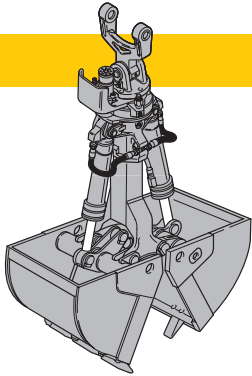
Grille above



Grilles in front



Variety of Tools

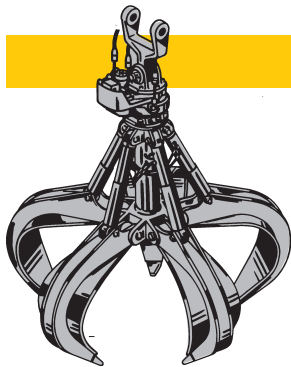


Shells for Loose Material

Clamshell Model 10 B

Shells for loose material with cutting edge (without teeth)

Cutting width of shells	mm	1000	1500	1800
Capacity	m ³	1,00	1,50	1,80
For loose material, specific weight up to	t/m ³	1,5	1,5	1,5
Total weight	kg	1000	1130	1250



Multiple Tine Grapples

open tines

semi-closed tines

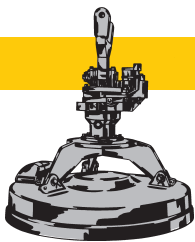
closed tines

Grapple model 64 (4 tines)	Capacity	m ³	0,40	0,60	0,40	0,60	0,40	0,60
	Weight	kg	1040	1110	1250	1320	1250	1320
Grapple model 65 (5 tines)	Capacity	m ³	0,40	0,60	0,40	0,60	0,40	0,60
	Weight	kg	1170	1260	1340	1450	1430	1590



Crane Hook with Suspension

Max. load	t	12,5
Height with suspension	mm	1000
Total weight	kg	130



Electro Magnets with Suspension

Generator	kW	9	12
Dia of magnet	mm	1100	1300
Height with suspension	mm	1470	1470
Total weight	kg	1330	1710

For further information see "Attachment-Information – Liebherr Hydraulic Clamshells and Grapples". To operate a magnet the installation of a generator is required; please contact your Liebherr dealer or the factory for further information.

Equipment



Undercarriage

	S	O
Two circuit travel brake with accumulator	•	
Travel motor protection		•
Outrigger cylinder rod guards		•
Creeper speed electrically switchable from cab	•	
New tires	•	
Service free parking brake	•	
Independent outrigger control		•
Choice of tires		•
Auto check valve directly on each stabilizer cylinder	•	
Proportional power steering with mechanical back up	•	
Customized colors		•
Two lockable storage boxes	•	
Lockable storage box additional		
Two-speed power shift transmission	•	



Uppercarriage

	S	O
Electric fuel tank filler pump		•
Maintenance-free swing brake lock	•	
Handrails, Non slip surfaces	•	
Main switch for electric circuit	•	
Engine hood with lift help	•	
Pedal controlled positioning swing brake		•
Reverse travel warning system		•
Sound insulation	•	
Customized colors		•
Pin lock upper/lower	•	
Maintenance-free HD-batteries	•	
Extended tool kit		•
Lockable tool box	•	
Tool kit	•	



Hydraulics

	S	O
Hydraulic tank shut-off valve	•	
Extra hydr. control for hydr. swivel	•	
Pressure compensation	•	
Hook up for pressure checks	•	
Pressure storage for controlled lowering of attachments with engine turned off	•	
Filter with partial micro filtration (5 µm)	•	
Electronic pump regulation	•	
Stepless mode system (ECO)	•	
Flow compensation	•	
Four mixed modes, can also be adjusted	•	
Full flow micro filtration		•
Bio degradable hydraulic oil		•
Pressure compensation		
Flow summation		
Additional hydraulic circuits		•



Engine

	S	O
Turbo charger	•	
Direct injection	•	
Cold start aid		•
Sensor controlled engine idling	•	
Air filter with pre-cleaner main- and safety element	•	



Operator's Cab

	S	O
Storage tray	•	
Displays for engine operating condition	•	
Mechanical hour meters, readable from outside the cab	•	
Roof hatch	•	
All-round adjustable roof vent		
6-way adjustable seat	•	
Airpressure operator seat with heating and head-rest		•
Seat and consoles independently adjustable	•	
Extinguisher		•
Removable customized foot mat	•	
Dome light	•	
Inside rear mirror	•	
Hydraulic cab elevation		•
Rigid cab elevation		•
Cab heater with defroster		•
Cloth hook	•	
Air conditioning	•	
Electric cool box		•
Steering wheel adjustable	•	
Bullet proof window (fixed installation – can not be opened)		•
Stereo radio		•
Preparation for radio installation		•
Rain hood over front window opening	•	
Beacon		•
All tinted windows	•	
Door with sliding window	•	
Optical and acoustical warning if outriggers are not fully retracted		•
Auxiliary heating		•
Sun shade	•	
Sun roller blind		
Electronic drive away lock		•
Wiper/washer	•	
Cigarette lighter and ashtray	•	
Additional flood lights		•



Attachment

	S	O
Flood lights	•	
Hydr. lines for clam operation in stick	•	
Industrial-type gooseneck sticks with remote hydraulic pin puller		•
Sealed pivots	•	
Safety lift hook		•
Liebherr line of clams		•
Safety check valves on hoist cylinder	•	
Safety check valves on stick cylinder	•	
Hose quick connection	•	
Centralized lube point (uppercarrige/attachment)	•	
Manual/hydraulic quick change tool adapter		•
Customized colors		•
Special buckets and other tools		•
Stick cylinder limit switch	•	
Overload warning device		•
Two way valves for bucket/clam use		•
Locking of connections for clam operation		•
Cylinders with shock absorber	•	

S = Standard, O = Option

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

All illustrations and data may differ from standard equipment. Subject to change without notice.

Liebherr-Hydraulikbagger GmbH

D-88457 Kirchdorf/Iller

☎ +49 (0)7354 80-0, Fax +49 (0)7354 80-72 94

www.liebherr.com, E-Mail: info@lhb.liebherr.com