# A 910 Compact Litronic

## LIEBHERR

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Wheeled excavator

910

#### **Generation** 6

**Engine** 114 HP (I) / 85 kW Stage V Tier 4 Final **Operating weight** 26,700–28,900 lb

Bucket capacity 0.20-0.63 yd³

## Performance

Compact, flexible – perfect combination for maximum performance

## Economy

A sound investment – optimum economy and environmentally friendly

## Reliability

Competence, consistency, innovation – proven experience

## Comfort

Ergonomic excellence – superior cabin design for operator comfort and wellbeing

## Maintainability

Service every step of the way – simple, fast and reliable





### A 910 Compact Litronic

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## Performance



# Compact, flexible – perfect combination for maximum performance

Restricted construction sites in city centers, road construction, as well as classic earthmoving work, are an easy task for Liebherr Compact wheeled excavators. Improved payload, combined with speed and compact machine dimensions, deliver maximum performance and flexibility on all sites.

## Maximum performance

#### Flexibility

High digging forces despite a tight tail swing permit flexible usage on every construction site. Hard surfaces can be processed quickly and precisely, thus also ensuring maximum productivity.

#### Being faster

Liebherr hydraulic excavators feature rapid, fluid movements combined with high precision. These properties are also available when simply driving the machine. For high acceleration and excellent drive features, particularly on gradients, the A 910 Compact has a powerful 4-cylinder Deutz TCD3.6L4 inline engine. The speed and precision of the machine can be adjusted using the MODE switch to suit a new task, which can also save fuel.

#### Joystick steering

With the optional joystick steering, the operator can steer the wheeled excavator using the mini joystick. In this way, working and driving movements can be performed at the same time without having to change controls. More efficient operation for even greater productivity.

### **Precise work**

#### Working with precision

The Liebherr joysticks enable the operator to intuitively and sensitively control the Liebherr hydraulic system to complete even the most challenging tasks quickly not just with reduced speed but also with maximum power output. Liebherr has been using an infinitely variable proportional controller with four axis for many years. The slim, ergonomically designed proportional sensors deliver additional functionality to the classic machine controller without having to reach for additional controls.

#### Automatic digging brake

The optional digging brake means that manual actuation of the brake pedal is no longer necessary in some applications. Particularly in applications with a frequent transfer of the excavator, this leads to quicker work processes and thus increases safety for people and the machine.



#### Four-wheel steering & crab steering

- Considerably increased flexibility and agility
- Comfortable, quick and responsive even under constricted conditions
- Recommended for works in urban or narrow areas



#### **Digging force**

- High digging and breakout force in the field
- Continuously high digging performance even in tough ground
- More digging force for faster results



#### Improved equipment

- Higher payloads due to the improved position of the slewing bearing
- Large side offset of the equipment for parallel work
- Protected internal adjustment cylinder
- Perfect equipment for constricted conditions





# A sound investment – optimum economy and environmentally friendly

The mobile A 910 Compact wheeled excavator is a construction machine which delivers maximum productivity in conjunction with superb efficiency. The efficiency can be further enhanced with the use of fuel-saving Liebherr hydraulic oil or a Liebherr quick coupling system.

## **Maximum efficiency**

#### Stages V and Tier 4 Final

For exhaust emissions stages V and Tier 4 Final, Deutz uses a SCR system, comprising a SCR catalytic system and other components such as an injector and AdBlue®, enabling a 91 percent reduction in nitrogen oxide (NOx). The system reduces exhaust gas emissions effectively and has no negative effect on performance. This results in low fuel consumption and reduced emissions, which is friendlier for the environment.

#### Engine idling and engine shut-down

The standard automatic idling function reduces the engine speed to idle as soon as the operator takes his hand from the joystick so that no hydraulic function is activated. Proximity sensors in the joystick levers restore the original engine speed as soon as the operator's hand is moved towards the lever again. This ensures that the set engine speed is available immediately. The result is fuel savings and reduced noise levels. Operating costs can be reduced even further with the optional automatic engine shut-down function.

## **Increased productivity**

#### Liebherr attachments and Solidlink

To boost the productivity of its construction machines, Liebherr offers a broad range of attachments for different fields of application. Furthermore, the hydraulic excavators can also be equipped with the Liebherr Solidlink hydraulic quick coupling system. The combination of a hydraulic Liebherr quick coupling system with the Solidlink coupling block permits fast, safe changing of mechanical and hydraulic attachments from the operator's cabin. This boosts productivity on average by 30 %.

#### **Efficient management**

LiDAT, Liebherr's own data transmission and positioning system, facilitates efficient management, monitoring and control of the entire fleet in terms of machinery data recording, data analysis, fleet management and service. All of the important machinery data can be viewed at any time on a web browser. LiDAT provides you comprehensive work deployment documentation, greater availability thanks to shorter downtimes, faster support from the manufacturer, quicker detection of strain / overload and subsequently a longer service life of the machine as well as greater planning efficiency.



#### No transport costs

Liebherr wheeled excavators can be driven on public roads. By adding the speeder equipment option, the machine can be driven at 15.5 mph or 18.6 mph. That means you can reach the next job site quickly. No complicated transport plans are needed, which saves money.

## Liebherr Power Efficiency (LPE) System



## Low fuel consumption thanks to intelligent machine control

- Liebherr-Power Efficiency (LPE) optimizes the interaction of the drive components in terms of efficiency
- LPE enables machine operation in the area of the lowest specific fuel use for less consumption and greater efficiency with the same performance



#### Liebherr quick coupling system Solidlink

- Faster and safer changing of mechanical and hydraulic attachments from the operator's cabin
- Machine utilization increased to up to 90% thanks to extended deployment options
- Visual and audible check of correct locking position of tool at quick coupling system by two proximity sensors

## Reliability



## Competence, consistency, innovation – proven experience

Liebherr construction machines represent safety with customer-focused sales and service partners. The quality and innovation of the machine provide security and play a key role in the success of the design specifications. An investment that pays off.

## High machine availability

#### **Quality and competence**

Our experience, understanding of customer needs and the technical implementation of these findings guarantee the success of the product. For decades, Liebherr has been inspirational with its extensive production and system solutions. Key components such as the electronic components, slew ring, slew drive and hydraulic cylinders are developed and produced by Liebherr itself. The great depth of in-house manufacturing guarantees maximum quality and ensures that components are optimally configured to each other.

#### **Robust design**

All steel components are designed and manufactured by Liebherr. High-strength steel plates configured for the toughest of requirements result in high torsional stiffness and optimum absorption of forces induced for a longer service life.

## More safety

#### Bright, longlife lighting

Various headlights provide optimal lighting in the working area, thus ensuring a better view and greater safety for people and the machine. The standard LED rear lights not only look great, they also have high luminosity and an extremely long life.

#### Pipe fracture safety valves

The standard pipe fracture safety valves on the stick and hoist cylinders prevent the equipment from dropping in an uncontrolled way and ensure maximum safety during every operation.

#### Electronic height limit

For applications with protruding or overhanging components in the working area, the compact wheeled excavators can be optionally equipped with an electronic height limit. The maximum permissible working height can be freely selected and stops the movement of the equipment when the set working height is reached. This helps avoid damage to the machine and its environment.



## QPDM – Quality and process data management

- QPDM allows production data to be logged, documented and evaluated
- Automation of documentation and test specifications
- Ability to handle large quantities and maintain uniform high quality



#### Less is more

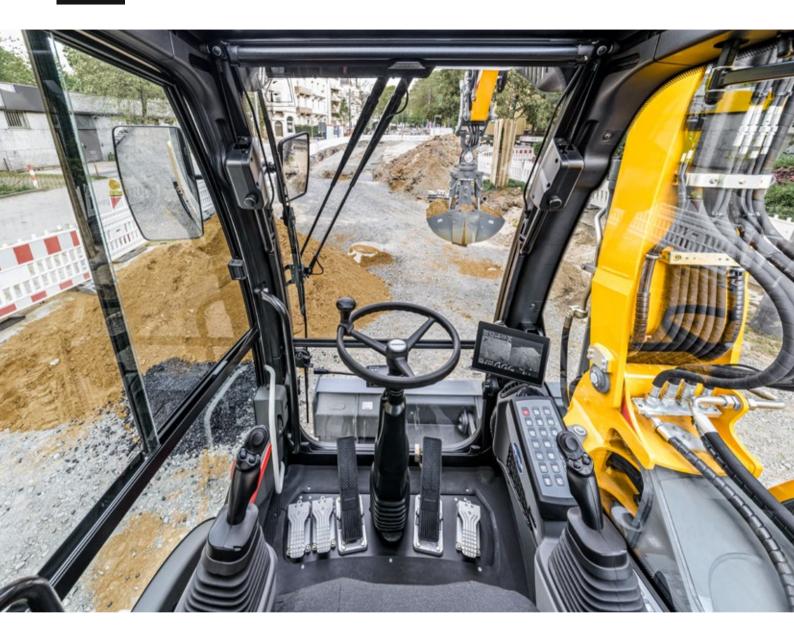
- Extended range of possible applications due to a short tail swing radius of only 5'6" ft in
- More safety for man and machine
- Liebherr compact wheeled excavators: short and safe



#### Improved rear and side visibility

- The standard camera for rear-view and lateral monitoring gives the driver an optimal view of his working area and the surrounding machine area at all times
- Extensive glazing in combination with two standard monitoring cameras ensure safe handling of the machine at all times





# Ergonomic excellence – superior cabin design for operator comfort and well-being

The modern Liebherr cab with an air-suspension heated seat and automatic air-conditioning ensures a pleasant atmosphere, thus offering the best conditions for healthy and productive work while allowing the operator to work with full concentration. The ergonomic control elements with touchscreen display also simplify the operation of the wheeled excavator. The extensive safety equipment includes the rollover protection system (ROPS) for the cab fitted as standard according to ISO 12117-2.

## First-class cab

#### Automatic air conditioning

The optional automatic air conditioning offers intuitive operation. Temperature, blower setting and the various air nozzles in the head, chest and foot areas are set using the touchscreen on the indicating unit. The defrost / defog one-button function clears fogged up windows in the shortest possible time. The filter for the cab air can be changed easily and conveniently from the outside.

#### **Operator seats**

The Standard, Comfort and Premium operator's seat versions deliver maximum comfort. Even the standard operator seat offers an extensive range of features such as air suspension, seat heating, headrest, lumbar support and many more. A luxury which we believe every construction machine should provide.

#### Smooth operation

The use of visco-elastic mounts, good noise insulation and modern, smooth Liebherr diesel engines minimize noise emissions and vibrations.

### **Comfortable operation**

#### Radio with hands-free device

The optional Liebherr radio is MP3-compatible, has a USB connection, can receive digital radio (DAB+ depending on country) and can be used as interface for the integral hands-free kit. If a smartphone is connected using Bluetooth, phone calls can also be controlled via the touchscreen. This means that all media are controlled using a central unit which provides greater clarity, simplicity and comfort.

#### Standard control concept

Liebherr delivers an operator-focused control system which uses the same logic in all machine classes and generations. That means the machine operator is always faced with the same working environment. Clarity, ergonomics and safety are the principles we follow in the design phase. That means we avoid time-consuming re-familiarization phases and allow the operator to work efficiently in his machine straight away. The two-hand control system is another core element of the Liebherr control concept. While this delivers maximum safety by preventing operator errors (such as accidentally opening the quick coupler), it also improves productivity as the operator does not have to reposition his hands (for example grading with joystick control).



#### Refuelling

- Using the optional refuelling pump, the machine can be refueled directly from a fuel container
- The tank hose integrated in the service door and the automatic shut-off when the tank is full offer greater convenience and short replenishment times
- Topping off is simple, quick and safe



#### Maximum safety

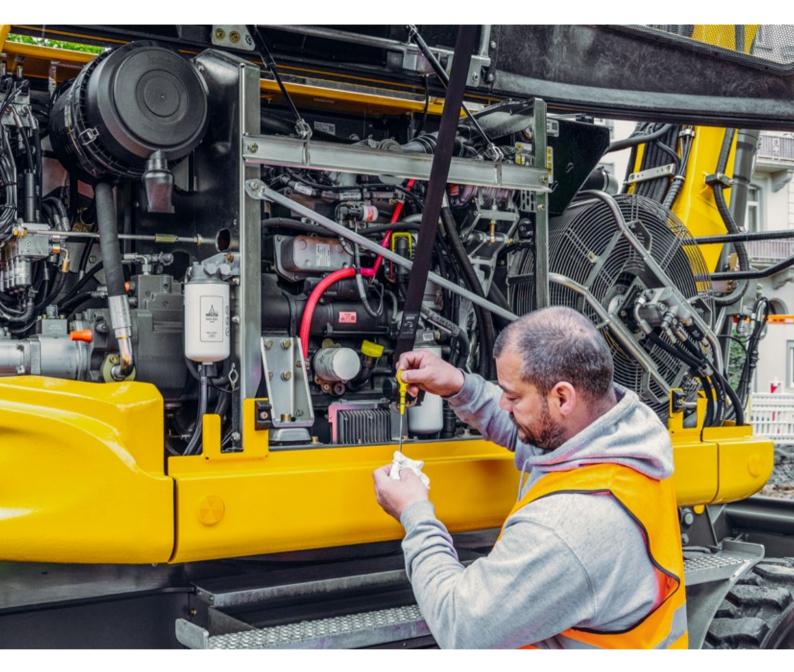
- More convenient and safer entry and exit in and out of the cab thanks to added width from the folding arm console
- Three entry steps with standard anti-slip galvanized plates provide a boost to safety



#### Intuitive operation

- Display of the machine data and camera image on the 9-inch touchscreen and direct access via menu bar
- 20 user-programmable memory slots for attachments, which can be used for quickly and easily setting the oil pressure and oil flow at the push of a button when changing tools

## Maintainability



# Service every step of the way – simple, fast and reliable

Liebherr compact wheeled excavators are powerful, robust, precise and efficient thanks to a serviceoriented machine design. Maintenance is quick, simple and safe. This reduces costs and keeps machine downtime to a minimum.

### Elaborate maintenance concept

#### Service-based machine design

The service-based machine design guarantees short servicing times, thus minimizing maintenance costs due to the time it saves. All the maintenance points are easily accessible from the ground and easy to reach due to the large, wide-opening service doors. The enhanced service concept places the maintenance points close to each other and reduces their number to a minimum. This means that service work can be completed even more quickly and efficiently.

#### Hydraulic oils with added value

Liebherr hydraulic oils achieve a service life of 6,000 operating hours plus. Instead of having defined change intervals, the results of the oil analysis (every 1,000 operating hours or after one year) determine when the oil needs to be changed. The unique Liebherr Hydraulic Plus oil can even achieve a service life of 8,000 operating hours plus at the same time reducing fuel consumption by up to 5%.

#### Maintenance without draining the oil

A cut-off valve isolating the oil reservoir from the hydraulic system is standard. This allows simple maintenance work to be performed on the hydraulic components without having to drain off the hydraulic fluid. This design reduces maintenance time and increases machine availability.

### Your competent service partner

#### Remanufacturing

The Liebherr remanufacturing program offers cost-effective reconditioning of components to the highest quality standards. Various reconditioning levels are available, including replacement components and general overhaul or repair. The customer receives components with original part quality at a reduced cost.

#### Competent advice and service

Turn to Liebherr for competent advice from experienced specialists who can provide advice for your specific requirements such as: application-oriented sales support, service agreements, cost effective repair alternatives, original parts management, as well as remote data transmission for machine planning and fleet management.



#### Lubrication during work

- Fully automatic central lubrication system for the equipment and swing ring
- Can be expanded to the connecting link and quick coupler
- Lubrication without interrupting work for higher productivity



#### **Excellent service access**

- Large, wide-opening service doors
- Engine oil, fuel, air and cab air filters are easily and safely accessible from the ground
- The oil level in the hydraulic tank can be checked from the cab
- Standard magnetic rod in the hydraulic tank as reliable service indicator



#### Rapid spare parts service

- 24-hour delivery: Spare parts service is available for our dealers around the clock
- Electronic spare parts catalogue: Fast and reliable selection and ordering via the Liebherr online portal
- With online tracking, the current processing status of your order can be viewed at any time

## Wheeled excavator A 910 Compact Litronic overview

# Ergonomic operator's work station for maximum comfort

- Operator's seat Comfort or Premium\*
- Automatic air-conditioning system\*
- 9" high resolution color display with touchscreen operation
- Adjustable arm console and ergonomic joysticks
- Folding arm console, left
- Proportional control with 4-way mini-joystick
- Joystick steering \*
- Large windows
- Convenient radio operation with hands-free device
- Tool Control for attachments \*
- LED headlights\*
- Rear and side monitor

## Superbly designed — equipment for maximum reliability

- Liebherr hydraulic cylinders
- Pipe fracture safety valves hoisting and stick cylinders
- Lateral adjustment with articulated joint
- Overload warning device
- Electronic lift limitation \*
- Liebherr quick coupling systems \*
- Wide selection of Liebherr attachments\*

\* Optional



## Superior technology for highest economy

- Diesel engine compliant with stages V and Tier 4 Final
- Emissions treatment with SCR technology
- Liebherr-Power-Efficiency (LPE)
- Load-sensing-control
- MODE selection (Sensitive, ECO, Power, Power-Plus)
- Sensor-controlled automatic idling system

## Elaborate maintenance concept for maximum productivity

- Fully automatic central lubrication system for uppercarriage and equipment\*
- Large, wide-opening service doors
- Central maintenance points accessible from the ground
- Hydraulic shut-off lock
- Cab air filter can be replaced quickly and conveniently from outside

## Perfect combination for highest possible performance

- Short tail swing radius
- 4-wheel steering \*
- Various support versions, welded on
- Divided blade\*
- Liebherr tires without intermediate ring\*
- Automatic working brake\*

## **Technical data**

### 🖽 Diesel engine

 Rating

 per SAE J1349

 per ISO 9249

 Model

 Type

 Bore / Stroke

 Displacement

 Engine operation

Air cleaner

Engine idling
Electrical system
Voltage
Batteries
Alternator
Stage V
Harmful emissions values
Emission control
Fuel tank
Urea tank
Tier 4 Final
Harmful emissions values
Emission control
Fuel tank
Urea tank

114 HP (85 kW) at 1,800 rpm 116 HP (85 kW) at 1,800 rpm Deutz TCD3.6L4 4 cylinder in-line 3.9/4.7 in 219.7 in<sup>3</sup> 4-stroke diesel Common-Rail Turbo-charged and after-cooled Reduced emissions Dry-type air cleaner with pre-cleaner, primary and safety elements Sensor controlled 24V 2 x 135Ah/12V Three-phase current 28V/80A According to regulation (EU) 2016/1628 Deutz DOC/DPF + SCR 46 gal 5gal In accordance with 40CFR1039 (EPA) / 13CCR (CARB) Deutz DOC/DPF + SCR

## ≈ Scooling system

Water-cooled Compact cooling system consisting cooling unit for water, hydraulic oil and charge air with stepless thermostatically controlled fan, fans for radiator cleaning can be completely folded away

#### Hydraulic system

Hydraulic pump	
For equipment and travel drive	Liebherr axial piston variable displacement pump
Max. flow	51gpm
Max. pressure	5,076 psi
Hydraulic pump regulation and control	Liebherr-Synchron-Comfort-system (LSC) with electronic engine speed sensing regulation, pressure and flow com- pensation, torque controlled swing drive priority
Hydraulic tank	26 gal
Hydraulic system	max. 61 gal
Filtration	1 main return filter with integrated partial micro filtration (5μm)
MODE selection	Adjustment of engine and hydraulic performance via
	a mode pre-selector to match application, e.g. for espe- cially economical and environmentally friendly operation or for maximum digging performance and heavy-duty jobs
S (Sensitive)	Mode for precision work and lifting through very sensi- tive movements
E (Eco)	Mode for especially economical and environmentally friendly operation
P (Power)	Mode for high performance with low fuel consumption
P+ (Power-Plus)	Mode for highest performance and for very heavy duty applications, suitable for continuous operation
Engine speed and performance setting	Stepless alignment of engine output and hydraulic power via engine speed
Option	Tool Control: 20 pre-adjustable pump flows and pres- sures for add-on attachments

#### Swing drive

Drive	Liebherr axial piston motor with integrated brake valve and torque control, Liebherr planetary reduction gear
Swing ring	Liebherr, sealed race ball bearing swing ring, internal teeth
Swing speed	0-10.0 rpm stepless
Swing torque	24,340 lbf ft
Holding brake	Wet multi-disc (spring applied, pressure released)
Option	Pedal controlled positioning swing brake Slewing gear brake Comfort

## $\stackrel{\fbox{}}{\doteq}$ Hydraulic controls

Power distribution	Via control valves with integrated safety valves, simulta- neous and independent actuation of chassis, swing drive and equipment
Servo circuit	
Equipment and swing	With hydraulic pilot control and proportional joystick levers
Chassis	Electro-proportional via foot pedal
Proportional control	Proportionally acting transmitters on the joysticks for additional hydraulic functions

46 gal 5 gal

## 🛛 Cab

Cab	ROPS safety cab structure (roll-over protection system) with individual windscreens or featuring a slide-in sub- part under the ceiling, work headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large stowing and depositing possibilities, shock-absorbing suspension, sound damping insulating, tinted laminated safety glass, separate window shades for the sunroof window and windscreen
Operator's seat Standard	Air cushioned operator's seat with 3D-adjustable arm- rests, headrest, lap belt, seat heater, manual weight adjustment, adjustable seat cushion inclination and length and mechanical lumbar vertebrae support
Operator's seat Comfort (Option)	In addition to operator's seat standard: lockable horizon- tal suspension, automatic weight adjustment, adjustable suspension stiffness, pneumatic lumbar vertebrae sup- port and passive seat climatization with active coal
Operator's seat Premium (Option)	In addition to operator's seat comfort: active electronic weight adjustment (automatic readjustment), pneumatic low frequency suspension and active seat climatization with active coal and ventilator
Arm consoles	Joysticks with control consoles and swivel seat, folding left control console
Operation and displays	Large high-resolution operating unit, self-explanatory, 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 including demisting (optional). Automatic heating and ventilation system (standard): fast de-icing 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; designed for extreme outside tem- peratures, sensors for solar radiation, inside and outside temperatures

#### o≕o Undercarriage

Drive	Oversized two speed power shift transmission with addi- tional creeper speed, Liebherr axial piston motor with functional brake valve on both sides
Pulling force	18,884 lbf
Travel speed	<ul> <li>0- 2.2 mph stepless (creeper speed off-road)</li> <li>0- 4.3 mph stepless (off-road)</li> <li>0- 8.1 mph stepless (creeper speed on-road)</li> <li>0-12.4 mph stepless (road travel)</li> <li>0-max. 15.5 or 18.6 mph Speeder (option)</li> </ul>
Driving operation	Automotive driving using accelerator pedal, cruise control function: storage of variable accelerator pedal positions, both off-road and on-road
Axles	Manual or automatic hydraulically controlled front axle oscillation lock
Option	Four wheel steering
Service brake	Two circuit travel brake system with accumulator; wet and backlash-free disc brake
Holding brake	Wet multi-disc (spring applied, pressure released)
Stabilization	Rear stabilizer blade (adjustable during travel for dozing) Rear outriggers Rear outriggers + front stabilizer blade Rear two-piece stabilizer blade Rear two-piece + front stabilizer blade

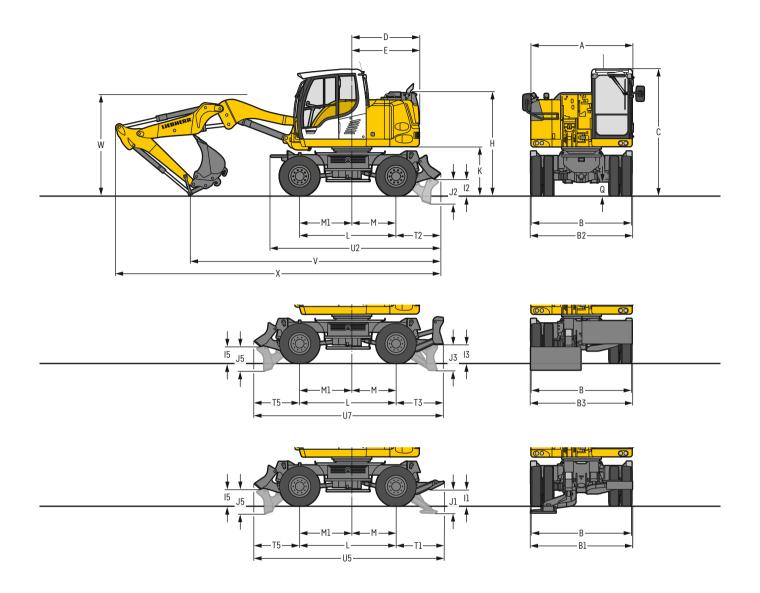
Equipment

Туре	High-strength steel plates at highly-stressed points for the toughest requirements. Complex and stable mount- ings of equipment and cylinders
Hydraulic cylinders	Liebherr cylinders with special sealing and guide system and, depending on cylinder type, shock absorption
Bearings	Sealed, low maintenance

#### ≪⇔ Complete machine

Lubrication	
Option	Liebherr central lubrication system for uppercarriage and equipment, automatically
Noise emission	
ISO 6396	71 dB(A) = L <sub>pA</sub> (inside cab)
2000/14/EC	99 dB(A) = L <sub>WA</sub> (surround noise)



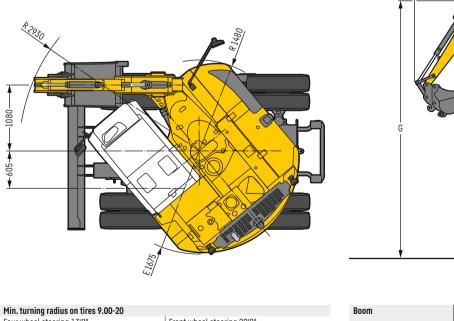


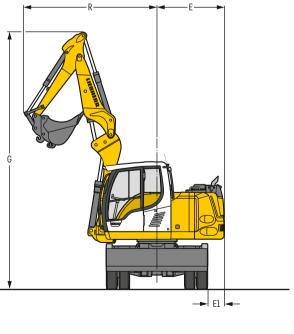
	ft in
A	8' 3"
B	8' 4"
B1	8' 4"
B2	8' 4"
B3	8' 4"
C	10' 4"
D	5' 6"
E	5' 6"
н	8' 5"
11	1' 4"
12	1' 5"
13	1' 6"
15	1' 5"
J1	1'11"
J2	2' 1"
J3	2' 2"
J5	2' 1"
K	4'
L	7'10"
M	3' 7"
M1	4' 3"
Q	1' 1"
T1	3'11"
T2	3' 8"
T3	3'10"
T5	3' 8"
U2	13'11"
U5	15' 5"
U7	15' 5"

Stick Two-piece boom 13'1" . Rear blade Rear Rear Rear Rear outriggers + front blade outriggers two-piece two-piece blade + front blade mm mm mm mm mm m 6'1" 6'1" ۷ 20' 6" 20'10" 20'10" 20' 8" 20' 8" W 7'10" 7'10" 7'10" 7'10" 7'10" Х 6'1" 26' 7" 26'11" 26'11" 26' 9" 26' 9"

Dimensions are with equipment over steering axle W = Max. ground clearance including approx. 6" piping

E = Tail radius Tires 9.00-20





Stick

**m** 6'1"

Two-piece boom

G

mm

20'11"

Four wheel steering 13'8"

Ε

mm

5'6"

R

mm

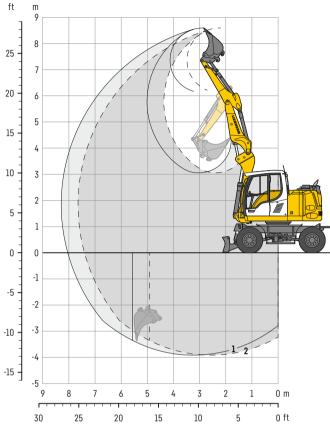
10'11"

E1

mm 1'4"

## **Backhoe bucket**

#### with two-piece boom 13'1"



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

#### with quick coupler Stick length Max, diaging depth

Stick length ft i	<b>n</b>   6'1"
Max. digging depth ft i	n 13'
Max. reach at ground level ft i	n 26'5"
Max. dumping height ft i	n 20'4"
Max. teeth height ft i	n 28'3"
Min. equipment radius ft i	n   10'11"

1

2 with stick 6'1" at max. equipment offset

#### **Digging forces**

**Digging envelope** 

without quick coupler	1
Max. digging force (ISO 6015)	lbf 10,184
	<b>lb</b> 10,100
Max. breakout force (ISO 6015)	lbf 12,567
	<b>lb</b> 12,600

#### **Operating weight**

The operating weight includes the basic machine with 8 tires plus intermediate rings, two-piece boom 13'1", stick 6'1", quick coupler SWA 33 and bucket  $2'6'' / 0.43 \text{ yd}^3$ .

Undercarriage versions	Weight (lb)
A 910 Compact Litronic with rear blade	26,500
A 910 Compact Litronic with rear two-piece blade	26,900
A 910 Compact Litronic with rear outriggers	26,500
A 910 Compact Litronic with rear two-piece + front blade	28,200
A 910 Compact Litronic with rear outriggers + front blade	28,000

Cutting width	Capacity ISO 7451 <sup>1)</sup>		Stabilizers raised	Rear blade down	Rear two-piece blade down	Rear outriggers down	Rear two-piece + front blade down	Rear outriggers + front blade down
Cutti	Capa ISO 7	Weight	Stick length (ft in)	Stick length (ft in)	Stick length (ft in)	Stick length (ft in)	Stick length (ft in)	Stick length (ft in)
ft in	yd3	lb	6'1"	6'1"	6'1"	6'1"	6'1"	6'1"
1' <sup>2)</sup>	0.20	353	=			•		=
1' 4"2)	0.26	419						
1' 6"2)	0.26	375				•	•	
1'10" <sup>2]</sup>	0.29	419						
2' 2" <sup>2</sup> )	0.35	463						
2' 6"2)	0.43	507						
2' 9" <sup>2]</sup>	0.50	529						
3' 1" <sup>2)</sup>	0.58	595	=			•		-
1' 3)	0.20	331			•	•	•	
1' 4"3)	0.27	397						
1' 6"3)	0.27	353						
1'10"3)	0.31	419	-					-
2' 2"3]	0.39	463						
2' 6"3)	0.46	485						
2' 9" <sup>3]</sup>	0.55	529						
3' 1" <sup>3)</sup>	0.63	595						=

\* Indicated loads are based on ISO 10567 and do not exceed 75% of tipping or 87% of hydraulic capacity, max. stick length without quick coupler, lifted 360° on firm with blocked oscillating axle <sup>11</sup> comparable with SAE (heaped)

<sup>2)</sup> Bucket with teeth

<sup>3)</sup> Bucket with teeth in HD version

Buckets up to 1'4" cutting width with limited digging depth

Max. material weight **■** = ≤ 3,034 lb/yd<sup>3</sup>, **■** = ≤ 2,528 lb/yd<sup>3</sup>, **△** = ≤ 2,023 lb/yd<sup>3</sup>, - = not authorized

## **Lift capacities**

#### with two-piece boom 13'1"

#### Stick 6'1"

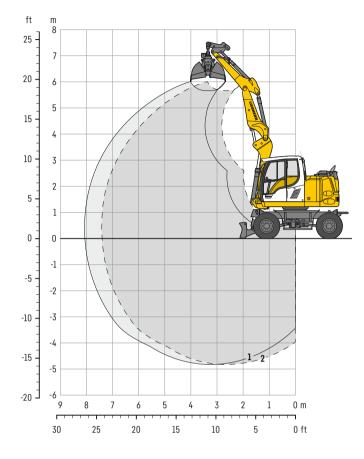
ft     rear     front     real     real     real       24.5	~~ ±			rt in
24.5				
Outriggers Blade				$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
21.0  Blade - Two-piece blade - Outriggers - Two-piece blade Blade Outriggers Blade	5,4* 5,4* 5,4* 5,4* 5,4* 5,4* 5,4* 5,4* 5,4* 5,4* 5,4* 5,4*			3,8         4,0*           4,0*         4,0*           4,0*         4,0*           4,0*         4,0*           4,0*         4,0*           4,0*         4,0*           4,0*         4,0*           4,0*         4,0*
17.5 June	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		2,8 3,6* 3,2 3,6* 3,3 3,6* 3,6* 3,6* 3,6* 3,6* 3,6* 3,6*
Blade	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2,3 3,4* 2,7 3,4* 2,8 3,4* 3,4* 3,4* 3,4* 3,4*
10.5         -         -         -         8,1         10,           Blade         -         9,1         10,         9,2         10,           Two-piece blade         -         9,4         10,         9,4         10,           Two-piece blade         Blade         10,1*         10,         10,1*         10,	5,3 7,7* 5,8 7,7* 5,9 7,7* 6,1 7,7* 7,3 7,7* 7,5 7,7*	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		2,1 3,4* 2,4 3,4* 2,4 3,4* 3,2 3,4* 3,2 3,4* 3,3 3,4*
-         -         -         10,5*         10,5*         7,9         12,           Blade         -         10,5*         10,5*         10,5*         12,           Two-piece blade         -         10,5*         10,5*         12,           Outriggers         -         10,5*         10,5*         9,0         12,           Two-piece blade         Blade         10,5*         10,5*         9,2         12,           Outriggers         Blade         10,5*         10,5*         11,2         12,           Outriggers         Blade         10,5*         10,5*         11,6         12,	5,2 7,7 5,7 9,1* 5,8 9,1* 5,9 9,1* 7,2 9,1* 7,4 9,1*	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		2,0 3,3 2,3 3,6* 2,3 3,6* 2,4 3,6* 3,0 3,6* 3,1 3,6* 24'1"
-         -         -         7,4*         7,4*         12,           Blade         -         7,4*         7,4*         8,5         13,           Two-piece blade         -         7,4*         7,4*         8,6         13,           Outriggers         -         7,4*         7,4*         8,8         13,           Two-piece blade         Blade         7,4*         7,4*         11,3         13,           Outriggers         Blade         7,4*         7,4*         11,3         13,	4,9 7,7 5,5 9,9* 5,6 9,9* 5,8 9,9* 7,2 9,9* 7,4 9,9*	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2,5 4,1 2,9 5,6* 2,9 5,6* 3,0 5,6* 3,8 5,6* 3,9 5,6*	1,9 3,3 2,2 3,8* 2,3 3,8* 2,3 3,8* 3,0 3,8* 3,1 3,8* 24*
-         -         8,2*         8,2*         10,1*         10,1*         6,9         12,1           Blade         -         8,2*         8,2*         10,1* <td< td=""><td><math display="block">\begin{array}{ccccc} 4,6 &amp; 7,6 \\ 5,2 &amp; 10,0^* \\ 5,3 &amp; 10,0^* \\ 5,5 &amp; 10,0^* \\ 6,9 &amp; 10,0^* \\ 7,2 &amp; 10,0^* \end{array}</math></td><td>3,3         5,4           3,8         7,2*           3,9         7,2*           4,0         7,2*           5,0         7,2*           5,1         7,2*</td><td>2,4 4,0 2,8 5,6* 2,8 5,6* 2,9 5,6* 3,7 5,6* 3,8 5,6*</td><td>2,0 3,4 2,3 4,3* 2,4 4,3* 2,4 4,3* 3,1 4,3* 3,2 4,3* <b>23'2"</b></td></td<>	$\begin{array}{ccccc} 4,6 & 7,6 \\ 5,2 & 10,0^* \\ 5,3 & 10,0^* \\ 5,5 & 10,0^* \\ 6,9 & 10,0^* \\ 7,2 & 10,0^* \end{array}$	3,3         5,4           3,8         7,2*           3,9         7,2*           4,0         7,2*           5,0         7,2*           5,1         7,2*	2,4 4,0 2,8 5,6* 2,8 5,6* 2,9 5,6* 3,7 5,6* 3,8 5,6*	2,0 3,4 2,3 4,3* 2,4 4,3* 2,4 4,3* 3,1 4,3* 3,2 4,3* <b>23'2"</b>
- <b>3.5</b> -         -         10,3*         10,3*         13,3         13,5*         6,7         11,1           Blade         -         10,3*         10,3*         13,5*         13,5*         16,7           Two-piece blade         -         10,3*         10,3*         13,5*         13,5*         7,8         16,6           Outriggers         -         10,3*         10,3*         13,5*         13,5*         7,9         16,6           Outriggers         -         10,3*         10,3*         13,5*         13,5*         8,2         16,6           Outriggers         Blade         10,3*         10,3*         13,5*         13,5*         10,6         16,0           Outriggers         Blade         10,3*         10,3*         13,5*         13,5*         11,0         16,6	4,4         7,4           5,1         10,2*           5,2         10,2*           5,3         10,2*           6,8         10,2*           7,0         10,2*	3,1         5,2           3,6         7,3*           3,7         7,3*           3,8         7,3*           4,8         7,3*           5,0         7,3*	2,3 3,9 2,7 4,9* 2,8 4,9* 2,8 4,9* 3,6 4,9* 3,7 4,9*	2,2 3,7 2,6 4,2* 2,6 4,2* 2,7 4,2* 3,4 4,2* 3,6 4,2* 2 <b>1'8"</b>
-7.0 -7	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3,1         5,2           3,6         5,8*           3,6         5,8*           3,7         5,8*           4,7         5,8*           4,9         5,8*		2,7 3,7* 3,1 3,7* 3,2 3,7* 3,2 3,7* 3,7* 3,7* 3,7* 3,7* 3,7* 3,7*

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

The lift capacities on the load hook of the Liebherr quick coupler SWA 33 without attachment are stated in lb x 1,000 and are valid on a firm, level supporting surface with blocked oscillating axle. These capacities can be slewed through 360° with the undercarriage in the transverse position. Capacities in the longitudinal position of the undercarriage (±15°) are specified over the steering axle with the stabilizers raised and over the rigid axle with the stabilizers down. The values apply when the adjusting cylinder is in the optimal position. Indicated loads based on the ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity, or are limited by the permissible load of the load hook on the quick coupler (max. 11,000 lb). Without the quick coupler, lift capacities will increase by up to 240 lb.

## **Clamshell grab**

#### with two-piece boom 13'1"



#### Digging envelope

with quick coupler		1
Stick length	ft in	6'1"
Max. digging depth	ft in	15'11"
Max. reach at ground level	ft in	26' 5"
Max. dumping height	ft in	18' 6"

2 with stick 6'1" at max. equipment offset

#### **Operating weight**

The operating weight includes the basic machine with 8 tires plus intermediate rings, two-piece boom 13'1", stick 6'1", quick coupler SWA 33 and clamshell grab GM 5B / 0.26 yd<sup>3</sup> (2' without ejector).

Undercarriage versions	Weight (lb)
A 910 Compact Litronic with rear blade	27,100
A 910 Compact Litronic with rear two-piece blade	27,600
A 910 Compact Litronic with rear outriggers	27,100
A 910 Compact Litronic with rear two-piece + front blade	28,900
A 910 Compact Litronic with rear outriggers + front blade	28,700

#### Clamshell grabs GM 5B Machine stability per ISO 10567\* (75% of tipping capacity)

••••••			•••••••••••••••••••••••••••••••	poi 100 20000 (10 /0 01 appi	.g capacity,			
shells	ty		Stabilizers raised	Rear blade down	Rear two-piece blade down	Rear outriggers down	Rear two-piece + front blade down	Rear outriggers + front blade down
u th of clam	년 Capacity	न Weight	Stick length (ft in) 6'1"	Stick length (ft in) 6'1"	Stick length (ft in) 6'1"	Stick length (ft in) 6'1"	Stick length (ft in) 6'1"	Stick length (ft in) 6'1"
	,		01	01	01	01	01	-
1' <sup>1)</sup>	0.13	904	L	<b>–</b>	<b>_</b>			
1'4"1)	0.17	970						=
2' 1)	0.26	1,036						-
2'7"1)	0.35	1,124						=
1' <sup>2]</sup>	0.13	992						-
1'4"2)	0.17	1,080						=

\* Indicated loads are based on ISO 10567 and do not exceed 75% of tipping or 87% of hydraulic capacity, max. stick length without quick coupler, lifted 360° on firm with blocked oscillating axle <sup>1)</sup> without ejector

<sup>2)</sup> with ejector

Max. material weight ■ = ≤ 3,034 lb/yd³, ■ = ≤ 2,528 lb/yd³, △ = ≤ 2,023 lb/yd³, - = not authorized

## Equipments

#### **Ditch cleaning buckets**

#### Ditch cleaning buckets Machine stability per ISO 10567\* (75% of tipping capacity)

ting width	Capacity ISO 7451 <sup>11</sup>	ight	Stabilizers raised	Rear blade down	Rear two-piece blade down	Rear outriggers down	Rear two-piece + front blade down	Rear outriggers + front blade down
Cut	ISO Cap	Wei	Stick length (ft in)	Stick length (ft in)	Stick length (ft in)	Stick length (ft in)	Stick length (ft in)	Stick length (ft in)
ft in	yd³	lb	6'1"	6'1"	6'1"	6'1"	6'1"	6'1"
Two-pie	ce boom	13'1"						
3'11"2)	0.38	750			■		=	
4' 3"3)	0.37	661						
4'11"3)	0.43	728						
4'11"4)	0.43	463						
4'11"2)	0.47	926						
5' 7" <sup>3]</sup>	0.48	860						

\* Indicated loads are based on ISO 10567 and do not exceed 75% of tipping or 87% of hydraulic capacity, max. stick length without quick coupler, lifted 360° on firm with blocked oscillating axle 11 comparable with SAE (heaped)

<sup>2)</sup> with 2 x 50° rotator

<sup>3)</sup> with 2 x 45° rotator

<sup>4)</sup> rigid ditch cleaning bucket

Max. material weight **■** = ≤ 3,034 lb/yd<sup>3</sup>, **■** = ≤ 2,528 lb/yd<sup>3</sup>, **Δ** = ≤ 2,023 lb/yd<sup>3</sup>, - = not authorized

## Equipment

#### o= Undercarriage

Dual-circuit braking system	•
Rear stabilizer blade	+
4-wheel steering (front wheel steering, 4-wheel steering, crab steering)	+
Digging brake, automatic	+
Tires (twin tires) Liebherr EM 22 290/90-20 PR 18	+
Tires (twin tires) Mitas EM 22 9.00-20 PR 14	•
Individual control outriggers	+
Travel speed levels (four)	•
Rear two-piece stabilizer blade	+
Rear two-piece + front stabilizer blade	+
Load holding valve on each stabilization cylinder	•
Powershift transmission, semiautomatic	•
Parking brake, maintenance-free	•
Rear outriggers	+
Rear outriggers + front stabilizer blade	+
Tires, variants	+
Protection for travel drive	+
Protection for piston rods, stabilizer cylinder	+
Speeder**	+
Storage compartment left	•
Storage compartment right	+
Tool equipment, extended	+

#### Depercarriage

Uppercarriage rear light, 2 pieces, LED       +         Uppercarriage right side light, 1 piece, LED       +         Refuelling system with filling pump       +         Main battery switch for electrical system       •         Engine hood with qas spring       •
Refuelling system with filling pump       +         Main battery switch for electrical system       •
Main battery switch for electrical system •
, , ,
Engine hood with gas spring
Amber beacon, at uppercarriage, LED double flash +
Service doors, lockable

## Hydraulic system

Shut-off valve between hydraulic tank and pump(s)	•
Pressure test fittings	•
Accumulator for controlled lowering of the equipment with the engine shut down	•
Hydraulic oil filter with integrated microfilter	•
Liebherr hydraulic oil from -4°F to +104°F	•
Liebherr hydraulic oil, biologically degradable	+
Liebherr hydraulic oil, specially for warm or cold regions	+
Bypass filter	+
Switchover high pressure circuit and tipping cylinder	+
Switchover high pressure circuit and two-piece boom	+

## 🗒 Diesel engine

Deutz particle filter	•
Fuel anti-theft device	+
Air pre-filter with dust discharge	+
Automatic engine shut-down (time adjustable)	+
Preheating fuel*	+

## 🖓 Cab

and the second	
4-points seat belt	+
Storage compartment	•
Cab lights rear, LED	+
Cab lights front, halogen (above rain cover)	+
Cab lights front, halogen (under rain cover)	•
Cab lights front, LED (above rain cover)	+
Cab lights front, LED (under rain cover)	+
Exterior mirror, electrical adjustable, with heating	+
Mechanical hour meters, readable from outside the cab	•
Roof window made from impact-resistant laminated safety glass	+
Slewing gear brake Comfort	+
Driver identification code	+
Operator's seat Standard	•
Operator's seat Comfort	+
Operator's seat Premium	+
Driving alarm (acoustic signal is emitted during travel, can be switched ON / OFF) Fire extinguisher	++
Front screen made from impact-resistant laminated safety glass – not adjustable	+
Windscreen retractable (including upper part)	•
Cruise control	•
Handrest (elevation) for joystick	+
Joystick steering	+
Joysticks Premium	+
Automatic air conditioning	+
Fuel consumption indicator	•
Electric cooler	+
Steering wheel, wide version (cost-neutral option)	+
Steering column adjustable horizontally	•
LiDAT, vehicle fleet management	•
Lightbar on cab, LED*	+
Positioning swing brake	+
Proportional control	•
Radio Comfort, control via display with handsfree set	+
Preparation for radio installation	•
Rain cover over front window opening	•
ROPS cab protection	•
Back-up alarm (acoustic signal is emitted traveling backward, can not be switched off)	+
Amber beacon, on cab, LED double flash	+
Tinted windows	•
Windscreen wiper, roof	+
Windshield wiper, entire windshield	+
Door with sliding window	•
Slipcover for operator seat	+
FOPS top guard	+
Right side window and windshield made from laminated safety glass	•
Sun visor	+
Sun blind	•
Auxiliary heating, adjustable (week time switch)	+
Left control console, folding	•
SuperFinish First aid box	
First-aid box Adjustment sylinder (propertional), feet pedal left	++
Adjustment cylinder (proportional), foot pedal left Warning triangle	+
Electronic immobilizer	+
Cigarette lighter	+
organetice induitien	

## Equipment

Boom lights, 2 pieces, halogen	•
Boom lights, 2 pieces, LED	+
Grab lines for stick with tipping kinematic	+
High pressure circuit incl. unpressurized return line and Tool Control	+
Electronic lift limitation	+
Load holding valve tipping cylinder	+
Load lug on stick	+
Leak oil line, additional for attachments	+
Liebherr ditch cleaning bucket	+
Liebherr quick coupler, hydraulic or mechanical	+
Liebherr backhoe bucket	+
Liebherr tooth system	+
Liebherr clamshell grab	+
Stick 6'1"	•
Medium pressure circuit incl. lines	+
Pipe fracture safety valves hoist cylinders	•
Pipe fracture safety valve stick cylinder	•
Hose quick coupling at end of stick	•
Hose protection for Solidlink	+
Quick coupling system Solidlink	+
Protection for piston rod, adjusting cylinder	+
Protection for bottom side of stick	+
Signal contacts for Solidlink, 14-pin	+
Tool Control, 20 attachment adjustments selectable over the display	+
Overload warning device	•
Two-piece boom	•

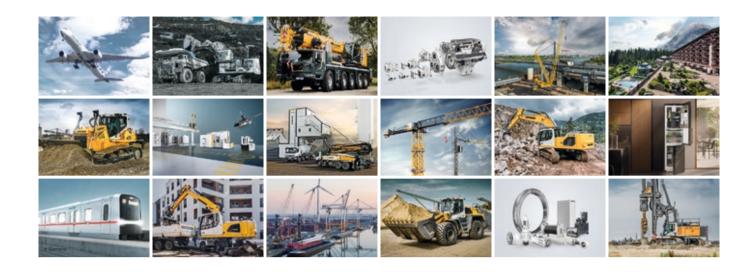
#### **Complete machine**

Lubrication	
Lubrication uppercarriage and equipment, manually – decentralized (grease points)	•
Lubrication undercarriage, manually – decentralized (grease points)	•
Central lubrication system for uppercarriage and equipment, automatically (without quick coupler and connecting link)*	+
Centralized lubrication extended for quick coupler	+
Centralized lubrication extended for connecting link	+
Special coating	
Custom painting for attachments	+
Special coating, variants	+
Monitoring	
Rear view monitoring with camera	•
Side view monitoring with camera	•

• = Standard, + = Option \* = country-dependent, \*\* = depending upon the country partially only 15.5 mph permitted

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

## **The Liebherr Group**



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

Liebherr was founded in 1949. With the development of the world's first mobile tower crane, Hans Liebherr laid the foundations of a successful family-run company which today comprises more than 150 companies on all continents with over 50,000 employees. The holding company of the Group is Liebherr-International AG in Bulle (Switzerland), whose shareholders 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 program

Not only is Liebherr one of the biggest construction machine manufacturers in the world, it also provides high-quality, user-oriented products and services in a wide range of other areas. The product program includes the segments earthmoving machinery, 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, refrigerators and freezers, components and hotels.

#### Customized solutions and maximum customer value

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.

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For more information go to www.P65warnings.ca.gov/diesel.
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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.

#### Liebherr USA, Co.

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