

# Crawler Excavator

**R 966**  
Litronic®

Motor:

**429 HP / 320 kW** SAE J1349

**435 HP / 320 kW** ISO 9249

**Stage Tier 4f**

Operating weight:

**Backhoe: 151,130 – 171,960 lb**

**Shovel: 147,600 – 155,760 lb**

Bucket Capacity:

**Backhoe: 1.95 – 7.20 yd<sup>3</sup>**

**Shovel: 4.60 – 6.55 yd<sup>3</sup>**



# LIEBHERR

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## Performance

Performance – power,  
versatility and productivity



## **Economy**

Profitability – efficiency and reduced operating costs

## **Reliability**

Reliability – world-renowned robustness

## **Comfort**

Spacious, ergonomic and high-visibility

## **Easy maintenance**

Simple service – Easier and safer service check points



# Performance



**Performance –  
power, versatility and productivity**

### High performance for maximum productivity

The R 966 crawler excavator is characterised by its maximum productivity. Whether it be it in earthmoving or quarry applications, this 70 tonne class excavator has an optimised hydraulic system matched together with intelligent operating modes. This ensures the capability for operating on large construction sites and in a quarry.

### Reliable working capacity

The Liebherr V8 engine on the R 966 is very productive thanks to its high torque even at low speeds. The digging and breakout forces of 69,240 lbf and 79,580 lb respectively ensure fast and efficient working cycles. Equipped with a Liebherr bucket and tooth system it guarantee easy penetration into material for simple extraction. The R 966 stability and fluid movements of the machine ensure smooth and fast loading of dump trucks.

### Optimisation of hydraulic system for constant power

With an independent 3rd pump dedicated for swing the R 966 has optimal power. This provides maximum torque while swinging and the remaining two pumps still have full power for other excavator functions.

### The versatility of the wide range of attachments

Thanks to the wide variety of attachments, optimised kinematics, the R 966 impresses with its versatility in all applications.

#### Liebherr Engine

- New Final Tier 4/Stage IV engine with SCR exhaust gas after-treatment system
- Designed specifically for construction applications
- Liebherr common rail injection system for optimised output
- Automatic fuel-saving idling system

#### Choice of work mode

- E Mode - Economy: for economical and ecologically-friendly operation. Minor restriction of power without affecting the load lifting and excavating capacities.
- P Mode - Power: for high excavation capacities and difficult applications. Pump flow and power are not limited
- S Mode - Sensitivity: for precision jobs and loading of materials.
- P+ Mode - Full Power: especially designed for increased power; only recommended for extreme applications

#### Floating Boom Function

- Increased hydraulic flow for the other cylinders (stick and/or bucket for example)
- More power available, making it easier to extract materials and reduce work cycle times
- Increased service life when a hydraulic hammer is used



# Economy



**Profitability – efficiency and  
reduced operating costs**

### Low operating costs

Thanks to its high technology and its innovation, the Liebherr France Company increases the performance of its machines while reducing their fuel consumption. Examples of this are the new diesel engine, automatic idling, electronic engine speed sensing control, Regeneration Plus function and the hydrostatic cooling system (fans operate only when necessary). Consequently, the reduced fuel consumption means less pollution.

### LiDAT fleet and machine park management tool

To improve your machine management, Liebherr has developed its own data transmission system using the GPRS network. This system allows you to instantly know the position of your excavator via a web interface. Thanks to data transmission, the LiDAT system developed and manufactured by Liebherr keeps you informed about fuel consumption, number of service hours or machine faults, just to name a few. LiDAT allows you to be proactive and more responsive: organizing and maintaining your fleet for increased productivity.

### An excellent after-sales service

The after-sales services can be customized to suit and respond to your specific needs. Several programs, such as ReMan, ReBuilt and Repair provide the perfect, economical solution, always including the manufacturer's quality and guarantee. A team of technicians, specialized to intervene on your machines, has all the latest-generation diagnostic tools, for a reduced down time of the machine. By following your chosen maintenance program, you will also obtain a higher resale price.

### Liebherr tools

- Wide range of tools suitable for every type of application
- Tools designed for maximum productivity and durability
- Shape of buckets designed to assist the filling and stability of bulky materials during the transport stages
- Hydraulic quick coupler system

### Liebherr lubricants

- Complete range of lubricants and coolants for your Liebherr engines
- Special service with product specialists available to listen to and advise you

### Spare parts service

- Any spare parts required are available within 24 hours – worldwide. And that means high operational readiness of the machines, wherever, whenever
- Over 80,000 spare parts in stock at all times



# Reliability



**Reliability – world-renowned  
robustness**



### A durable and tried-and-tested design

In demanding applications Liebherr represents the benchmark for the robustness of its machines and the quality of the Liebherr components. Several casted parts are used for the design of the machine and are a testimony to the expertise and know-how of the manufacturer. With the large-sized attachments the R 966 crawler excavators is ideal for tough applications.

### A tried-and-tested production process and advanced technology

Liebherr development process integrates advanced digital tools in the fields of finite element computation, fatigue calculation and other simulation software. The results are then validated on special test benches prior to carrying out endurance tests on the entire machine in extreme conditions.

### High-performance and durable undercarriage

Liebherr offers a large and unique range of rigid and variable undercarriages. The chamfered track pads has optimal manoeuvrability and is more resistant to wear on rocky terrain. The Liebherr travel drive are more powerful and better protected. The supporting rollers with double bearings guarantee improved load distribution and thus better durability over time.

### Specific solutions tailored to customer requirements

In the case a customer has a special requests to address a specific application the customized solutions are designed and manufactured by Liebherr. This ensures successful integration and optimal performance of the excavator for the customer. As a sign of reliability Liebherr provides a manufacturer's warranty for the entire excavator including specific components as well as the electronics.

### SCR system with diesel exhaust fluid (AdBlue®)

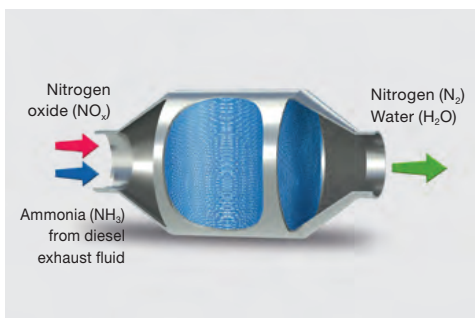
- Diesel exhaust fluid level indicator on the display
- Liebherr design > complies with Final Tier 4/Stage IV standard
- No need for particle filters (DPF) and exhaust gas recycling (EGR)
- Simple system for enhanced reliability and less maintenance

### Undercarriage

- Robust design for greater resistance and a better distribution of forces
- Easy and safe transport thanks to integrated securing hooks
- Three different types of travel mechanism, one of which is variable

### Key components developed by Liebherr

- Perfect harmonization of the machine elements, designed specifically for earthmoving and quarry applications
- Combustion engine, hydraulic pumps, swing mechanism, cylinders and electronic components are designed and manufactured by Liebherr
- Purpose built options such as special attachment lengths
- Specific tools and custom protection can be added at the factory



# Comfort



**Spacious, ergonomic  
and high-visibility**

### A spacious and ergonomic work station

The cab offers a generous space for maximum comfort. Equipped, among other things, with a pneumatic seat with heater as standard (optional with airconditioning), controls connected to the seat and high-performance automatic air-conditioning, the cab creates a pleasant working environment. All the controls are precisely laid out in an intuitive manner for greater responsiveness and concentration while working. The cab is mounted on viscoelastic studs for significantly lower vibration.

### Fully automatic air-conditioning

The automatic air-conditioning with touchscreen controls has several ventilation outlets for optimum ambient air in the cab.

### High resolution color touchscreen

The color touchscreen is a true human-machine interface for controlling several comfort functions, such as the radio, and more operational functions, such as work modes, tool types and even the backup camera.

### A spacious and comfortable cab

The cab of the R 966 is the most spacious cab in 70 tonne machine class. It offers unrivalled comfort for higher operator productivity during long working hours. With the highest level of protection on the market the impact-resistant windows offer maximum safety.



#### Control screen

- 7" color touchscreen
- Several setting, control and surveillance options
- Robust and reliable design (Ingress Protection Rating IP65)
- Compatible high resolution video for displaying the rear camera image

#### Heightened visibility

- Rear camera integrated in the counterweight as standard and camera for side area monitoring, for rear visibility and heightened operating safety
- Optimized design of the whole uppercarriage providing the operator with an improved field of vision
- Secure emergency exit through the rear window

#### New options

- Lighting in engine compartment
- LED headlights with adjustable current value
- 360° camera
- Follow me home (headlight cutoff delay)
- Windshield wiper on bottom part

# Easy maintenance



**Simple service –  
Easier and safer service check points**

### Ergonomic access and time-saving

For maximum safety during servicing different types of platforms are available with a large central platform in particular for access to engine and hydraulic system components. The two-piece engine hood facilitates easier opening and closing. Fluid level monitoring, such as the oil level or urea tank level can be carried out quickly and easily from the touchscreen in the cab. The automatic lubrication system reduces precious servicing time while guaranteeing optimal lubrication of the excavator.

### Less maintenance for more productivity

The frequency of the service intervals is optimised to guarantee that each part is functioning optimally and that the maintenance tasks are only performed as necessary. Whether it is the interval for changing the hydraulic oil, which can be up to 3,000 hours, or the interval for changing the engine oil, every 500 hours, everything has been taken into account to reduce the frequency of interventions and thus limit the machine's downtime and lower costs.

### An exhaust gas treatment without maintenance

Thanks to its unique Liebherr design, the exhaust gas treatment is carried out in compliance with the Final Tier 4/Stage IV standards, without fitting a particle filter and exhaust gas recycling (EGR). This results in an output with no loss of productivity linked to the regeneration of these filters and, of course, no maintenance time or cost of spare parts associated with this technology.

### Expert advice and service provisions

Liebherr offers an expert advice service. Qualified personnel will help you make the appropriate decisions to meet your needs: sales arguments based on the terrain, service agreements, advantageous repair alternatives, original parts management, and remote data transfer for fleet management.

#### LiDAT data transfer system

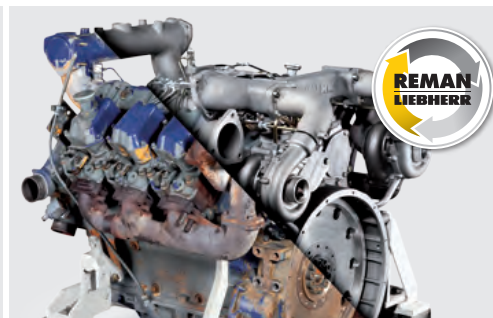
- Complete fleet management, all from one source
- Optimized economical performance of the machine park thanks to detailed view of the distribution of operating states and times
- Reports on capacity commitment and the use of the machine park can be called up daily via the Web portal
- Precise location of the machine
- Regional delimitation and fixed downtimes increase safety and reliability

#### Liebherr AdBlue solution

- The crawler excavator has a stainless steel urea tank with capacity for 48 gal
- For maximum safety, the tank can be refilled using a filling pump and gun (optional)
- An 24 V electric field supply is also available for connecting the filling kit

#### Liebherr warranties and remanufacturing

- Significant warranties for the complete excavator and key components
- Optimal planning of all servicing activities
- Liebherr remanufacturing programme for processing worn components, conforming to the highest industrial standards



# Long live progress with the R 966

## Equipment

- Cast steel elements
- Greater resistance to stresses
- Longer service life

## Tools

- Z-type Liebherr teeth for fast replacement
- Wide range of work tools

## Undercarriage

- Robust structure thanks to the X-shaped profile
- Improved self-cleaning capacity
- Special heat treatment for low wear and tear of drive sprockets
- 3 guiding guards per track – standard





#### **Operator's cab**

- Comfortable and ergonomic
- 7" high resolution color touchscreen for heightened readability
- Rear window with improved visibility

#### **Visibility**

- Rear camera integrated in the counterweight
- Two boom-mounted lights – standard
- Optimized design of the whole uppercarriage providing the operator with a better field of vision

#### **Automatic centralized lubrication - standard**

- Reduced maintenance time
- Longer service life thanks to better lubrication

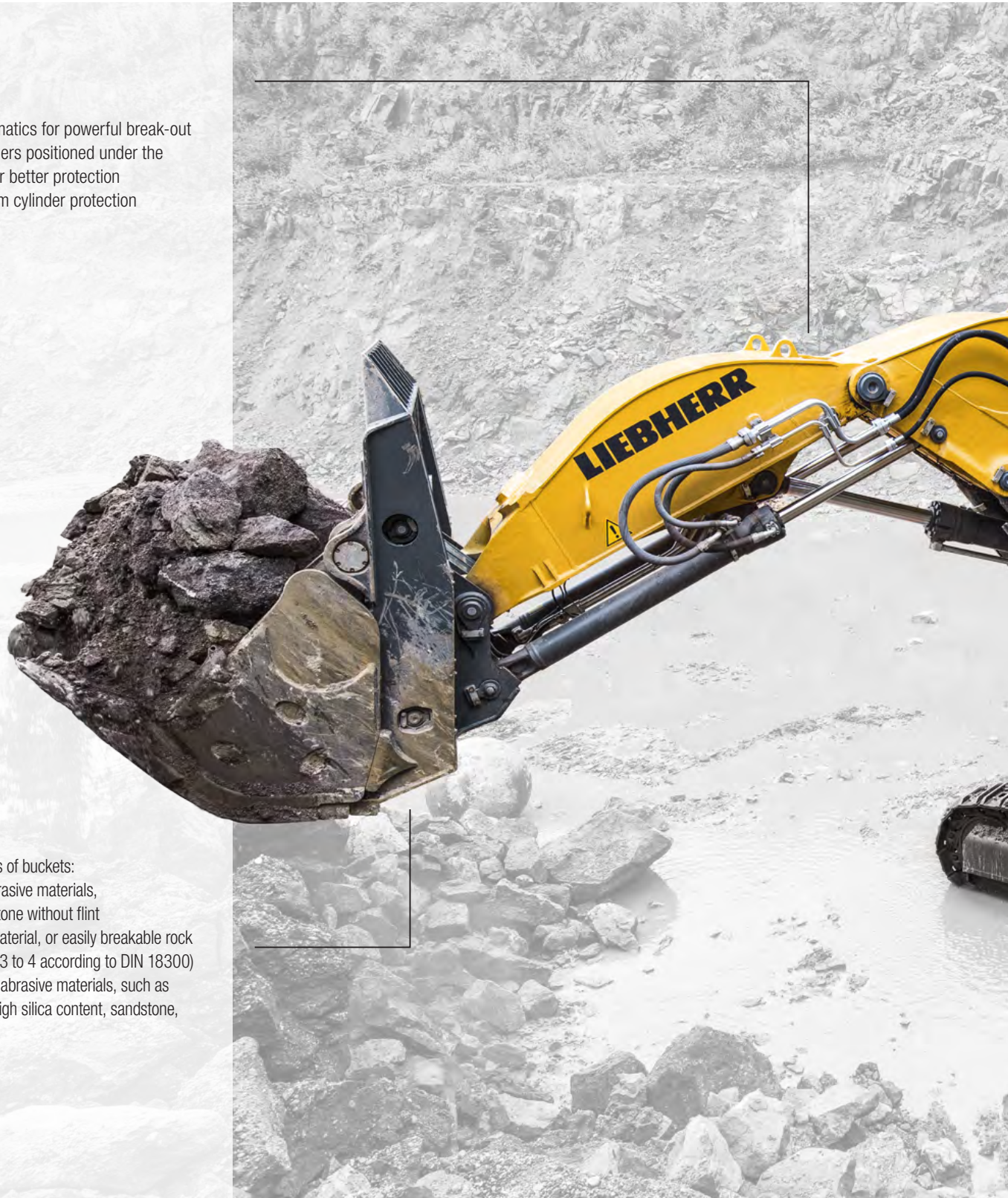
# Long live progress with the R 966 Shovel

## Equipment

- Parallel kinematics for powerful break-out
- Bucket cylinders positioned under the equipment for better protection
- Optional boom cylinder protection

## Tools

- Different types of buckets:
- Type I: non-abrasive materials, such as limestone without flint
- Type II: Shot material, or easily breakable rock (classification 3 to 4 according to DIN 18300)
- Type III: Highly abrasive materials, such as rocks with a high silica content, sandstone, granite, etc.







#### **Operator's cab**

- Operator's cab with 2' 7" elevation for improved visibility
- Optionally equipped with a FOPS and FGPS front guard
- Comfortable and quiet cab

# Technical Data



## Engine

<b>Rating</b>	
per SAE J1349	429 HP (320 kW) at 1,800 rpm
per ISO 9249	435 HP (320 kW) at 1,800 rpm
<b>Torque</b>	2,028 lbf ft at 1,100 rpm
<b>Model</b>	Liebherr D9508 A7 SCR
<b>Type</b>	8 cylinder V engine
Bore/Stroke	5.0/6.2 in
Displacement	986 in <sup>3</sup>
<b>Engine operation</b>	4-stroke diesel Common-Rail
<b>Exhaust gas treatment</b>	SCR system (Selective Catalytic Reduction) emission standard Tier 4 final/stage IV
<b>Cooling system</b>	water-cooled and integrated motor oil cooler, after-cooled and fuel cooled
<b>Air cleaner</b>	dry-type air cleaner with pre-cleaner, primary and safety elements
<b>Fuel tank</b>	301 gal
<b>Urea tank</b>	48 gal
<b>Electrical system</b>	
Voltage	24 V
Batteries	2 x 180 Ah/12 V
Starter	24 V/7.8 kW
Alternator	three-phase current 28 V/140 A
Engine idling	sensor controlled
<b>Motor management</b>	connection to the integrated excavator system controlling via CAN-BUS to the economical utilisation of the service that is available



## Hydraulic Controls

<b>Power distribution</b>	via control valves in single block with integrated safety valves
Flow summation	to boom and stick
Closed-loop circuit	for uppercarriage swing drive
<b>Servo circuit</b>	electro-hydraulic control
Attachment and swing	proportional via joystick levers
Travel	– proportional via foot pedals or removable hand levers – speed pre-selection
<b>Additional functions</b>	via foot pedals or joystick toggle switch



## Hydraulic System

<b>Hydraulic pump</b>	
for attachment and travel drive	two Liebherr variable flow, swashplate pumps
Max. flow	2 x 108 gpm
Max. pressure	5,076 psi
for swing drive	reversible, variable flow, swashplate pump, closed-loop circuit
Max. flow	65 gpm
Max. pressure	5,366 psi
<b>Pump regulation</b>	electro-hydraulic with electronic engine speed sensing regulation, flow compensation, automatic oil flow optimizer
<b>Hydraulic tank</b>	115 gal
<b>Hydraulic system</b>	243 gal
<b>Hydraulic oil filter</b>	2 full flow filters in return line with integrated fine filter area (5 µm)
<b>Cooling system</b>	compact cooler for water cooler, after-cooler, fuel cooler and transmission pump oil, sandwiched with cooler for oil and condenser of air-conditioning with hydrostatically controlled fan drives
<b>MODE selection</b>	adjustment of engine and hydraulic performance via a mode pre-selector to match application, e.g. for especially economical and environmentally friendly operation or for maximum digging performance and heavy-duty jobs
<b>RPM adjustment</b>	stepless adjustment of engine output via RPM at each selected mode
<b>Tool Control</b>	10 preadjustable pump flows and pressures for add-on tools



## Swing Drive

<b>Drive</b>	Liebherr swashplate motor with integrated brake valves
<b>Transmission</b>	Liebherr compact planetary reduction gear
<b>Swing ring</b>	Liebherr, sealed race ball bearing swing ring, internal teeth
<b>Swing speed</b>	0 – 5.6 rpm stepless
<b>Swing torque</b>	171,852 lbf ft
<b>Holding brake</b>	wet multi-disc (spring applied, pressure released)



## Operator's Cab

<b>Cab</b>	work headlights integrated in the ceiling, a door with a side window (can be opened on both sides), large stowing and depositing possibilities, shock-absorbing suspension, sounddamping insulating, tinted laminated safety glass, separate window shades for the sunroof window and windscreen, 12 V plug, storage bins, lunchbox, cup holder
<b>Operator's seat</b>	Liebherr-Comfort seat, airsprung with automatic weight adjustment, vertical and horizontal seat damping including consoles and joysticks. Seat and armrests adjustable separately and in combination, seat heating as standard
<b>Control system</b>	arm consoles, swinging with the seat
<b>Operation and displays</b>	large high resolution color display with selfexplanatory operation via touchscreen, video, versatile adjusting, control and monitoring facilities, e.g. climate control, implement and tool parameters
<b>Air-conditioning</b>	standard automatic air-conditioning, ambient air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu. Ambient air and fresh air filters can be easily replaced and are accessible from the outside. Heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures



## Undercarriage

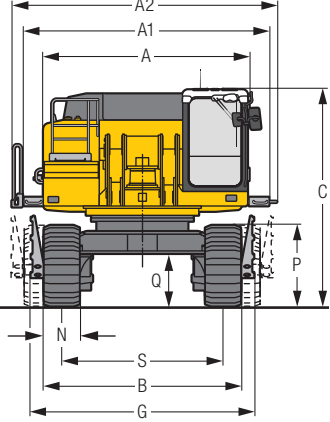
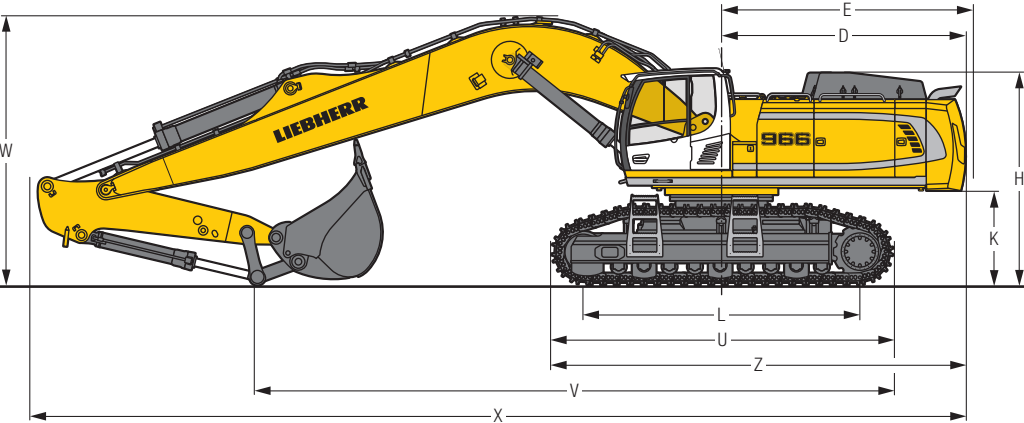
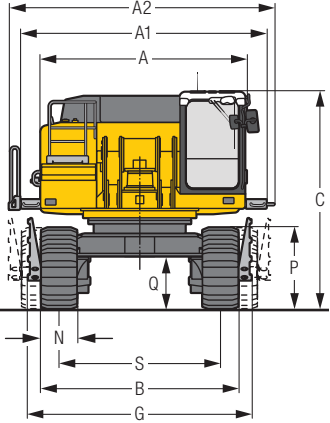
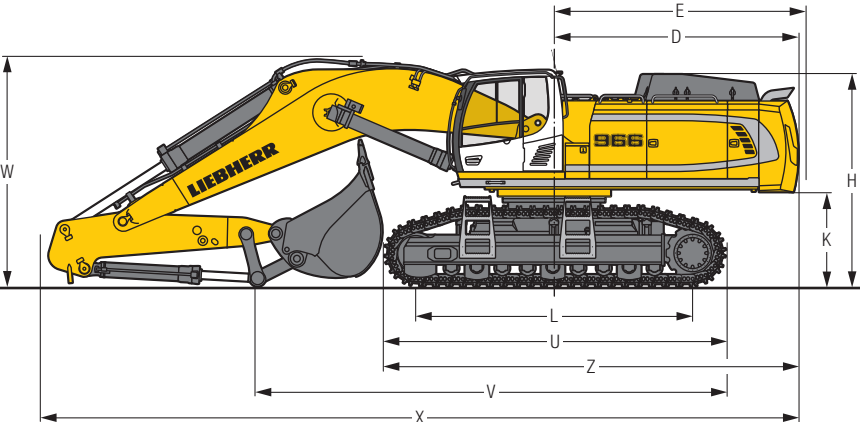
<b>Version</b>	HD gauge 10'10" LC-V gauge 11'1"
<b>Drive</b>	Liebherr swashplate motors with integrated brake valves on both sides
<b>Transmission</b>	Liebherr planetary reduction gears
<b>Travel speed</b>	low range – 1.9 mph high range – 2.5 mph
<b>Net drawbar pull on crawler</b>	107,459 lbf
<b>Track components</b>	D8K, maintenance-free
<b>Track rollers/Carrier rollers</b>	HD: 9/2 LC-V: 9/3
<b>Tracks</b>	sealed and greased
<b>Track pads</b>	double grouser
<b>Holding brake</b>	wet multi-disc (spring applied, pressure released)
<b>Brake valves</b>	outside the travel motor
<b>Lashing eyes</b>	integrated



## Attachment

<b>Type</b>	combination of resistant steel plates and cast steel components
<b>Hydraulic cylinders</b>	Liebherr cylinders with special seal-system, shock protection
<b>Bearings</b>	sealed, low maintenance
<b>Lubrication</b>	automatic central lubrication system (except link and tilt geometry)
<b>Hydraulic connections</b>	pipes and hoses equipped with SAE split-flange connections
<b>Bucket</b>	standard equipped with Liebherr tooth system

# Dimensions



	HD	ft in
A		11' 6"
A1		13' 8"
A2		14' 9"
C		11'7"/12' 3"
D		13' 7"
E		14'
H		11' 4"
K		4' 9"
L		15'
P		4' 4"
Q		2'
S		10'10"
U		18' 8"
N		20" 24" 30"
B		12'10" 12'10" 13' 3"
G		14' 2" 14' 2" 14' 2"
Z		22'11"

	LC-V	ft in
A		11' 6"
A1		13' 8"
A2		14' 9"
C		12'1"/12' 9"
D		13' 7"
E		14'
H		11'10"
K		5' 3"
L		15' 5"
P		4' 6"
Q		2'11"
S		8'11"/11' 1"
U		18'11"
N		20" 24" 30"
B		11' /13' 2" 11' /13' 2" 11'5"/13' 7"
G		12'5"/14' 7" 12'5"/14' 7" 12'5"/14' 7"
Z		23' 1"

\* with FOPS top guard  
 \*\* work position

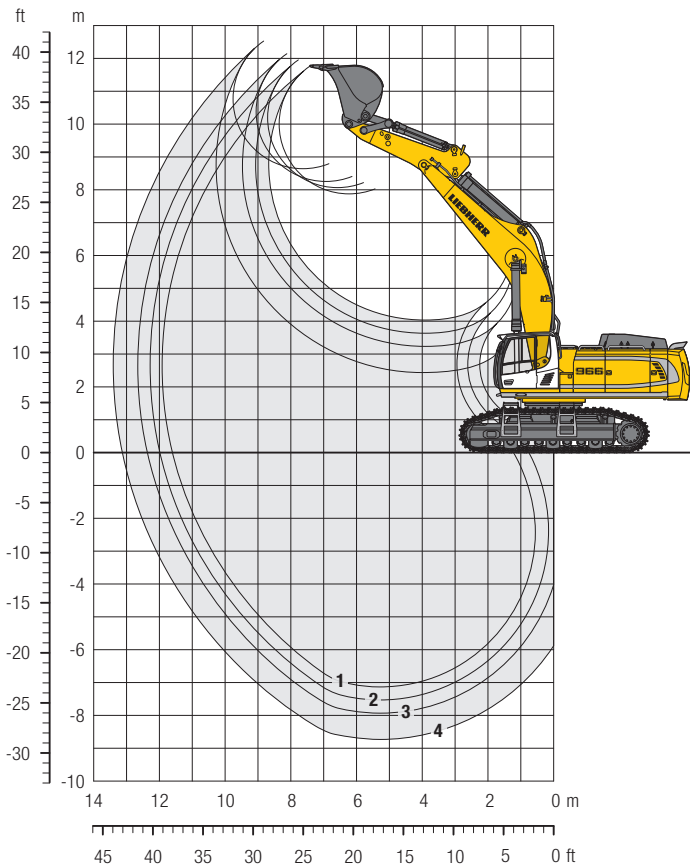
	HD-Undercarriage			
	Stick length ft in	Mono boom 23' ft in	Mono boom 26'11" ft in	Mono boom 32'10" ft in
V	8' 6"	26' 3"	–	–
	9'10"	20' 2"	29' 2"	35' 5"
	11' 2"	19' 8"	27'11"	34' 1"
	13' 9"	31' 4"	25' 1"	31' 6"
	16' 5"	–	21' 4"	28' 1"
W	8' 6"	12'10"	–	–
	9'10"	13' 1"	13' 3"	14' 9"
	11' 2"	13' 9"	13' 7"	14'11"
	13' 9"	12' 6"	13' 9"	15' 1"
	16' 5"	–	13' 7"	15' 3"
X	8' 6"	42' 2"	–	–
	9'10"	41'10"	45'11"	52'
	11' 2"	42' 2"	46' 3"	52'
	13' 9"	41' 8"	46' 5"	52'
	16' 5"	–	46' 3"	52'

	LC-V-Undercarriage			
	Stick length ft in	Mono boom 23' ft in	Mono boom 26'11" ft in	Mono boom 32'10" ft in
V	8' 6"	26' 1"	–	–
	9'10"	24'11"	29'	35' 5"
	11' 2"	19' 8"	27' 9"	34' 1"
	13' 9"	31' 4"	25' 1"	31' 4"
	16' 5"	–	21' 2"	27'11"
W	8' 6"	12'10"	–	–
	9'10"	13' 1"	13' 7"	14'11"
	11' 2"	13' 9"	13' 9"	15' 1"
	13' 9"	12' 8"	13'11"	15' 5"
	16' 5"	–	13' 7"	15' 5"
X	8' 6"	42' 2"	–	–
	9'10"	41'10"	45' 9"	52'
	11' 2"	42'	46' 3"	52'
	13' 9"	41' 8"	46' 3"	52'
	16' 5"	–	46' 1"	52'

\* without bucket

# Backhoe Bucket

with Mono Boom 23' and Counterweight 24,250 lb



## Digging Envelope

		1	2	3	4
Stick length	ft in	8'6"	9'10"	11'2"	13'9"
Max. digging depth	ft in	23'5"	24' 9"	26'1"	28'8"
Max. reach at ground level	ft in	38'1"	39' 2"	40'6"	43'
Max. dumping height	ft in	25'9"	26' 5"	27'1"	28'5"
Max. teeth height	ft in	38'7"	39' 2"	39'8"	41'

## Digging Forces

		1	2	3	4
Digging force ISO	lbf	69,240	63,400	58,450	50,580
	lb	69,230	63,270	58,420	50,490
Breakout force ISO	lbf	79,580	79,580	79,580	79,580
	lb	79,590	79,590	79,590	79,590

## Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 24,250 lb, mono boom 23', stick 8'6" and HD bucket 5.23 yd<sup>3</sup> (10,140 lb).

Undercarriage		HD			LC-V		
		20"	24"	30"	20"	24"	30"
Pad width	in	20"	24"	30"	20"	24"	30"
Weight	lb	151,130	152,670	154,880	157,190	158,730	161,160
Ground pressure	psi	19.6	16.5	13.4	20.1	16.8	13.7

Optional: heavy counterweight

(counterweight 31,970 lb increases the operating weight by 7,720 lb and ground pressure by 1.00 psi) see load tables on page 30

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

	Cutting width in	Capacity ISO 7451 yd <sup>3</sup>	Weight lb	HD-Undercarriage			LC-V-Undercarriage		
				Stick length (ft in)			Stick length (ft in)		
				8'6"	9'10"	11'2"	8'6"	9'10"	11'2"
STD <sup>1)</sup>	77"	4.58	7,610	▲	▲	■	▲	▲	■
	85"	5.23	7,940	▲	▲	■	▲	▲	■
	85"	5.88	8,600	■	▲	△	▲	▲	△
	91"	6.54	8,820	▲	■	—	■	■	—
	100"	7.19	9,480	■	△	—	▲	△	—
HD <sup>2)</sup>	79"	3.92	9,040	▲	▲	■	▲	▲	■
	85"	4.58	9,810	▲	▲	■	▲	▲	■
	85"	5.23	10,140	▲	■	△	▲	■	△
	85"	5.88	10,470	■	■	—	▲	■	—
	91"	6.54	11,240	■	△	—	▲	△	—
HDV <sup>3)</sup>	71"	3.27	9,480	▲	▲	▲	▲	▲	▲
	77"	3.92	10,140	▲	▲	▲	▲	▲	▲
	85"	4.58	11,020	▲	▲	△	▲	▲	△
	85"	5.23	11,460	■	▲	△	▲	▲	△
	85"	5.88	12,020	▲	△	—	■	△	—

\* Indicated loads are based on ISO 10567 max. stick length, lifted 360° on firm

<sup>1)</sup> Standard bucket with teeth Z 70

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

<sup>3)</sup> HDV bucket with teeth Z 70

Other backhoes available on request

Max. material weight ▲ = ≤ 3,371 lb/yd<sup>3</sup>, ■ = ≤ 3,034 lb/yd<sup>3</sup>, ▲ = ≤ 2,781 lb/yd<sup>3</sup>, ■ = ≤ 2,528 lb/yd<sup>3</sup>, △ = ≤ 2,023 lb/yd<sup>3</sup>, — = not authorized

# Lift Capacities

with Mono Boom 23' and Counterweight 24,250 lb

## Stick 8'6"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		ft in
		HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	
40	HD													
	LC-V													
35	HD													
	LC-V													
30	HD												22.4'	22.4'
	LC-V												22.1'	22.1'
25	HD												20.8'	20.8'
	LC-V												20.7'	20.7'
20	HD												20.3'	20.3'
	LC-V												20.3'	20.3'
15	HD												20.5'	20.5'
	LC-V												20.5'	20.5'
10	HD												21.3'	21.3'
	LC-V												21.4'	21.4'
5	HD												22.9'	22.9'
	LC-V												23.2'	23.2'
0	HD												24.4'	24.4'
	LC-V												24.1'	24.1'
-5	HD	52.3"	52.3"	65.2"	65.2"	44.9"	44.9"	36.1"	36.6"	27.3"	32.3"		26.6"	30.6"
	LC-V	56.3"	56.3"	64.6"	64.6"	48.3"	51.0"	35.2"	40.3"				29.2"	31.2"
-10	HD	67.8"	67.8"	57.3"	57.3"	45.0"	45.7"	33.0"	35.4"				31.4"	32.9"
	LC-V	66.7"	66.7"	56.2"	56.2"	44.9"	44.9"	34.5"	34.5"				32.7"	32.7"
-15	HD			43.6"	43.6"	34.0"	34.0"						30.3"	30.3"
	LC-V			41.7"	41.7"	31.9"	31.9"						29.8"	29.8"
-20	HD													
	LC-V													
-25	HD													
	LC-V													
-30	HD													
	LC-V													
-35	HD													
	LC-V													

## Stick 9'10"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		ft in
		HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	
40	HD													
	LC-V													
35	HD													
	LC-V													
30	HD												18.5'	18.5'
	LC-V												18.3'	18.3'
25	HD												20.0'	20.0'
	LC-V												20.7'	20.7'
20	HD												37.0'	37.0'
	LC-V												37.5'	37.5'
15	HD												42.9'	42.9'
	LC-V												43.6'	43.6'
10	HD												47.5'	49.0'
	LC-V												49.5'	49.5'
5	HD												45.2'	52.9'
	LC-V												49.0'	53.1'
0	HD												55.4'	55.4'
	LC-V												57.9'	57.9'
-5	HD	50.4"	50.4"	68.0"	68.0"	44.0"	44.0"	32.0"	41.0"				44.0"	41.0"
	LC-V	53.3"	53.3"	67.4"	67.4"	48.0"	51.8"	34.8"	40.7"				48.0"	40.7"
-10	HD	76.7"	76.7"	60.6"	60.6"	44.5"	47.4"	32.5"	37.1"				46.7"	46.7"
	LC-V	75.4"	75.4"	59.6"	59.6"	46.7"	46.7"	35.4"	36.4"				46.7"	46.7"
-15	HD												48.3"	48.3"
	LC-V												46.7"	46.7"
-20	HD													
	LC-V													
-25	HD													
	LC-V													
-30	HD													
	LC-V													
-35	HD													
	LC-V													

## Stick 11'2"

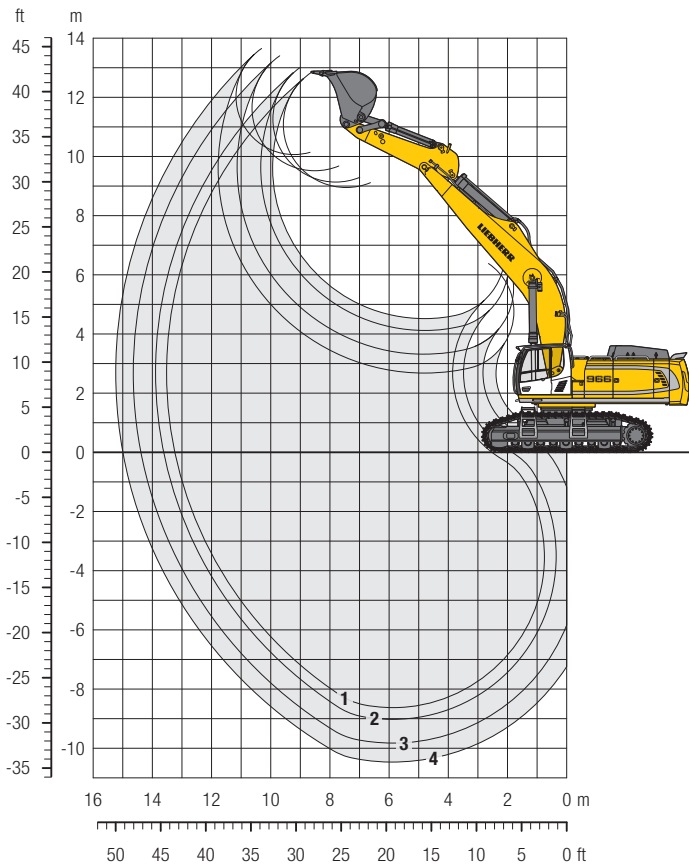
ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		ft in
		HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	
40	HD													
	LC-V													
35	HD													
	LC-V													
30	HD												15.5'	15.5'
	LC-V												15.4'	15.4'
25	HD												14.6'	14.6'
	LC-V												14.5'	14.5'
20	HD												14.2'	14.2'
	LC-V												14.2'	14.2'
15	HD												14.4'	14.4'
	LC-V												14.4'	14.4'
10	HD												14.9'	14.9'
	LC-V												15.0'	15.0'
5	HD												15.9'	15.9'
	LC-V												16.1'	16.1'
0	HD												17.6'	17.6'
	LC-V												17.9'	17.9'
-5	HD	47.8"	47.8"	69.1"	70.1"	43.7"	52.7"	31.8"	41.2"	24.8"	33.1"		20.5"	20.5"
	LC-V	50.1"	50.1"	69.6"	69.6"	47.7"	52.4"	34.6"	41.0"	27.0"	32.8"		20.9"	20.9"
-10	HD	71.0"	71.0"	63.5"	63.5"	44.1"	48.8"	32.0"	38.2"				25.6"	25.6"
	LC-V	73.6"	73.6"	62.6"	62.6"	48.1"	48.2"	34.9"	37.7"				26.4"	26.4"
-15	HD	68.0"	68.0"	52.5"	52.5"	40.8"	40.8"						29.9"	29.9"
	LC-V	65.8"	65.8"	51.0"	51.0"	39.6"	39.6"						29.7"	29.7"
-20	HD													
	LC-V													
-25	HD													
	LC-V													
-30	HD													
	LC-V													
-35	HD													
	LC-V													

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

The load values are quoted in lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 30" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated by \*). Without bucket cylinder, link and lever the lift capacities will increase by 2,540 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

# Backhoe Bucket

with Mono Boom 26'11" and Counterweight 24,250 lb



## Digging Envelope

		1	2	3	4*
Stick length	ft in	9'10"	11' 2"	13'9"	16'5"
Max. digging depth	ft in	28' 5"	29' 8"	32'4"	34'5"
Max. reach at ground level	ft in	43' 6"	44' 7"	47'1"	49'1"
Max. dumping height	ft in	29' 4"	29'10"	31'2"	33'
Max. teeth height	ft in	42'	42' 8"	44'	44'7"

## Digging Forces

		1	2	3	4*
Digging force ISO	lbf	63,400	58,450	50,580	45,860
	lb	63,270	58,420	50,490	45,860
Breakout force ISO	lbf	79,580	79,580	79,580	70,370
	lb	79,590	79,590	79,590	70,330

\* with bucket R 956 Litronic

## Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 24,250 lb, mono boom 26'11", stick 11'2" and HD bucket 3.92 yd<sup>3</sup> (9,040 lb).

Undercarriage	HD			LC-V			
Pad width	in	20"	24"	30"	20"	24"	30"
Weight	lb	152,230	153,770	155,980	158,290	159,840	162,260
Ground pressure	psi	19.8	16.6	13.5	20.2	16.9	13.8

Optional: heavy counterweight

(counterweight 31,970 lb increases the operating weight by 7,720 lb and ground pressure by 1.00 psi) see load tables on pages 31 and 32

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

Cutting width	Capacity ISO 7451	Weight	HD-Undercarriage				LC-V-Undercarriage				
			Stick length (ft in)				Stick length (ft in)				
			9'10"	11'2"	13'9"	16'5"	9'10"	11'2"	13'9"	16'5"	
STD <sup>1)</sup>	61"	3.27	6,500	▲	▲	▲	—	▲	▲	▲	—
	69"	3.92	6,950	▲	■	△	—	▲	▲	△	—
	77"	4.58	7,610	▲	■	—	—	■	■	—	—
	85"	5.23	7,940	△	△	—	—	▲	■	—	—
	85"	5.88	8,600	△	—	—	—	△	△	—	—
HD <sup>2)</sup>	91"	6.54	8,820	—	—	—	—	△	—	—	—
	63"	2.62	7,830	▲	▲	■	—	▲	▲	■	—
	71"	3.27	8,490	▲	▲	△	—	▲	▲	△	—
	79"	3.92	9,040	■	▲	—	—	▲	■	—	—
	85"	4.58	9,810	■	△	—	—	▲	■	—	—
STD <sup>3)</sup>	85"	5.23	10,140	△	—	—	—	■	△	—	—
	53"	2.16	4,630	—	—	—	—	■	—	—	■
	61"	2.62	4,960	—	—	—	—	■	—	—	■
69"	3.07	5,400	—	—	—	△	—	—	—	△	

\* Indicated loads are based on ISO 10567 max. stick length, lifted 360° on firm

<sup>1)</sup> Standard bucket with teeth Z 70

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

<sup>3)</sup> Standard bucket from R 956 Litronic with teeth Z 70

Other backhoes available on request

Max. material weight ▲ = ≤ 3,371 lb/yd<sup>3</sup>, ■ = ≤ 3,034 lb/yd<sup>3</sup>, ▲ = ≤ 2,781 lb/yd<sup>3</sup>, ■ = ≤ 2,528 lb/yd<sup>3</sup>, △ = ≤ 2,023 lb/yd<sup>3</sup>, — = not authorized



# Lift Capacities

with Mono Boom 26'11" and Counterweight 24,250 lb

## Stick 9'10"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		ft in		
40	HD LC-V																			
35	HD LC-V							22.9*	22.9*									19.8*	19.8*	25' 4"
30	HD LC-V									22.0*	22.0*							18.1*	18.1*	30'
25	HD LC-V							26.9*	26.9*	24.9*	24.9*							17.3*	17.3*	33' 2"
20	HD LC-V					36.0*	36.0*	29.6*	29.6*	26.1*	26.1*	20.9	22.2*					17.1*	17.1*	35' 5"
15	HD LC-V					42.7*	42.7*	32.9*	32.9*	26.2*	26.2*	22.6	24.2*					17.1*	17.1*	36' 8"
10	HD LC-V					42.6	48.3*	31.9	36.0*	24.8	29.7*	19.7	25.9*					17.8	17.9*	37' 4"
5	HD LC-V					41.0	49.6*	30.4	38.2*	23.8	31.1*	19.2	26.6*					17.5	19.0*	37' 2"
0	HD LC-V					44.8	50.4*	33.1	38.4*	25.9	31.2*	20.9	26.7*					19.2*	19.2*	36' 5"
-5	HD LC-V			43.1*	43.1*	44.5	50.1*	29.6	39.1*	23.2	31.9*	18.8	26.7					19.7	20.8*	34' 11"
-10	HD LC-V	53.2*	53.2*	46.2*	46.2*	40.7	48.3*	29.4	38.6*	23.0	31.5*	21.4	26.0*					19.0	23.6*	32' 5"
-15	HD LC-V	55.8*	55.8*	54.4*	54.4*	44.7	48.1*	32.2	38.5*	25.1	31.4*	20.6	26.8*					21.0	23.9*	23' 7"
-20	HD LC-V	55.9*	55.9*	54.4*	54.4*	44.7	44.7*	32.6	36.2*	25.5	29.3*							21.2	26.3*	
-25	HD LC-V			48.1*	48.1*	39.7*	39.7*	30.7	32.1*									25.6	26.0*	
-30	HD LC-V			47.1*	47.1*	38.9*	38.9*	31.4*	31.4*									25.9*	25.9*	
-35	HD LC-V			36.5*	36.5*	30.0*	30.0*											24.0*	24.0*	
	HD LC-V			34.9*	34.9*	28.6*	28.6*											23.6*	23.6*	

## Stick 11'2"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		ft in		
40	HD LC-V																			
35	HD LC-V																	16.6*	16.6*	27' 1"
30	HD LC-V									23.4*	23.4*							16.4*	16.4*	31' 6"
25	HD LC-V							25.8*	25.8*	23.7*	23.7*							15.3*	15.3*	34' 7"
20	HD LC-V			47.8*	47.8*	34.0*	34.0*	28.3*	28.3*	25.0*	25.0*	21.1	23.2*					14.6*	14.6*	36' 8"
15	HD LC-V					40.6*	40.6*	31.7*	31.7*	26.1	26.9*	20.4	24.1*					14.5*	14.5*	38'
10	HD LC-V					41.3*	41.3*	32.0*	32.0*	27.1*	27.1*	22.1	24.2*					14.6*	14.6*	38' 7"
5	HD LC-V					43.4	46.5*	32.1	35.0*	24.8	28.9*	19.7	25.2*					14.7*	14.7*	38' 6"
0	HD LC-V					41.2	49.6*	30.5	37.5*	23.8	30.5*	19.1	26.1*					15.2*	15.2*	37' 8"
-5	HD LC-V			43.8*	43.8*	44.3	50.1*	29.5	38.8*	23.0	31.5*	18.6	26.5					16.1*	16.1*	36' 2"
-10	HD LC-V	49.2*	49.2*	46.1*	46.1*	44.3	48.7*	32.0	38.5*	25.2	31.5*	20.4	26.6*					16.2*	16.2*	33' 10"
-15	HD LC-V	51.3*	51.3*	57.9*	57.9*	44.9	45.8*	32.2	36.7*	25.1	29.8*	20.8	26.2*					16.9	17.5*	30' 5"
-20	HD LC-V	63.2*	63.2*	51.2*	51.2*	41.3*	41.3*	30.1	33.3*	23.7	26.0*	18.6	26.6*					17.7*	17.7*	25' 6"
-25	HD LC-V	62.1*	62.1*	50.3*	50.3*	40.7*	40.7*	32.7*	32.7*			20.4	26.6*					16.9	17.5*	
-30	HD LC-V			40.6*	40.6*	33.0*	33.0*	25.1*	25.1*			20.4	26.6*					17.7*	17.7*	
-35	HD LC-V			39.2*	39.2*	31.9*	31.9*					20.4	26.6*					17.7*	17.7*	

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

The load values are quoted in lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 30" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated by \*). Without bucket cylinder, link and lever the lift capacities will increase by 2,540 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

# Lift Capacities

with Mono Boom 26'11" and Counterweight 24,250 lb

## Stick 13'9"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		ft in	
40	HD																		
40	LC-V																		
35	HD									15,3*	15,3*							12,1*	12,1*
35	LC-V									17,3*	17,3*							11,9*	11,9*
30	HD									20,6*	20,6*							11,2*	11,2*
30	LC-V									20,6*	20,6*							11,1*	11,1*
25	HD									21,3*	21,3*	20,6*	20,6*					10,8*	10,8*
25	LC-V									21,4*	21,4*	20,6*	20,6*					10,7*	10,7*
20	HD							25,5*	25,5*	22,8*	22,8*	21,2*	21,2*					10,6*	10,6*
20	LC-V							25,8*	25,8*	23,0*	23,0*	21,3*	21,3*					10,6*	10,6*
15	HD			53,0*	53,0*	36,5*	36,5*	29,0*	29,0*	24,9*	24,9*	20,6*	20,6*	14,6*	14,6*			10,7*	10,7*
15	LC-V			54,6*	54,6*	37,2*	37,2*	29,4*	29,4*	25,1*	25,1*	22,3*	22,5*	15,2*	15,2*			10,8*	10,8*
10	HD					42,9*	42,9*	32,7*	32,7*	25,0*	27,1*	19,7*	23,7*	15,8*	19,2*			11,1*	11,1*
10	LC-V					43,5*	43,5*	33,1*	33,1*	27,1*	27,3*	21,4*	23,8*	17,2*	19,5*			11,1*	11,1*
5	HD					41,8*	47,4*	30,8*	35,7*	23,8*	29,1*	18,9*	24,9*	15,4*	20,0*			11,7*	11,7*
5	LC-V					45,6*	47,7*	33,4*	36,0*	25,9*	29,2*	20,6*	25,0*	16,8*	19,8*			11,8*	11,8*
0	HD			29,1*	29,1*	40,3*	49,4*	29,5*	37,7*	22,9*	30,5*	18,4*	25,7*	14,8*	14,8*			12,7*	12,7*
0	LC-V			30,4*	30,4*	44,2*	49,5*	32,2*	37,8*	25,0*	30,6*	20,1*	25,8*	13,8*	13,8*			12,8*	12,8*
-5	HD	27,5*	27,5*	42,7*	42,7*	39,8*	49,3*	28,8*	38,3*	22,3*	31,0*	18,0*	25,9*					14,1*	14,1*
-5	LC-V	29,1*	29,1*	44,2*	44,2*	43,7*	49,2*	31,6*	38,3*	24,5*	31,0*	19,8*	25,9*					14,3*	14,3*
-10	HD	42,5*	42,5*	58,7*	58,7*	40,0*	47,6*	28,7*	37,5*	22,2*	30,4*	18,1*	24,9*					16,4*	16,4*
-10	LC-V	44,0*	44,0*	60,5*	60,5*	43,9*	47,3*	31,5*	37,3*	24,4*	30,3*	19,9*	24,7*					16,7*	16,7*
-15	HD	58,3*	58,3*	56,5*	56,5*	40,7*	43,9*	29,1*	35,0*	22,6*	28,1*							19,7*	20,4*
-15	LC-V	60,1*	60,1*	55,8*	55,8*	43,4*	43,4*	32,0*	34,6*	24,9*	27,7*							20,9*	20,9*
-20	HD	62,5*	62,5*	47,6*	47,6*	37,6*	37,6*	29,8*	29,8*									23,2*	23,2*
-20	LC-V	60,7*	60,7*	46,5*	46,5*	36,8*	36,8*	29,0*	29,0*									23,1*	23,1*
-25	HD			33,3*	33,3*	26,0*	26,0*											21,0*	21,0*
-25	LC-V					24,2*	24,2*											20,5*	20,5*
-30	HD																		
-30	LC-V																		
-35	HD																		
-35	LC-V																		

## Stick 16'5"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		ft in	
40	HD																		
40	LC-V																		
35	HD																	9,3*	9,3*
35	LC-V																	9,2*	9,2*
30	HD												17,2*	17,2*				8,7*	8,7*
30	LC-V												17,9*	17,9*				8,7*	8,7*
25	HD												18,8*	18,8*	8,7*	8,7*		8,4*	8,4*
25	LC-V												18,8*	18,8*	9,8*	9,8*		8,4*	8,4*
20	HD									21,0*	21,0*	19,7*	19,7*	16,6*	16,6*			8,3*	8,3*
20	LC-V									21,2*	21,2*	19,8*	19,8*	17,1*	17,1*			8,3*	8,3*
15	HD					32,7*	32,7*	26,7*	26,7*	23,2*	23,2*	21,0*	21,0*	16,7*	19,6*			8,4*	8,4*
15	LC-V			46,2*	46,2*	33,4*	33,4*	27,1*	27,1*	23,5*	23,5*	21,1*	21,1*	18,1*	19,7*			8,4*	8,4*
10	HD			45,2*	45,2*	39,5*	39,5*	30,6*	30,6*	25,6*	25,6*	20,2*	22,5*	16,1*	20,5*			8,6*	8,6*
10	LC-V			41,4*	41,4*	40,1*	40,1*	31,0*	31,0*	25,9*	25,9*	21,9*	22,7*	17,6*	20,6*			8,7*	8,7*
5	HD			29,8*	29,8*	43,2*	45,0*	31,6*	34,1*	24,3*	27,9*	19,3*	23,9*	15,6*	21,3*			9,1*	9,1*
5	LC-V			29,7*	29,7*	45,4*	45,4*	34,2*	34,4*	26,4*	28,1*	21,0*	24,1*	17,0*	21,4*			9,2*	9,2*
0	HD			33,1*	33,1*	40,9*	48,2*	29,9*	36,6*	23,2*	29,6*	18,5*	25,1*	15,1*	21,6*			9,8*	9,8*
0	LC-V			33,8*	33,8*	44,7*	48,4*	32,6*	36,8*	25,3*	29,8*	20,2*	25,2*	16,6*	22,0*			9,9*	9,9*
-5	HD	26,6*	26,6*	41,6*	41,6*	39,8*	49,4*	28,9*	37,9*	22,4*	30,7*	18,0*	25,7*	14,9*	21,4*			10,8*	10,8*
-5	LC-V	27,7*	27,7*	42,7*	42,7*	43,7*	49,4*	31,7*	38,0*	24,5*	30,7*	19,8*	25,8*	16,4*	20,9*			11,0*	11,0*
-10	HD	37,7*	37,7*	53,3*	53,3*	39,6*	48,7*	28,6*	37,9*	22,1*	30,7*	17,9*	25,5*					12,4*	12,4*
-10	LC-V	38,9*	38,9*	54,6*	54,6*	43,5*	48,5*	31,3*	37,9*	24,3*	30,7*	19,6*	25,4*					12,6*	12,6*
-15	HD	50,1*	50,1*	61,0*	61,0*	40,0*	46,2*	28,7*	36,4*	22,2*	29,5*	18,1*	23,8*					14,9*	14,9*
-15	LC-V	51,5*	51,5*	60,4*	60,4*	44,0*	45,8*	31,5*	36,2*	24,4*	29,2*	19,9*	23,5*					15,3*	15,3*
-20	HD	64,8*	64,8*	53,7*	53,7*	41,0*	41,4*	29,4*	32,8*	22,9*	25,9*							19,5*	19,5*
-20	LC-V	66,6*	66,6*	52,8*	52,8*	40,7*	40,7*	32,3*	32,3*	25,2*	25,4*							20,2*	20,2*
-25	HD	56,5*	56,5*	42,3*	42,3*	33,0*	33,0*	25,3*	25,3*									21,5*	21,5*
-25	LC-V	54,2*	54,2*	40,8*	40,8*	31,8*	31,8*	24,0*	24,0*									21,3*	21,3*
-30	HD																		
-30	LC-V																		
-35	HD																		
-35	LC-V																		

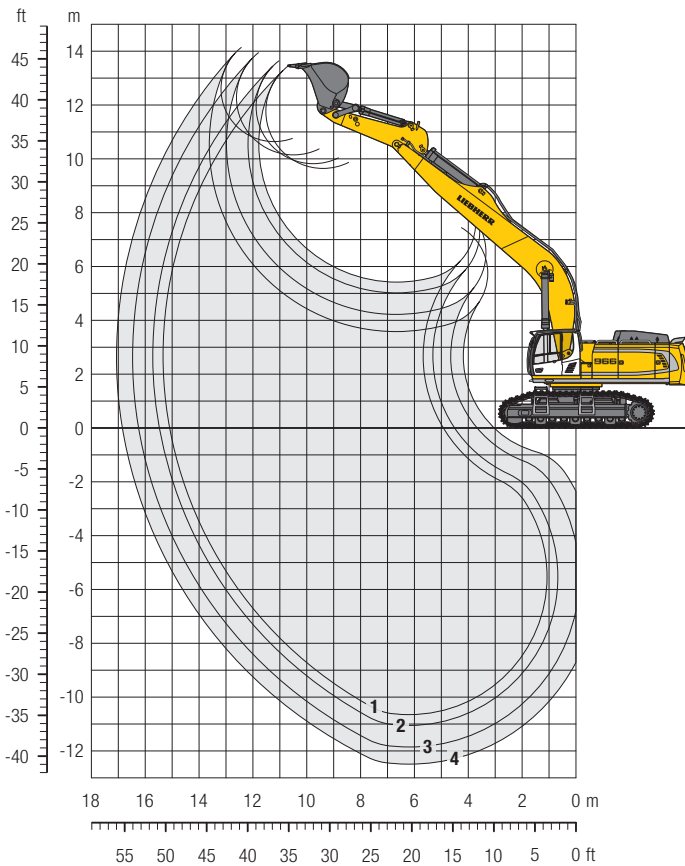
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

The load values are quoted in lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 30" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Without bucket cylinder, link and lever the lift capacities will increase by 2,540 lb/1,820 lb\*. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

\* for stick 16'5"

# Backhoe Bucket

with Mono Boom 32'10" and Counterweight 31,970 lb



## Digging Envelope

		1	2	3	4*
Stick length	ft in	9'10"	11'2"	13' 9"	16'5"
Max. digging depth	ft in	34'11"	36'3"	38'11"	41'
Max. reach at ground level	ft in	49' 6"	50'8"	53' 2"	55'1"
Max. dumping height	ft in	31' 8"	32'2"	33' 4"	34'9"
Max. teeth height	ft in	44'	44'7"	45' 7"	46'3"

## Digging Forces

		1	2	3	4*
Digging force ISO	lbf	63,400	58,450	50,580	45,860
	lb	63,270	58,420	50,490	45,860
Breakout force ISO	lbf	79,580	79,580	79,580	70,370
	lb	79,590	79,590	79,590	70,330

\* with bucket R 956 Litronic

## Operating Weight and Ground Pressure

The operating weight includes the basic machine with counterweight 31,970 lb, mono boom 32'10", stick 13'9" and HD bucket 2.62 yd<sup>3</sup> (7,830 lb).

Undercarriage		HD			LC-V		
Pad width	in	20"	24"	30"	20"	24"	30"
Weight	lb	161,930	163,470	165,680	167,990	169,540	171,960
Ground pressure	psi	21.1	17.6	14.4	21.3	18.1	14.7

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

	Cutting width in	Capacity ISO 7451 yd <sup>3</sup>	Weight lb	HD-Undercarriage				LC-V-Undercarriage			
				Stick length (ft in)				Stick length (ft in)			
				9'10"	11'2"	13'9"	16'5"	9'10"	11'2"	13'9"	16'5"
STD <sup>1)</sup>	53"	2.62	6,060	▲	▲	▲	—	▲	▲	▲	—
	61"	3.27	6,500	▲	■	■	—	▲	▲	■	—
	69"	3.92	6,950	▲	■	△	—	■	▲	△	—
	77"	4.58	7,610	△	△	—	—	■	△	—	—
HD <sup>2)</sup>	55"	1.96	7,170	▲	▲	▲	—	▲	▲	▲	—
	63"	2.62	7,830	▲	▲	▲	—	▲	▲	▲	—
	71"	3.27	8,490	▲	■	△	—	▲	■	△	—
STD <sup>3)</sup>	79"	3.92	9,040	△	△	—	—	■	■	—	—
	53"	2.16	4,630	—	—	—	■	—	—	—	■
HD <sup>4)</sup>	61"	2.62	4,960	—	—	—	△	—	—	—	△
	53"	2.16	5,180	—	—	—	▲	—	—	—	▲
	61"	2.62	5,840	—	—	—	△	—	—	—	△

\* Indicated loads are based on ISO 10567 max. stick length, lifted 360° on firm

1) Standard bucket with teeth Z 70

2) HD bucket with teeth Z 70

3) Standard bucket from R 956 Litronic with teeth Z 70

4) HD bucket from R 956 Litronic with teeth Z 70

Other backhoes available on request

Max. material weight ▲ = ≤ 3,371 lb/yd<sup>3</sup>, ■ = ≤ 3,034 lb/yd<sup>3</sup>, ▲ = ≤ 2,781 lb/yd<sup>3</sup>, ■ = ≤ 2,528 lb/yd<sup>3</sup>, △ = ≤ 2,023 lb/yd<sup>3</sup>, — = not authorized

# Lift Capacities

with Mono Boom 32'10" and Counterweight 31,970 lb

## Stick 9'10"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		ft in
		HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	
40	HD																	
40	LC-V																	
35	HD																	17,2"
35	LC-V																	17,2"
30	HD											16,8"	16,8"					16,8"
30	LC-V											16,9"	16,9"					16,8"
25	HD								22,2"	22,2"	19,0"	19,0"	17,4"	17,4"				16,4"
25	LC-V								25,5"	25,5"	20,9"	20,9"	17,5"	17,5"	16,9"	16,9"		16,4"
20	HD								29,6"	29,6"	23,1"	23,1"	19,8"	19,8"	17,2"	17,2"		16,4"
20	LC-V								25,9"	25,9"	21,1"	21,1"	18,6"	18,6"	17,3"	17,3"		16,4"
15	HD								30,0"	30,0"	23,3"	23,3"	19,9"	19,9"	18,0"	18,0"		16,0"
15	LC-V																	16,7"
10	HD																	15,3"
10	LC-V																	17,1"
5	HD																	16,6"
5	LC-V																	18,0"
0	HD								30,7	34,7"	24,0	27,7"	19,7	23,2"	16,5	20,1"		15,2
0	LC-V								33,6	34,7"	26,2	27,8"	21,5	23,2"	18,0	20,1"		18,9"
-5	HD								30,9	34,4"	23,9	28,1"	19,5	23,6"	16,4	20,3"		16,7
-5	LC-V								33,8	34,4"	26,1	28,1"	21,3	23,6"	18,0	20,3"		19,0"
-10	HD					40,2"	40,2"		31,2	33,6"	24,1	27,8"	19,6	23,4"				17,2
-10	LC-V					40,1"	40,1"		33,5	33,5"	26,3	27,7"	21,5	23,3"				20,3"
-15	HD							44,2"	44,2"	38,4"	38,4"	31,9	32,0"	24,6	27,7"	20,2	22,2"	19,4
-15	LC-V							44,1"	44,1"	38,1"	38,1"	31,8"	31,8"	26,5"	26,5"	21,9"	21,9"	20,9"
-20	HD								41,3"	41,3"	34,9"	34,9"	29,2"	29,2"	24,1"	24,1"		19,4
-20	LC-V								40,8"	40,8"	34,5"	34,5"	28,8"	28,8"	23,6"	23,6"		21,4"
-25	HD								34,5"	34,5"	29,1"	29,1"	23,7"	23,7"				21,2"
-25	LC-V								33,5"	33,5"	28,3"	28,3"	22,8"	22,8"				21,1"
-30	HD																	
-30	LC-V																	
-35	HD																	
-35	LC-V																	

## Stick 11'2"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		ft in
		HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	HD	LC-V	
40	HD																	
40	LC-V																	
35	HD																	14,9"
35	LC-V																	14,9"
30	HD																	14,8"
30	LC-V																	14,2"
25	HD																	14,2"
25	LC-V																	14,2"
20	HD																	15,9"
20	LC-V																	15,9"
15	HD																	18,1"
15	LC-V																	18,1"
10	HD																	16,6"
10	LC-V																	16,6"
5	HD																	15,9"
5	LC-V																	15,9"
0	HD																	18,1"
0	LC-V																	18,1"
-5	HD																	16,6"
-5	LC-V																	16,6"
-10	HD																	15,9"
-10	LC-V																	15,9"
-15	HD																	18,1"
-15	LC-V																	18,1"
-20	HD																	16,6"
-20	LC-V																	16,6"
-25	HD																	15,9"
-25	LC-V																	15,9"
-30	HD																	18,1"
-30	LC-V																	18,1"
-35	HD																	16,6"
-35	LC-V																	16,6"

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

The load values are quoted in lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 30" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Without bucket cylinder, link and lever the lift capacities will increase by 2,540 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

# Lift Capacities

with Mono Boom 32'10" and Counterweight 31,970 lb

## Stick 13'9"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		ft in					
40	HD																				11,6"	11,6"	
	LC-V																						
35	HD																						
	LC-V																						38' 4"
30	HD																						
	LC-V												14,1"	14,1"	14,0"	14,0"							41' 6"
25	HD																						
	LC-V												14,9"	14,9"	14,2"	14,2"							43'11"
20	HD																						
	LC-V						28,3"	28,3"	21,6"	21,6"	18,2"	18,2"	16,1"	16,1"	14,9"	14,9"	14,0"	14,0"					45' 6"
15	HD																						
	LC-V								25,4"	25,4"	20,4"	20,4"	17,6"	17,6"	15,8"	15,8"	14,6"	14,9"					46' 7"
10	HD																						
	LC-V								29,0"	29,0"	22,7"	22,7"	19,1"	19,1"	16,8"	16,8"	14,2"	15,5"					47'
5	HD																						
	LC-V								31,2"	31,6"	24,7"	24,7"	20,0"	20,5"	16,5"	17,8"	13,7"	16,1"					47'
0	HD																						
	LC-V								30,3"	33,1"	23,8"	26,1"	19,3"	21,6"	16,0"	18,7"	13,5"	16,6"					46' 4"
-5	HD																						
	LC-V						34,0"	34,0"	29,9"	33,2"	25,9"	26,2"	21,1"	21,7"	17,5"	18,7"	14,8"	16,7"					46' 4"
-10	HD																						
	LC-V						35,4"	35,4"	29,9"	33,7"	23,3"	27,0"	18,9"	22,4"	15,7"	19,2"	13,4"	14,1"					45' 1"
-15	HD																						
	LC-V								30,0"	33,6"	23,2"	27,2"	18,7"	22,7"	15,7"	19,4"							43' 4"
-20	HD																						
	LC-V								32,9"	33,6"	25,4"	27,2"	20,6"	22,7"	17,2"	19,3"							40' 8"
-25	HD																						
	LC-V								30,5"	32,7"	23,4"	26,8"	18,9"	22,4"	16,0"	18,7"							37' 2"
-30	HD																						
	LC-V								30,9"	30,9"	24,0"	25,4"	19,6"	20,9"	16,5"	18,9"							32' 7"
-35	HD																						
	LC-V								27,1"	27,1"	21,8"	21,8"	16,0"	17,9"	14,4"	16,6"							26' 2"

## Stick 16'5"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		ft in					
40	HD																						
	LC-V																						37' 6"
35	HD																						
	LC-V																						41' 5"
30	HD																						
	LC-V																						44' 4"
25	HD																						
	LC-V																						46' 6"
20	HD																						
	LC-V																						48' 1"
15	HD																						
	LC-V																						49' 1"
10	HD																						
	LC-V																						49' 6"
5	HD																						
	LC-V																						49' 5"
0	HD																						
	LC-V																						48'10"
-5	HD																						
	LC-V																						47' 8"
-10	HD																						
	LC-V																						46'
-15	HD																						
	LC-V																						43' 7"
-20	HD																						
	LC-V																						40' 5"
-25	HD																						
	LC-V																						36' 2"
-30	HD																						
	LC-V																						30' 7"
-35	HD																						
	LC-V																						22' 2"

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

The load values are quoted in lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 30" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Without bucket cylinder, link and lever the lift capacities will increase by 2,540 lb/1,820 lb\*. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

\* for stick 16'5"



# Lift Capacities

with Mono Boom 26'11" and Counterweight 31,970 lb

## Stick 9'10"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		ft in		
40	HD LC-V																			
35	HD LC-V							22,9*	22,9*									19,8*	19,8*	25' 4"
30	HD LC-V									22,0*	22,0*							18,1*	18,1*	30'
25	HD LC-V							26,9*	26,9*	24,9*	24,9*							17,3*	17,3*	33' 2"
20	HD LC-V					36,0*	36,0*	29,6*	29,6*	26,1*	26,1*	22,2*	22,2*					17,1*	17,1*	35' 5"
15	HD LC-V					42,7*	42,7*	32,9*	32,9*	26,2*	26,2*	24,2*	24,2*					17,3*	17,3*	36' 8"
10	HD LC-V					48,3*	48,3*	36,0*	36,0*	29,1*	29,7*	23,3*	25,9*					17,9*	17,9*	37' 4"
5	HD LC-V					48,6*	48,6*	36,3*	36,3*	29,8*	29,8*	25,1*	26,0*					18,0*	18,0*	37' 2"
0	HD LC-V					48,4	49,6*	35,9	38,2*	28,1	31,1*	22,8	26,6*					19,0*	19,0*	36' 5"
-5	HD LC-V			43,1*	43,1*	50,4*	50,4*	38,4*	38,4*	30,3	31,2*	24,6	26,7*					19,2*	19,2*	37' 2"
-10	HD LC-V	53,2*	53,2*	46,2*	46,2*	50,1*	50,1*	38,0	39,1*	27,5	31,9*	22,4	26,8*					20,8*	20,8*	36' 5"
-15	HD LC-V	55,8*	55,8*	48,1*	48,1*	48,2	48,3*	34,9	38,6*	27,3	31,5*	24,3	26,8*					21,0*	21,0*	34' 11"
-20	HD LC-V	55,9*	55,9*	44,7*	44,7*	48,1*	48,1*	37,8	38,5*	29,6	31,4*							22,6	23,6*	34' 11"
-25	HD LC-V			45,1*	45,1*	44,7*	44,7*	35,2	36,5*	27,6	29,6*							23,9*	23,9*	32' 5"
-30	HD LC-V			39,7*	39,7*	36,2*	36,2*	32,1*	32,1*	29,3*	29,3*							25,2	26,3*	32' 5"
-35	HD LC-V			31,4*	31,4*	29,3*	29,3*											26,3*	26,3*	28' 10"
	HD LC-V			30,0*	30,0*	28,6*	28,6*											25,9*	25,9*	28' 10"
	HD LC-V			28,6*	28,6*													24,0*	24,0*	23' 7"
	HD LC-V																	23,6*	23,6*	23' 7"

## Stick 11'2"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		ft in		
40	HD LC-V																			
35	HD LC-V																	16,6*	16,6*	27' 1"
30	HD LC-V									23,4*	23,4*							16,4*	16,4*	27' 1"
25	HD LC-V									23,4*	23,4*							15,3*	15,3*	31' 6"
20	HD LC-V									23,7*	23,7*							15,2*	15,2*	31' 6"
15	HD LC-V									23,7*	23,7*							14,6*	14,6*	34' 7"
10	HD LC-V					34,0*	34,0*	28,3*	28,3*	25,0*	25,0*	23,2*	23,2*					14,6*	14,6*	34' 7"
5	HD LC-V			47,8*	47,8*	34,6*	34,6*	28,6*	28,6*	25,2*	25,2*	23,3*	23,3*					14,5*	14,5*	36' 8"
0	HD LC-V					40,6*	40,6*	31,7*	31,7*	26,9*	26,9*	24,0	24,1*					14,5*	14,5*	36' 8"
-5	HD LC-V					41,3*	41,3*	32,0*	32,0*	27,1*	27,1*	24,2*	24,2*					14,6*	14,6*	38'
-10	HD LC-V					46,5*	46,5*	35,0*	35,0*	28,9*	28,9*	23,3	25,2*					14,7*	14,7*	38'
-15	HD LC-V					47,0*	47,0*	35,3*	35,3*	29,1*	29,1*	25,1	25,3*					15,2*	15,2*	38' 7"
-20	HD LC-V					48,6	49,6*	36,0	37,5*	28,1	30,5*	22,7	26,1*					15,2*	15,2*	38' 7"
-25	HD LC-V					49,8*	49,8*	37,7*	37,7*	30,3	30,6*	24,5	26,2*					16,1*	16,1*	38' 6"
-30	HD LC-V					47,8	50,1*	35,0	38,8*	27,4	31,5*	22,3	26,6*					16,2*	16,2*	38' 6"
-35	HD LC-V					50,1*	50,1*	37,9	38,8*	29,6	31,5*	24,1	26,6*					17,5*	17,5*	37' 8"
	HD LC-V			43,8*	43,8*	47,8	48,9*	34,7	38,6*	27,1	31,5*	22,2	26,1*					17,7*	17,7*	37' 8"
	HD LC-V			46,1*	46,1*	48,7*	48,7*	37,6	38,5*	29,3	31,4*	24,0	26,0*					19,7*	19,7*	36' 2"
	HD LC-V	49,2*	49,2*	57,9*	57,9*	46,1*	46,1*	34,9	37,0*	27,2	30,1*							20,0*	20,0*	36' 2"
	HD LC-V	51,3*	51,3*	57,3*	57,3*	45,8*	45,8*	36,7*	36,7*	29,5	29,8*							23,3*	23,3*	33' 10"
	HD LC-V	63,2*	63,2*	51,2*	51,2*	41,3*	41,3*	33,3*	33,3*	26,0*	26,0*							23,8*	23,8*	33' 10"
	HD LC-V	62,1*	62,1*	50,3*	50,3*	40,7*	40,7*	32,7*	32,7*									25,2*	25,2*	30' 5"
	HD LC-V			40,6*	40,6*	33,0*	33,0*	25,1*	25,1*									25,2*	25,2*	30' 5"
	HD LC-V			39,2*	39,2*	31,9*	31,9*											24,0*	24,0*	25' 6"
	HD LC-V																	23,8*	23,8*	25' 6"

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

The load values are quoted in lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 30" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated by \*). Without bucket cylinder, link and lever the lift capacities will increase by 2,540 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

# Lift Capacities

with Mono Boom 26'11" and Counterweight 31,970 lb

## Stick 13'9"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		ft in		
40	HD LC-V																			
35	HD LC-V									15,3*	15,3*							12,1*	12,1*	30' 7"
30	HD LC-V									20,6*	20,6*							11,2*	11,2*	34' 6"
25	HD LC-V									21,3*	21,3*	20,6*	20,6*					10,8*	10,8*	37' 4"
20	HD LC-V							25,5*	25,5*	22,8*	22,8*	21,2*	21,2*					10,6*	10,6*	39' 4"
15	HD LC-V			53,0*	53,0*	36,5*	36,5*	29,0*	29,0*	24,9*	24,9*	22,4*	22,4*	14,6*	14,6*			10,7*	10,7*	40' 6"
10	HD LC-V			54,6*	54,6*	37,2*	37,2*	29,4*	29,4*	25,1*	25,1*	22,5*	22,5*	15,2*	15,2*			10,8*	10,8*	41'
5	HD LC-V					47,4*	47,4*	35,7*	35,7*	28,1*	29,1*	22,6*	24,9*	18,5*	20,0*			11,7*	11,7*	40' 11"
0	HD LC-V			29,1*	29,1*	47,7*	47,7*	36,0*	36,0*	29,2*	29,2*	24,3*	25,0*	19,8*	19,8*			11,1*	11,1*	40' 2"
- 5	HD LC-V	27,5*	27,5*	30,4*	30,4*	49,5*	49,5*	37,8*	37,8*	29,4*	30,6*	23,7*	25,8*	13,8*	13,8*			12,7*	12,7*	38' 10"
-10	HD LC-V	29,1*	29,1*	42,7*	42,7*	47,2*	49,3*	34,3*	38,3*	26,7*	31,0*	21,6*	25,9*					14,1*	14,1*	36' 7"
-15	HD LC-V	42,5*	42,5*	44,2*	44,2*	49,2*	49,2*	37,2*	38,3*	28,9*	31,0*	23,4*	25,9*					14,3*	14,3*	33' 6"
-20	HD LC-V	44,0*	44,0*	58,7*	58,7*	47,4*	47,6*	34,2*	37,5*	26,6*	30,4*	21,7*	24,9*					16,4*	16,4*	29' 2"
-25	HD LC-V	58,3*	58,3*	60,5*	60,5*	47,3*	47,3*	37,1*	37,3*	28,8*	30,3*	23,6*	24,7*					16,7*	16,7*	22' 11"
-30	HD LC-V	60,7*	60,7*	56,5*	56,5*	43,9*	43,9*	34,6*	35,0*	27,0*	28,1*							20,4*	20,4*	
-35	HD LC-V			60,1*	60,1*	55,8*	55,8*	43,4*	43,4*	34,6*	34,6*							20,9*	20,9*	
	HD LC-V	62,5*	62,5*	47,6*	47,6*	37,6*	37,6*	29,8*	29,8*									23,2*	23,2*	
	HD LC-V	60,7*	60,7*	46,5*	46,5*	36,8*	36,8*	29,0*	29,0*									23,1*	23,1*	
	HD LC-V			33,3*	33,3*	26,0*	26,0*											21,0*	21,0*	
	HD LC-V					24,2*	24,2*											20,5*	20,5*	

## Stick 16'5"

ft	Under-carriage	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		45 ft		ft in		
40	HD LC-V																			
35	HD LC-V																	9,3*	9,3*	33' 11"
30	HD LC-V													17,2*	17,2*			8,7*	8,7*	37' 5"
25	HD LC-V													17,9*	17,9*			8,7*	8,7*	40'
20	HD LC-V									21,0*	21,0*	18,8*	18,8*	8,7*	8,7*			8,4*	8,4*	41' 11"
15	HD LC-V			46,2*	46,2*	32,7*	32,7*	26,7*	26,7*	21,2*	21,2*	19,8*	19,8*	16,6*	16,6*			8,3*	8,3*	43'
10	HD LC-V			45,2*	45,2*	33,4*	33,4*	27,1*	27,1*	23,2*	23,2*	21,0*	21,0*	19,6*	19,6*			8,4*	8,4*	43' 6"
5	HD LC-V			41,4*	41,4*	40,1*	40,1*	31,0*	31,0*	23,5*	23,5*	21,1*	21,1*	19,7*	19,7*			8,7*	8,7*	43' 5"
0	HD LC-V			29,8*	29,8*	45,0*	45,0*	34,1*	34,1*	25,6*	25,6*	22,5*	22,5*	19,2*	20,5*			9,1*	9,1*	42' 8"
- 5	HD LC-V	26,6*	26,6*	29,7*	29,7*	45,4*	45,4*	34,4*	34,4*	27,9*	27,9*	22,9*	23,9*	18,7*	21,3*			9,2*	9,2*	41' 5"
-10	HD LC-V	27,7*	27,7*	42,7*	42,7*	49,4*	49,4*	37,3*	38,0*	29,0*	30,7*	24,3*	25,8*	19,5*	20,9*			10,8*	10,8*	39' 5"
-15	HD LC-V	37,7*	37,7*	53,3*	53,3*	47,0*	48,7*	34,0*	37,9*	26,4*	30,7*	21,5*	25,5*					11,0*	11,0*	36' 6"
-20	HD LC-V	38,9*	38,9*	54,6*	54,6*	48,5*	48,5*	36,9*	37,9*	28,7*	30,7*	23,3*	25,4*					12,4*	12,4*	32' 7"
-25	HD LC-V	50,1*	50,1*	61,0*	61,0*	46,2*	46,2*	34,2*	36,4*	26,6*	29,5*	21,7*	23,8*					12,6*	12,6*	27' 2"
-30	HD LC-V	51,5*	51,5*	60,4*	60,4*	45,8*	45,8*	36,2*	36,2*	28,8*	29,2*	23,5*	23,5*					15,3*	15,3*	
-35	HD LC-V	64,8*	64,8*	53,7*	53,7*	41,4*	41,4*	32,8*	32,8*	25,9*	25,9*							19,5*	19,5*	
	HD LC-V	66,6*	66,6*	52,8*	52,8*	40,7*	40,7*	32,3*	32,3*	25,4*	25,4*							20,2*	20,2*	
	HD LC-V	56,5*	56,5*	42,3*	42,3*	33,0*	33,0*	25,3*	25,3*									21,5*	21,5*	
	HD LC-V	54,2*	54,2*	40,8*	40,8*	31,8*	31,8*	24,0*	24,0*									21,3*	21,3*	

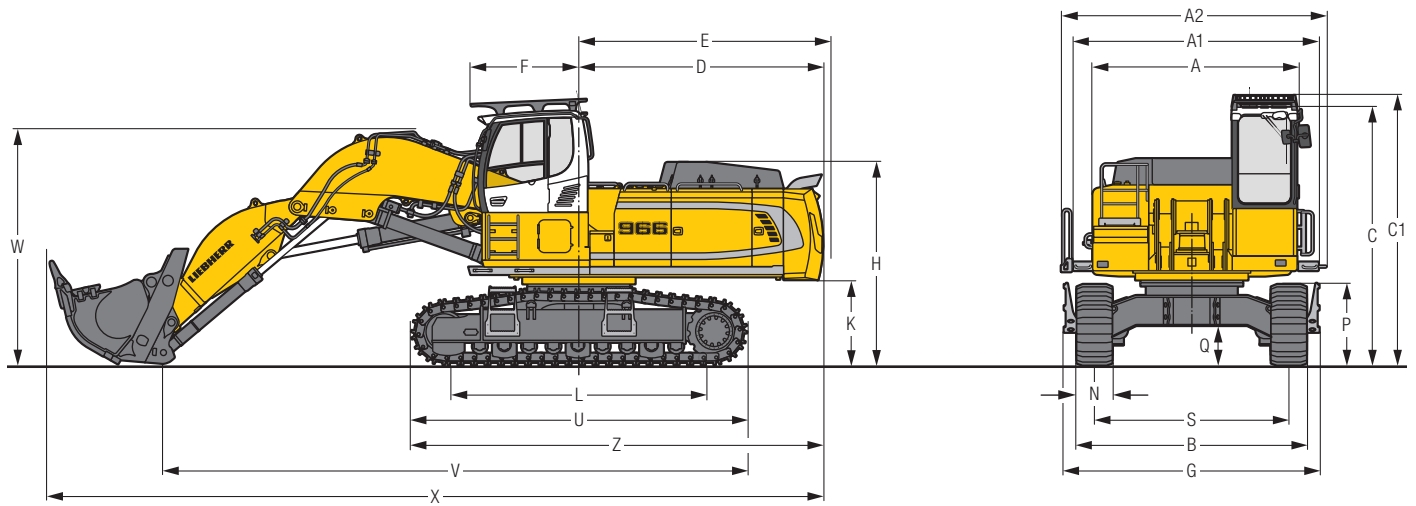
Height Can be slewed through 360° In longitudinal position of undercarriage Max. reach \* Limited by hydr. capacity

The load values are quoted in lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 30" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Without bucket cylinder, link and lever the lift capacities will increase by 2,540 lb/1,820 lb\*. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

\* for stick 16'5"



# Dimensions Front Shovel

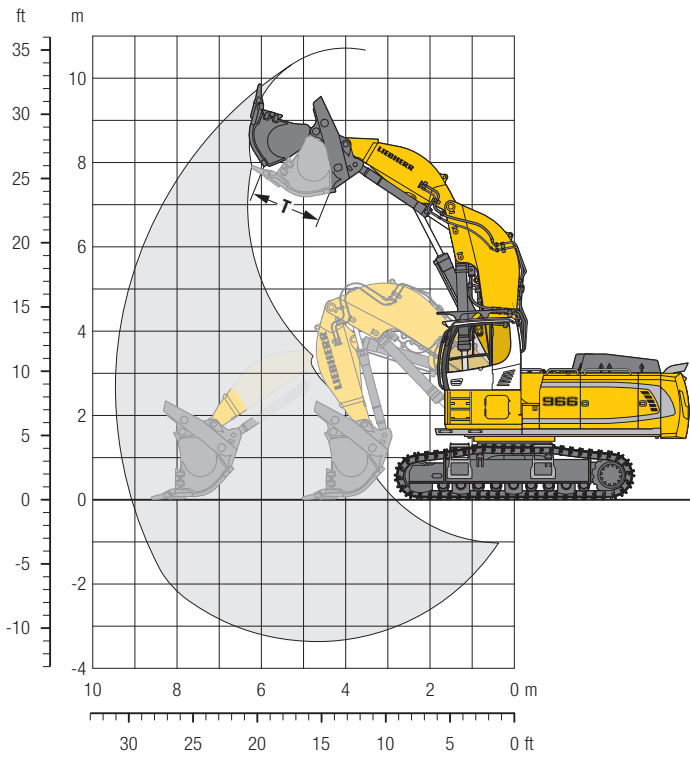


HD	ft in
A	11' 6"
A1	13' 8"
A2	14' 9"
C	14' 2"
C1	14'10"
D	13' 7"
E	14'
F	6'
H	11' 4"
K	4' 9"
L	15'

HD	ft in
P	4' 4"
Q	2'
S	10'10"
U	18' 8"
N	20" 24" 30"
B	12'10"* 12'10"* 13' 3"
G	14' 2"* 14' 2"* 14' 2"*
Z	22'11"
V	32' 6"
W	13' 1"
X	43' 4"

\* transport position

# Front Shovel



## Digging Envelope

Max. reach at ground level	29'10"
Max. dumping height	23' 5"
Max. crowd length	11'10"
Bucket opening width T	5' 5"

Max. crowd force	368,780 lbf/112,440 lb
Max. crowd force at ground level	302,400 lbf/ 92,150 lb
Max. breakout force	272,900 lbf/ 83,110 lb

## Operating Weight and Ground Pressure

The operating weight includes the basic machine with cab elevation 2'7", shovel attachment and front shovel 5.23 yd<sup>3</sup> (15,430 lb), level II.

Undercarriage	HD	
Pad width	in 20"	24"
Weight	lb 147,599	155,757
Ground pressure	psi 20.1	16.8

## Front Shovels

Cutting width in	Capacity ISO 7451 yd <sup>3</sup>	Weight lb	Wear kit level	HD-Undercarriage	
				Shovel Attachment	
93"	4.58	14,550	II	▲	
93"	4.58	16,200	III	▲	
102"	5.23	14,330	I	▲	
102"	5.23	15,430	II	■	
102"	5.23	17,420	III	▲	
102"	5.88	14,770	I	▲	
102"	5.88	15,870	II	▲	
102"	5.88	17,200	III	■	
102"	6.54	14,990	I	■	
102"	6.54	16,540	II	△	

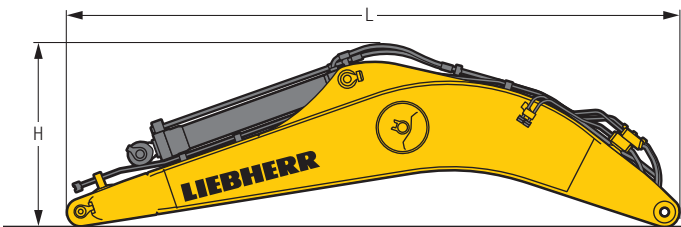
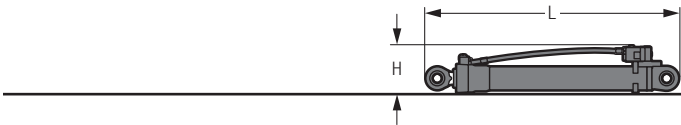
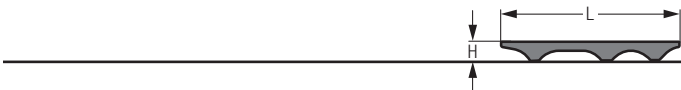
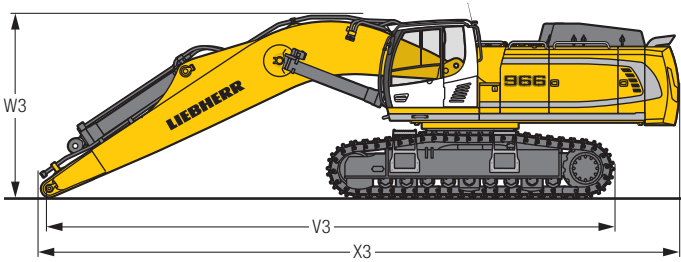
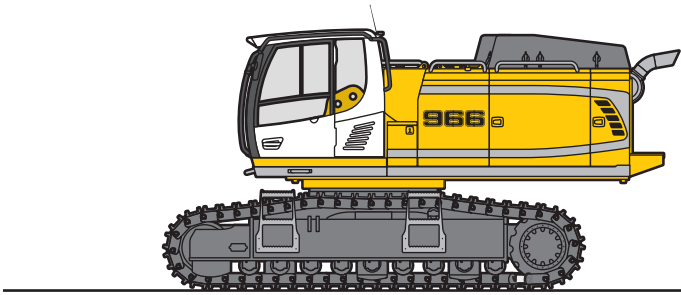
Level I: For non-abrasive materials, such as limestone without flint inclusion, shot material or easily breakable rock, i.e., deteriorated rock, soft limestone, shale, etc.

Level II: For pre-blasted heavy rock, or deteriorated, cracked material (classification 3 to 4, according to DIN 18300)

Level III: For highly-abrasive materials such as rock with a high silica content, sandstone etc.

Max. material weight ▲ = ≤ 3,371 lb/yd<sup>3</sup>, ■ = ≤ 3,034 lb/yd<sup>3</sup>, ▲ = ≤ 2,781 lb/yd<sup>3</sup>, ■ = ≤ 2,528 lb/yd<sup>3</sup>, △ = ≤ 2,023 lb/yd<sup>3</sup>

# Dimensions and Weights



## Basic Machine

Track pads	in	20"	24"	30"
Weight with backhoe attachment and HD-undercarriage without counterweight	lb	89,840	91,380	93,480
Weight with shovel attachment and HD-undercarriage without counterweight	lb	89,840	91,380	93,480
Weight with backhoe attachment and LC-V-undercarriage without counterweight	lb	95,790	97,330	99,760

## Basic Machine

		HD	LC-V
V3	Mono boom 23'	ft in 32'8"	32'6"
	Mono boom 26'11"	ft in 36'9"	36'9"
	Mono boom 32'10"	ft in 43'	43'
W3	Mono boom 23'	ft in 11'2"	11'8"
	Mono boom 26'11"	ft in 12'	12'4"
	Mono boom 32'10"	ft in 13'5"	13'9"
X3	Mono boom 23'	ft in 37'7"	37'7"
	Mono boom 26'11"	ft in 41'8"	41'8"
	Mono boom 32'10"	ft in 47'9"	47'9"

## Cab Elevation

		2'7"
L Length	ft in	6'2"
H Height	ft in	3'1"
Width	ft in	4'6"
Weight	lb	1,320

## Counterweight

		Std	heavy
L Length	ft in	2'6"	2'6"
H Height	ft in	5'1"	5'1"
Width	ft in	11'	11'
Weight	lb	24,250	31,970

## Upper Protection Screen

L Length	ft in	6'5"
H Height	ft in	7"
Width	ft in	3'8"
Weight	lb	170

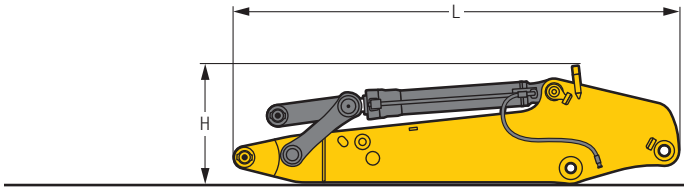
## Hoist Cylinders (two)

L Length	ft in	8'8"
H Height	ft in	1'7"
Width	ft in	1'2"
Weight	lb	2 x 1,650

## Mono Boom with Stick Cylinder

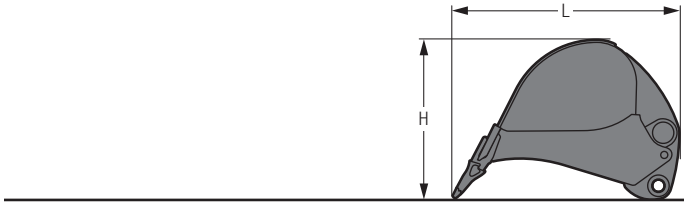
Stick length	ft in	23'	26'11"	32'10"
L Length	ft in	24'1"	28' 1"	33'11"
H Height	ft in	7'3"	6' 9"	7' 9"
Width	ft in	4'9"	4' 9"	4' 9"
Weight	lb	15,870	17,420	19,840

# Dimensions and Weights



## Stick with Bucket Cylinder

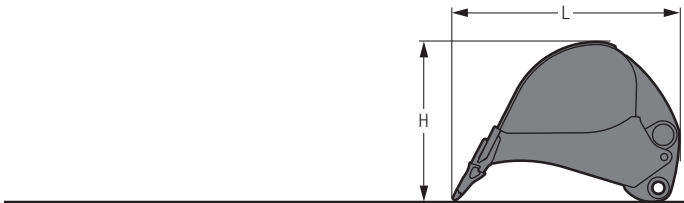
Stick length	in	8'6"	9'10"	11'2"	13' 9"	16' 5"
L Length	ft in	13'	13'11"	15'3"	17'11"	20' 6"
H Height	ft in	4'1"	4' 1"	4'1"	3'11"	3'11"
Width	ft in	3'1"	3' 1"	3'1"	3' 1"	2' 9"
Weight	lb	7,720	8,050	8,380	9,040	9,260



## Backhoe Buckets

Std

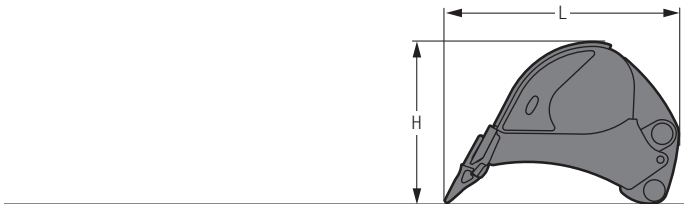
Cutting width	in	45"	53"	61"	69"	77"
Capacity	yd <sup>3</sup>	1.96	2.62	3.27	3.92	4.58
L Length	ft in	7'10"	7'10"	7'10"	7'10"	7'10"
H Height	ft in	5' 7"	5' 7"	5' 7"	5' 7"	5' 7"
Width	ft in	3'11"	4' 7"	5' 3"	5'11"	2,000
Weight	lb	5,620	6,060	6,500	6,950	7,610



## Backhoe Buckets

Std

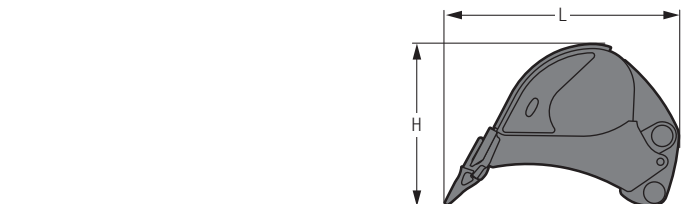
Cutting width	in	85"	85"	91"	100"
Capacity	yd <sup>3</sup>	5.23	5.88	6.54	7.19
L Length	ft in	7'10"	8'6"	8'6"	8'6"
H Height	ft in	5' 7"	5'7"	5'7"	5'9"
Width	ft in	6' 7"	7'3"	7'9"	8'6"
Weight	lb	3,600	7,940	8,820	9,480



## Backhoe Buckets

HD

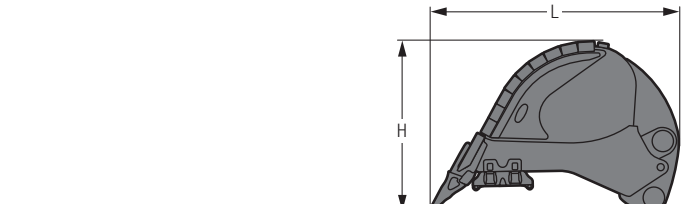
Cutting width	in	55"	63"	71"	79"
Capacity	yd <sup>3</sup>	1.96	2.62	3.27	3.92
L Length	ft in	7'7"	7'7"	7'7"	7'7"
H Height	ft in	5'3"	5'3"	5'3"	5'3"
Width	ft in	4'9"	5'5"	6'1"	6'9"
Weight	lb	7,170	7,830	8,490	9,040



## Backhoe Buckets

HD

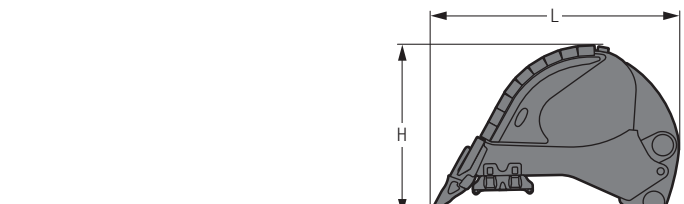
Cutting width	in	85"	85"	85"	91"
Capacity	yd <sup>3</sup>	4.58	5.23	5.88	6.54
L Length	ft in	7'9"	8'	8'4"	8'4"
H Height	ft in	5'5"	5'7"	5'9"	5'9"
Width	ft in	7'3"	7'3"	7'3"	7'9"
Weight	lb	9,810	10,140	10,470	11,240



## Backhoe Buckets

HDV

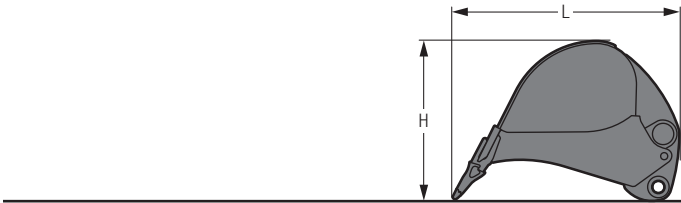
Cutting width	in	61"	71"	77"	85"
Capacity	yd <sup>3</sup>	2.62	3.27	3.92	4.58
L Length	ft in	7'9"	7'9"	7'9"	7'9"
H Height	ft in	5'5"	5'5"	5'5"	5'5"
Width	ft in	5'3"	6'1"	6'7"	7'3"
Weight	lb	9,040	9,480	10,140	11,020



## Backhoe Buckets

HDV

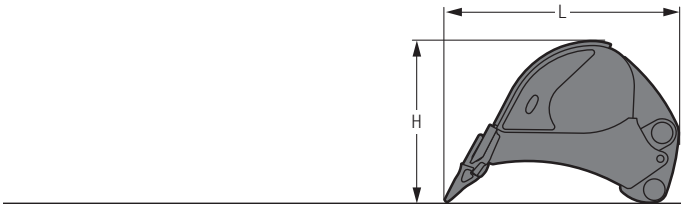
Cutting width	in	85"	85"	93"
Capacity	yd <sup>3</sup>	5.23	5.88	6.54
L Length	ft in	8'	8'4"	8'4"
H Height	ft in	5'7"	5'9"	5'9"
Width	ft in	7'3"	7'3"	7'9"
Weight	lb	11,460	12,020	12,790



### Backhoe Buckets R 956

Std

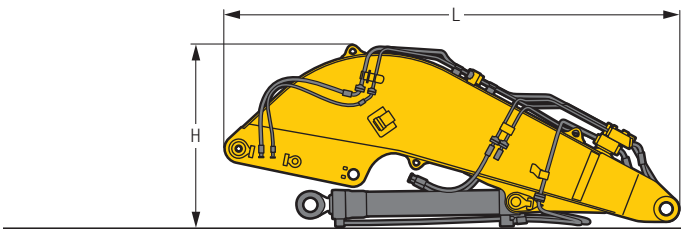
Cutting width	in	53"	61"	69"	77"
Capacity	yd <sup>3</sup>	2.16	2.62	3.07	3.53
L Length	ft in	7' 3"	2,7' 3"	7' 3"	7' 3"
H Height	ft in	5' 1"	5' 1"	5' 1"	5' 1"
Width	ft in	4' 7"	5' 3"	5' 11"	6' 7"
Weight	lb	2,100	2,250	2,450	2,650



### Backhoe Buckets R 956

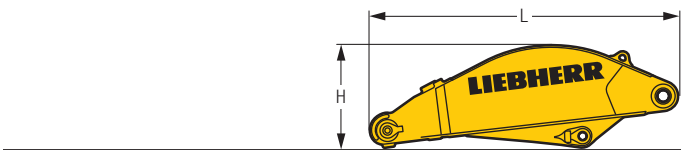
HD

Cutting width	in	53"	61"	69"
Capacity	yd <sup>3</sup>	2.16	2.62	3.07
L Length	ft in	7' 3"	7' 3"	7' 3"
H Height	ft in	5' 3"	5' 3"	5' 3"
Width	ft in	4' 7"	5' 3"	5' 11"
Weight	lb	2,350	2,650	2,850



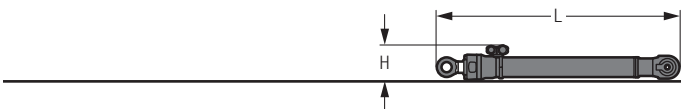
### Shovel Boom

L Length	ft in	15' 7"
H Height	ft in	6' 5"
Width	ft in	6' 3"
Weight without crowd cylinder	lb	11,130
Weight crowd cylinder	lb	1,430



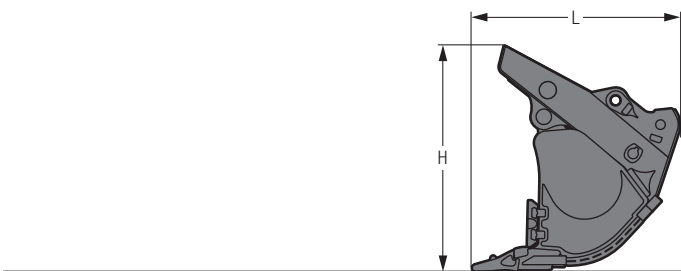
### Shovel Stick

L Length	ft in	10' 8"
H Height	ft in	3' 7"
Width	ft in	4' 11"
Weight	lb	5,510



### Shovel Bucket Cylinders (two)

L Length	ft in	8' 4"
H Height	ft in	1' 2"
Width	ft in	1' 8"
Weight	lb	2 x 880



### Front Shovels

Cutting width	in	93"	102"	102"	102"
Capacity	yd <sup>3</sup>	4.58	5.23	5.88	6.54
L Length	ft in	7' 3"	7' 3"	7' 3"	7' 7"
H Height	ft in	7' 10"	7' 10"	7' 10"	8' 2"
Width	ft in	7' 10"	8' 8"	8' 8"	8' 8"
Weight					
Level I	lb	–	14,330	14,770	14,990
Level II	lb	14,550	15,430	15,870	16,540
Level III	lb	16,200	17,420	17,200	–

# Standard Equipment

## Undercarriage

- Lashing eyelets
- Sprocket double-toothed with dirt ejector
- Supporting rollers with double bearings
- Track guides (three pieces per track frame)
- Track pads, chamfered
- Track rollers, lifetime-lubricated
- Tracks, sealed and greased

## Uppercarriage

- Engine hood with two-part gas spring opening
- Fuel tank cap lockable with padlock
- Handrails
- Internal platform with access to engine and hydraulic compartments
- Manual main switch
- Sound insulation
- Storage box, lockable
- Swing brake lock, maintenance-free
- Tool set 29 pieces
- Uppercarriage headlights (halogen)
- Walkway, both-sided

## Hydraulic System

- Dedicated swing circuit
- Filter with integrated fine filter area
- Liebherr hydraulic oil
- Positive Control system
- Pressure storage for controlled lowering of equipment with engine turned off
- Pressure test ports for hydraulic
- Shut-off valve between hydraulic tank and pumps
- Work mode selector

## Engine

- Common-Rail injection system
- Conform with stage Tier 4f emission standard
- Engine idling, automatic, sensor-controlled
- Fixed geometry turbo charger
- Fuel filter and water separator
- Intercooler
- Liebherr SCR system (Selective Catalytic Reduction)
- Oil level monitoring on touchscreen
- Stepless adjustable engine speed
- Urea tank level monitoring on touchscreen

## Operator's Cab

- 7" colour multifunction display with touchscreen
- Air conditioning, automatic
- Cigarette lighter and ashtray
- Coat hook
- Cup holder
- Fuel consumption indicator
- Headlights (two pieces, Halogen)
- Hydraulic suspension
- Impact-resistant front window (two pieces, non removable)
- Impact-resistant roof window
- Interior light
- LiDAT Plus (Liebherr data transfer system) \*
- Mechanical hour meters, readable from outside the cab
- Operator seat "Comfort" with horizontal and vertical damping
- Preparation for radio installation
- Rain hood over front window opening
- Rearview mirrors
- Rear view monitoring camera
- Rear window emergency exit
- Retractable seat belt 2"
- Roll-down sun blind
- Rubber floor mat
- Sliding windows in cab door
- Storage bin
- Storage space
- Tinted windows
- Wiper/washer

## Attachment

- Boom oil-recirculation
- Headlights on boom (right and left, Halogen)
- Liebherr central lubrication system, fully-automatic (except connecting link for bucket kinematics)
- Load valve for stick cylinder (on distributor)
- Safety check valves on hoist cylinders
- Stick oil-recirculation

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

\* optionally extendable after one year

# Options

## Undercarriage

- Cover and base protection plates
- Factory special painting
- Protection plate for wrecking ball operation
- Steps, wide version
- Track guides (four pieces per track frame)
- Travel drive protection
- Travel gear support, reinforced

## Uppercarriage

- Additional right-hand rearview mirror
- Cab elevation
- Camera for side area monitoring
- Diesel refuelling pump (electric)
- Electric socket for external start-up aid (24 V)
- Electric socket for urea filling station (24 V)
- Factory special painting
- Fan drive, reversible
- Fine filter protection grid for radiator
- Heavy counterweight
- Lubrication line protection (swing ring)
- Protection for headlights on uppercarriage
- SkyView 360° camera
- Storage box with extended tool set 40 pieces (incl. toolbox)
- Swing drive protection
- Walkway, foldable
- Walkway, wide version with guard rail
- Wiggins quick-coupling for fuel

## Hydraulic System

- Hydraulic bypass fine filter
- Liebherr hydraulic oil, adapted for extreme climate conditions
- Liebherr hydraulic oil, biodegradable
- Preheating for hydraulic oil

## Engine

- Air pre-filter with dust trap
- Automatic engine shut-down on idle (adjustable)
- Engine compartment lighting
- Engine shut-down self-timer
- Liebherr particle filter
- Preheating for fuel, coolant and engine oil
- Wiggins quick coupling for engine oil

## Operator's Cab

- Additional front and/or rear cab headlights (Halogen or LED)
- Adjustable intensity headlights (LED)
- Amber beacon

## Operator's Cab

- Auxiliary heater (programmable timer)
- Electric cool box (12 V)
- Electronic immobilizer
- Emergency stop button in cab
- Factory special painting
- Falling objects protection structure (FOPS)
- Fire extinguisher
- First-aid kit
- Follow me home headlights
- Footrest
- Front guard protection structure (FGPS)
- Front headlights (two pieces, LED)
- Handrest for joysticks
- Integral protection guard
- Liebherr proportional control (mini-joysticks 2 axis)
- Lower part windshield wiper
- Operator seat "Comfort" with four-point harness
- Operator seat "Premium" with integrated ventilation
- Radio "Comfort"
- Roof window wiper
- Sun visor
- Sunshield on cab roof
- Switchable high-pressure control
- Travel alarm

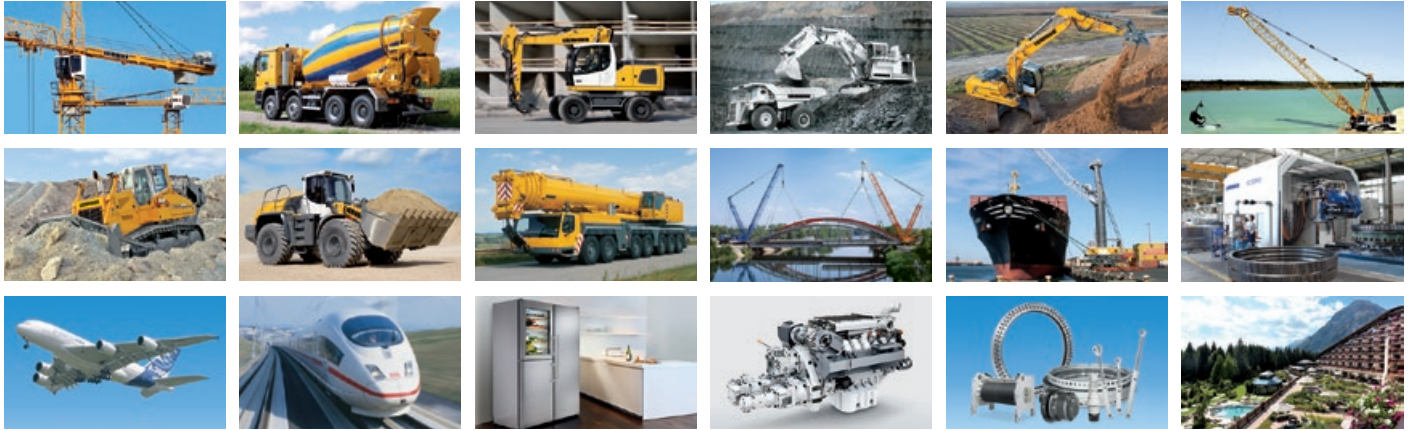
## Attachment

- Automatic lubrication system for connecting link
- Bottom protection for boom
- Bottom protection for stick
- Cylinders check valve
- Eyelet on boom and stick
- Factory special painting
- Filter for hydraulic hammer return flow
- Headlight on boom (LED)
- Headlights protection
- High pressure circuit
- Hoist cylinder stroke limitation, adjustable
- Hoist cylinders float position
- Hydraulic or mechanical quick coupler
- Leak return line for tools
- Liebherr bucket range
- Liebherr tooth system
- Load valve for bucket cylinder
- Middle pressure circuit
- Overload warning device
- Piston rod protection for bucket cylinder
- Piston rod protection for stick cylinder
- Protection for hoist cylinders hoses
- Safety check valves for hoist cylinder
- Safety check valves for stick cylinder
- Stick cylinder stroke limitation, adjustable
- Sticks, sealed version
- Tool Control, 10 tool adjustments selectable via display

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

**Options and/or special attachments, 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 of Companies



## Wide Product Range

The Liebherr Group is one of the largest construction equipment manufacturers in the world. Liebherr's high-value products and services enjoy a high reputation in many other fields. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

## Exceptional Customer Benefit

Every product line provides a complete range of models in many different versions. With both their technical excellence and acknowledged quality, Liebherr products offer a maximum of customer benefits in practical application.

## State-of-the-art Technology

To provide consistent, top quality products, Liebherr attaches great importance to each product area, its components and core technologies. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for construction equipment and mining trucks.

## Worldwide and Independent

Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a group of more than 130 companies with over 41,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

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