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# R 9100

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Generation 8

# LIEBHERR

Mining excavator



#### Technologies

- IoMine ready
- Liebherr Power Efficiency

#### Powertrain options

Liebherr ICE - Diesel: 565 kW (FCO)  
757HP

#### Backhoe configuration

Overall weight: 112 tonnes  
123 tons  
Bucket payload: 13.5 tonnes  
15 tons

#### Face shovel configuration

Overall weight: 116 tonnes  
128 tons  
Bucket payload: 13 tonnes  
14 tons

# Overview

## R 9100



High digging forces

Patented EVO bucket



**Diesel drive 565 kW / 757 HP**



**BH 7.0–7.5 m<sup>3</sup> / 9.2–9.8 yd<sup>3</sup>**  
**FS 7.3 m<sup>3</sup> / 9.6 yd<sup>3</sup>**



**BH 112 tonnes / 123 tons**  
**FS 116 tonnes / 128 tons**

### **New attachment design**

- New stick and boom design
- Reduced attachment weight
- Higher digging force
- Optimisation of the hydraulic circuit to limit pressure losses

### **Standard heavy-duty bucket**

- Maximised payload with versatile Liebherr bucket solution
- Shift levers and bucket links with integrated greasing system

### **Perfect shovel truck match**

- 3–4 pass loading of 45-tonne trucks
- 5–6 pass loading of 65-tonne trucks
- 8 pass loading of 100-tonne trucks



Cutting-edge technologies

Latest cabin generation

Sustainable & efficient performance

#### Upgraded cabin

Increased comfort and ergonomics:

- User-friendly operator station
- Panoramic vision with direct view on tracks
- Modern and user-centric dashboard

#### Cutting-edge technologies

- Liebherr Assistance Systems
- Advanced machine monitoring with modern 10"5" and 15" touchscreens (day & night mode)
- Permanent 270° vision system
- Skyview available as an option for 360° views around machine

#### Liebherr D9512 diesel engine

- Proven V12 design
- Serial implementation of Liebherr Power Efficiency – Engine Control
- Automatic idle control
- 3,500 m maximum altitude without derating

Performance

**Productive, efficient and reliable**

**+30 %**

**Fuel efficiency  
than previous generation**



## Fast and precise movement

### Liebherr D9512

- 565 kW / 757 HP at 1,800 rpm
- 12 cylinder V-engine
- Displacement  
24.24 l / 1,479 in<sup>3</sup>
- Fuel consumption optimised  
(FCO) configuration



### V12 engine

The R 9100 is fitted with the D9512 engine, providing superior performance for increased productivity.

### Fast cycle times

Like all other Liebherr mining excavators, the R 9100 G8 uses a closed-loop swing circuit. The main hydraulic circuit is comprised of independent valve banks fed by three working pumps, providing unrivalled flexibility of attachment control and force distribution, while allowing full oil flow integration for fast movement and lowest cycle times.

### Precise machine motion

For enhanced efficiency, the R 9100 G8's hydraulic control system is electro-hydraulically controlled for greater working precision, smoother movements and reduced fuel consumption. The ergonomical joysticks on the suspended seat armrests allow the operator to accurately position the machine.

## Thoroughly tested to meet your mine's demands

In a manner consistent with all Liebherr mining excavators, the R 9100 G8 was placed into the hands of customers who utilise comparable Liebherr machinery as part of its pre-series field validation program. This field validation is an integral part of Liebherr's development process because validation in the field under actual mining conditions (i.e. extreme temperatures and humidity, high dust levels and altitude) is irreplaceable.



# Productivity

# Attachment

## Reach the next level



**Backhoe**  
7.5 m<sup>3</sup> / 9.8 yd<sup>3</sup>



**100t trucks**  
8 passes



**65t trucks**  
5-6 passes



**45t trucks**  
3-4 passes



**Face shovel**  
7.3 m<sup>3</sup> / 9.6 yd<sup>3</sup>



**100t trucks**  
9-10 passes



**65t trucks**  
6 passes



**45t trucks**  
4-5 passes

*Site-specific factors like loose material density, bucket size, fill factors, truck body size and payload capacity will influence pass match. Contact your local Liebherr affiliate or sales partner for analysis of your site.*

### New attachment design

The R 9100 G8 attachment has been redesigned to reduce weight, improve fatigue resistance and increase digging forces.

### Maximised payload

Designed for best force distribution, the attachment delivers high digging and hoisting forces, which ensures maximum payload during each cycle. The EVO bucket allows the operator to take advantage of each pass and therefore increase productivity.

### Optimised cost per tonne

Built to deliver maximum efficiency in the 100-tonne class, the R 9100 G8 offers superior durability through its component design, delivering state-of-the-art capabilities and reliability.





**Get the most out of each pass**



**IoMine**

## Automation

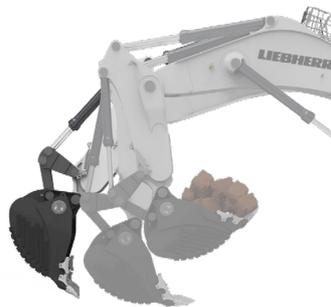
### Bucket Filling Assistant

Allows easier bucket filling and consistent bucket fill factors, especially in blocky or hard digging conditions, for overall improvements in productivity and decreased operator fatigue.



### Anti-stalling function

Prevents the bucket from stalling during the digging phase.



### Semi-automatic bucket filling function

Allows the machine electronic to realise fully automatic attachment movements.



Discover more about the Bucket Filling Assistant [here!](#)



# Comfort Operator cabin

## Superior comfort

- Tinted laminated safety glass
- Armoured front window
- Adjustable air suspended seat
- A/C with dust filter in fresh/recirculated air
- Optional Operator Comfort Kit



## Working environment

### Operator comfort

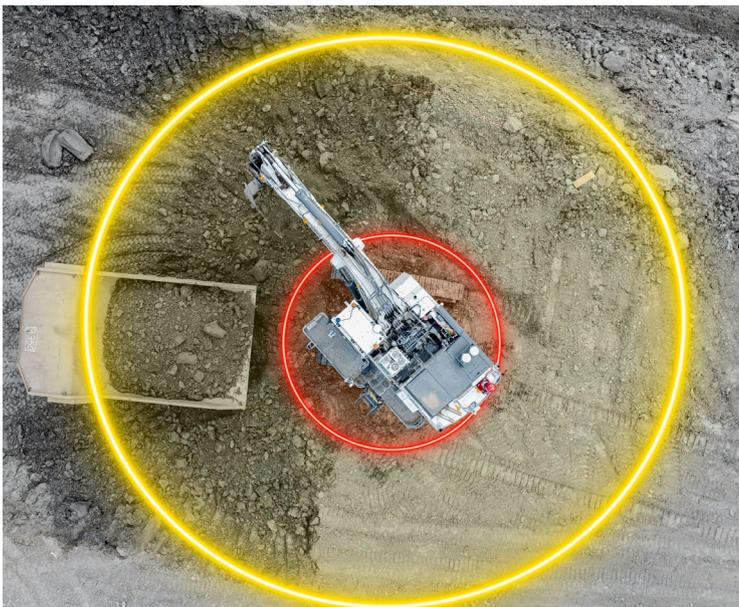
When designing the cab for the R 9100 G8, operator safety and comfort were paramount. With its high safety standards, premium operator seat, optimal visibility, low noise level and strong structure, the cab provides a pleasant environment for operators on shift. Plus, Liebherr offers options so the cab can be adapted to suit specific thermal conditions or to meet site requirements, like FOPS.

### Optional

- External louvres
- Operator Comfort Kit
- Front protective grid
- Four-point harness

### Upgraded cabin

- Modern and large touchscreens
- State-of-the-art onboard technologies
- User-friendly piloting station
- Onboard diagnostics for service staff



### Vision system

The R 9100 G8 offers superior visibility of the machine's surroundings. The dedicated monitor inside the cabin provides a continuous 270° view around the machine. The Skyview system is available as an option to provide continuous 360° vision.

IoMine

# Unleash the full potential of your mine



## Your connected mining ecosystem

IoMine, Liebherr Mining's cutting-edge technology product line, supports your transition to integrated operations. By adopting IoMine, you can improve decision-making and provide greater operational safety – all while fostering sustainable development and ensuring cost optimisation in the management of your mine. IoMine is a reliable partner for achieving a more efficient, cost-effective and productive mining operation.

## Partnering for mining success

IoMine optimises operations by improving asset availability, efficiency and productivity. These products enhance fleet capabilities, simplify operations and improve fleet management for more profitability and smarter energy use.

## Unlock peak performance



### Enhanced decision-making

Optimise your mining operations and increase efficiency by making informed decisions supported by accurate, real-time data.



### Increased safety

Real-time machine monitoring and operator alerts from assistance systems enhance safety while autonomous technology reduces risks, ensuring a safer worksite.



### Optimised operational efficiency

Real-time operator assistance, streamlined maintenance and autonomous technologies work together to enhance integration, productivity, efficiency and profitability.



### Maximised machine availability

Proactive maintenance, operational insights and advanced automation collectively prevent breakdowns, minimise downtime and boost efficiency, productivity and profitability for continuous operations.





## Let's journey together on the path to data-driven decision-making and autonomy in digging, dozing and hauling.



Operate  
**IoMine**

**Empower mining success.**  
Find the right IoMine products for optimising processes, reinforcing safety and increasing the profitability of your mining operations.



Automate  
**IoMine**

**Safe. Efficient. Automated.**  
Liebherr's advanced automation solutions integrate seamlessly into your existing systems for real-time monitoring and intelligent autonomy.



Maintain  
**IoMine**

**Less downtime, more mining.**  
Keep your mining fleet running at peak performance with IoMine's dedicated maintenance products, which are innovative solutions designed to minimise downtime and increase efficiency.



Scan here to learn more about the IoMine portfolio

# Assistance Systems

## The best performance. Easy.



IoMine

### Get the best out of your Liebherr mining excavator

The R 9100 G8 is compatible with Liebherr's range of Assistance Systems for excavators – advanced onboard applications that use analytics, real-time operational information and actionable insights to improve operator productivity and efficiency.



Measure and analyse every bucket payload for optimal truck loading



Visualise data using different views & advanced filtering



Display targeted productivity and actual payload with 99% accuracy



Provide transparency of performance, operating time and fuel efficiency



Identify operational conformance anomalies and improve operator effectiveness



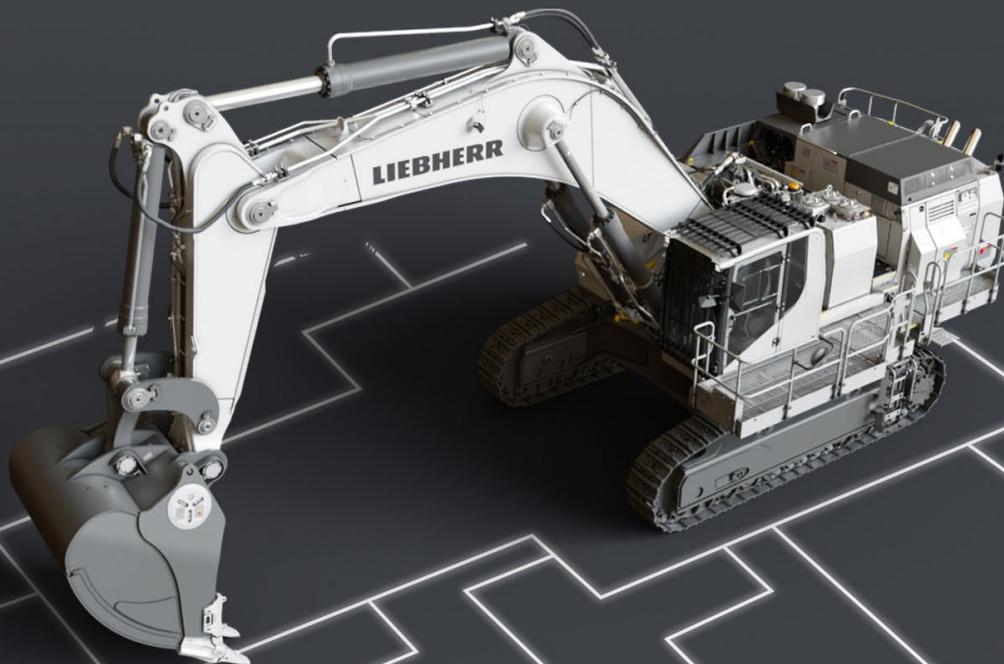
Control the machine and its surroundings via state-of-the-art touchscreen displays



Make informed decisions



Increase productivity





## Truck Loading Assistant

Helps operators consistently achieve the target load for each truck thanks to real-time loading information, which results in:

- Reduced over- and underloading
- Instantaneous measurement of bucket payload
- Improved loading accuracy
- Strategic calculation of the number of passes required.



## Performance Monitoring

Transforms operational data into clear indicators for analysing and comparing operator, machine and process performance, which:

- Highlights areas for improvement in the loading cycle by evaluating times, phases and key KPIs.
- Facilitates fact-based decision-making, promoting continuous improvement in efficiency and sustainability.



## Application Severity

Analyses actual site operating conditions based on machine and sensor data, which allows you to:

- Assess the impact of operating conditions on costs, productivity and reliability using the system's severity indicators.
- Adapt operating and maintenance strategies throughout the machine's life cycle.



## Operational Conformance

Ensures consistent machine usage by monitoring deviations from the defined scope of use through:

- Automatic detection of non-compliant events that could impact component availability, performance or lifespan.
- A clear overview of common non-compliant events so usage patterns can be corrected and operating costs kept to a minimum.

Adapt power and hydraulic  
flow specifically to the load  
profile

Digging force

**435 kN**

Breakout force

**560 kN**



## Performance

# Advanced hydraulic system

### Fast & precise movement

#### Intelligent power management system

The Liebherr R 9100 G8 is equipped with a closed loop swing circuit. Kinetic energy is recovered when the swing motion is used during deceleration to drive the main and auxiliary pumps, resulting in reduced fuel consumption. Cylinder dampening through IMUs provides smoother attachment movements without affecting attachment speed.

#### Independent cooling system

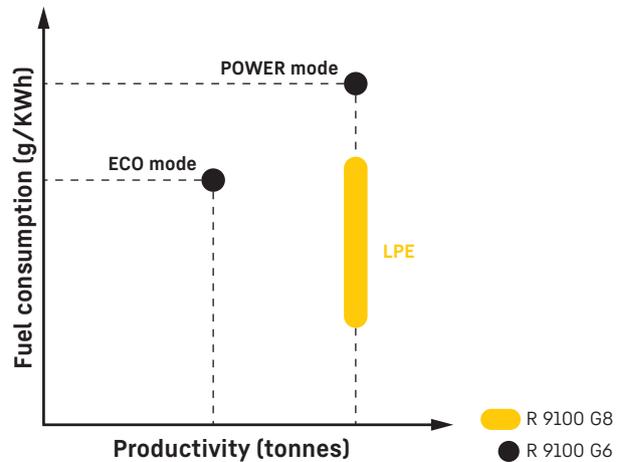
Oil and water cooling fans are independently and electronically managed. The oversized cooling systems reduce parasitic demand on engine horsepower, ensuring maximum available power is provided to the excavator's working circuits.

### Moving more with less

#### Patented Liebherr Power Efficiency

Specific engine and hydraulic management drastically reduces fuel consumption without any compromise on machine productivity, thanks to:

- Piloting processes that adapt according to operator requirements and machine condition
- Electronically controlled pressure and oil flow
- Reduced hydraulic throttling and engine load profile for increased component lifetime.



Up to **20 %**  
less fuel consumption  
than the previous generation

# Safety

## Protecting your most important assets

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### Machine accessibility

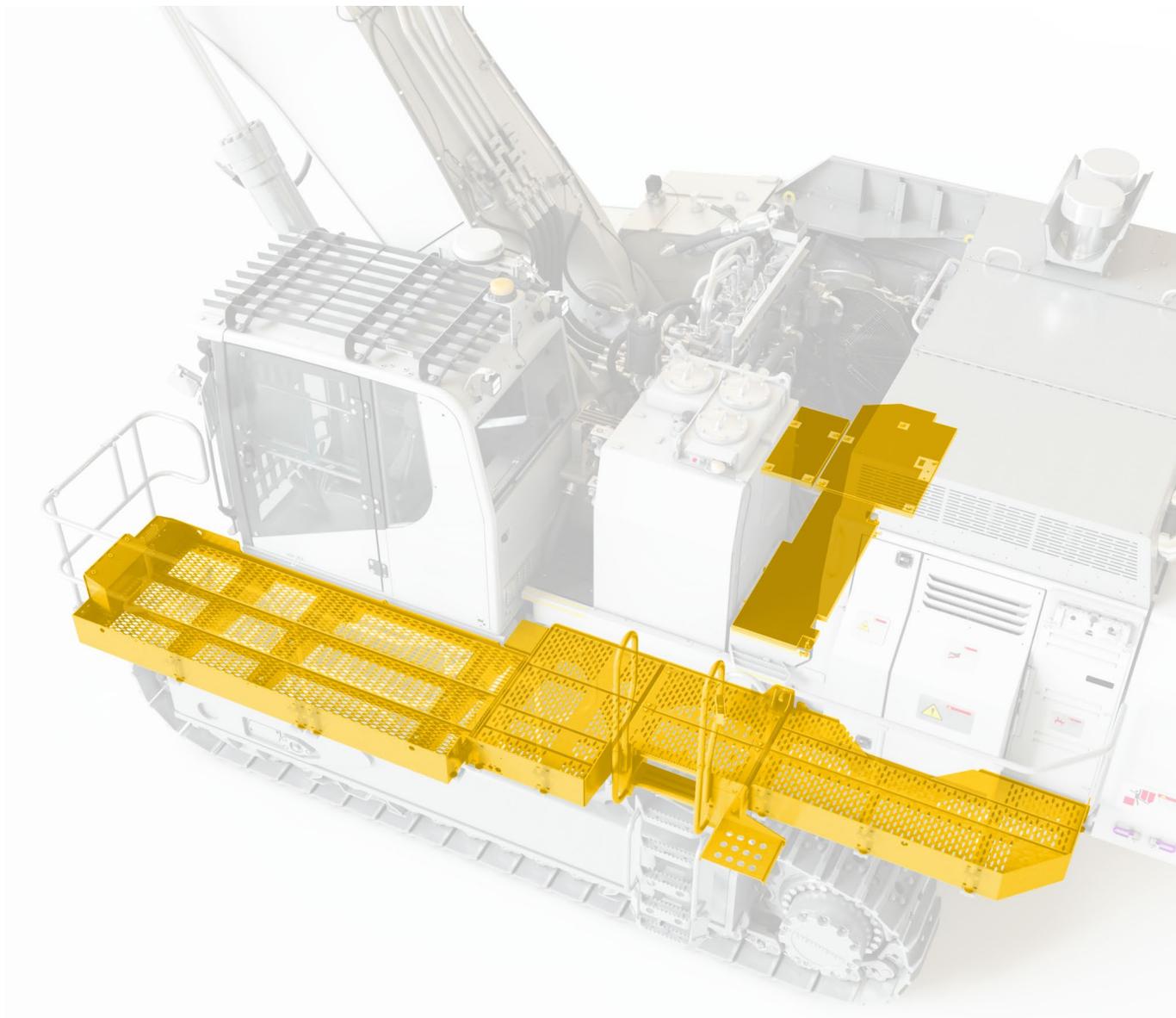
The R 9100 G8 can be fitted with an optional ergonomic hydraulically controlled 45° stairway with handrails, boosting safety while accessing the uppercarriage.

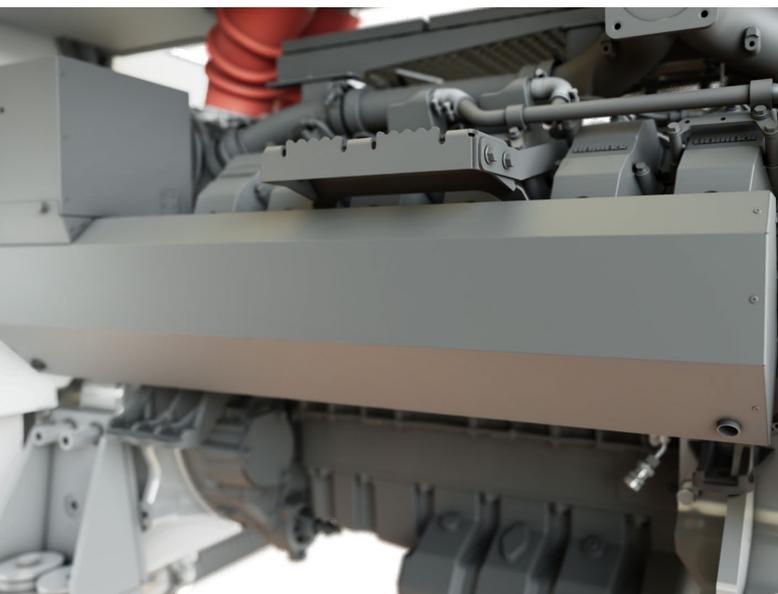
### Wide catwalks for inspection

Enlarged walkways allow easy and safe access for inspecting and maintaining engines, fans and pumps. All routine service items have been positioned to allow effortless inspection and replacement.

### Emergency stops and exits

Emergency stops are located throughout the machine for optimal safety. A mechanical emergency exit guarantees a safe and quick withdrawal from the machine.





#### **LED lighting system**

Thanks to LED long-reach lights located on the attachment, uppercarriage and counterweight, the machine offers the best possible visibility for the operator and for the other people and equipment on site.

#### **Safe surrounding area**

The horn, LED working lights, LED service lights, LED access lights, flashing lights and travel alarm guarantee safe 24/7 operation and maintenance conditions.

#### **Advanced engine fire protection**

Turbochargers and exhaust manifolds are heat shielded. The engines are mechanically segregated from hydraulic components, further improving machine safety.

Maintenance

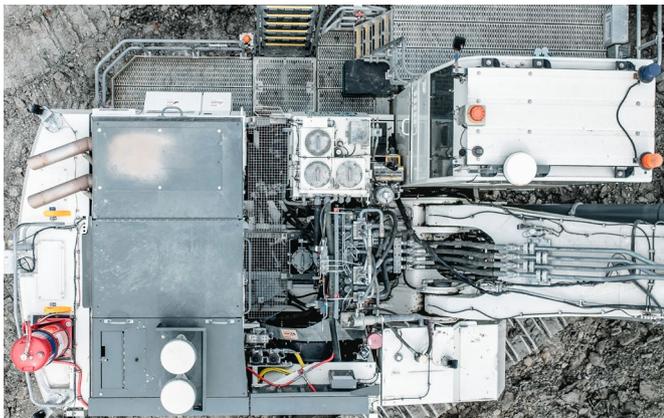
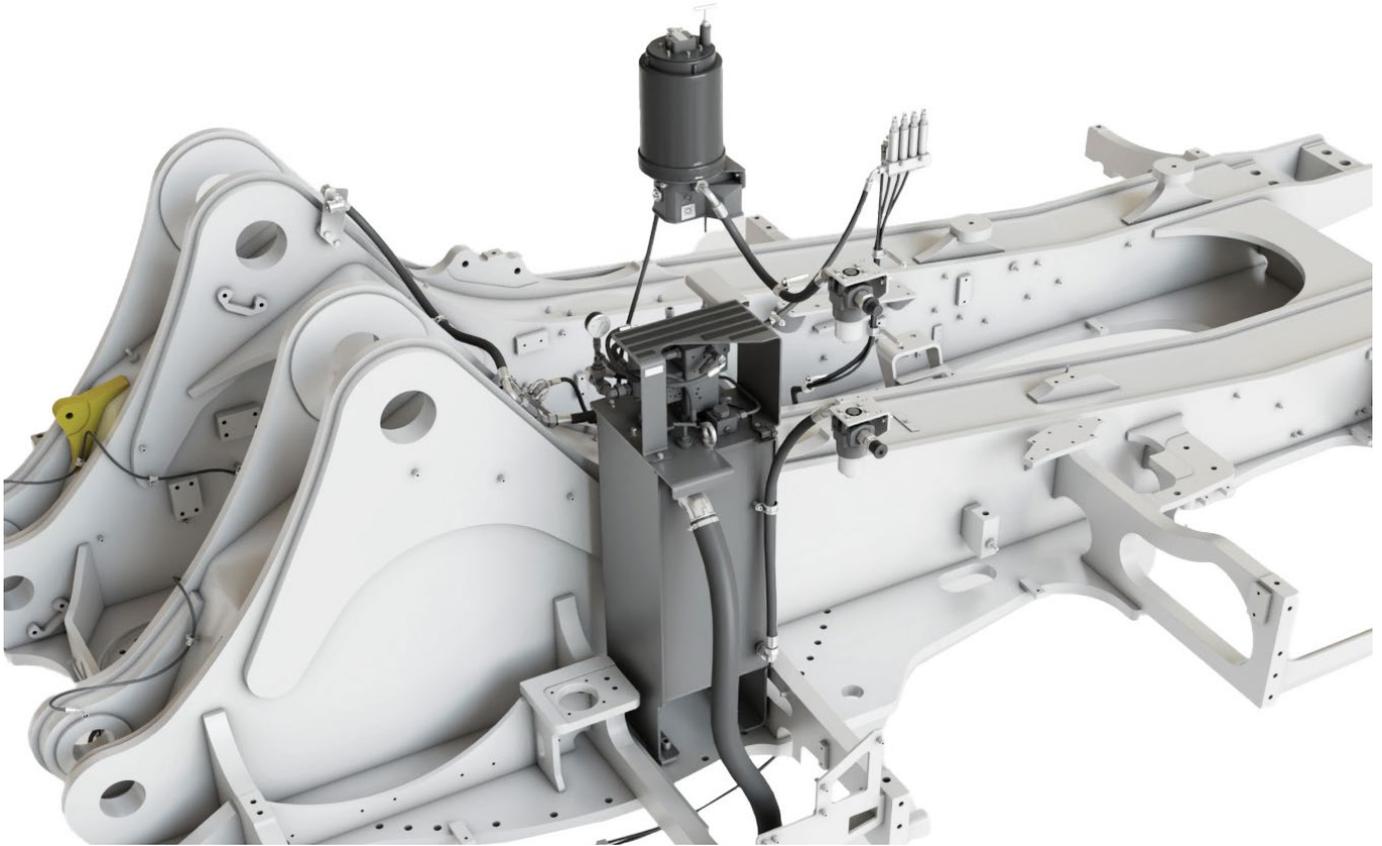
# Easy & safe operations

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## Automatic greasing system

In line with Liebherr's commitment to continuous improvement, the R 9100 G8's greasing system has been redesigned and the tanks and pumps have been repositioned to improve reliability and maintenance. The grease change intervals have been extended to 250 hours, minimising the downtime of this prime mover.



### Greasing system features

- Grease tank for the attachment, uppercarriage and swing ring bearing
- Grease tank for the swing ring teeth
- Simplified component layout
- Automatic greasing cycles
- Reduced number of injectors & hoses

### Superior engine accessibility

- Service access from one-side
- Easy-to-maintain components
- Wide catwalks with slip-resistant surfaces

### Straightforward troubleshooting

- Signal panels
- Control system hardware and software completely developed and managed by Liebherr
- Reduced number of connections and connectors



Quality  
**The Liebherr trademark**

**Providing reliable machinery is the highest priority for Liebherr Mining. Utilised in tough mining applications all around the world, the R 9100 G8 is built to last over 36,000 operational hours. Liebherr's engineering expertise and continuous improvement programs combine to deliver industry-leading machines.**

#### **Vertical integration**

Liebherr has built a solid reputation for developing and producing high-quality, strategic components for mining equipment. These robust and reliable Liebherr components were integrated into the R 9100 G8 to ensure the best reliability and highest performance on site.

#### **Mining know-how**

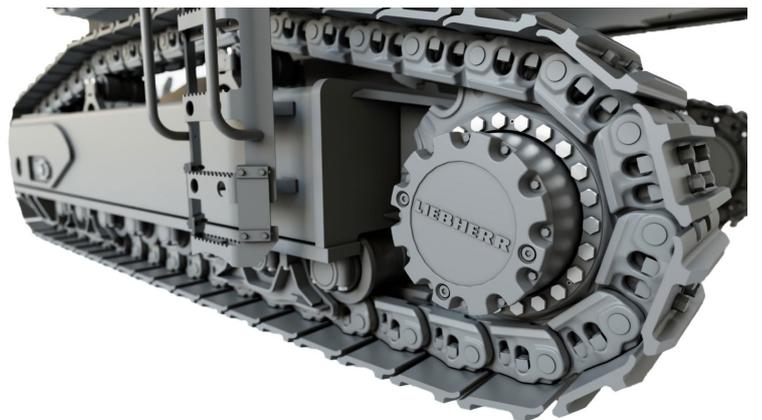
Liebherr mining excavators are conceptualised, designed and dedicated to the mining industry. The engineering department uses specific 3D simulation solutions, such as finite element and fatigue life analyses, to ensure these machines can meet any possible customer requirements.



**36,000**  
Operational hours

**Robust undercarriage**

- Heavy-duty design with durable side frame links
- Final drive with double lifetime sealing and all-weather execution as standard
- Fatigue-resistant steel structure
- Sealed for life heavy-duty carrier and track rollers



# The four pillars of Liebherr Mining

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With more than 50 years of experience in the mining industry, Liebherr Mining has identified four key factors of customer satisfaction: Performance, Safety, Service and Sustainability. These pillars provide structure and focus for all our activities and embody Liebherr's customer commitments.





**Performance**  
Productive, efficient and reliable



**Safety**  
Protecting your most important assets



**Service**  
Where you need it, when you need it



**Sustainability**  
Committed to our future



# Technical data

## Powertrain

1 Liebherr ICE – Diesel	
Rating per ISO 9249	565 kW (757 HP) at 1,800 rpm
Model	Liebherr D9512 (fuel consumption optimised setting)
Type	12-cylinder V-engine
Bore / stroke	128 / 157 mm 5.04 / 6.18 in
Displacement	24.24 l / 1,479 in <sup>3</sup>
Engine operation	4-stroke diesel common-rail direct injection turbo-charged
Cooling	water-cooled, hydrostatic fan drive
Liebherr Power Efficiency – Engine Control	engine management systems adapting power specifically to engine load profile
Air cleaner	dry-type air cleaner with pre-cleaner, primary and safety elements, automatic dust discharge
Fuel tank capacity	1,478 l / 390 gal
Engine idling	electronically controlled
Electrical system	
Voltage	24 V
Batteries	4 x 75 Ah / 12 V
Starter	24 V / 2 x 8.4 kW
Alternator	24 V / 140 A

## Hydraulic controls

Power distribution	via monoblock control valves with integrated primary and secondary relief valves
Flow summation	to attachment and travel drive
Closed-loop circuit	for uppercarriage swing drive
Servo circuit	
Attachment and swing	proportional via electronic joystick levers
Travel	proportional via electric pedals and removable hand levers
Shovel flap functions	proportional via electric pedals and rocker

## Swing drive

Hydraulic motor	2 Liebherr axial piston motors
Swing gear	2 Liebherr planetary reduction gears
Swing ring	Liebherr, sealed single race ball bearing swing ring, internal teeth
Swing speed	0–7.7 rpm
Swing-holding brake	wet multi-disc brakes, spring applied, hydraulically released

## Hydraulic system

Hydraulic pump	
for attachment and travel drive	3 Liebherr variable flow axial piston pumps
Max. flow	3 x 435 l/min. / 3 x 115 gpm
Max. pressure	350 bar / 5,076 psi
for swing drive	1 Liebherr reversible swashplate pump, closed-loop circuit
Max. flow	420 l/min. / 111 gpm
Max. pressure	350 bar / 5,076 psi
Pump management	electronically controlled pressure and flow management with oil flow optimisation
Hydraulic tank capacity	1,000 l / 264 gal
Hydraulic system capacity	1,500 l / 396 gal
Hydraulic oil filter	1 high pressure safety filter after each high pressure pump + extra-fine filtration of entire return flow with integrated by-pass filtration (15 / 5 µm) + dedicated leak-oil filtration
Hydraulic oil cooler	1 separated cooler, temperature controlled fan driven via 1 hydraulic piston motor
Liebherr Power Efficiency – Hydraulic Control	hydraulic management system adapting the hydraulic flow specifically to the load profile

## Electric system

Electric isolation	easy accessible battery isolators
Working lights	high brightness LED lights: - 2 on working attachment - 2 on cabin - 2 on RHS of uppercarriage - 3 on LHS of uppercarriage
Emergency stop switches	in the cab / in engine compartment
Electrical wiring	Heavy-duty execution in IP 65 standard for operating conditions of -50 °C to 100 °C / -58 °F to 212 °F

## Uppercarriage

Design	torque resistant modular design upper frame
Attachment mounting	parallel length girders
Catwalks	large catwalk on LHS

## Cab

Design	sound insulated, tinted windows, front window armoured glass, door with sliding window
Operator's seat	air suspended, body-contoured with shock absorber, adjustable to operator's weight
Joysticks	Integrated into armrest of seat, armrest adjusted to seat position
Condition monitoring	machine condition monitoring system with error reporting and operational information
Monitoring	via 12" touch display, data memory
Vision system	camera installation on counterweight and RHS of the uppercarriage, displayed over the LCD-display
Heating system / air conditioning	standard automatic air conditioning, contains fluorinated greenhouse gases HFC 134a with a Global Warming Potential (GWP) of 1430, the AC circuit contains 1.7 kg / 3.8 lb of HFC-134 representing an equivalent of 2.4 tonnes / 2.7 tons of CO <sub>2</sub> , combined cooler / heater, additional dust filter in fresh/recirculated air
Noise level (ISO 6396)	L <sub>DA</sub> (inside cab) = 76 dB(A)
Hand-arm vibrations	≤ 2.5 m/s <sup>2</sup>
Whole-body vibrations	≤ 0.5 m/s <sup>2</sup>

## Undercarriage

HD version	heavy duty
Drive	Liebherr swashplate motors
Travel gear	planetary reduction gears
Travel speed	0-3.0 km/h / 0-1.86 mph
Track components	280 mm / 11.02 in track pitch, maintenance free
Track rollers / carrier rollers	8 track rollers and 2 carrier rollers per side frame
Track pads	double grouser
Track tensioner	spring with grease tensioner
Parking brake	wet multi-discs (spring applied, pressure released)
Brake valves	integrated in main valve block

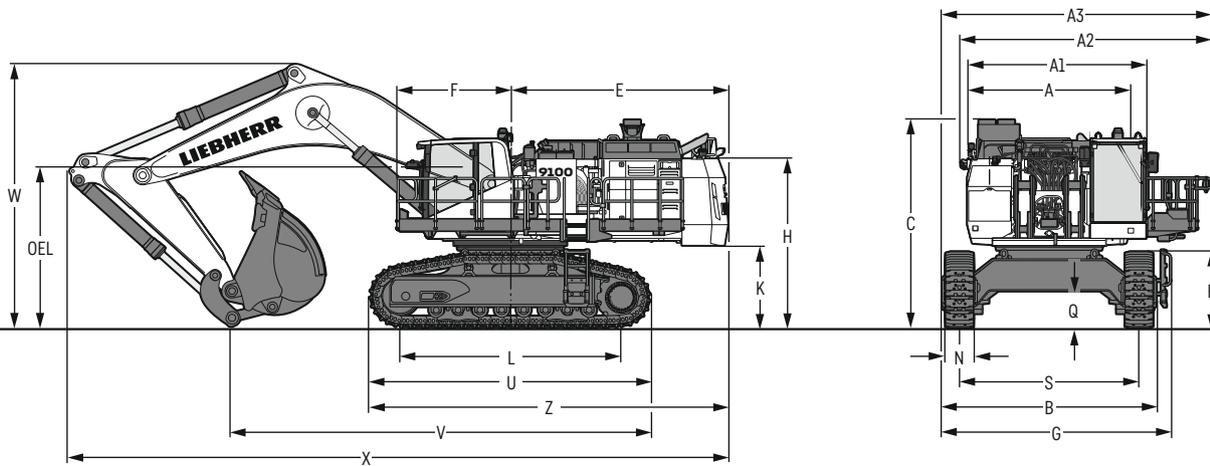
## Central lubrication system

Type	single line lubrication system for the entire attachment / swing ring bearing and teeth
Grease pumps	1 hydraulic pump for attachment / swing ring bearing lubrication, 1 electric pump for swing teeth lubrication
Capacity	100l / 26.4 gal bulk container for attachment / swing ring bearing, separate 8l / 2.1 gal container for swing ring teeth
Refill	via quick connections and grease filters for both containers

## Attachment

Design	box-type, combination of resistant steel plates and cast steel components
Hydraulic cylinders	Liebherr design
Hydraulic connections	pipes and hoses equipped with SAE flange connections
Pivots	sealed, low maintenance
Pivots bucket-to-stick Pivots bucket-to-link	O-ring sealed and completely enclosed

# Dimensions

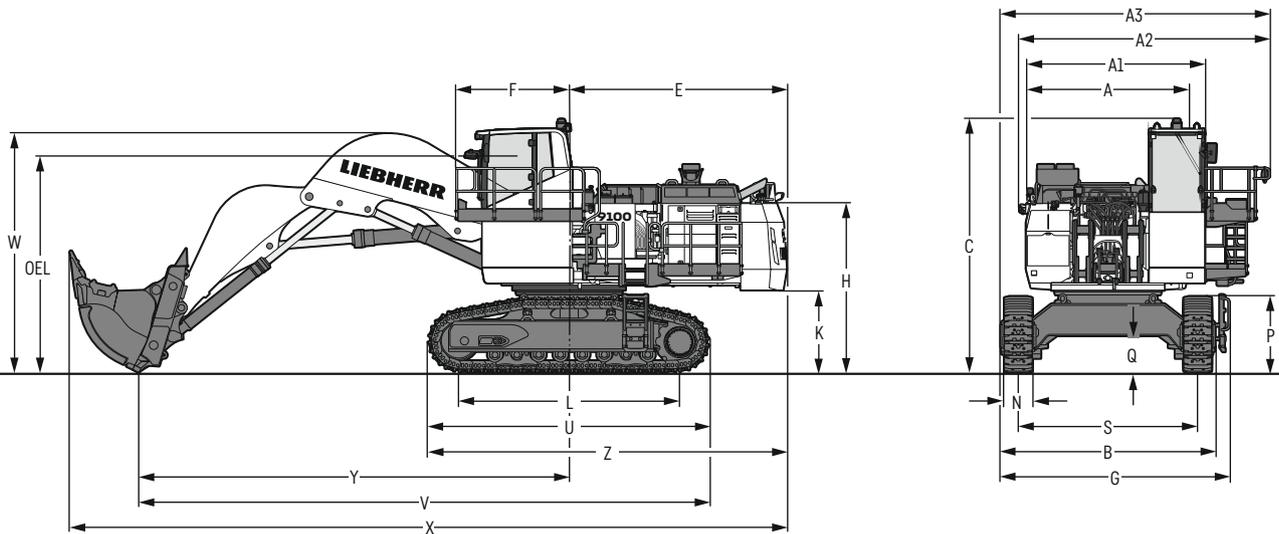


	mm / ft in
A	3,550 / 11'8"
A1	3,931 / 12'11"
A2	5,443 / 17'10"
A3	5,936 / 19'6"
B	4,745 / 15'7"
C	4,562 / 14'11"

	mm / ft in
E	4,730 / 15'6"
F	2,473 / 8'1"
G	4,996 / 16'5"
H	3,703 / 12'2"
K	1,803 / 5'9"
L	4,810 / 15'8"

	mm / ft in
N	500 / 1'6" 600 / 2' 750 / 2'5"
P	1,663 / 5'5"
Q	812 / 2'7"
S	3,900 / 12'8"

	mm / ft in
U	6,107 / 20'
V	9,150 / 30'
W	5,810 / 19'1"
X	14,360 / 47'1"
Z	7,800 / 25'7"
OEL (operator's eye level)	3,545 / 11'8"



	mm / ft in
A	3,550 / 11'8"
A1	3,931 / 12'11"
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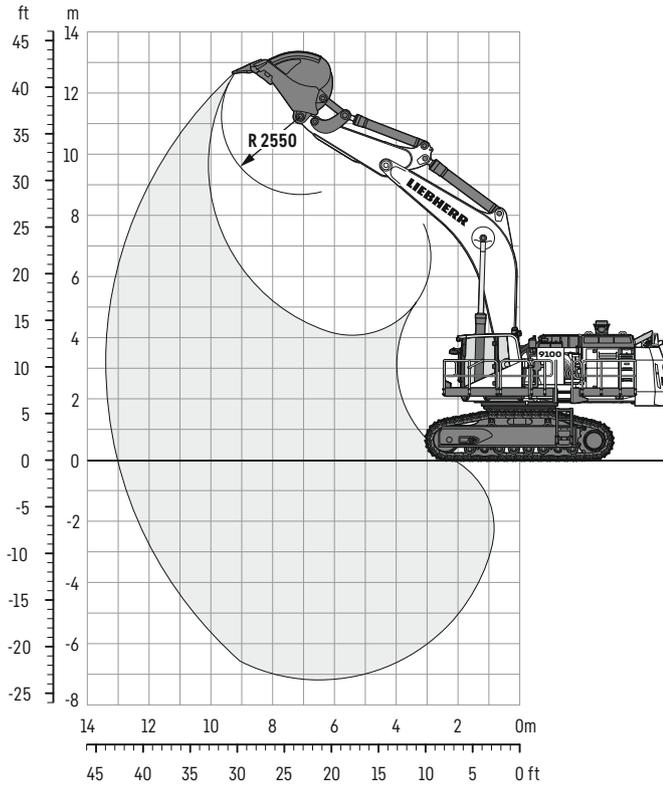
	mm / ft in
N	500 / 1'6" 600 / 2' 750 / 2'5"
P	1,663 / 5'5"
Q	812 / 2'7"
S	3,900 / 12'8"
U	6,107 / 20'

	mm / ft in
V	12,415 / 40'9"
W	5,250 / 17'3"
X	15,590 / 51'2"
Y	9,360 / 30'9"
Z	7,800 / 5'9"
OEL (operator's eye level)	4,735 / 15'6"

According to ISO 9248, measurements of general machinery dimensions, performances and capacities may vary within tolerances laid out by this standard.

# Backhoe attachment

with 7.60 m / 24'9" boom



## Digging envelope

Stick length	m	3.20
	ft in	10'5"
Max. digging depth	m	7.15
	ft in	23'5"
Max. reach at ground level	m	13.00
	ft in	42'7"
Max. dumping height	m	8.65
	ft in	28'4"
Max. teeth height	m	12.70
	ft in	41'7"

## Forces

Max. digging force (ISO 6015)	kN	435
	lbf	97,792
Max. breakout force (ISO 6015)	kN	560
	lbf	125,893

Machine shown with a bucket for average material abrasiveness and 1.8 t/m<sup>3</sup> (3,034 lb/yd<sup>3</sup>) density. The characteristics of the material to be extracted and additional options can change the bucket's volume, shape and radius and therefore may also change the work area reachable by the bucket.

## Operating weight and ground pressure

The operating weight includes the basic machine with 7.60 m / 24'9" boom, 3.20 m / 10'5" stick and 7.50 m <sup>3</sup> / 9.8 yd <sup>3</sup> bucket			
Undercarriage		HD	
Pad width	mm	600	750
	ft in	2'	2'5"
Weight	kg	111,600	112,600
	lb	246,036	248,241
Ground pressure*	kg/cm <sup>2</sup>	1.77	1.43
	psi	25.17	20.33

\* according to ISO 16754

## Backhoe buckets

For materials class according to VOB Section C, DIN 18300		<5	<5	<5	5-6	5-6	5-6	5-6	7-8	7-8	7-8
Typical operation according to VOB Section C, DIN 18300		GP	GP	GP	HD	HD	HD	HD	XHD	XHD	XHD
Capacity ISO 7451	m <sup>3</sup>	10.00	8.40	7.70	8.00	7.00	7.50	7.00	7.50	6.50	6.00
	yd <sup>3</sup>	13.10	11.00	10.10	10.50	9.20	9.80	9.20	9.80	8.50	7.80
Suitable for material up to a specific weight of	t/m <sup>3</sup>	1.50	1.65	1.80	1.65	1.80	1.80	1.95	1.65	2.00	2.20
	lb/yd <sup>3</sup>	2,528	2,781	3,034	2,781	3,034	3,034	3,287	2,781	3,371	3,708
Weight	kg	7,200	7,000	6,900	7,700	7,200	7,450	7,200	8,520	7,710	7,420
	lb	15,873	15,432	15,212	16,976	15,873	16,424	15,873	18,783	16,998	16,358

GP: general purpose bucket with Liebherr Z100 teeth

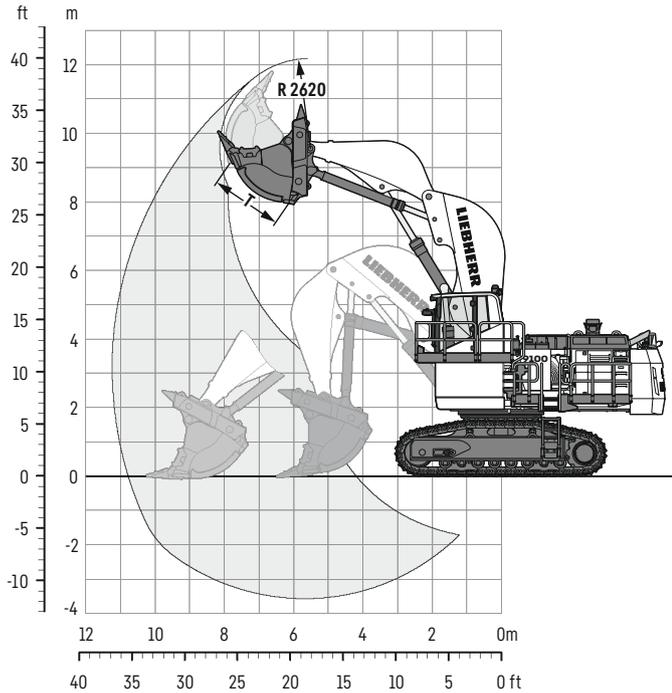
HD: heavy-duty bucket with Liebherr Z100 teeth

XHD: heavy-duty rock bucket with Liebherr Z100 / Z110 teeth

According to ISO 9248, measurements of general machinery dimensions, performances and capacities may vary within tolerances laid out by this standard.

# Face shovel attachment

with 5.30 m / 17'4" boom



## Digging envelope

Stick length	m	3.70
	ft in	12'1"
Max. reach at ground level	m	10.70
	ft in	35'1"
Max. dumping height	m	8.00
	ft in	26'2"
Max. crowd length	m	3.70
	ft in	12'1"
Bucket opening width T	mm	2,000
	ft in	6'6"

## Forces

Max. crowd force at ground level (ISO 6015)	kN	545
	lbf	122,521
Max. crowd force (ISO 6015)	kN	704
	lbf	158,266
Max. breakout force (ISO 6015)	kN	585
	lbf	131,513

Machine shown with a bucket for average material abrasiveness and 1.8 t/m<sup>3</sup> (3,034 lb/yd<sup>3</sup>) density. The characteristics of the material to be extracted and additional options can change the bucket's volume, shape and radius and therefore may also change the work area reachable by the bucket.

## Operating weight and ground pressure

The operating weight includes the basic machine with shovel attachment and 7.30 m <sup>3</sup> / 9.6 yd <sup>3</sup> bucket			
Undercarriage		HD	
Pad width	mm	600	750
	ft in	2'	2'5"
Weight	kg	116,100	117,100
	lb	255,957	258,161
Ground pressure*	kg/cm <sup>2</sup>	1.84	1.49
	psi	26.17	21.19

\* according to ISO 16754

## Face shovel buckets

For materials class according to VOB Section C, DIN 18300		<5	<5	5-6	5-6	5-6	5-6	7-8	7-8	7-8
Typical operation according to VOB Section C, DIN 18300		GP	GP	HD	HD	HD	HD	XHD	XHD	XHD
Capacity ISO 7451	m <sup>3</sup>	9.00	7.80	7.80	7.30	6.70	5.90	7.30	6.70	5.80
	yd <sup>3</sup>	11.8	10.20	10.20	9.60	8.80	7.70	9.60	8.80	7.60
Suitable for material up to a specific weight of	t/m <sup>3</sup>	1.30	1.70	1.60	1.80	2.00	2.40	1.50	1.80	2.20
	lb/yd <sup>3</sup>	2,191	2,865	2,697	3,034	3,371	4,045	2,528	3,034	3,708
Weight	kg	12,700	11,500	12,200	11,600	11,200	10,600	13,400	12,600	11,800
	lb	27,999	25,353	26,896	25,574	24,692	23,369	29,542	27,778	26,015

GP: general purpose bucket with Liebherr Z90 teeth

HD: heavy-duty bucket with Liebherr Z100 teeth

XHD: heavy-duty rock bucket with Liebherr Z100 teeth

According to ISO 9248, measurements of general machinery dimensions, performances and capacities may vary within tolerances laid out by this standard.

# Optional equipment

## Undercarriage

Narrow track pad width (500 mm)  
Large track pad width (750 mm)  
Rock protection for idler wheel  
Protection for undercarriage centre frame  
Full length chain guide

## Uppercarriage

Grid protection for front headlights  
Wiggins couplings for ground level access service  
Wiggins fast fueling system with Multiflo Hydra-Flo®  
Wiggins fast fueling with 'wiggins' couplings  
Steel grease lines on swing ring  
Hydraulically operated 45° access stair  
Swing ring scrapers  
External grease refill station (hydraulically powered)  
Right-hand bumper  
External starting device  
Rock protection for swing gear and grease lines  
Heavy-duty engine air filtration system for very harsh conditions

## Attachment

Piston rod guard for bucket cylinder (backhoe configuration only)

## Hydraulic system

Oil cooler inlet screen  
Bleed down manifold  
Additional bypass filtration system  
Reverse fan

## Cab

4-point seat belt  
Cab elevation (1,200 mm / 3'9")  
Cab pressurisation / cab pressurisation with HEPA filter  
FOPS top guard with additional sun protection  
Operator Comfort Kit  
Front protective grid  
Roof glazing  
External louvres  
4G modem + modem satellite

## Safety

Automatic fire suppression system  
Additional emergency stop (ground level)

## General

Maritime transport packaging

## IoMine

Truck Loading Assistant & Performance Monitoring  
Operational Conformance & Application Severity  
Skyview  
Bucket Filling Assitant







Mining excavator



Mining truck



Mining dozer



Mining dragline



Service tools



Customer service

## Quality commitment

- Liebherr-Mining Equipment Colmar SAS, France, is ISO 9001 certified
- Compliance of materials tested in laboratory
- Quality control during all stages of production
- CE certified, MDG 15 & MDG 41 compliant

Subject to technical modifications. All comparisons and claims of performance are made with respect to the prior Liebherr model unless specifically stated.

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