# **Crawler Loader**



**Operating Weight:** 21,100 – 22,700 kg 46,510 - 50,040 lb

Engine Output:

SAE J1349 135 kW / 181 HP

ISO 9249 135 kW / 184 HP

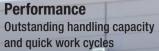
Tier 4f

**EU Stage IV** 



#### LR 636 Litronic

Engine (ISO 9249): 135 KW/184 HP Tier 4f / EU Stage IV Engine (SAE J1349): 135 KW/181 HP Tier 4f / EU Stage IV Operating weight: 21,100 – 22,700 kg 46,510 – 50,040 lb Bucket capacity: 1,90 – 4,60 m<sup>3</sup> 2.49 – 6.02 yd<sup>3</sup> Hydrostatic travel drive with electronic control unit





**Efficiency** Cost efficiency comes standard

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Reliability Robust design in every regard

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**Comfort** Ample space, ergonomics and comfort – All in one Maintainability Simple maintenance and an extensive service network

## Performance



# Outstanding handling capacity and quick work cycles

Power, agility and innovation are the hallmarks of Liebherr crawler loaders. Whether for moving material, pushing or grading, the Generation 6 of Liebherr crawler loaders offers powerful machines for every application.

### High productivity

#### Powerful engines...

Liebherr diesel engines are designed for the harsh conditions of construction sites and provide the right amount of power in every situation. Depending on the job requirements, different operating modes are available for maximum power or fuel-saving operation.

#### ... and an intelligent drive system

The hydrostatic travel drive operates smoothly and automatically adjusts the working speed to the required traction. The engine's power is always transmitted to both tracks without interruption. This permits exact and powerful steering; track slip is minimized and operators can concentrate completely on their work.

#### Quick work cycle and high tipping load

The ability to change direction rapidly combined with quick loading cycles guarantees short cycle times and increased productivity. The high tipping load also ensures an impressive level of stability, e.g. when loading trucks.

### Precise control

#### **Excellent maneuverability**

When handling materials in a confined space, the hydrostatic travel drive offers an additional benefit. All steering motions – including turning on the spot – are fast and effortless.

#### "LUDV" hydraulic control block

Load-Independent Flow Distribution: the enhanced development of Load Sensing into the LUDV-system adds even more sensitivity to the control of the lifting frame. It allows the harmonized execution of concurrent movements, such as simultaneously raising and tipping the bucket. Power adaptation on demand continues to be guaranteed.

#### The "all-purpose machine"

The LR 636 can take on every challenge from complex landscaping jobs to handling materials, pushing and levelling work.



#### Liebherr Hydrostatic drive

- Automatic speed and torque adjustment continuously optimizes transmission of engine power to the tracks as the load changes.
- The high efficiency of the hydrostatic drive is available over the entire speed range. The drive's capabilities are especially beneficial when performing difficult pushing and loading work.

#### Intelligent engine control

- The electronically modelled power and torque curves ensure outstanding pulling power and a dynamic response to increasing loads.
- On-demand power boost assures adequate power reserves, even under the most difficult working conditions.

#### Powerful operating equipment

- Solid Z-kinematics design provides very high break-out forces.
- LUDV-system: optimized hydraulics technology for harmonized simultaneous movements of front equipment.
- High break-out forces, rapid loading cycles and high bucket filling capacity.

# Efficiency



# Cost efficiency comes standard

Liebherr crawler loaders are designed from the ground up with economy in mind. A highly efficient drive concept, intelligent working hydraulics, components with long service lives and a low maintenance requirement reduce operating costs – and increase your profits.

### Unrivalled economy

#### The latest engine and exhaust technology

The newest generation of Liebherr diesel engines complies with Emission Stage IV/Tier 4f. SCR technology: the exhaust gas undergoes selective catalytic reduction trought injection of urea (DEF, AdBlue<sup>®</sup>). A diesel particulate filter is not required. As a result, the engine operates in a temperature range of maximum efficiency. The constant, low engine speed, in combination with common rail injection, ensures optimized cylinder charging and, in turn, even more efficient fuel combustion.

#### **Highly efficient driveline**

The high efficiency of the hydrostatic drive extends over almost the entire speed range. In combination with the intelligent working hydraulics, the engine's power is transmitted with maximum efficiency and fuel consumption is minimized.

#### Lower CO<sub>2</sub> emissions

With exhaust emission values that comply with the most stringent legislation and even greater fuel economy than that of previous models, the Liebherr LR 636 crawler loader sets new standards for environmental friendliness. The "ecological footprint" is smaller than ever.

### Optimized for every job

#### Wide variety of equipment

The variety of front and rear equipment ensures the perfect configuration for every application: standard bucket, 4-in-1 bucket, waste handling bucket, rear ripper, winch and drawbar are all available.

#### Undercarriage with rotary bushings

As the perfect feature when working on very abrasive ground, Liebherr offers a track assembly with free-turning bushings (FTB). The large, free-turning bushings minimize track and sprocket wear; in addition, chain links and rollers have even more wear material. This extends the service life of the entire track assembly considerably in these specific applications.

#### Equipment for special applications

Applications such as handling of waste materials place major demands on the versatility and toughness of the machines. Specially developed equipment kits ensure maximum efficiency and a long service life, even under these harsh operating conditions.



#### Eco-Mode

- The selectable Eco-Mode lowers fuel consumption by reducing the engine speed at the push of a button while still maintaining high power. Ideal for light - and medium-duty applications.
- If the machine idles for an extended period of time, the engine can shut down automatically and avoid wasting fuel needlessly (optional).

#### LR 636 Iandfill kit

- Liebherr offers a fully equipped variant of the LR 636 for use on landfills.
- The individual components have been developed especially for use on landfills and provide optimum protection.

#### Always informed with LiDAT

- The Liebherr LiDAT data transmission and positioning system contributes to effective fleet management.
- Utilizing the latest communication technology, LiDAT provides extensive information on machine operation and in this way ensures economical management, optimized service call scheduling and remote monitoring.

# Reliability



# Robust design in every regard

Today's construction sites require machines with maximum versatility and ruggedness. Crawler loaders from Liebherr meet these requirements in an ideal manner: Thanks to components designed specifically for construction machinery, proven technology and innovative customer-specific solutions, you can expect maximum availability.

### Liebherr driveline

#### Long-lasting engines

Diesel engines from Liebherr have powered construction machinery around the world for decades. Developed for the harshest operating conditions, their rugged construction and low nominal operating speed guarantee maximum reliability and a long service life.

#### Wear-free drive concept

The proven Liebherr hydrostatic travel drive does not need components such as a torque converter, manual gearbox, differential steering or steering couplings. The high-quality hydraulic pumps and motors operate reliably and practically without wear.

#### Long-lasting final drives

The large final drives used in the LR 636 are extremely robust and designed for the heaviest loads. Double mechanical seals with monitoring for leaks ensure reliable operation.

### Rugged design

#### Main frame with proven box-section design

The main and track roller frames are constructed in a proven box-section design which provides maximum torsional resistance and optimal absorption of forces. Components subjected to high loads are manufactured from cast steel.

#### **Optimized equipment**

The lifting frame's tough Z-kinematics and the hard-wearing buckets are made of high-grade steel to ensure machine reliability and durability. The design is low-maintenance as bearing points are accessible from ground level.

The crawler loader's ripper size is ideal and highly effective even in heavy-duty applications, making the LR 636 the ultimate all-rounder on the construction site.

#### An intelligent cooling system

A hydraulically driven fan is activated on demand to regulate the operating temperature independently of the engine's speed. This guarantees short warm-up times and reliable cooling – even in extremely dusty surroundings. A reversible fan is available for machines operating in special applications.



### From the screen to the construction site

- Optimized layout: Components are analyzed with the aid of the latest development software as early as the design phase.
- Extensive test bench runs are the next important step in the development process.
- Long-term field tests under rigorous test conditions ensure maximum machine avail-ability.

#### Key technologies from Liebherr

- Liebherr has decades of experience in developing, designing and manufacturing components and, as a result, offers maximum reliability.
- Important key components such as diesel engines, distribution gearboxes, hydraulic cylinders, final drives and electronics are manufactured in our own facility, optimized for combined operation and represent the highest quality.

#### Optimized running gear

- The tension carrier are mounted on the main frame for efficient self-cleaning of the track roller-frame.
- The track tensioner is fully encapsulated and, as a result, ideally protected against material ingress and possible blocking of the tension springs.
- The temperature of the final drives is constantly monitored, increasing the operating reliability of the machine even more.

# Comfort



# Comfort, space and ergonomics: All in one

The working area in the generation 6 Liebherr crawler loaders is characterized by the exceptional level of comfort offered to the operator. Comfort is provided by the generous space, ergonomic layout and quiet environment. The Liebherr cab provides the perfect conditions for fatigue-free and concentrated work.

### Deluxe cab

#### Ergonomic and purposely designed

The well-thought-out design of the operator's cab provides the best conditions for relaxed and productive work.

All instruments and operating controls are organized logically and ergonomically, and are easily reached. An unobstructed view of the work equipment and perfect all-round visibility allows the operator to concentrate fully on the task at hand.

#### Convenience in daily use

Carefully considered details such as adjustable armrests, a variety of stowage options, a cooled storage compartment and a powerful air conditioning system improve the operator's comfort and boost daily productivity.

#### Quiet and dust-free

Thanks to effective sound insulation and modern, low-noise diesel engines, the LR 636 features exemplary noise levels that lie well below the legal limits. The pressurized cab keeps the operator's environment free of dust from the surroundings.

### Simple and intuitive operation

#### Single-lever control

All driving functions can be controlled smoothly and precisely with only one operating lever – including the "turning on the spot" function. The travel joystick is optionally available in either a proportional or "V-lever" version including foot-pedal steering – this allows control to be matched optimally to the needs of the operator.

#### Safety-Plus comfort seat

The standard air-sprung seat adjusts perfectly to the operator and deactivates the machine automatically on exiting the cab.

#### The hydrostatic drive as service brake

The crawler loader never loses traction even when driving on slopes. Thanks to the self-locking nature of the hydrostatic drive system, the operator can bring the machine to a stop at any time simply by bringing the joystick to the "neutral" position. An automatically activated parking brake provides additional safety.



#### Individual set-up

- The intuitive touch-screen display continuously provides all important operating data.
- At the same time, the display screen also serves as a monitor for the reversing camera.
- At the push of a button, the operator can adjust a wide variety of machine settings – e.g., the response of the travel drive – precisely to his needs.

#### Visibility = safety

- The reversing camera comes standard and increases the operator's field of vision and enhances safety on the construction site as well as helping to improve productivity when using the ripper.
- The camera is permanently active and when reversing, the image can be selected in either small or large format.

#### Panoramic windows

- A plus for safety and productivity: the front screen extends a long way down to give the best possible view of the working equipment.
- The cab's integrated ROPS/FOPS protection also ensures unmatched all-round visibility.

# Maintainability



### Simple maintenance and an extensive service network

Thanks to their minimal maintenance requirements, Liebherr crawler loaders make a reliable contribution to your economic success. A dense service network means short distances, efficient structures and fast service response times for the user.

# Cost-effective maintenance

#### Simple daily checks

All items that the operator checks during daily routine inspections are readily accessible on one side of the engine. The hydraulically tilted cab comes as standard and provides easy access to components as well. Service work can be performed quickly and efficiently.

#### Long maintenance intervals

The maintenance intervals are optimally matched to the individual components. Maintenance-free mountings are often used in exposed areas. Hydraulic oil change intervals of up to 8,000 operating hours reduce costs and minimize downtime.

### Optimal planning

#### **Planned costs**

Liebherr crawler loaders come with extensive standard warranties for the entire machine and the drive train. Customized inspection and service programmes allow optimal planning of all maintenance activities.

#### Remanufacturing

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

# The focus is on the customer

#### Qualified advice and service

Competent advice is a given at Liebherr. Experienced specialist provide adequate guidance for your specific requirements: application-oriented sales support, service agreements, value-priced repair alternatives, original parts management, as well as remote data transmission for machine planning and fleet management.

#### Continuous dialogue with users

We utilize the expert knowledge and practical experience of our customers to consistently optimize our machines and services – real solutions for real situations.



#### Easy access

- All service points are centrally located and easily accessible. Thanks to wide-opening access doors, the daily inspection of the machine is simple and time-saving.
- The standard lighting of the engine area simplifies maintenance and inspection.

#### Tilt-out cooling fan

 In especially dusty applications, the standard swing-out fan contributes significantly to easy cleaning of the radiator system. The HD radiator grille requires no tools to open.

#### Rapid spare parts service

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

# **Technical Data**



Liebherr Diesel engine	D 934 A7
	Emission regulations according to 97/68/EC,
	2004/26/EC Stage IV, EPA/CARB Tier 4f
Rated power (net)	
ISO 9249	135 kW/184 HP
SAE J1349	135 kW/181 HP
Maximum power (net)	
ISO 9249	160 kW/218 HP
SAE J1349	160 kW/214 HP
Rated speed	1,800 rpm
Displacement	7.0 I / 427 in <sup>3</sup>
Bore/stroke	122 mm (4.80 in) / 150 mm (5.91 in)
Design	4 cylinder in-line engine, water-cooled, turbocharged,
	air-to-air intercooler
Injection system	Direct fuel injection,
	Common Rail, electronic control
Lubrication	Pressurized lube system, engine lubrication guaranteed
	for inclinations up to 45°, on all sides
Operating voltage	24 V
Alternator	140 A
Starter	7.8 kW/11 HP
Batteries	2 x 180 Ah/12 V
Air cleaner	Dry-type air cleaner with pre-cleaner and automatic
	dust ejector, main and safety elements with radial seal
Cooling system	Combination cooler with single cooling units for water,
	hydraulic oil and intake charge air
Cooling fan	Hydrostatically driven, thermostatically controlled

### Travel Drive, Control

Transmission system	Closed-loop infinitely variable hydrostatic travel drive powered by two axial piston variable displacement pumps and two axial piston variable displacement motors in swash-plate design, each track is driven indepedently from each other
Travel speed *	Continuously variable
Speed range 1 (reverse):	0 – 4.0 km/h / 2.5 mph (4.5 km/h / 2.8 mph)
Speed range 2 (reverse):	0 – 6.5 km/h / 4.0 mph (8.0 km/h / 4.9 mph)
Speed range 3 (reverse):	0 – 11.0 km/h / 6.8 mph (11.0 km/h / 6.8 mph)
	* Travel speed ranges can be set on the travel joystick
Electronic control	Electronic engine speed sensing control (load-sensing
	feature) automatically adjusts travel speed and drawbar
	pull to match changing load conditions
Steering	Hydrostatic, unlimited manoeuvrability for full power turns and counterrotation
Service brake	Hydrostatic, dynamic braking effect from travel drive system
Parking/	Multi-disc brake, wear-free, automatically applied with
emergency brake	neutral joystick position
Cooling system	Hydraulic oil cooler integrated into combination cooler
Filter system	Micro cartridge filters in replenishing circuit
Final drive	Combination spur gear with planetary gear, double sealed
	(duo cone seals) with electronic seal-integrity indicator
Control	Single joystick for all travel and steering functions, as well as for counterrotation

### P Operator's Cab

Cab	Resiliently mounted cab with positive pressure ventilation
	can be tilted with hand pump 40° to the rear.
	With integrated ROPS Rollover Protective Structure
	(EN ISO 3471) and FOPS Falling Objects Protective
	Structure (EN ISO 3449).
Operator's seat	Air-suspended comfort seat, fully adjustable
Monitoring	Touch screen: display of current machine information,
	automatic monitoring of operating conditions. Individual
	setting of machine parameters

 Hydraulic system
 LUDV-system

 Pump type
 Variable displacement pump (swash-plate design)

 Pump flow max.
 209 l/min. / 55.2 gpm

 Pressure limitation
 260 bar / 3,770 psi

 Filter system
 Return filter with magnetic rod in hydraulic tank

 Control
 Single joystick implement control for all bucket functions, with magnetic detent functions for float position as well as for automatic bucket positioner and for automatic lift kickout

**Hydraulics** 

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# Undercarriage

Mounting	Pivot shafts and equalizer bar (cushion mounted)
Track chains	Sealed and lubricated, track chain tension via grease
	tensioner and steel spring
Links, each side	38
Sprocket segments,	5
each side	
Track rollers, each side	6
Carrier rollers, each side	1
Track shoes, standard	560 mm / 22", double grouser
Track shoes, optional	508 mm / 20", double grouser
	610 mm / 24", double grouser
	Wider track shoes available on demand
Grouser hight	42.5 mm / 1.67 in



# $\mathfrak{D}$ Sound Emissions

Operator sound exposure ISO 6396	$L_{pA} = 78 \text{ dB}(A)$ (in the cab)
Exterior sound pressure	$L_{WA} = 110 \text{ dB(A)}$
2000/14/EC	(to the environment)

# Refill Capacities

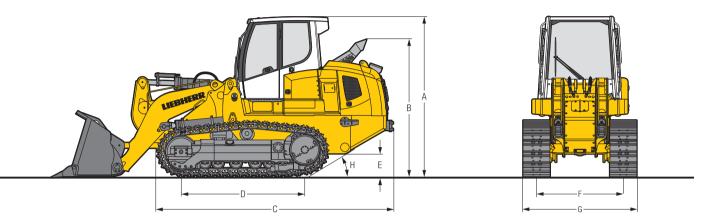
Fuel tank	400 I / 105.6 gal
Diesel Exhaust Fluid (DEF) tank	49 I / 12.9 gal
Cooling system	42 I / 11.1 gal
Engine oil, with filter	29 I / 7.7 gal
Splitter box	5.3 I / 1.4 gal
Hydraulic tank	86 I / 22.7 gal
Pivot shaft, each side	5 I / 1.3 gal
Final drive, each side	20 I / 5.3 gal
Duo cone seal, each side	9.5 I / 2.5 gal



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Lifting	6.4 s	
Dumping	2.2 s	
Tilting back	3.2 s	
Lowering <sup>1)</sup>	2.6 s	

<sup>1)</sup> Float position and empty bucket

# **Dimensions**

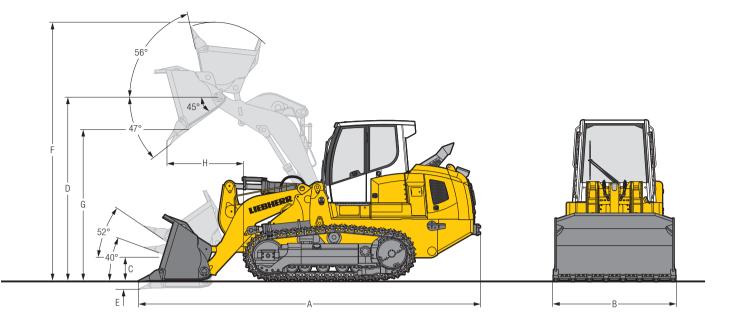


### Dimensions

mm	3,330
ft in	10'11"
mm	2,866
ft in	9'5"
mm	4,940
ft in	16'2"
mm	2,580
ft in	8'6"
mm	483
ft in	1'7"
mm	1,8001)
ft in	5'11"
mm	2,308
ft in	7'7"
mm	2,360
ft in	7'9"
mm	2,550
ft in	8'4"
	30°
	ft in mm ft in mm ft in mm ft in ft in mm ft in mm ft in mm ft in mm ft in mm

<sup>1)</sup> Track guard with 610 mm/24" track shoes: 1,940 mm/6'4"

# **Front Attachments**

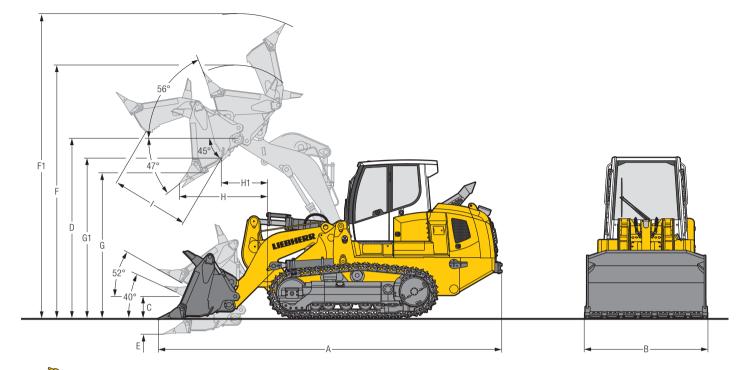


### Standard bucket

Version with		Bolt-on adapters, segments and shanks	Flush mounted weld-on adapters and shanks	Bolt-on cutting edge
Nominal rated bucket capacity, ISO 7546	m <sup>3</sup>	2.4	2.3	2.4
	yd <sup>3</sup>	3.14	3.01	3.14
Nominal rated bucket capacity, SAE J742	m <sup>3</sup>	2.5	2.3	2.5
	yd <sup>3</sup>	3.27	3.01	3.27
Breakout force, ISO 14397	kN	164	180	164
	lb	36,856	40,451	36,856
Static tipping load, ISO 14397	kg	14,571	14,393	14,731
	lb	32,124	31,731	32,476
Overall length bucket at ground	mm	6,984	6,868	6,984
with rear bumper	ft in	22'1"	22'6"	22'11"
Bucket width, overall <sup>2)</sup>	mm	2,529	2,500	2,490
	ft in	8'4"	8'2"	8'2"
Height of hinge pin, transport position	mm	576	576	576
	ft in	1'11"	1'11"	1'11"
Height of hinge pin, max.	mm	4,051	4,051	4,051
	ft in	13'4"	13'4"	13'4"
Digging depth, max.	mm	151	121	151
	in	5.94"	4.76"	5.94"
Overall height with bucket at full lift	mm	5,477	5,477	5,477
	ft in	18'	18'	18'
Dump clearance at full lift and	mm	3,059	3,146	3,059
45° discharge, ISO 7131	ft in	10'0"	10'4"	10'0"
Reach at full lift and	mm	1,244	1,195	1,244
45° discharge, ISO 7131	ft in	4'1"	3'11"	4'1"
Bucket weight	kg	1,705	1,539	1,585
	lb	3,759	3,393	3,494
Operating weight <sup>1)</sup>	kg	21,587	21,074	21,467
	lb	47,591	46,460	47,327
Ground pressure <sup>1)</sup>	kg/cm <sup>2</sup>	0.75	0.73	0.74
	psi	10.67	10.38	10.52

<sup>1)</sup> Including coolant and lubricants, full fuel tank, ROPS/FOPS cab, operator, bucket, rear bumper and track shoes with 560 mm/22".
 <sup>2)</sup> With 560 mm/22" track shoes, with other track shoes on demand at your dealer.

# **Front Attachments**



# Multi-purpose bucket

Version with		Bolt-on adapters, weld-on adapters and shanks	Flush mounted weld-on adapters and shanks	Bolt-on cutting edge
Nominal rated bucket capacity, ISO 7546	m <sup>3</sup> /yd <sup>3</sup>	2.0/2.62	1.9/2.49	2.0/2.62
Nominal rated bucket capacity, SAE J742	2 m³/yd³	2.1/2.75	1.9/2.49	2.1/2.75
Breakout force, ISO 14397	kN/lb	155/34,833	169/37,979	155/34,833
Static tipping load, ISO 14397	kg / lb	12,646/27,880	13,038/28,744	12,801/28,221
Overall length bucket at ground	mm	7,094	6,978	7,094
with rear bumper	ft in	23'3"	22'11"	23'3"
Bucket width, overall <sup>2)</sup>	mm	2,529	2,500	2,490
	ft in	8'4"	8'2"	8'2"
Height of hinge pin, transport position	mm	576	576	576
	ft in	1'11"	1'11"	1'11"
Height of hinge pin, max.	mm	4,051	4,051	4,051
	ft in	13'3"	13'3"	13'3"
Digging depth, max.	mm	220	190	220
	in	8.66"	7.48"	8.66"
Overall height with bucket at full lift	mm	5,458	5,458	5,458
(bucket closed)	ft in	17'11"	17'11"	17'11"
1 Overall height with bucket at full lift	mm	6,160	6,070	6,160
(bucket open)	ft in	20'3"	19'11"	20'3"
Dump clearance at full lift and 45°	mm	2,966	3,053	2,966
discharge (bucket), ISO 7131	ft in	9'9"	10'0"	9'9"
1 Dump clearance at full lift and 45°	mm	3,576	3,576	3,576
discharge (blade), ISO 7131	ft in	12'9"	11'9"	11'9"
Reach at full lift and 45° discharge	mm	1,238	1,189	1,238
(bucket), ISO 7131	ft in	4'1"	3'11"	4'1"
1 Reach at full lift and 45° discharge	mm	691	691	691
(blade), ISO 7131	ft in	2'3"	2'3"	2'3"
Width of opening	mm/ft in	1,290/4'3"	1,290/4'3"	1,290/4'3"
Bucket weight	kg / lb	2,281/5,029	2,115/4,751	2,161/4,764
Operating weight <sup>1)</sup>	kg/lb	21,879/48,235	21,711/47,865	21,759/47,970
Ground pressure <sup>1)</sup> k	g/cm²/psi	0.76/10.81	0.75/10.67	0.75/10.67

<sup>1)</sup> Including coolant and lubricants, full fuel tank, ROPS/FOPS cab, operator, bucket, rear bumper and track shoes with 560 mm/22".
 <sup>2)</sup> With 560 mm/22" track shoes, with other track shoes on demand at your dealer.

## **Rear Attachments**





# 3-shank ripper radial

In combination with		Standard bucket up to 3.01 yd <sup>3</sup>	Standard bucket greater than 3.01 yd <sup>3</sup>	Multi-purpose bucket (all sizes)
A Beam width	mm	2,100	2,100	2,100
	ft in	6'11"	6'11"	6'11"
B Ripping width	mm	1,860	1,860	1,860
	ft in	6'1	6'1	6'1
C Distance between shanks	mm	900	900	900
	ft in	2'11	2'11	2'11
D Penetration max.	mm	365	365	365
	ft in	1'2"	1'2"	1'2"
E Ground clearance, max. below shanks	mm	883	883	883
	ft in	2'11"	2'11"	2'11"
F Additional length, ripper raised	mm	604	604	604
	ft in	2'	2'	2'
G Additional length, transport position	mm	715	715	715
	ft in	2'4"	2'4"	2'4"
H Approach angle, ripper raised		21°	21°	21°
Ripper weight <sup>1)</sup>	kg	1,106	1,106	1,106
	lb	2,438	2,438	2,438
Change in operating weight	kg	939	592	939
	lb	2,070	1,305	2,070
Change in ground pressure	kg /cm <sup>2</sup>	0.03	0.02	0.03
	psi	0.43	0.28	0.43
Change in static tipping load	kg	1,897	1,285	1,762
	lb	4,182	2,833	3,885

<sup>1)</sup> If the ripper is mounted, no rear bumper will be fitted to the machine (rear bumper weight 260 kg/573 lb).

# Equipment

### Base Machine

Central lubrication system	+
Cover plate turbocharger	+
Diesel particle filter	+
Dry type air filter dual step, with pre-filter and automatic dust ejector	•
Engine compartment doors, lockable	•
Fan, hinged	•
Fan, hydraulically driven	•
Fan, reversible	+
Fuel water separator	•
Fuel water separator, electric heater	+
Landfill arrangement	+
LiDAT – Data transmission system	•
Liebherr diesel engine emission stage IV / Tier 4f	•
Liebherr hydraulic oil, biologically degradable	+
Lugs for crane lifting, front	•
Lugs for crane lifting, rear	•
Radiator guard, hinged	•
Radiator, wide-meshed	•
Special paint scheme	+
Tank guard	+
Toll equipment basic scope	•
Tool equipment extended scope	+
Towing hitch, front	•
Towing hitch, rear	•
Tunnel arrangement	+

## Hydraulics

Automatic lift kickout	•
Automatic tilt kickout	•
Bucket float function	•
Bucket quick drop function	•
Hydraulic kit for multi-purpose bucket	+
LUDV-system	•
Oil filter in hydraulic tank	•

### 🔁 Travel drive

Emergency stop	٠
Final drives planetary gear	٠
Inching brake pedal	+
Load limit control, electronic	٠
Machine-release switch	٠
Parking brake, automatic	٠
Seat contact switch	٠
Travel control, 3 speed ranges	٠
Travel drive joystick, proportional	٠
Travel drive, hydrostatic	٠
V-pattern travel control with steering pedals	+

## P Operator's Cab

Air conditioner	•
Armrests 2D, adjustable	٠
Cab tilting system	•
Coat hook	٠
Condenser unit pivoted	+
Dome light	٠
Fire extinguisher	+
Mechanical suspension seat	+
Operator's seat Comfort, air-suspended	•
Operator's seat Premium, air-suspended	+
Polycarbonate front screen	+
Polycarbonate rear screen	+
Pressurised cab	•
Protective grid, rear window	+
Radio	+
Radio preparation kit	٠
Rear-view camera	•
Rear-view mirror, inside	+
Rear-view mirror, outside	+
ROPS/FOPS integrated	•
Safety glass, tinted	•
Sliding window left	٠
Sliding window right	•
Socket 12 V	٠
Socket 24 V	•
Speed switch, work/travel modes	٠
Stowage compartment, air-conditioned	•
Sun visor, front	•
Warm water heating	•
Windshield washer system	٠
Windshield wipers front and rear, with intermittent function	•

# Equipment

## Æ Electrical System

-	
2 additional working lights on the cab, rear	+
2 cold start batteries	•
2 working lights on the cab, rear	•
4 working lights on the cab, front	•
All working lights in LED version	+
Back-up alarm	+
Back-up alarm, switchable	+
Battery main switch	•
Beacon	+
Horn	•
Immobiliser, electronic	+
On-board voltage 24 V	•

### Undercarriage

Idler-deflector	•
Master link, two-piece	•
Rear striker bar	+
Sprocket segments with recesses	+
Sprocket segments, bolted	•
Sprocket-deflector	•
Track frame, closed	•
Track guard, full length	+
Track guide, centre part	+
Track guides, front and rear	•
Track pads with mud holes	+
Track shoes, moderate service	•
Tracks, oil-lubricated	•
Undercarriage LGP	+
Undercarriage with rotary bushings FTB	+

### Attachments Rear

Counterweight, rear	+
Drawbar rear, rigid	•
Ripper, 3 shanks	+
Winch	+

### Attachments Front

Bolt-on cutting edges, reversible	+
Bolt-on cutting segments, reversible	+
Clamping cylinder guards, multi-purpose bucket	+
Lifting cylinder guards	+
Multi-purpose bucket	+
Standard bucket	+
Standard bucket HD	+
Teeth adapters bolt-on	+
Teeth adapters weld-on	+
Tilt cylinder guards	+
Trash rack for standard bucket	+
Trash rack multi-purpose bucket	+
Waste handling bucket	+
Z-bar linkage	٠

• = Standard, + = Option

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.

#### 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.com