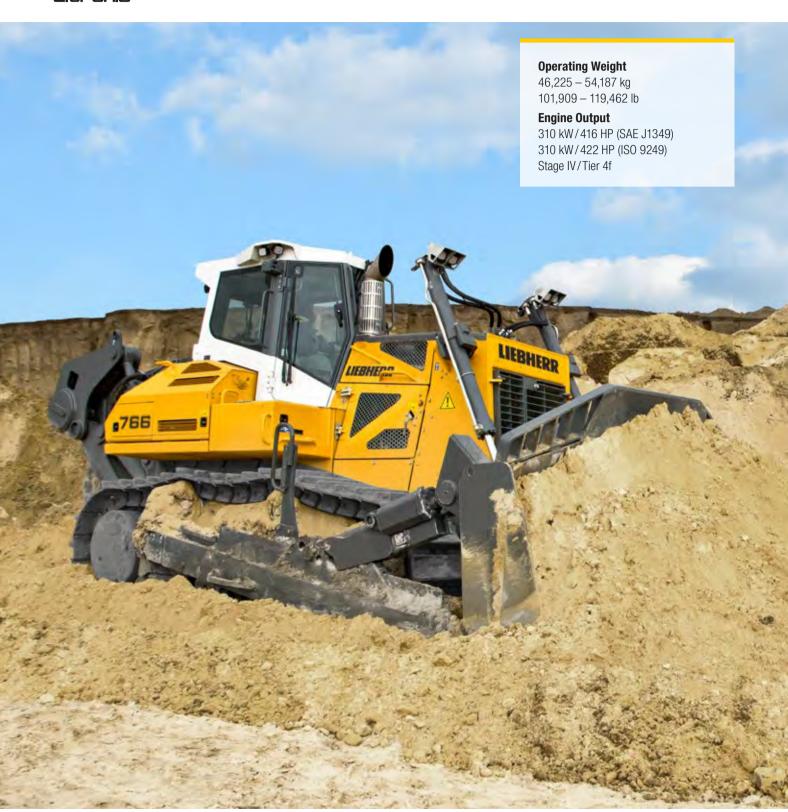
## **Crawler Tractor**

# **PR 766**

Litronic®



# LIEBHERR



Superb performance in bulldozing and ripping operations







310 kW/422 HP

#### **Operating Weight**

46,225 – 54,187 kg 101,909 – 119,462 lb

### **Blade Capacity**

13.6 - 17.0 m<sup>3</sup> 17.80 - 22.20 yd<sup>3</sup>

## **Hydrostatic Travel Drive**

with electronic control unit













# Performance



## **Superb Performance in Bulldozing** and Ripping Operations

Power and innovative technology are essentially the hallmarks of Liebherr crawler tractors. Either in heavy-duty ripping work, transporting materials or grading, the PR 766 is an extremely powerful machine for any application.

## High Productivity

#### **Powerful Engine**

The Liebherr diesel engine is designed for tough mining and extraction operations and provides sufficient power to contend with any situation. Depending on the job requirements different operating modes are available for maximum power or fuel-saving operation.

#### **An Intelligent Drive System**

The hydrostatic travel drive operates smoothly and automatically adjusts the working speed to the load conditions. The engine's power is always transmitted to both tracks without interruption. This allows exact and powerful steering. Track slip is minimised and operators can concentrate completely on their work.

#### **Excellent Maneuverability**

When working in tight areas, the hydrostatic travel drive offers an additional benefit. All steering motions – including turning on the spot – are fast and precise. When involved in ripping work, the rear-mounted ripper can be positioned precisely to enable it to apply great power when ripping out layers of hard rock.

#### **Best Traction and Lowest Vibration Levels**

Pendulum-mounted sprocket wheels and idle rollers provide good traction to the track and also reduce vibration levels on the crawler tractor.

#### **Outstanding Grading Attributes**

Crawler tractors in all size classes must provide maximum versatility. The PR 766 delivers an exceptionally smooth ride, precise blade control and a perfect view of the blade. It therefore is able to deliver optimum productivity during heavy-duty bulldozer operations, when preparing platforms for mining excavators and when building and maintaining vehicular access routes, i.e. haul roads.

#### **Equipment for Special Applications**

Applications such as coal handling, woodchip handling or waste sites place enormous demands on bulldozers. Equipment kits especially developed for the PR 766 ensure the highest efficiency and longevity even under these difficult operating conditions.



#### Intelligent Engine Control

- The electronically controlled power and torque characteristics provide excellent traction and rapid response
- A requirements-driven increase in power ensures sufficient power reserves, even in the most arduous of workplace situations
- When reversing on steep terrain, enough engine power is provided to enable the vehicle to achieve high driving speeds and short cycle times



#### Liebherr-Hydrostatic Drive

- Infinitely variable choice of vehicle speeds
- Continuous power flow no interruption in traction as a result of gear changing!
- Continuous power transmission to both tracks
- Superlative manoeuvrability, including pivot-turn capability
- Optimum traction levels with automatic overload protection
- Zero-wear drive system with automatically activated parking brake



## Application-Optimized Shape of Dozer Blade

Intensive development work, accompanied by measurements in the field, have matched the dozer blade surface areas and shapes perfectly to suit the basic machine. They provide the best material rolling properties on self-bonding materials as well as high fill levels for dozer blades when pushing heavy masses of rock





## **Cost Efficiency Comes as Standard**

Liebherr crawler tractors are designed from the ground up with economy in mind. Highly efficient drive concept, long service life of components and low maintenance requirements reduce operating costs and increase profits.

## **Unrivalled Economy**

#### State of the Art Engine Technology

The latest generation of Liebherr diesel engines is characterised by an extremely low level of fuel consumption. The constant, low engine speed in combination with Common-Rail fuel injection leads to optimised cylinder management and very efficient combustion of fuel. This enables the engine to work with a very high level of efficiency at all times.

#### **Highly Efficient Driveline**

The high efficiency rating of the hydrostatic drive across the entire vehicle speed range and the efficient Liebherr diesel engine minimise fuel consumption and ensure that  $CO_2$  emission levels are low.

#### **Efficient Cooling System**

Hydrostatic fans and coolers with widely spaced louvre slats deliver optimum cooling power in very dusty work environments. Requirements-based speed adaptation and flow-optimised fan blades result in fuel savings and minimal noise emissions.

#### **Load Sensing Work Hydraulics**

The system always provides the amount of power actually needed by the operating hydraulics. If the equipment is not being actuated, fuel is being saved.



#### Eco-Mode

- The standard ECO function enables the driver to choose between high performance and maximum economy.
   Consequently during light and medium duty operations the ECO function further improves operational efficiency and saves fuel in the process
- Additional functions such as the automatic reduction of engine speed or automatic engine shut-down further contribute towards fuel efficiency

## Fast Component Replacement

As part of the development work on the PR 766, Liebherr always ensures that all important components can be replaced quickly and easily, and sent in to the Liebherr REMAN programme for reconditioning. For example, the Liebherr travelling drives and their oil motors can be dismantled easily from one side when required. In the same way, the folding front section on the chassis provides optimum access to the Power-Pack (engine & transmission). This makes it possible to remove and reinstall the radiator and the Liebherr diesel engine quickly.

#### **Tilting Cab**

The standard cab can be tilted, if required allowing quick and easy access to all components of the travel drive and the operating hydraulics. This saves time and increases machine availability.

## Long service intervals

With Liebherr hydraulic fluids, service intervals of up to 6,000 hours can be achieved. If Liebherr Plus oils are used, this extends service intervals to as much as 8,000 hours of operation. Maintenance times are reduced substantially which improves machine availability, i.e. it reduces downtime. Liebherr oils reduce fuel consumption by cutting down on the resistance levels of moving parts. These oils also provide high-caliber corrosion protection and optimum compatibility with hydraulic hoses, seals and gaskets.



#### Intelligent Cooling System

- Electronically controlled suction fans regulate the operating temperatures of hydraulic fluid and engine. The individual components are maintained within an ideal temperature range at all times. This protects the components and extends their service life. The cooling air is drawn in from clean areas which reduces contamination levels
- Optionally, Liebherr can provide reversible fans for automatic self-cleaning of the radiator/ coolers in very dusty working environments



## Always Informed with LiDAT

- Evaluations of machine utilisation and fuel consumption deliver cost-effective machine management
- Effective fleet management by data transmission and positioning system
- Monitoring of important machine parameters
- Standard availability of LiDAT includes
  1 year of free-of-charge usage





# **Components for Ultimate Performance and Service Life**

The extraction industry imposes very high demands on the performance and reliability of the machines and vehicles it uses. The PR 766 meets these demands perfectly. Its components were specifically developed for arduous working environments. The same is true of its carefully crafted technology and innovative and detailed solutions. All of which combine to deliver ultimate levels of operational availability.

## Liebherr Driveline

#### **Robust Engines**

Diesel engines from Liebherr have powered construction machinery around the world for decades. Developed for the harshest of operating conditions, the robust build and state-of-the-art technology of these engines ensure optimum operational safety and long service life.

#### **Wear-free Drive Concept**

The tried and tested hydrostatic Liebherr travel drive does not require any components such as a torque converter, multiratio transmission, service brakes or steering couplings. The high-quality hydraulic pumps and motors operate reliably and practically without wear.

## **Generously Dimensioned Final Drives** with Automatic Temperature Monitoring

The durable final drives are extremely robust and have been designed to cope with exceptionally high loads. The double transmission seal with continuous temperature monitoring ensures reliable operation.

# Solutions for Continuous Operation

#### Main Frame with a Proven Box-Section Design

The main frame is constructed using a proven box-section design, which provides maximum torsional stiffness and optimal absorption of forces. Cast steel is used for components subjects to high stress.

#### **Optimised Equipment**

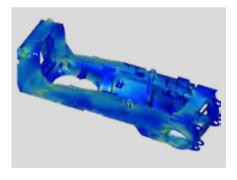
Liebherr blades are manufactured using high-quality steels and are based on a modular design principle. The robust blade mountings provide optimum rigidity and enable the blade to be guided precisely. All rear-mounted ripper variants are designed for heavy-duty mining and extraction operations and deliver very high penetration forces. In addition, exposed areas such as bolt connections are protected by appropriate wearing materials.

#### **Robust Radiator Version**

For work in very dusty environments, reliable and corrosion-resistant radiators/coolers are used. The louvre slats on these are spaced widely at 8 mm intervals. These offer optimum protection against dirt and environmental influences.

#### **Options for Operation at Low-Temperatures**

For operation at low temperatures, Liebherr can provide a number of ex-factory adaptations and these have a proven track record extending back over many years of practical operations.



#### Designed for the Harshest of Applications

- Optimised layout: at the development stage components are designed with state-of-the-art software tools
- Extensive test bench runs are the next important step in the development process
- Long-term field tests under rigorous conditions ensure maximum machine availability



## 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, splitter box, hydraulicpumps and -engines, hydraulic cylinders, final drives and electronics are manufactured in our own facilities, optimised for combined operation and representing the highest quality



#### The Right Configuration for Tough and Abrasive Operations

- The combined overrun plate with side-mounted stone protection grille offers optimum protection for the radiator/cooler and also gives the driver excellent visibility of the material collecting in the dozer blade
- For very abrasive operations, there is the option of fitting ultra-wear-resistant steel panels to the blade, to the dozer frame and beside the hydraulic cylinders





## **Maximum Driver Comfort** for More Productivity

The completely redesigned working environment offers exceptional operator comfort. With its spacious ergonomic layout and low sound levels, the Liebherr comfort cab provides the perfect conditions for fatigue-free, focused work to optimise productivity.

## Deluxe Cab

#### **Ergonomic and Purposely Designed**

The well-thought-out design of the operator's cab provides the essential conditions for relaxed and productive work. All instruments and operating controls are carefully organised for easy reach. An unobstructed view of the work equipment and perfect all-round visibility allows the operator to concentrate fully on the task in hand.

#### Convenience in Daily Use

Well thought-out solutions, such as a cooled storage compartment, additional footrests, adjustable joysticks and a powerful air conditioning system enhance operator comfort and productivity during daily operation.

#### **Quiet and Dust-Free**

Thanks to effective sound insulation and modern, low noise diesel engines, the PR 766 features extremely low noise levels that lie well below the legal limits. The pressurised cab keeps the operator's environment free of dust from the surroundinas.

## Simple and Intuitive Operation

#### **Joystick Control**

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

#### **Rear-Mounted Ripper Control Element** in the Form of a Handle

The control element can be adjusted in 2 axes and as such can be adapted ergonomically to suit each driver during ripping applications, as well as providing a safe handle.

#### **Safety-Plus Comfort Seat**

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

#### The Hydrostatic Drive as a Service Brake

The crawler tractor operates with continuous power on both tracks 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 returning the joystick to the "neutral" position – or by depressing the inching pedal. An automatically activated parking brake provides additional safety.





#### **Touchscreen Display**

- The standard touchscreen display and all machine data relevant to operation can be read and adjusted quickly
- Drivers are able to adapt many machine settings – for example the response characteristics of the travelling drive to suit their precise needs
- Visual and acoustic warning units provide a high level of operational safety

#### Intuitive Control

- The new, ergonomically shaped joysticks can be adjusted in a longitudinal direction
- 3 speeds can be programmed individually
- Depending on which mode is selected, the standard inch pedal can even be used to reduce the engine speed – perfect customisation for the operator

#### **New Ripper Joystick**

- Newly designed joystick allows an individual and versatile adaption to the operator
- In addition, the joystick serves as a handle to avoid a malfunction due to uneven ground conditions
- The height adjustment as well as the cutting angle adjustment of the ripper are set via push buttons on the joystick





## **Maximum Safety for Driver** and Maintenance Team

The Liebherr PR 766 offers a carefully thought out safety concept for drivers and for service personnel. Maintenance and service points are readily accessible and this, in conjunction with wide-opening covers, enables maintenance and service work to be carried out rapidly and safely. Moreover, the cab on the PR 766 offers a wide range of safety features.

## Highest of Safety Standards

#### **Best All-Round Visibility with** Integrated ROPS/FOPS Protection

A new feature in this machine class is the ROPS/FOPS protection integrated directly as standard equipment in the cab structure of Liebherr bulldozers. This provides perfect all-round visibility, substantially improving productivity and, even more importantly, improving workplace safety.

#### **Rear-View Camera**

The image from the standard reversing camera is integrated directly in the front display and this switches into full-screen mode automatically whenever the vehicle is reversing. This offers an optimum level of safety and comfort.

#### **Work Platform**

To make inspection and service work as convenient as possible for maintenance personnel, an optional work platform with handrail can be supplied. Access to components like the air-con unit, oil cooler and electronics is therefore a very safe process.

#### **Lighting for the Access Steps**

From ground level, the driver can activate the access steps lighting. This lights up the entire area for the left-hand access steps.

#### **Automatic Parking Brake**

When the machine is stationary, the standard parking brake is activated automatically. This prevents the machine from rolling away. The zero-wear parking brake releases automatically whenever the vehicle sets off, making operation even more convenient.

#### Safe Access to the Workplace and the Service Points

Readily accessible and ergonomic handles with non-slip access steps make the driver's cab easy and safe to enter and leave.



#### **Engine Compartment Lighting**

- The engine compartment light is available in a bright LED version
- Safe and efficient carrying out of the daily checks by the driver, even in case of poor visibility



#### **Ground-Level Operating Panel**

- The operating panel is easy to reach from ground-level, and this makes it possible to activate the cab access step lighting
- It is also a quick and safe operation to speed-fill the fuel tank on this vehicle
- The emergency-stop button integrated directly in the control panel can be operated at any time to shut down the entire unit



#### **Cab Access Light**

- An LED spotlight mounted on the left lifting cylinder. Switches located at the operating panel on the ripper and in the cabin
- It enables a safe and reliable access of the machine even in dark conditions



## **Customer Service**



## Simple Maintenance and an **Extensive Service Network**

Thanks to their minimal maintenance requirements, Liebherr crawler tractors make a reliable contribution to your economic success. The extensive network of highly professional Liebherr Service Centres mean that operators can obtain assistance rapidly and relatively locally.

## 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 provides easy access to components as well. Service work can be performed quickly and efficiently.

#### **Long Maintenance Intervals**

The maintenance intervals are perfectly matched to suit individual components. In exposed areas zero-maintenance bearings are used. Particularly long maintenance intervals for engine oil and hydraulic fluid reduce costs and increase availability by reducing downtime periods.

## Optimal **Planning**

#### **Planned Costs**

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

#### Remanufacturing

The Liebherr-Reman Programme provides a cost-effective way of upgrading components to meet the stringent quality standards of the originally manufactured equipment. Various reconditioning levels are available including replacement components and general overhaul or repair. This assures the customer the most economical and highest quality component for the service life of the machine.

## The Focus is on the Customer

#### Professional Advice and Service

Professional advice is a given at Liebherr. Experienced specialists provide guidance for your specific requirements including 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 utilise the expert knowledge and practical experience of our customers to continually optimise 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, routine inspection of the machine is easily performed
- Lube points for the central pendulum bridge mounting are arranged conveniently inside the engine compartment
- The standard lighting inside the engine compartment is a great help for maintenance and servicing work



#### Tilt-Out **Cooling Fan**

- In very dusty working environments. the pivot-mounted radiator grille facilitates the cleaning of the cooler and the radiator system
- The hydraulically driven fan can swing out after loosening a just few screws



#### **Expedited Spare Parts Service**

- 24-hour delivery spare parts service is available for our dealers around the clock
- The electronic spare parts catalogue allows 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**

## Engine

Lighter Disselensing	D 9508 A7-04
Liebherr Diesel engine	
	Emission regulations according to 97/68/EC,
D-4-4(4)	2004/26/EC Stage IV, EPA/CARB Tier 4f
Rated power (net)	0.10.1.11./.100.1.1D
ISO 9249	310 kW/422 HP
SAE J1349	310 kW/416 HP
Maximum power (net)	
ISO 9249	360 kW/490 HP
SAE J1349	360 kW/483 HP
Rated speed	1,600 rpm
Displacement	16.2 I/989 in <sup>3</sup>
Design	8 cylinder V-engine, water-cooled,
	turbocharged, air-to-air intercooler
Injection system	Direct fuel injection,
	Common Rail, electronic control
Lubrication	Pressurised lube system, engine lubrication
	guaranteed for inclinations up to 35° (lateral
	slope) and up to 45° (longitudinal slope)
Operating voltage	24 V
Alternator	140 A
Starter	7.8 kW/11 HP
Batteries	4 x 95 Ah/12 V
Air cleaner	Dry-type air cleaner with pre-cleaner, main an
	safety elements, control light in the operator's
	cab
Cooling system	Combi radiator, comprising radiators for water
	and charge air. Hydrostatic fan drive

# Hydraulics

Hydraulic system	Load sensing (demand-controlled)		
Pump type	Swash plate piston pump		
Pump flow max.	352 I/min./92.9 gpm/77.4 lmp.gpm		
Pressure limitation	280 bar/4,060 psi		
Control valve	2 segments, expandable to 4		
Filter system	Return filter with magnetic rod in the hydraulic tank		
Control	Single joystick for all blade functions		

## Travel Drive, Control

Transmission system	Infinitely variable hydrostatic travel drive, inde- pendent drive for each track
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 - 6.0 km/h / 3.7 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 (memory function)
Electronic control	The electronic system automatically adjusts trave speed and drawbar pull to match changing load
	conditions
Steering	Hydrostatic
Service brake	Hydrostatic (self-locking), wear-free
Parking brake	Multi-disk brake, wear-free, automatically applied with neutral joystick position
Cooling system	Hydraulic oil cooler integrated in combi radiator, hydrostatic fan drive
Filter system	Micro cartridge filters in replenishing circuit
Final drive	Combination spur gear with planetary gear,
	double-sealed (duo cone seals), temperature controlled
Control	Proportional single joystick for all travel and steering functions. Optional: detented Joystick

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			

# Undercarriage

	•			
Design		Undercarriage with bogie suspension		
Mounting		Via separate pivot shafts and equalizer bar		
Track chains		Lubricated, single-grouser shoes, tensioning via		
		a steel spring and grease tensioner		
Links, each side	е	44		
Track rollers, ea	ach side	7		
Carrier rollers,	each side	2		
Sprocket segm	ents,			
each side		3		
Track shoes, st	andard	610 mm/24"		
Track shoes, op	otional	660 mm/26"		
		711 mm/28"		
		760 mm/30"		

## ${\mathfrak P}$ Sound Levels

Operator sound exposure ISO 6396	
L <sub>pA</sub> (in the cab)	79 dB(A)
Exterior sound pressure 2000/14/EC	
L <sub>WA</sub> (to the environment)	114 dB(A)

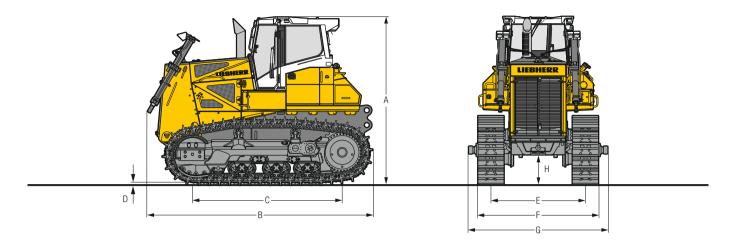
## Refill Capacities

Fuel tank	840 I/221.8 gal/184.8 lmp.gal
Diesel Exhaust Fluid	
(DEF) tank	96 I/25.3 gal/21.1 lmp.gal
Cooling system	90 I/23.8 gal/19.8 lmp.gal
Engine oil, with filter	65 I/17.2 gal/14.3 lmp.gal
Hydraulic tank	275 I/72.6 gal/60.5 lmp.gal
Final drive, each side	25,5 I / 6.7 gal / 5.6 Imp.gal

## Drawbar Pull

Max.	694 kN
at 1.5 km/h / 0.9 mph	612 kN
at 3.0 km/h / 1.9 mph	318 kN
at 6.0 km/h / 3.7 mph	157 kN
at 9.0 km/h / 5.6 mph	106 kN

## Dimensions

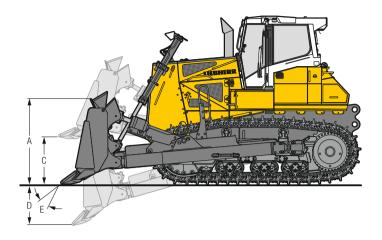


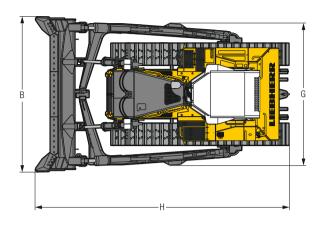
## Dimensions

Undercarriage		bogie suspension	double bogie suspension
A Height over cab	mm	3,970	3,970
	ft in	13'0"	13'0"
B Overall length without attachments	mm	5,055	5,055
	ft in	16'7"	16'7"
C Length of track on ground	mm	3,550	3,550
	ft in	11'8"	11'8"
D Height of grousers	mm	84	84
	in	3.31"	3.31"
H Ground clearance	mm	680	680
	ft in	2'3"	2'3"
E Track gauge	mm	2,240	2,240
	ft in	7'4"	7'4"
G Width over trunnions	mm	3,263	3,263
	ft in	10'8"	10'8"
F Track shoes 610 mm/24"			
Width over tracks	mm/ft in	2,850/9'4"	2,850/7'4"
Tractor shipping weight 1)	kg/lb	37,500/82,673	38,400/84,657
F Track shoes 660 mm/26"			
Width over tracks	mm/ft in	2,900/9'6"	2,900/9'6"
Tractor shipping weight 1)	kg/lb	37,763/83,253	38,663/85,237
F Track shoes 711 mm/28"			
Width over tracks	mm/ft in	2,951/9'8"	2,951/9'8"
Tractor shipping weight 1)	kg/lb	38,130/84,062	39,030/86,046
F Track shoes 760 mm/30"			
Width over tracks	mm/ft in	3,000/9'10"	3,000/9'10"
Tractor shipping weight 1)	kg/lb	38,402/84,662	39,302/86,646

<sup>1)</sup> Including coolant and lubricants, 20 % fuel, ROPS/FOPS cab.

## Front Attachments



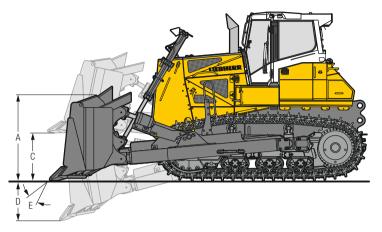


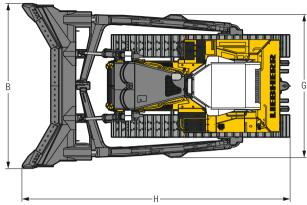


Undercarriage		bogie suspension	double bogie suspension
Blade capacity, ISO 9246	m³	13.6	13.6
	yd³	17.79	17.79
A Height of blade	mm	1,950	1,950
	ft in	6'5"	6'5"
3 Width of blade	mm	4,370	4,370
	ft in	14'4"	14'4"
Lifting height	mm	1,480	1,480
	ft in	4'10"	4'10"
Digging depth	mm	647	647
	ft in	2'1"	2'1"
Blade pitch adjustment		9.4°	9.4°
Max. blade tilt	mm	1,028	1,028
	ft in	3'4"	3'4"
G Width over push frame	mm	3,973	3,973
	ft in	13'0"	13'0"
Overall length, blade straight	mm	7,022	7,022
	ft in	23'0"	23'0"
Track shoes 610 mm/24"			
Operating weight 1)	kg	46,225/101,909	47,125/103,893
Ground pressure 1)	kg/cm² / psi	1.07/15.22	1.09/15.5
Track shoes 660 mm/26"			
Operating weight 1)	kg	46,488/102,488	47,388/104,473
Ground pressure 1)	kg/cm² / psi	0.99/14.08	1.01/14.36
Track shoes 711 mm/28"			
Operating weight 1)	kg	46,855/103,297	47,755/105,282
Ground pressure 1)	kg/cm² / psi	0.93/13.22	0.95/13.51
Track shoes 760 mm/30"			
Operating weight 1)	kg	47,127/103,897	48,027/105,881
Ground pressure 1)	kg/cm² / psi	0.87/12.37	0.89/12.66

<sup>1)</sup> Including coolant and lubricants, 100% fuel, ROPS/FOPS cab, operator, Semi-U blade.

## Front Attachments







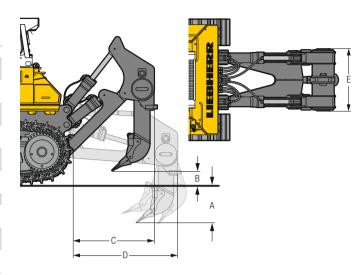
Undercarriage		bogie suspension	double bogie suspension
Blade capacity, ISO 9246	m³	17.0	17.0
	yd³	22.23	22.23
Height of blade	mm	1,950	1,950
	ft in	6'5"	6'5"
Width of blade	mm	4,650	4,650
	ft in	15'3"	15'3"
Lifting height	mm	1.480	1.480
	ft in	4'10"	4'10"
Digging depth	mm	647	647
	ft in	2'1"	2'1"
Blade pitch adjustment		9.4°	9.4°
Max. blade tilt	mm	1.094	1.094
	ft in	3'7"	3'7"
G Width over push frame	mm	3.973	3.973
	ft in	13'0"	13'0"
Overall length, blade straight	mm	7.549	7.549
	ft in	24'9"	24'9"
Track shoes 610 mm/24"			
Operating weight 1)	kg	47,075/103,782	47,975/105,767
Ground pressure 1)	kg/cm² / psi	1.09/15.5	1.11/15.78
Track shoes 660 mm/26"			
Operating weight 1)	kg	47,338/104,362	48,238/106,346
Ground pressure 1)	kg/cm² / psi	1.01/14.36	1.03/14.65
Track shoes 711 mm/28"			
Operating weight 1)	kg	47,705/105,171	48,605/107,156
Ground pressure 1)	kg/cm² / psi	0.95/13.51	0.96/13.56
Track shoes 760 mm/30"			
Operating weight 1)	kg	47,977/105,771	48,877/107,755
Ground pressure 1)	kg/cm² / psi	0.89/12.66	0.91/12.94

<sup>1)</sup> Including coolant and lubricants, 100% fuel, ROPS/FOPS cab, operator, U blade.

## Rear Attachments

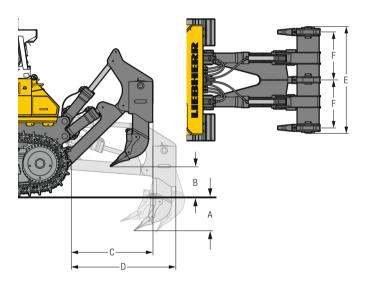
# 1-Shank Ripper

	•••		
	Parallelogram		hydraulic pitch adjustment
Α	Ripping depth (max./min.)	mm ft in	1,300 / 476 4'3"/1'7"
В	Lifting height (max./min.)	mm ft in	1,000 / 260 3'3"/10"
C	Additional length, attachment raised	mm ft in	1,894 6'3"
D	Additional length, attachment lowered	mm ft in	2,494 8'2"
E	Overall beam width	mm ft in	1,400 4'7"
F	Distance between shanks	mm ft in	_
	Max. pitch adjustment		31°
	Maximum penetration force	kN Ib	166.9 37,507
	Max. pryout force	kN Ib	291.5 65,509
	Weight	kg Ib	4,786 10,551



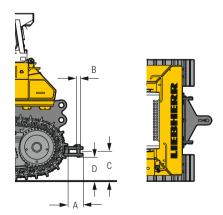
# 3-Shank Ripper

	Parallelogram		hydraulic pitch adjustment
Α	Ripping depth (max./min.)	mm	900/520
		ft in	2'11"/1'8"
В	Lifting height (max./min.)	mm	1,038/658
		ft in	3'5"/2'2"
C	Additional length, attachment raised	mm	1,894
		ft in	6'3"
D	Additional length, attachment lowered	mm	2,494
		ft in	8'2"
E	Overall beam width	mm	2,494
		ft in	8'2"
F	Distance between shanks	mm	1,130
		ft in	3'8"
	Max. pitch adjustment		31°
	Maximum penetration force	kN	176.4
		lb	39,642
	Max. pryout force	kN	291.5
		lb	65,509
	Weight	kg	6,160
		lb	13,580



## Drawbar

		rigid
Α	Additional length	<b>mm</b> 434
		ft in 1'5"
В	Socket pin diameter	<b>mm</b> 60
		<b>in</b> 2.36"
C	Height of jaw	<b>mm</b> 378
		ft in 1'3"
D	Ground clearance	<b>mm</b> 528
		<b>ft in</b> 1'9"
	Jaw opening	<b>mm</b> 105
		<b>ft in</b> 4.13"
	Weight	<b>kg</b> 750
		<b>Ib</b> 1,653



## Equipment

## Base Machine

-	Dase Macillie	
	Additional hour meter, external	+
	Air pre-cleaner Top Air	+
	Auto Idle	+
	Automatic engine shut-off	+
	Battery compartment, lockable	•
	Catwalk with hand rail	+
	Coal equipment	+
	Cold environment equipment	+
	Diesel Exhaust Fluid (DEF) tank, lockable	+
	Dry type air filter dual step, with pre-filter and automatic dust ejector	•
	Engine compartment doors, lockable	•
	Fan hinged, front	+
	Fan rigid, rear	•
	Fan, hydraulically driven	•
	Fan, reversible	+
	Fire protection wall	+
	Forestry equipment	1)
	Fuel water separator, electric heater and fuel water separator	•
	Grade control ready kit	1)
	Hydraulic oil level control	+
	Landfill equipment	+
	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	•
	Quick refuelling	+
	Radiator guard, hinged	•
	Radiator, heavy duty	•
	Radiator, wide-meshed	•
	Refuelling pump, electric	+
	Special paint scheme	+
	Tool equipment basic scope	•
	Tool equipment extended scope	+
	Towing hitch rear	•
	Towing lug front	•
	Woodchip equipment	+

# Hydraulic System

Blade float function	•
Blade quick drop function	•
Control block for 2 circuits	•
Hydraulic kit for ripper	+
Hydraulic kit for winch	+
Oil filter in hydraulic tank	•
Variable flow pump, load-sensing	•

## Travel Drive

_	Final drives planetary gear	•
	Inch brake pedal	•
	Load limit control, electronic	•
	Parking brake, automatic	•
	Seat contact switch	•
	Travel control, 3 speed ranges	•
	Travel drive joystick, detended	+
	Travel drive joystick, proportional	•
	Travel drive, hydrostatic	•

## Operator's Cab

- W Operator 3 dab	
Air-conditioner	•
Armrests 3D adjustable	•
Cab heating	•
Coat hook	•
Dome light	•
Fire extinguisher in the cab	+
Footrest on the right side of the front console	•
Joysticks, longitudinally adjustable	•
Operator's seat Comfort, air-suspended	•
Operator's seat Premium, air-suspended	+
Polycarbonate rear-screen	1)
Pressurised cab	•
Radio	+
Radio preparation kit	+
Rear-view camera	•
Rear-view mirror, inside	•
Rear-view mirrors, external	+
ROPS/FOPS integrated	•
Safety glass tinted	•
Sliding window left	+
Sliding window rear	+
Sliding window right	+
Socket 12 V	+
Stowage compartment, air-conditioned	•
Sunblind, front	•
Touch-controlled colour display	•
Windshield washer system	•
Windshield wipers front, rear, doors, with intermittent function	•

<sup>• =</sup> Standard += Option ¹) on demand at your dealer

# Electrical System

2 additional working lights LED on the cab, rear	+
4 cold start batteries	•
2 LED working lights on each lift cylinder	•
2 LED working lights on the cab, rear	•
Access lighting	•
Additional working light LED on the ripper	+
Amber beacon	+
Back-up alarm	+
Back-up alarm, acoustic and visual	+
Back-up alarm, switchable	+
Battery main switch, lockable	•
Emergency stop, in the cab	+
Emergency stop, on ripper	+
Horn	•
Immobiliser, electronic	+
LED working lights "Nordic"	+
LED working lights on the cab, front	•
Light engine compartement	•
On-board voltage 24 V	•

## Undercarriage

Master link, two-piece	•
Sprocket segments with recesses	+
Sprocket segments, bolted	•
Track frame, closed	•
Track guide	•
Track pads with mud holes	+
Track shoes, heavy duty	•
Tracks, oil-lubricated	•
Undercarriage with bogie suspension	•
Undercarriage with double bogie suspension	+

## **№** Attachments Front

_	Coal U-blade	1)
	Hydraulic pitch adjustment	+
	Protection for blade pitch cylinder	+
	Protection for blade tilt cylinder	+
	Rock guard with overflow panel on semi U-balde	+
	Rock guard with overflow panel on U-blade	+
	Semi-U blade	+
	Trash rack on semi-U and U-blade	+
	U-blade	+
	Wear plates on push frame	+
	Wear plates on semi U-blade	+
	Wear plates on U-blade	+
	Woodchip U-blade	1)

## **Attachments Rear**

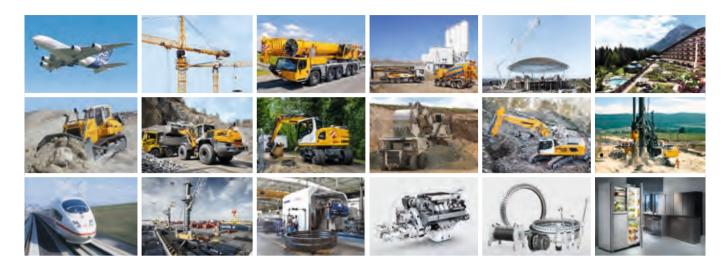
Counterweight, rear (5,000 kg/11,023 lb)	+
Drawbar rear, rigid	+
Mounting plate for external equipment	1)
Ripper, 1 shank with hydraulic pin puller	+
Ripper, 3 shanks	+
Winch	+

• = Standard += Option ¹) on demand at your dealer

Standard equipment may vary. Consult your Liebherr dealer for details.

# Printed in Germany by Typodruck RG-BK LWT/VM-12228660-1-01.18\_enUS-GB All illustrations and data may differ from standard equipment. Subject to change without notice.

## 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 applications.

#### 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