

# Crawler Tractor

## PR 776

Litronic®

### Operating Weight

71,800 – 73,189 kg  
158,292 – 161,354 lb

### Engine Output

SAE J1349	ISO 9249
Forward / Reverse	Forward / Reverse
440 / 565 kW	440 / 565 kW
590 / 757 HP	598 / 768 HP
Tier 2	
Stage V / Tier 4f	



# LIEBHERR



## Performance

Superb Performance in Bulldozing  
and Ripping Operations



## Efficiency

Cost Efficiency  
Comes as Standard



## Reliability

Components for Ultimate  
Performance and Service Life

### Engine (ISO 9249)

440 kW / 598 HP Forward

565 kW / 768 HP Reverse

### Engine (SAE J1349)

440 kW / 590 HP Forward

565 kW / 757 HP Reverse

### Operating Weight

64,747 – 73,189 kg

142,743 – 161,354 lb

### Blade Capacity

18.5 – 22.0 m<sup>3</sup>

24.2 – 28.8 yd<sup>3</sup>

### Hydrostatic Travel Drive

with electronic control unit





### Comfort

Optimum Driver Comfort  
for More Productivity



### Safety

Maximum Safety for Driver  
and Maintenance Team



### Customer Service

Simple Maintenance and an  
Extensive Service Network





# 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 776 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 track rollers and idlers provide good traction and also reduce vibration levels on the crawler tractor.

## Outstanding Grading Attributes

Crawler tractors in all size classes must provide maximum versatility. The PR 776 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.

## High Blade Penetration Forces

The blade on the PR 776 is mounted very close to the main frame. This achieves maximum penetration forces and assures rapid filling of the blade.

## Visible Productivity Benefit

The optional GPS navigation system displays the status of work in progress as well as the surrounding terrain. This allows the operator to focus fully on maximum productivity.



### 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
- Superior manoeuvrability, including turning on the spot
- 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



# Efficiency



## 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

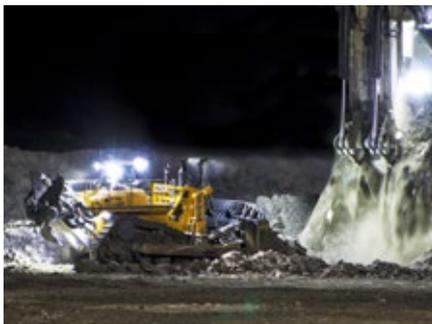
The high efficiency rating of the hydrostatic drive across the entire vehicle speed range and the efficient Liebherr diesel engine minimise fuel consumption and ensure that CO<sub>2</sub> emission levels are low.

### 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.



## Fast Component Replacement

As part of the development work on the PR 776, 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-calibre corrosion protection and optimum compatibility with hydraulic hoses, seals and gaskets.

### 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

### 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



# Reliability



## 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 776 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

# Solutions for Continuous Operation

## 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, multi-ratio 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.

## 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 subjected to high stress.

## Optimised Equipment

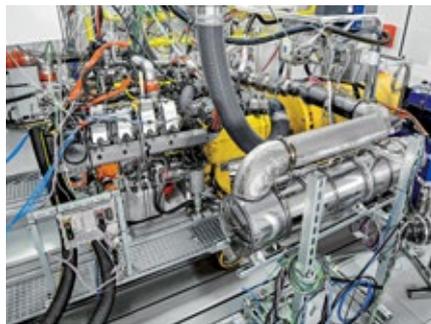
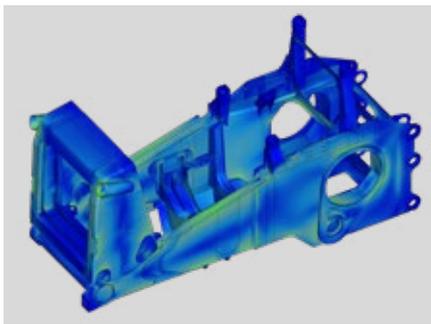
Liebherr blades are manufactured using high-quality steels and are based on a modular design principle. The robust blade mountings provide optimum rigidity and enable the blade to be guided precisely. All rear-mounted ripper variants are designed for heavy-duty mining and extraction operations and deliver 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, hydraulic pumps and -motors, hydraulic cylinders, final drives and electronics are manufactured in our own facilities, optimized 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



# Comfort



## 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 776 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 surroundings.



### 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

## 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.



### 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



### Unrivalled Visibility

- Thanks to the raised seat position, very wide door windows and ideal positioning of the lifting cylinders and exhaust pipes, the driver has perfect forward visibility and a great view of the work equipment, i.e. the tools in use
- A direct view behind the blade enables the driver to identify the processed surface area at all times



# Safety



## Maximum Safety for Driver and Maintenance Team

The Liebherr PR 776 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 776 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.



## Optimum Visibility to all Sides, Even with a Work Platform Fitted

- The PR 776 offers optimum visibility to all sides, even with the optional work platform installed. People and obstacles can be detected very well. Especially when used in mining applications, this feature contributes substantially to enhanced safety
- The containers with sloping edges provide clear visibility of areas close to the machine

## 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

## Modern Lighting Concept

- To provide optimum illumination of the working area, there is a choice of modern lighting, e.g. high-performance LEDs
- The modular lighting concept is part of the new machine design and it makes it possible to match the lighting to each application in an optimum manner



# 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 Dialog 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 filter makes it a great deal easier to clean the cooler/radiator system. The radiator shroud can be lifted up after unfastening just a few screws
- On the PR 776, as a standard feature, the hydraulic fluid fans at the back can be opened up for cleaning without the need for tools

### 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

<b>Liebherr Diesel engine</b>	D 9512 A7 Emission regulations according to 97/68/EC, 2004/26/EG Stage V, EPA/CARB Tier 4f or Tier 2
<b>Rated power (net)</b> ISO 9249 FDW/REV SAE J1349 FDW/REV	440/565 kW / 598/768 HP 440/565 kW / 590/757 HP
<b>Maximum power (net)</b> ISO 9249 FDW/REV SAE J1349 FDW/REV	506/565 kW / 687/768 HP 506/565 kW / 678/757 HP
<b>Rated speed</b>	1,600 rpm
<b>Displacement</b>	24.2 l / 1,477 in <sup>3</sup>
<b>Design</b>	12 cylinder V-engine, water-cooled, turbo-charged, air-to-air intercooler
<b>Injection system</b>	Direct fuel injection, Common Rail, electronic control
<b>Lubrication</b>	Pressurised lube system, engine lubrication guaranteed for inclinations up to 35° (lateral slope) and up to 45° (longitudinal slope)
<b>Operating voltage</b>	24 V
<b>Alternator</b>	140 A
<b>Starter</b>	2 x 8.4 kW / 11 HP
<b>Batteries</b>	4 x 180 Ah / 12 V
<b>Air cleaner</b>	Dry-type air cleaner with pre-cleaner, main and safety elements, control light in the operator's cab
<b>Cooling system</b>	Combi radiator, comprising a radiator for water and charge air. Hydrostatic fan drive



## Hydraulics

<b>Hydraulic system</b>	Load sensing (demand-controlled)
<b>Pump type</b>	Swash plate piston pump
<b>Pump flow max.</b>	352 l/min. / 92.9 gpm / 77.43 Imp.gpm
<b>Pressure limitation</b>	260 bar / 3,770 psi
<b>Control valve</b>	4 segments, expandable
<b>Filter system</b>	Return filter with magnetic rod in the hydraulic tank
<b>Control</b>	Single joystick for all blade functions



## Travel Drive, Control

<b>Transmission system</b>	Infinitely variable hydrostatic travel drive, independent drive for each track
<b>Travel speed*</b> Speed range 1 (reverse): Speed range 2 (reverse): Speed range 3 (reverse):	Continuously variable 0 – 4.0 km/h / 2.5 mph (4.5 km/h / 2.8 mph) 0 – 6.0 km/h / 3.7 mph (8.0 km/h / 4.9 mph) 0 – 10.5 km/h / 6.5 mph (10.5 km/h / 6.5 mph) * Travel speed ranges can be set on the travel joystick (memory function)
<b>Electronic control</b>	The electronic system automatically adjusts travel speed and drawbar pull to match changing load conditions
<b>Steering</b>	Hydrostatic
<b>Service brake</b>	Hydrostatic (self-locking), wear-free
<b>Parking brake</b>	Multi-disk brake, wear-free, automatically applied with neutral joystick position
<b>Cooling system</b>	Two separate hydraulic oil coolers, hydrostatic fan drives
<b>Filter system</b>	Micro cartridge filters in replenishing circuit
<b>Final drive</b>	Combination spur gear with planetary gear, double-sealed (duo cone seals), temperature controlled
<b>Control</b>	Single joystick for all travel and steering functions



## Operator's Cab

<b>Cab</b>	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)
<b>Operator's seat</b>	Air-suspended comfort seat, fully adjustable
<b>Monitoring</b>	Touch screen: display of current machine information, automatic monitoring of operating conditions. Individual setting of machine parameters

## Undercarriage

<b>Design</b>	Undercarriage with oscillating idlers and rollers
<b>Mounting</b>	Via separate pivot shafts and equalizer bar
<b>Track chains</b>	Lubricated, single-grouser shoes, tensioning via a steel spring and grease tensioner
<b>Links, each side</b>	44
<b>Track rollers, each side</b>	8
<b>Carrier rollers</b>	1 per side (optional)
<b>Sprocket segments, each side</b>	5
<b>Track shoes, standard</b>	610 mm/24"
<b>Track shoes, optional</b>	710 mm/28" 762 mm/30"
<b>Track shoe type</b>	SESS (Super Extrem Service Shoes)



## Sound Levels

<b>Operator sound exposure ISO 6396</b>	
L <sub>pA</sub> (in the cab)	76 dB(A)
<b>Exterior sound pressure 2000/14/EC</b>	
L <sub>WA</sub> (to the environment)	116 dB(A)



## Refill Capacities

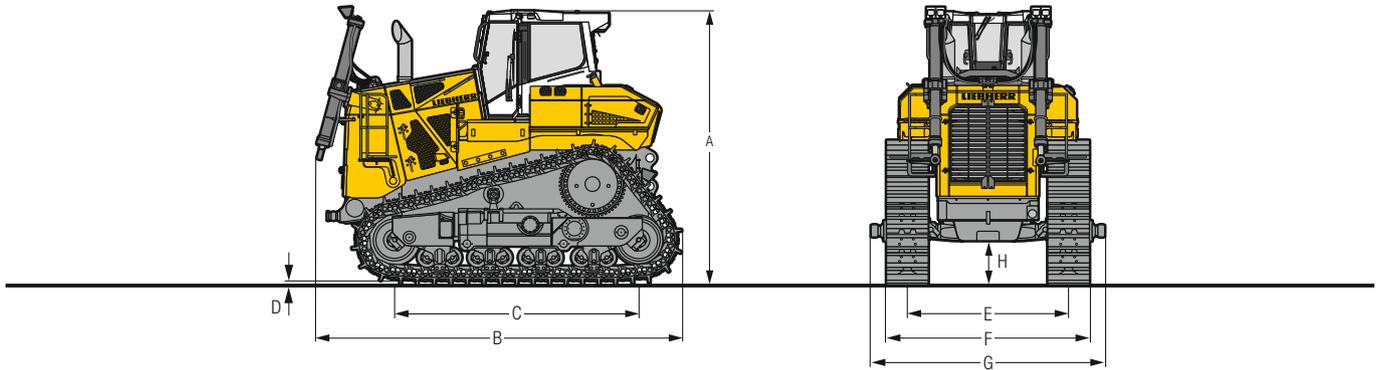
<b>Fuel tank</b>	1,224 l/323.3 gal/269.2 Imp.gal
<b>Diesel Exhaust Fluid (DEF) tank</b>	132 l/ 34.9 gal / 29 Imp.gal
<b>Cooling system</b>	110 l/29 gal/24.2 Imp.gal
<b>Engine oil with filter</b>	93 l/24.6 gal/20.5 Imp.gal
<b>Splitter box</b>	16 l/4.2 gal/3.5 Imp.gal
<b>Hydraulic tank</b>	320 l/84.5 gal/70.4 Imp.gal
<b>Final drive, each side</b>	43 l/11.4 gal/9.5 Imp.gal



## Drawbar Pull

<b>Max.</b>	955 kN
<b>at 1.5 km/h / 0.9 mph</b>	842 kN
<b>at 3.0 km/h / 1.9 mph</b>	452 kN
<b>at 6.0 km/h / 3.7 mph</b>	226 kN
<b>at 9.0 km/h / 5.6 mph</b>	151 kN

# Dimensions

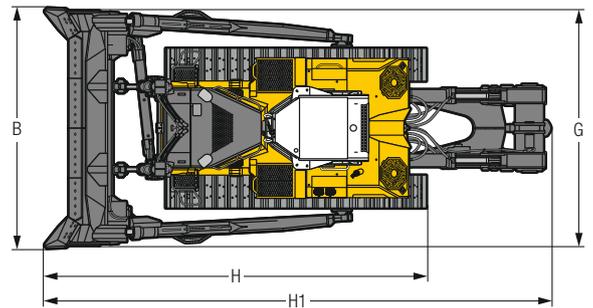


## Dimensions

<b>A</b>	<b>Height over cab</b>	mm	4,350
		ft in	14'3"
<b>B</b>	<b>Overall length without attachments</b>	mm	5,770
		ft in	18'11"
<b>C</b>	<b>Length of track on ground</b>	mm	3,867
		ft in	12'8"
<b>D</b>	<b>Height of grousers</b>	mm	93
		in	3.6"
<b>H</b>	<b>Ground clearance</b>	mm	703
		ft in	2'4"
<b>E</b>	<b>Track gauge</b>	mm	2,550
		ft in	8'4"
<b>G</b>	<b>Width over trunnions</b>	mm	3,715
		ft in	12'2"
<b>F</b>	<b>Track shoes 610 mm / 24"</b>		
	Width over tracks	mm / ft in	3,160 / 10'4"
	Tractor shipping weight <sup>1)</sup>	kg / lb	53,100 / 117,065
<b>F</b>	<b>Track shoes 710 mm / 28"</b>		
	Width over tracks	mm / ft in	3,260 / 10'8"
	Tractor shipping weight <sup>1)</sup>	kg / lb	53,744 / 118,485
<b>F</b>	<b>Track shoes 762 mm / 30"</b>		
	Width over tracks	mm / ft in	3,310 / 10'10"
	Tractor shipping weight <sup>1)</sup>	kg / lb	54,066 / 119,195

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

# Front Attachments

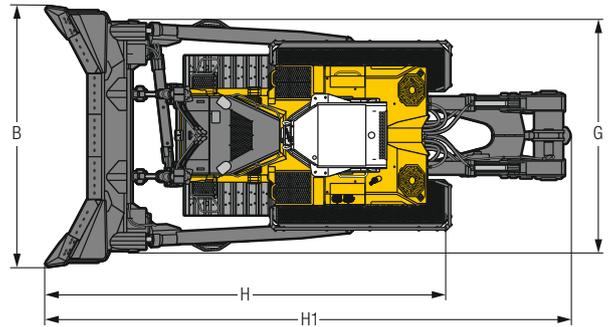


## Semi-U Blade

	<b>Blade capacity, ISO 9246</b>	<b>m<sup>3</sup></b>	18.5
		<b>yd<sup>3</sup></b>	24.2
<b>A</b>	<b>Height of blade</b>	<b>mm</b>	2,125
		<b>ft in</b>	7'
<b>B</b>	<b>Width of blade</b>	<b>mm</b>	4,830
		<b>ft in</b>	15'10"
<b>C</b>	<b>Lifting height</b>	<b>mm</b>	1,565
		<b>ft in</b>	5'2"
<b>D</b>	<b>Digging depth</b>	<b>mm</b>	670
		<b>ft in</b>	2'2"
<b>E</b>	<b>Blade pitch adjustment</b>		11°
	<b>Max. blade tilt</b>	<b>mm</b>	1,245
		<b>ft in</b>	4'1"
<b>G</b>	<b>Width over push frame</b>	<b>mm</b>	4,674
		<b>ft in</b>	15'4"
<b>H</b>	<b>Overall length, without ripper</b>	<b>mm</b>	7,625
		<b>ft in</b>	25'
<b>H1</b>	<b>Overall length, with ripper in max. extended position</b>	<b>mm</b>	10,094
		<b>ft in</b>	33'1"
	<b>Track shoes 610 mm / 24"</b>		
	Operating weight <sup>1)</sup>	<b>kg / lb</b>	71,800 / 158,292
	Ground pressure <sup>1)</sup>	<b>kg/cm<sup>2</sup> / psi</b>	1.52 / 21.61
	<b>Track shoes 710 mm / 28"</b>		
	Operating weight <sup>1)</sup>	<b>kg / lb</b>	72,444 / 159,711
	Ground pressure <sup>1)</sup>	<b>kg/cm<sup>2</sup> / psi</b>	1.32 / 18.77
	<b>Track shoes 762 mm / 30"</b>		
	Operating weight <sup>1)</sup>	<b>kg / lb</b>	72,766 / 160,421
	Ground pressure <sup>1)</sup>	<b>kg/cm<sup>2</sup> / psi</b>	1.24 / 17.63

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

# Front Attachments



## U Blade

	<b>Blade capacity, ISO 9246</b>	<b>m<sup>3</sup></b>	22.0
		<b>yd<sup>3</sup></b>	28.77
<b>A</b>	<b>Height of blade</b>	<b>mm</b>	2,125
		<b>ft in</b>	7'
<b>B</b>	<b>Width of blade</b>	<b>mm</b>	5,270
		<b>ft in</b>	17'3"
<b>C</b>	<b>Lifting height</b>	<b>mm</b>	1,565
		<b>ft in</b>	5'2"
<b>D</b>	<b>Digging depth</b>	<b>mm</b>	670
		<b>ft in</b>	2'2"
<b>E</b>	<b>Blade pitch adjustment</b>		11°
	<b>Max. blade tilt</b>	<b>mm</b>	1,360
		<b>ft in</b>	4'6"
<b>G</b>	<b>Width over push frame</b>	<b>mm</b>	4,674
		<b>ft in</b>	15'4"
<b>H</b>	<b>Overall length, without ripper</b>	<b>mm</b>	7,971
		<b>ft in</b>	26'2"
<b>H1</b>	<b>Overall length, with ripper in max. extended position</b>	<b>mm</b>	10,440
		<b>ft in</b>	34'3"
	<b>Track shoes 610 mm / 24"</b>		
	Operating weight <sup>1)</sup>	<b>kg / lb</b>	72,223 / 159,224
	Ground pressure <sup>1)</sup>	<b>kg/cm<sup>2</sup> / psi</b>	1.53 / 21.76
	<b>Track shoes 710 mm / 28"</b>		
	Operating weight <sup>1)</sup>	<b>kg / lb</b>	72,867 / 160,644
	Ground pressure <sup>1)</sup>	<b>kg/cm<sup>2</sup> / psi</b>	1.32 / 18.77
	<b>Track shoes 762 mm / 30"</b>		
	Operating weight <sup>1)</sup>	<b>kg / lb</b>	73,189 / 161,354
	Ground pressure <sup>1)</sup>	<b>kg/cm<sup>2</sup> / psi</b>	1.24 / 17.63

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

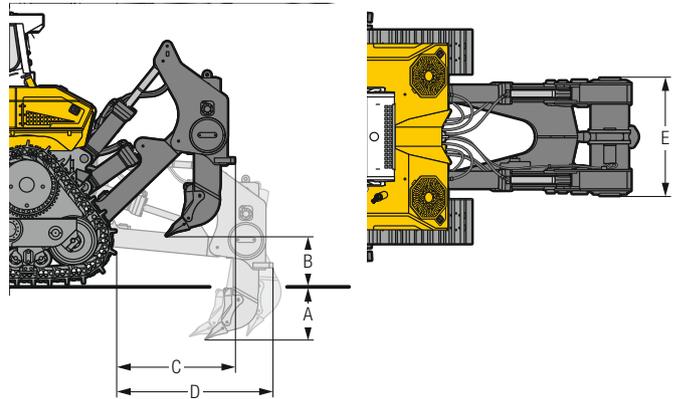
# Rear Attachments



## 1-Shank Ripper

Parallelogram		hydraulic pitch adjustment	
		standard shank	deep shank*
<b>A</b> Ripping depth (max./min.)	mm	1,445/705	1,895/705
	ft in	4'9"/2'4"	6'3"/2'4"
<b>B</b> Lifting height (max./min.)	mm	958/218	959/364
	ft in	3'2"/9"	3'2"/1'2"
<b>C</b> Additional length, attachment raised	mm	1,949	1,949
	ft in	6'5"	6'5"
<b>D</b> Additional length, attachment lowered	mm	2,529	2,529
	ft in	8'4"	8'4"
<b>E</b> Overall beam width	mm	1,760	1,760
	ft in	5'9"	5'9"
<b>F</b> Distance between shanks	mm	–	–
	ft in	–	–
<b>Max. pitch adjustment</b>		30°	30°
<b>Max. penetration force</b>	kN	237	237
	lbf	53,280	53,280
<b>Max. pryout force</b>	kN	441	441
	lbf	99,141	99,141
<b>Weight</b>	kg	7,194	7,333
	lb	15,860	16,166

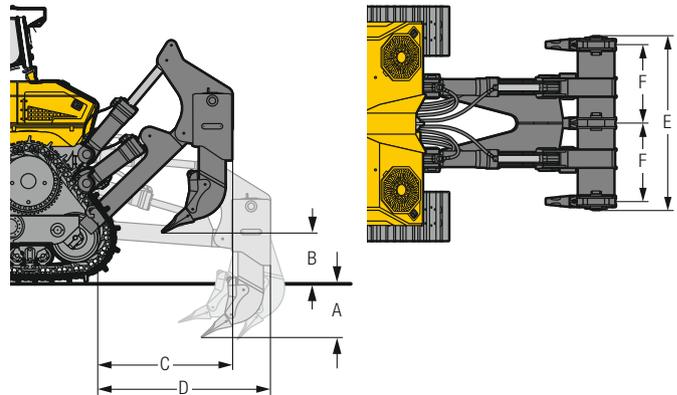
\* Best performance to operate in loose material – deep shanks are designed for light and moderate duty



## 3-Shank Ripper

Parallelogram		hydraulic pitch adjustment	
		standard shanks	deep shanks*
<b>A</b> Ripping depth (max./min.)	mm	900/650	1,896/706
	ft in	2'11"/2'2"	6'3"/2'4"
<b>B</b> Lifting height (max./min.)	mm	1,014/764	958/164
	ft in	3'4"/2'6"	3'2"/6"
<b>C</b> Additional length, attachment raised	mm	1,904	1,904
	ft in	6'3"	6'3"
<b>D</b> Additional length, attachment lowered	mm	2,484	2,484
	ft in	8'2"	8'2"
<b>E</b> Overall beam width	mm	2,970	2,970
	ft in	9'9"	9'9"
<b>F</b> Distance between shanks	mm	1,300	1,300
	ft in	4'3"	4'3"
<b>Max. pitch adjustment</b>		30°	30°
<b>Max. penetration force</b>	kN	219	219
	lbf	49,233	49,233
<b>Max. pryout force</b>	kN	441	441
	lbf	99,141	99,141
<b>Weight</b>	kg	9,430	10,290
	lb	20,790	22,686

\* Best performance to operate in loose material – deep shanks are designed for light and moderate duty



# Equipment



## Base Machine

Additional hour meter installed in engine department	+
Air filter, dry type, dual step with cyclones (pre-filter)	•
Aluminium water and oil radiators wide-meshed	•
Automatic access ladder	+
Automatic centralized lubrication system	+
Automatic dust ejector	•
Battery compartment	•
Catwalk all-round	+
Coal equipment	1)
Cold environment equipment	+
Cooling fan, hydraulically driven	•
Cooling fan, reversible	+
Cooling fan, with safety guard	•
Ecology drains (engine-, splitter box-, hydraulic oil)	•
Engine compartment doors	•
Fluid sampling ports (engine-, splitter box-, hydraulic oil)	•
Fuel pre-filter, with electric heater and water separator	•
Fuel pre-filter, with electric heater and water separator (metal bowl)	+
Grade control ready kit	1)
Grease points grouped	1)
Handrail without catwalk	+
Heavy duty steps and handles	•
High altitude kit	+
Hinged heavy duty belly pan	•
Hinged oil radiator fans	•
Hinged water radiator fan	•
Landfill equipment	1)
LiDAT – Data transmission system	•
Liebherr diesel engine	•
Quick change for engine, hydraulic and splitter box oil	+
Quick refuelling	+
Radiator grill, hinged (water cooler)	•
Special paint	+
Thermal isolation for engine turbo charger and exhaust gas pipes	+
Thermal shields for turbo chargers	•
Tool kit	+
Towing hitch rear	•
Towing lug front	•
Vandalism protection (6 caplocks)	+
Woodchip equipment	1)



## Hydraulic System

2 Control blocks	•
Float position blade	•
Hydraulic kit for ripper	•
Oil filter in hydraulic tank	•
Quick drop function blade	•
Variable flow pump, load-sensing	•



## Travel Drive

Emergency stop	•
Final drives planetary gear	•
Inch brake pedal	•
Parking brake, automatic	•
Travel control, 3 speed ranges	•
Travel drive joystick, detented	+
Travel drive joystick, proportional	•
Travel drive, hydrostatic	•



## Operator's Cab

Air-conditioner	•
Armrests 3D adjustable	•
Cab heating	•
Coat hook	•
Diagnostic connector	•
Dome light	•
Entry lights	•
Fire extinguisher in the cab	+
Footrest on the right side of the front console	•
Joysticks, longitudinally adjustable	•
Operator awareness (seat contact switch)	•
Operator's seat Comfort, air-suspended and heated	•
Operator's seat Premium, air-suspended, heated and ventilated	+
Operator's seat Premium, additionally with 3-point belt system	+
Pressurised cab	•
Radio	+
Radio preparation kit	•
Rear mirror left and right on cab, outside	+
Rear mirror, inside	•
Rear view camera	•
ROPS/FOPS integrated	•
Safety glass tinted	•
Safety switch	•
Seat belt	•
Sliding window left	+
Sliding window rear	+
Sliding window right	+
Socket 12 V	•
Stowage compartment, air-conditioned	•
Sunblind, all around	+
Touch-controlled colour display	•
Windshield washer system	•
Windshield wipers front, rear, doors, with intermittent function	•

• = Standard

+ = Option

1) on demand at your dealer



## Electrical System

1 additional working light LED on the ripper	+
2 additional working lights LED on the cab, rear	+
2 LED working lights on each lift cylinder	•
2 LED working lights on the cab, rear	•
2 LED working lights rear, integrated in console	•
4 cold start batteries	•
4 LED working lights on the cab, front	•
Amber beacon	+
Back-up alarm	+
Back-up alarm, acoustic and visual, switchable	+
Back-up alarm, switchable	+
Battery main switch, lockable	•
Emergency stop (on ripper)	+
Emergency stops on engine hood (left and right)	+
Engine coolant heater 110 V	+
Engine coolant heater 230 V	+
External starting aid plug 24 V	+
Ground level service station (entrance light)	•
Horn	•
LED working lights "High Density" (4,200 lm)	+
Light engine compartment	•
On-board voltage 24 V	•
Starter disconnect switch	+



## Undercarriage

Carrier rollers	+
Master link, two-piece	•
Rollers and idlers, lifetime lubricated	•
Sprocket segments with recesses	+
Sprocket segments, bolted	•
Track adjuster, hydraulic	•
Track guide	•
Track shoes with mud holes	+
Track shoes, heavy duty (Extrem Service Shoes)	•
Tracks, oil-lubricated	•
Undercarriage with oscillating idlers and rollers (bogie suspension)	•



## Attachments Front

Hydraulic pitch adjustment (dual tilt)	+
Protection for blade pitch cylinder	+
Protection for blade tilt cylinder	+
Push plate for semi U-blade	1)
Rock guard with overflow panel on semi U-blade	•
Rock guard with overflow panel on U-blade	•
Semi U-blade	+
Trash rack on semi-U or U-blade (landfill equipment)	1)
U-blade	+
Wear plates on push frame (580 kg / 1,279 lb)	+
Wear plates on semi U-blade (920 kg / 2,028 lb)	+
Wear plates on U-blade (680 kg / 1,499 lb)	+

• = Standard

+ = Option

1) on demand at your dealer

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



## Attachments Rear

Counterweight, rear (7,000 kg / 15,432 lb)	+
Drawbar rear, rigid	1)
Hydraulic pin puller for 1-shank ripper	+
Mounting plate for third-party equipment	1)
Ripper, 1-shank	+
Ripper, 3-shank	+



## Control and Warning Lights

Auto Idle	+
Automatic engine shut-down	+
Display air filter contamination	•
Display date and clock	•
Display diesel engine preheating	•
Display diesel engine speed	•
Display ECO-Mode	•
Display engine coolant temperature	•
Display float position blade	•
Display fuel level	•
Display hydraulic oil return filter contamination	•
Display hydraulic oil temperature	•
Display parking brake	•
Display travel speed ranges	•
Engine after run	+
Hour meter	•
Indicator light battery charge	•
Indicator light coolant level	+
Indicator light diesel engine	•
Indicator light fuel water separator	•
Indicator light oil level in hydraulic oil tank	+
Indicator light pump replenishing pressure	•
Indicator light reversible fan	+
Indicator light travel drive oil temperature	•
Preparation tilt switch 35 degrees	+

# 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 then, the family business has steadily grown to a group of more than 130 companies with more than 46,000 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](http://www.liebherr.com)

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