The Crawler Tractor.

PR 724
Litronic®

Engine output:	**118 kW / 160 HP**
Operating weight:	**16,600 - 20,100 kg**
	36,603 - 44,321 lb

LIEBHERR

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Blade capacity:	3.17 - 4.27 m³ / 4.15 - 5.58 yd³

Hydrostatic travel drive with electronic control

Performance

The Liebherr PR 724 crawler tractor combines sheer strength with innovative technology. The result: high drawbar pull and tear-out forces ensures maximum productivity under all conditions. Whether in extremely difficult terrain or during fine levelling – the PR 724 excels in any application with its outstanding performance.

Economy

The PR 724 from Liebherr offers you clear economic benefits. Service and maintenance-friendly technology reduces both down time and costs. The economical drive system guarantees high efficiency combined with low fuel consumption. For example the long-life track frame components increases long-term serviceability and, of course, economy.

Reliability

Strong and robust: Liebherr crawler tractors are designed with longevity in mind. Liebherr crawler tractors are the benchmark for reliability and long life.

Comfort

The PR 724 crawler tractor offers the operator a spacious workplace with a state-of-the-art ergonomic layout and gives the operator an excellent view of the work area and blade. The single-joystick control enables the machine to be controlled sensitively and productivily.

Liebherr Diesel engine

- The turbocharger and charge-air cooler ensure high tractive power and output reserves in every situation.
- Environmentally sound and economical: Complies with the latest European emissions standards 97/68 EC Stage 2 and EPA Tier 2 Standards.
- Specially-developed components for use in construction machinery ensure operational safety and a long lifetime.

Performance

The PR 724 crawler tractor from Liebherr excels with its high performance – even under the toughest conditions and in rough terrain. The machine's key benefits include its excellent performance in almost any ground conditions, its pushing power and short cycle times.

Optimum levelling

Long track frames
The long track frames ensure quiet and low-vibration performance.

Torsionally stiff machine design
The entire front superstructure of the machine is torsionally stiff. Strong vibrations are not transferred via either the hydraulic jack suspension or the push frame suspension. This ensures that the 6-way blade can always be optimally utilized.

High pushing power

High-traction power train
Thanks to optimum efficiency over the entire speed range, there is sufficient power available at any time while pushing.

High blade filling capacity
The optimum blade profile ensures quick and complete filling of the blade.

Quick cycle times
The combination of continuously variable speed control and high driving power ensures high pushing and ripping speeds.

Versatility

Continuously variable speed and constantly driven track chains
The hydrostatic travel drive enables the machine to be controlled sensitively and precisely in any situation.

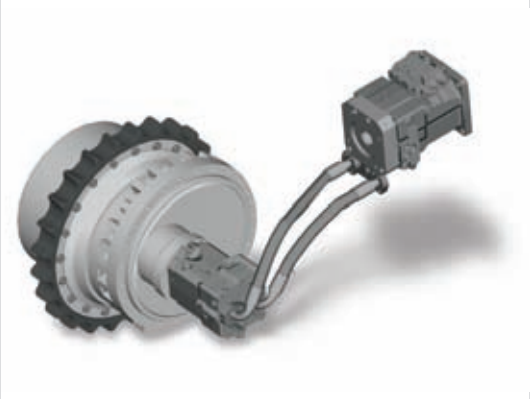
High ground clearance
The machine can be easily and safely operated in rough terrain without fear of underside damage.

Low center of gravity
The low mounting of the heavy drive components allows even the most difficult embankment work to be carried out with precision.

Deep wading ability
The intelligent layout of the drive components allows reliable operation even with high water levels.

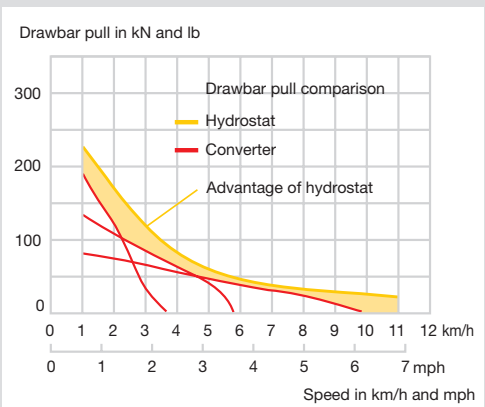
Grading properties

- The blade, which is well forward, and the inside mounted C-frame give the operator a perfect view of the blade corners and the work area.
- The front equipment, implement hydraulics and the basic machine are optimally aligned for efficient grading work at every time.



Hydrostatic travel drive from Liebherr

- This transmission system offers full power and safety in every operational situation.
- Infinitely variable speed adjustment ensures the optimal speed for every application.
- Engine speed sensing control with automatic speed and speed alignment ensures optimal productivity.



Efficiency/speed

- High drawbar pull in all speed ranges and low thermal load:
  The Liebherr hydrostat and electronic speed sensing guarantee excellent efficiency with minimal fuel consumption.

Economy

With its low fuel and running costs, the PR 724 crawler tractor makes a big contribution to reducing costs. All service and maintenance work can be carried out within a short period of time. This greatly reduces down time and increases productivity.

Low fuel consumption

Economical drive system
The hydrostatic drive ensures optimum efficiency over the entire speed range.

Hydrostatic fan drive
The operating temperature is reached quickly as the fan is only switched on when required.

Load sensing hydraulics
This system only consumes the energy that is actually required by the operating equipment.

Low maintenance costs

Long maintenance intervals
The maintenance intervals are optimally geared to the individual components. Maintenance-free solutions are used in special applications.

Tilting cab and centralized service points
Both the operator and maintenance staff have quick and easy access to the important maintenance points.

High track frame service life

Large track frame components
The use of high-quality components with a large amount of usable material ensures high service life.

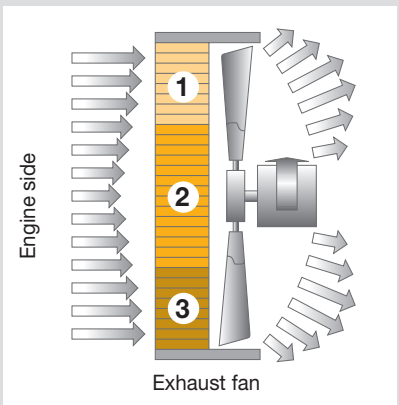
Use of standard track frames
In contrast to track frames with raised sprockets, standard track frames are subjected to less stress within the individual track frame components – thus increasing the service life and reducing costs.

Maintenance-friendly

- Easily accessible, wide-opening engine compartiment doors, centralized maintenance points and a tilting cab for quick and easy maintenance

Optimised transport width

- The 6-way blade with hinged corners provides a transport width of less than 9’ 10”, enabling easy transport and great productivity on site.



Triple-action combination cooler

- The hydrostatically driven and thermostatically controlled fan constantly adapts to the actual cooling requirement, reducing noise emissions and fuel consumption. The triple combination cooler cools the charge air (1), the water (2) and the hydraulic oil (3).
- Optional: reversible fan for the quick cleaning of the cooler and the engine compartment by reversing airflow.

Reliability

You can rely on Liebherr performance: With its high quality and advanced technology, the PR 724 crawler tractor offers maximum availability. With its robust cast steel components on the parts of the machine that are subjected to high stress, the machine meets all application requirements.

Intelligent solutions for continuous use over extended time

Low engine speed	The advanced engine design ensures reduced noise levels. Engine life is prolonged due to low piston speed.
Large distance between the cooler (fin spacing)	The highly efficent, large cooler provides large fin spacing. This greatly reduces the risk of blockage and subsequent overheating.
Hydrostatic fan drive	The operating temperature is controlled reliably and independently. This gives a long service life of the main components.
Automatic dust extraction	This self-cleaning function considerably lengthens the maintenance intervals of the air filter.
Ground clearance	The large ground clearance and a flat, closed underbody prevent material from accumulating and enable optimum performance and mobility even in the toughest applications such as in quarries or in forestry work.

Endurance tested components

- All components are subjected to intensive endurance tests. Only parts that meet the high Liebherr quality standards are used.

Key technologies from Liebherr

- Liebherr has many years of experience in the development, engineering and production of components.
- Liebherr-built engines, transfer box, hydraulic components and travel drives represent the highest quality.
- Group-wide know-how enables the ideal configuration of each machine and ensures maximum dependability.

Intuitive single-joystick control

- Adjustment of the travel speed to the job in question: continuously variable within 3 speed ranges.

1) Continuous forward travel
2) Continuous reverse travel
3) + 4) Right cornering and counter-rotation
5) +6) Left cornering and counter-rotation
7) Selector switch for speed ranges.

Inching brake pedal

- An inching brake pedal is also available as an option. In this case, in addition to the Liebherr single-joystick control, the operator can use the foot pedal to control the speed of the machine and, if necessary, apply the brakes.

1) Inching function
2) Brake function

Comfort

The comfortable cab is spacious, soundproof and has been ergonomically designed. It offers ideal conditions for productive work without tiring the operator. Excellent visibility both all around and on the sides of the blade – enable reliable and precise operation.

Maximum cab volume with excellent visibility conditions

Comfort cab
Large, soundproof, ergonomically designed cab, allows the operator to work comfortably throughout the day.

Large Window Area
Large, sloping doors allow a full view of the sides and corners of the blade.

ROPS/FOPS cab
Optimum all round view due to the ROPS and FOPS protection integrated in the cab.

Low sound levels

Low internal noise
Liebherr crawler tractors offer the operator a noise level within the cab that is far below legal requirements.

Low external noise
Very low exterior sound – Liebherr crawler tractors are exemplary and easily comply with noise regulations.

Simple and precise control

Liebherr single-joystick control
All driving movements can be easily controlled with only one joystick – including continuous speed selection and the “turning on the spot“ (counter rotation) function.

Simple and quick maintenance

Centralized maintenance points
All the maintenance points of the drive line are located on one side of the machine to keep daily maintenance to a minimum.

Digital panel

- Ideally positioned in the field of view of the operator, the digital panel informs the operator about all the important machine data.

Comfortable seating and storage space

- A flexible seat that can be adjusted to the operator’s requirements with 3-way adjustable armrests creates a pleasant workspace.
- Large storage space including a 12V socket for operating a cooler are standard features.

Basic machine

Engine

Liebherr diesel engine	D 924 TI-E Emission regulations according to 97/68/EC Stage II, EPA/CARB Tier 2
Rating (ISO 9249)	118 kW / 160 HP
Rating (SAE J1349)	118 kW / 158 HP
Rated speed	1.800 rpm
Displacement	6.6 l / 403 cu.in.
Design	4-cylinder in-line engine, water-cooled, turbocharged, air-air-intercooler
Injection system	Direct fuel injection with in-line injection pump, mechanical governor
Engine lubrication	Force-feed lubrication, engine lubrication in an inclined position of up to 45°, on all sides
Operating voltage	24 V
Alternator	DC / 55 A
Starter	5.4 kW
Batteries	2 x 110 Ah / 12 V
Air cleaner	Dry air filter with pre-cleaner and automatic dust extraction, main and safety element
Cooling system	Combination radiator, comprised of a radiator for water, hydraulic fluid, charge air; hydrostatic fan drive

Travel drive, control

Transmission system	Infinitely variable hydrostatic travel drive, independent drive for each track frame side
Travel speed	Continuously variable Speed range 1: 0-4.0 km/h / 2.5 mph (4.8 km/h / 3 mph reverse) Speed range 2: 0-6.5 km/h / 4mph (7.8 km/h / 4.8 mph reverse) Speed range 3: 0-11.0 km/h / 6.8 mph (11.0 km/h / 6.8 mph reverse)
Drawbar pull	227 kN at 1.5 km/h / 0.9 mph
Electronic engine speed sensing control	Litronic regulation system ensures a constant balance between the travel speed and the necessary drawbar pull using engine speed sensing
Steering	Hydrostatic
Service brake	Hydrostatic (self locking), wear-free
Parking brake/ emergency brake	multi-disc brake, wear-free, automatically applied with neutral joystick position
Cooling system	Hydraulic oil cooler, integrated in combination radiator
Filter system	Micro cartridge filters in cooling circuit
Final drive	Spur gear stage with second-stage planetary gear stage, piston ring type seal with electronic seal monitoring
Control	Single joystick for all travel and steering functions and counter rotation

Track frame

	L	XL	LGP
Mount	Via separate pivot shafts and an oscillating equalizer bar		
Chains	Lubricated, single grouser pads, tension via grease tensioner and hydraulic cylinders		
Links	42	46	46
Track rollers/carrier rollers	7/2	8/2	8/2
Sprocket segments	5	5	5
Track pad width standard	508 mm (20”)	508 mm (20”)	711 mm (28”) 812 mm (32”)
Track pad width option	560 mm (22”) 610 mm (24”)	560 mm (22”) 610 mm (24”)	914 mm (36”)

Hydraulic equipment

Hydraulic system	Load sensing (demand-controlled)
Pump type	Swash plate piston pump
Pump flow max.	174 l/min / 45.9 gpm
Pressure limitation	200 bar / 2900 PSI
Control valve	2 segments, expandable to 4
Filter system	Return filter with magnetic rod in the hydraulic tank
Control	Single four-way joystick for all blade functions

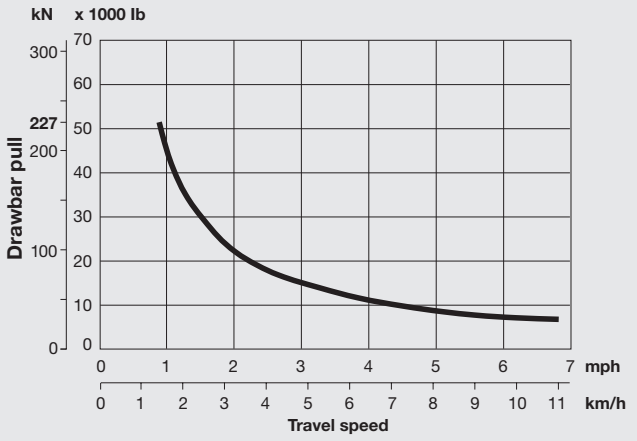
Operator’s cab

Cab	Resiliently mounted cab with enclosed positive pressure ventilation, can be tilted with the hand pump 40° to the rear. With integral ROPS Rollover Protective Structure (ISO 3471) and FOPS Falling Objects Protective Structure (ISO 3449)	
Operator’s seat	Fully adjustable suspended swivel seat adjustable to operator’s weight	
Monitoring	Combined analogue / LCD display, automatic monitoring, display and warnings in the event of unexpected machine operation	
Noise emissions	Sound pressure level at the operator’s position Sound power level surrounding area	L_{pA} = 77 dB(A) (ISO 6396:1992) L_{wA} = 109 dB(A) (2000/14/EC)

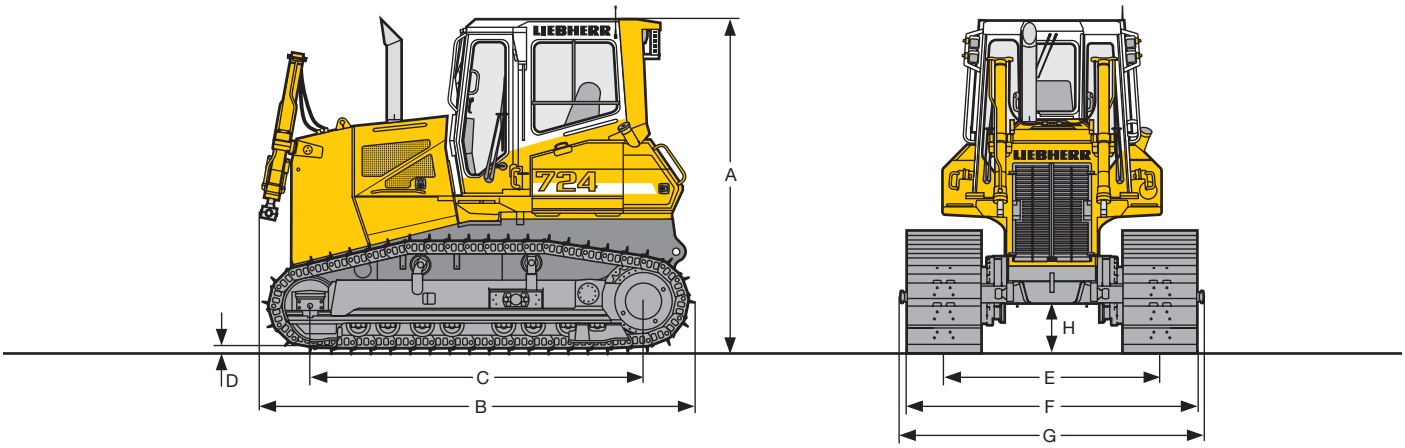
Refill capacities

Fuel tank	365 l (96.4 gallons)
Cooling system	30 l (7.9 gallons)
Engine oil	19 l (5 gallons)
Splitter box	3.2 l (0.8 gallons)
Hydraulic tank	162 l (42.8 gallons)
Final drive, each	18.5 l (4.9 gallons)

Drawbar pull PR 724



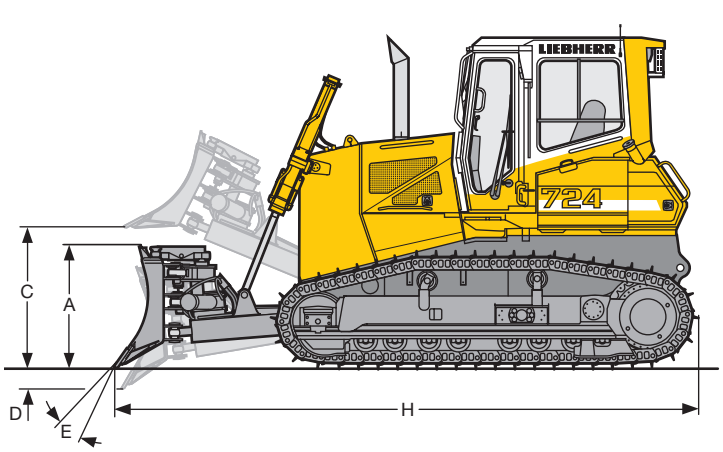
Dimensions

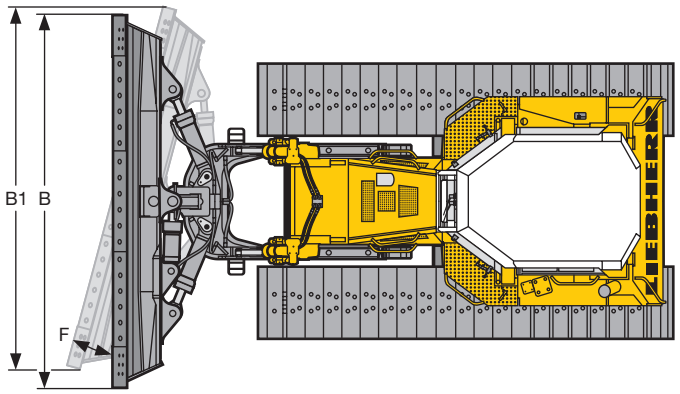


Dimensions		PR 724 L	PR 724 XL	PR 724 LGP
A Height over cab	mm	3,197	3,197	3,197
	ft-in	10’6”	10’6”	10’6”
B Overall length without attachments	mm	4,114	4,173	4,173
	ft-in	13’6”	13’8”	13’8”
C Distance idler/sprocket centre	mm	2,830	3,210	3,210
	ft-in	9’3”	10’6”	10’6”
D Height of grousers	mm	56	56	56
	inch	2.2”	2.2”	2.2”
E Track gauge	mm	1,800	1,800	2,084
	ft-in	5’11”	5’11”	6’10”
F Width above tracks[1]	mm	2,410	2,410	2,998
	inch	7’11”	7’11”	9’10”
G Width over ball head	mm	2,648	2,648	3,248
	ft-in	8’8”	8’8”	10’8”
H Ground clearance	mm	475	475	475
	ft-in	1’7”	1’7”	1’7”

[1] Track pads 610 mm/24” (L and XL), respectively 914 mm/36” (LGP)

Front attachment

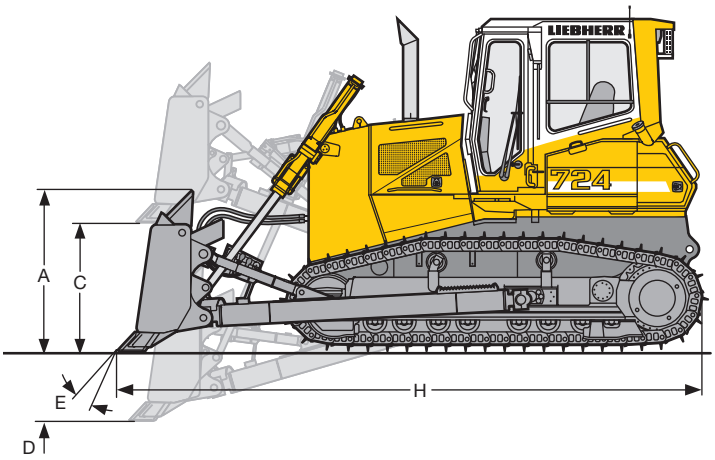


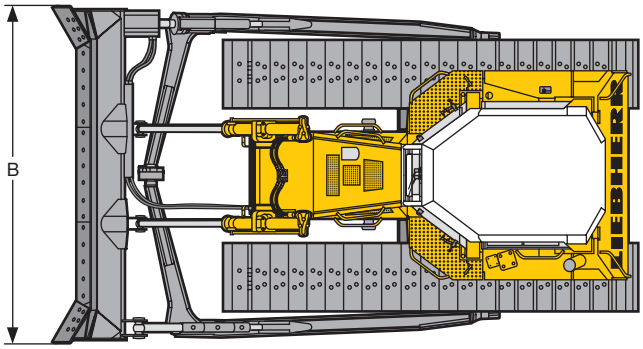


6-way-blade with inside mounted push frame[1]		6-way blade L	6-way blade XL	6-way blade with hinged corners XL	6-way blade LGP	6-way blade with hinged corners LGP
Blade capacity according to ISO 9246	m^3	3.17	3.17	3.17	3.39	3.39
	yd^3	4.15	4.15	4.15	4.43	4.43
A Height of blade	mm	1,200	1,200	1,200	1,100	1,100
	ft-in	3'11"	3'11"	3'11"	3'7"	3'7"
B Width of blade	mm	3,204	3,204	3,204	3,790	3,790
	ft-in	10'6"	10'6"	10'6"	12'5"	12'5"
B1 Width of blade angled	mm	2,997	2,997	3,081	3,537	3,638
	ft-in	9'10"	9'10"	10'1"	11'7"	11'11"
Transport width	mm	2,997	2,997	2,430	3,537	3,000
	ft-in	9'10"	9'10"	8'	11'7"	9'10"
C Lifting height	mm	1,149	1,187	1,187	1,174	1,174
	ft-in	3'9"	3'11"	3'11"	3'11"	3'11"
D Depth below ground	mm	532	510	510	504	504
	ft-in	1'9"	1'8"	1'8"	1'8"	1'8"
E Max. blade pitch		5°	5°	5°	5°	5°
F Angle adjustment		23°	23°	18°	23°	18°
Max. blade tilt	mm	474	474	474	560	560
	ft-in	1'7"	1'7"	1'7"	1'10"	1'10"
H Overall length, blade straight	mm	5,369	5,501	5,501	5,468	5,468
	ft-in	17'7"	18'11"	18'11"	17'11"	17'11"
Operating weight[2]	kg	16,675	17,235	17,570	18,245	18,580
	lb	36,768	38,003	38,742	40,230	40,969
Ground pressure[2]	kg/cm^2	0.48	0.44	0.45	0.31	0.32
	PSI	6.83	6.26	6.4	4.41	4.55

[1] Optional outside-mounted push frame (See Attachment-Information concerning the 6-way blade with outside-mounted push frame)
[2] Lubricants and fuels, 6-way blade, operator, track pads 610 mm/24" (L and XL) resp. 914 mm/36" (LGP)

Front attachment

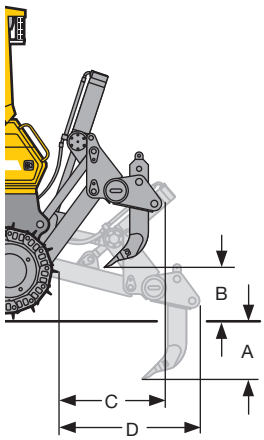


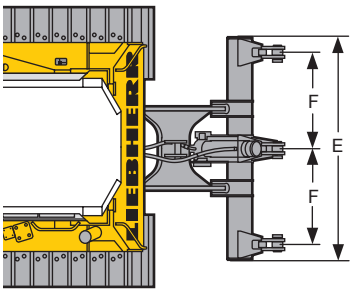


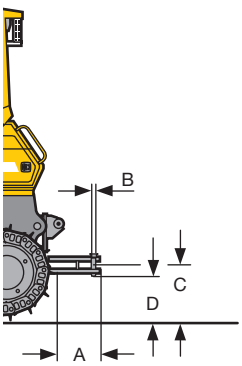
Semi-U blade and straight blade		Semi-U blade L	Semi-U blade XL	Straight blade LGP
Blade capacity according to ISO 9246	m^3	4.27	4.27	3.43
	yd^3	5.58	5.58	4.49
A Height of blade	mm	1,250	1,250	1,100
	ft-in	4’1”	4’1”	3’7”
B Width of blade	mm	3,000	3,000	3,600
	ft-in	9’10”	9’10”	11’10”
C Lifting height	mm	968	1,062	1,061
	ft-in	3’2”	3’6”	3’6”
D Depth below ground	mm	419	460	460
	ft-in	1’4”	1’6”	1’6”
E Max. blade pitch		10°	10°	10°
Max. blade tilt	mm	639	639	618
	ft-in	2’1”	2’1”	2’0”
H Overall length, blade straight	mm	5,155	5,535	5,316
	ft-in	16’11”	18’2”	17’5”
Operating weight[1]	kg	16,600	17,095	18,130
	lb	36,603	37,694	39,977
Ground pressure[1]	kg/cm^2	0.48	0.44	0.31
	PSI	6.83	6.26	4.41

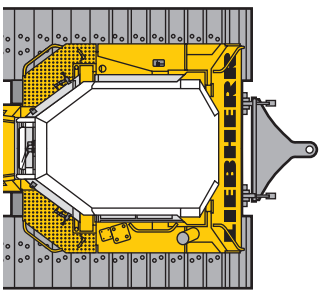
[1] Lubrication and operating materials, semi-U blade/straight blade, operator, track pads 610 mm/24” (L/XL) or 914 mm/36” (LGP)

Rear attachment









Ripper 3 shanks		Parallelogram
A Ripping depth (max./min.)	mm	500 / 350
	ft-in	1’8”/1’2”
B Lifting height (max./min.)	mm	650 / 500
	ft-in	2’2”/1’8”
C Overall length, attachment raised	mm	1,071
	ft-in	3’6”
D Overall length, attachment lowered	mm	1,427
	ft-in	4’8”
E Toolbar width	mm	2,300
	ft-in	7’7”
F Distance between teeth	mm	1,000
	ft-in	3’3”
Weight	kg	1,480
	lb	3,263

Drawbar		Rigid
A Additional length	mm	463
	ft-in	1’6”
B Socket pin diameter	mm	45
	ft-in	0’2”
C Height of hoe	mm	525
	ft-in	1’9”
D Ground clearance	mm	435
	ft-in	1’5”
Jaw opening	mm	90
	ft-in	0’4”
Weight	kg	205
	lb	452

Equipment

Basic machine	s	o
Tow switch	•	
Towing hitch rear	•	
Towing lug front	•	
Forestry equipment		•
Landfill equipment		•
Battery compartment, lockable	•	
Filling with environmentally-friendly oil		•
Filling with oil SAE 30		•
Filling with oil SAE 10		•
Tank guard, complete		•
Refuelling pump, electric		•
Belly pans, heavy-duty	•	
Cold start device, glow plug	•	
Radiator, wide-meshed	•	
Radiator guard, heavy-duty		•
Radiator guard, hinged	•	
Liebherr diesel engine	•	
Fan, hydraulically driven	•	
Fan, hydraulically driven, reversible		•
Fan guard	•	
Engine cover, perforated	•	
Engine doors, perforated	•	
Engine doors, hinged, lockable	•	
Lugs for crane lifting	•	
Special paint		•
Fuel water separator	•	
Fuel water separator with electric heater		•
Air filter, dry type, dual step	•	
Pre-cleaner with automatic dust ejector	•	
Toolkit	•	

Travel drive	s	o
Parking brake, automatic	•	
Function control, automatic	•	
Control, single joystick	•	
Load limit control, electronic	•	
Electronic control	•	
Travel control, 3-speed	•	
Hydrostatic travel drive	•	
Inching brake pedal		•
Emergency stop	•	
Oil cooler	•	
Final drives planetary gear	•	
Safety lever	•	

Track frame	s	o
Trad pad in design ESS		•
Track frame, closed	•	
Sprocket segments, bolted	•	
Master link, two-piece	•	
Track shoes with mud hole track pads		•
Track guide centre part		•
Tracks oil-lubricated	•	
Track guard		•
Undercarriage L		•
Undercarriage XL		•
Undercarriage LGP		•
Track frames, oscillating	•	
Pivot shaft, separate	•	
Sprocket segments with recesses		•

Electrical system	s	o
Starter motor 5.4 kW	•	
Working lights, front, 6 units	•	
Working lights, rear, 2 units	•	
Batteries, heavy-duty cold start, 2 units	•	
Battery main switch, electric	•	
On-board system 24 V	•	
Alternator 55 A	•	
Alternator 80 A		•
Back-up alarm		•
Beacon		•
Horn	•	
Start lock, electronic		•
Additional lights, rear		•

Operator's cab	s	o
Storage box	•	
Adjustable armrest	•	
Ash tray	•	
Pressurised with air filter	•	
Operator's seat, 6-way adjustable	•	
Operator's seat, air-suspended		•
Fire extinguisher		•
Dome light	•	
Coat hook	•	
Air conditioner		•
FM radio		•
Radio installation kit		•
ROPS/FOPS	•	
Rear mirror, inside	•	
Safety glass, tinted	•	
Windshield washer system with intermittent function	•	
Windshield wipers front, rear	•	
Sliding window, left	•	
Sliding window, right		•
Protective grids for windows		•
Extension, seat back		•
Sun visor	•	
Socket 12 V	•	
Hot water heating	•	

Instruments – Indicators	s	o
Battery charging	•	
Engine-hour meter	•	
Electronic control	•	
Speed range	•	
Engine oil pressure	•	
Cooling water temperature	•	
Oil pressure cooling circuit	•	
Oil level final drives	•	
Float position blade	•	
Fuel level	•	
Contamination hydraulic filter	•	
Contamination air filter	•	
Cold start diesel engine	•	
Oil temperature warning indicator		•

Hydraulic equipment	s	o
Hydraulic control ripper		•
Hydraulic control winch		•
Variable flow pump, load-sensing	•	
Oil filter with strainer in hydraulic tank	•	
Blade quick drop	•	
Control block for 2 circuits	•	
Float position blade	•	
Hydraulic servo control	•	
Hydraulic tank oil level control		•

Attachments	s	o
Mounting plate for external tools		•
Drawbar rear, rigid		•
Drawbar rear, swivelling		•
Counterweight, rear		•
Ripper 3 shanks		•
Bumper rear		•
6-way blade with inside mounted pushframe		•
6-way blade with outside mounted pushframe		•
Straight blade		•
Semi-U blade		•
Winch		•
Spill plate for blade		•

S = Standard, O = Option

Subject to changes.

Options and/or special attachments, supplied by vendors other than Liebherr, are only to be installed with the knowledge and approval of Liebherr 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, too. 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 its 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 100 companies with over 23,000 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

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