## **Crawler Tractors**

PR 754

**PR 764** 

Litronic

Engine Output (SAE J1349): Engine Output (ISO 9249): Operating Weight: 250 kW / 335 HP 250 kW / 340 HP 35,000 - 40,800 kg 77,162 - 89,948 lb 310 kW / 416 HP 310 kW / 422 HP 44,220 - 52,685 kg 97,488 - 116,150 lb



# LIEBHERR

## **PR 754**

Engine Output (SAE J1349): 250 KW / 335 HP Engine Output (ISO 9249): 250 KW / 340 HP Operating Weight: 35,000 - 40,800 kg

77,162 - 89,948 lb

Blade Capacity: 8.9 - 11.7 m<sup>3</sup>

11.6 - 15.3 yd<sup>3</sup>

Hydrostatic travel drive, electronically controlled

## **PR 764**

Engine Output (SAE J1349): 310 kW / 416 HP Engine Output (ISO 9249): 310 KW / 422 HP **Operating Weight:** 44,220 - 52,685 kg

97,488 - 116,150 lb

Blade Capacity: 13.6 - 17.0 m<sup>3</sup>

17.8 - 22.2 yd<sup>3</sup>

Hydrostatic travel drive, electronically controlled



#### **Performance**

Power and innovative technology are features of Liebherr's generation 4 crawler tractors. Their excellent power-to-weight ratio stands for maximum productivity in all operating conditions. Whether ripping hard ground, moving material or grading surfaces, the outstanding performance of the PR 754 and PR 764 never fails to impress.

#### **Economy**

Liebherr's economic advantages are undisputed: like all Liebherr machines, the PR 754 and PR 764 save money by being easy to service, with shorter down times and lower maintenance costs. The Liebherr diesel engines combines performance with economy, and with the machines' efficient drive-train, impressive power is available at minimum fuel consumption.

#### Reliability

Sturdy and strong: Liebherr crawler tractors and the materials used to build them are designed for long, trouble-free life. Components subject to severe loads are made from high-strength materials, and points exposed to possible damage are well protected. Liebherr crawler tractors owe their high levels of availability to these stringent reliability standards.

#### Comfort

The operator of a generation 4 Liebherr crawler tractor works in a cab of generous size, with controls laid out according to the latest ergonomic principles. This well-designed cab provides an ideal view of the work area and the working equipment. Intuitive single joystick control makes for sensitive and accurate dozer operation.

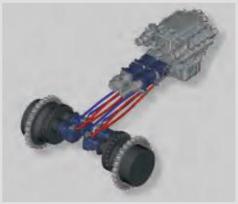






## Liebherr diesel engines featuring the latest technologies:

- Electronically controlled, the power output and torque curves are designed for outstanding power and tractive force when ripping or dozing.
- An extra-deep oil sump maintains engine lubrication at slopes of up to 45 degrees (PR 754) and 40 degrees (PR 764).





## Performance

Liebherr has successfully been building crawler tractors with hydrostatic transmission for the past thirty years. The generation 4 models exemplify power, efficiency and capability in a wide range of applications.

#### **Outstanding productivity**

Impressive power and drawbar pull

The powerful Liebherr diesel engine, combined with Liebherr's innovative driveline, makes ample power available for every working situation. The hydrostatic drive requires no gear shifting: engine power reaches the tracks without interruption, even when turning.

High traction and ripping power

Thanks to the hydrostatic transmission, the operator simply selects the most suitable working speed. The system automatically maintains peak engine rpm and power efficiency. Track slip is kept low and maximum power is continuously transferred to the tracks.

**Bogie suspension** 

For work on uneven or rough surfaces, Liebherr offers different types of bogie undercarriages for increased traction and pushing power.

Outstanding maneuverability The hydrostatic drive is particularly suitable for ripping work. The machine can be turned quickly, the rear mounted ripper positioned accurately between hard rock layers, and the material broken out with the necessary force.

**Optimized blade** patterns

The blades for the PR 754 and PR 764 have had their penetration and rolling behavior optimized, to increase their transport capacity.

Low center of gravity

The driveline assemblies are compact so that the complete machine has a very low center of gravity, thereby allowing safe operation on steep slopes.

Generous ground clearance

The well-planned component layout is designed for maximum ground clearance. Heavy duty belly pans prevent damage when working on rough stone or rock.

#### Liebherr hydrostatic transmission

- Automatic speed and torque adjustment keeps the engine working at optimal power as the load changes.
- Even at low speeds, for example in demanding ripping operations, the thermal load of the hydrostatic travel drive remains low. The efficiency of the drive remained virtually unchanged.



#### Oscillating roller tracks

- When working on uneven surfaces, oscillating bogie undercarriages increase the ground contact area and improve traction. In addition, the resilient mountings effectively absorb shock loads.
- For work on softer, more yielding surfaces such as coal or wood chips, tracks with rigid rollers are used.



# Specific fuel consumption [g/kWh] Engine rated speed [1/min]

## Constant engine speed keeps fuel consumption low

• Since the engine's nominal operating speed is in the region of its lowest specific fuel consumption, maximum operating economy is assured.





## **Economy**

Liebherr crawler tractors are designed with economy in mind, featuring low fuel consumption, high productivity, extended component life and minimum maintenance costs.

#### Low fuel consumption

**Constant low** engine speeds The Liebherr diesel engine always operates at a constant speed - in the most economical rpm range regardless of the actual travel speed.

A low mean piston speed boosts cylinder filling and leads to more efficient combustion of the fuel-air mixture.

Efficient driveline

Hydrostatic transmission delivers the best possible level of efficiency over the full speed range. Even when peak power at low ground speed is required e.g. when ripping - the oil temperature remains low.

Load-sensing implement hydraulics This system keeps energy consumption down to the level needed by the hydraulics at any given moment. It saves fuel when the work tools are not being operated.

#### Low maintenance costs

Good accessibility

All the diesel engine's servicing points are grouped together centrally, and can be easily reached. The hydraulic tilt cab makes it even easier to reach the various mechanical assemblies for quick, effective servicing.

Longer maintenance intervals

Maintenance intervals are optimally matched to the various components and assemblies. Where parts are exposed to dirt and dust, for instance on the pushing frame, maintenance-free bearings are used.

#### **Long-life tracks**

Large track components High-quality components with ample dimensions prolong the operating life of the undercarriage.

#### Tiltable cab

• For easy, quick access to all drivetrain and hydraulic components.

#### Simple maintenance

• All the servicing points are located centrally and are easy to reach, minimizing the time spent on daily inspection work.



#### Liebherr Litronic control system

- Liebherr's Litronic control system matches travel speed ideally to the task at hand.
- Track slip is kept to a minimum in pushing as well as in ripping applications; this improves power transmission and prolongs track life.





#### The ideal configuration for every task

- For mining or applications in abrasive materials, optional wear plates increase machine operating life.
- Liebherr offers special machine configurations for landfill, coal, or woodchip applications, as well as for low ambient temperatures.





## Reliability

Well-proven technologies and high quality are what keeps a machine ready for use. Liebherr develops and builds its own components and assemblies specifically for use on construction and civil engineering machinery, so that their strength can be guaranteed however difficult the application.

#### Liebherr powertrain

Liebherr engines

Liebherr diesel engines have been developed for the toughest imaginable operating conditions. A rigid ladder-type frame reduces engine vibration and provides the strength needed for maximum operating reliability and long service life.

Wear-free driveline concept

A tried and tested system: Liebherr's hydrostatic travel drive needs no torque converter, manual-shift gearbox, differential steering or steering clutches. The system's hydraulic pumps and motors are standardized, effectively wear-free in operation and exceptionally reliable.

Long-life final drives

Of ample dimensions, Generation 4 final drives are designed to withstand the most severe loads. Double transmission seals with automatic leak detection enhance reliability even more.

#### **Robust steel construction**

**Box-section main frame** 

The main frame is of box-section design – a well-proven principle for maximum torsional stiffness and optimal absorption of forces. Cast steel is used for components subject to high stress.

Rear-mounted ripper

Liebherr rippers are built for heavy-duty tasks, and have extra protection at all areas exposed to wear.

#### Secrets of long-term reliability

Modern cooling system

Two hydrostatically driven fans and a wide-meshed radiator guarantee optimal cooling performance, even in dusty environments.

**Protected electrics** 

High quality cable protection prevents mechanical damage to the cable harness.

#### Component endurance tests

- Even at the design stage, components are subjected to FE analysis in order to determine their dimensions in relation to the loads they will encounter.
- All components undergo long-term laboratory and field testing, and only those that comply with Liebherr's high quality standards are approved for production.



#### Modern cooling system

- Two electronically controlled fans draw in the volume of air actually needed to keep the hydraulic fluid and engine oil temperatures stable as loads vary. All components operate in their most favorable temperature ranges, thus avoiding unnecessary strain and prolonging their trouble-free operating life.
- Cooling air is drawn in from clean zones around the machine, to keep dust contamination to a minimum.
- Optional: a reversible fan for automatic radiator cleaning when operating in extremely dirty or dusty conditions.





#### Intuitive single joystick control

• Fingertip speed control: three travel speed ranges can be preselected and programmed individually by push-button: Initial settings Stage 1: 0 – 2.5 mph

Stage 2: 0 – 4.0 mph Stage 3: 0 - 6.8 mph

• Memory function Each time the machine is restarted, all existing settings are retained.



#### Inching brake pedal

- In addition to the travel joystick, the operator can control speed via a pedal and apply the brakes if necessary.
- 1 Inching function 2 Braking function



## Comfort

The operator's work area has been redesigned for an exceptionally high level of comfort and convenience. There is ample space, the controls are laid out ergonomically and the noise level is low. Liebherr cabs provide perfect conditions for concentrated work without fatigue. The excellent view makes safe, accurate operation much easier.

#### **Outstanding cab design**

Ergonomics The well-planned cab layout makes conditions ideal

for stress-free, efficient operation of the machine. All instruments and controls are clearly laid out and within

easy reach.

Low noise levels

Thanks to effective sound insulation and the use of

modern, quiet-running diesel engines, the PR 754 and PR 764 feature exemplary noise levels that are well

below the legal limits.

Outstanding view Integral ROPS/FOPS protection large window area

provide the operator with the best possible view in

every direction.

#### Simple, precise control

A single joystick control A single joystick controls all travel movements conveniently and accurately, including the 'counter rota-

tion' function.

**Stepless speed control** Ground speed can be selected without gear changes

and therefore with no interruption to the transmission

of power.

**Safety in every situation** Even on steep gradients, the crawler tractor is always

positively driven. Since the system cannot freewheel (hydrostatic transmission), the operator controls braking simply by moving back the travel joystick. When the machine comes to a halt, the parking brake is ap-

plied automatically for additional safety.



#### Well-planned details

- A large storage compartment is standard, and includes a 12 Volt power.
- The seat with its wide range of adjustments and three-position armrests helps to provide a pleasant work area for the operator.
- Many other details, for example a sliding side window, tinted glass and a footrest, add to the operator's comfort.



### Excellent view of rear-mounted attachments

- ROPS/FOPS protection is integrated into the cab, with large window area
- Excellent view of ripper and surrounding work area
- Direct view of ripper adjusting pin

## **Basic machine**

10000 p					
Engine	PR 754	PR 764			
Liebherr diesel engine	D 946 L A6 Emission regulations acco 2004/26/EC Stage IIIA and				
Rating (SAE J1349)	250 kW / 335 HP	310 kW / 416 HP			
Rating (ISO 9249)	250 kW / 340 HP	310 kW / 422 HP			
Rated speed	1,600 <sup>1</sup> /min	1,600 <sup>1</sup> /min			
Displacement	12 I / 733 in <sup>3</sup>	16.2 I / 989 in <sup>3</sup>			
Design	6 cylinder in-line-engine (wet-sleeve) water-cooled, intercooled	8 cylinder V-engine turbocharged,			
Injection system	Direct fuel injection, pump-line-nozzle system, electronic control	Direct fuel injection, Common Rail system, electronic control			
Lubrication	Force-feed lubrication, enguaranteed for inclinations and 40° (PR 764)				
Operating voltage	24 V	24 V			
Alternator	80 A	80 A			
Starter	7.8 kW / 11 HP	7.8 kW / 11 HP			
Batteries	2 x 225 Ah / 12 V	2 x 225 Ah / 12 V			
Air cleaner	Dry-type air cleaner with safety element, aspirated pre-cleaner, service gauge in cab				
Cooling system	Combi radiator, comprising a radiator for water and charge air. Hydrostatic fan drive				

### Travel drive, control

	PR 754	PR 764
Transmission system	Infinitely variable hy independent drive f	vdrostatic travel drive, for each track
Travel speed* Speed range 1 (reverse) Speed range 2 (reverse) Speed range 3 (reverse)	0- 6.5 km/h / 4.0 m 0-11.0 km/h / 6.8 m * Pre-adjusted, all s	ele hph (4.8 km/h / 2.9 mph) hph (7.8 km/h / 4.8 mph) hph (11.0 km/h / 6.8 mph) heed ranges can be custo- el joystick (memory function)
Drawbar pull at 1.5 km/h / 0.9 mph	520 kN 116,901 lbf	610 kN 137,134 lbf
Electronic control	sensing feature) aut	peed sensing control (load tomatically adjusts travel pull to match changing
Steering	Hydrostatic	
Service brake	Wear-free, hydrosta	atic (dynamic braking)
Automatic park brake	,	tiple-disc brakes, automa- neutral joystick position
Cooling system	Separate hydraulic driven and thermos	oil cooler, hydrostatically tatically controlled
Filter system	Micro cartridge filte	rs in cooling circuit
Final drive	, ,	nation spur gear with plane- ple sealed with electronic ator
Control	Single joystick for a	all travel and steering



#### **Noise emissions**

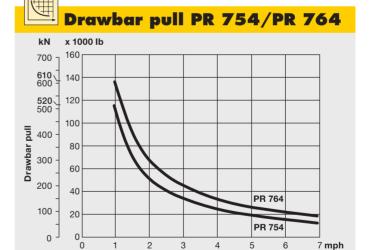
	PR 754	PR 764
Operator sound exposure	$L_{pA} = 78 \text{ dB(A)}$	$L_{pA} = 79 \text{ dB(A)}$
ISO 6396	emission at the operator's	position
Exterior sound pressure	$L_{wA} = 113 \text{ dB(A)}$	$L_{wA} = 114 \text{ dB(A)}$
2000/14/FC	emission in the environme	ent

motions, as well as for counter rotation

Operate Operate	or's cab	
	PR 754	PR 764
Cab	Resiliently mounted cab wentilation, can be tilted we to the rear. With integrate tective Structure (EN ISO ling Objects Protective St	with hand pump 40° and ROPS Rollover Pro- 3471) and FOPS Fal-
Operator's seat	Comfort seat, adjustable	to operator's weight
Monitoring	Combined analog / LC dismonitoring of abnormal o	

<b>Undercarriage</b>							
	PR 754	PR 764					
Design	Undercarriage with rigid o	r bogie suspension					
Mount	Via separate pivot shafts and an oscillating equalizer bar						
Chains	Lubricated single-bar grouser shoes ESS*, track chain tensioning via steel spring and grease tensioner						
Links, each side	44	44					
Track rollers/carrier							
rollers	7/2 each side	7/2 each side					
Sprocket segments	5 each side	3 each side					
Track shoes standard	560 mm / 22" ESS	610 mm / 24" ESS					
Track shoes optional	610 mm / 24" ESS 660 mm / 26" ESS 710 mm / 28" ESS	660 mm / 26" ESS 710 mm / 28" ESS 760 mm / 30" ESS					

<sup>\*</sup> ESS Extreme Service Shoes



10 11 **km/h** 

Usable drawbar pull will depend on traction and weight of tractor

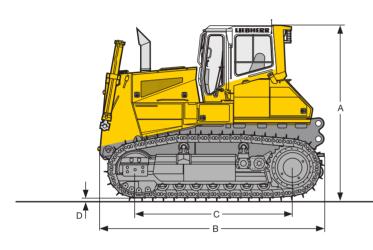
6 Travel speed

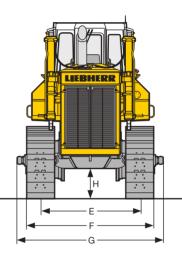
## **Basic machine**

#### **Hydraulic system** PR 754 PR 764 Load Sensing proportional pump flow control System type Pump type Swash plate variable displacement piston pump 261 l/min / 68.9 gpm 260 bar / 3,770 PSI 352 l/min / 92.9 gpm 260 bar / 3,770 PSI Pump flow max. Pressure limitation Control valve 2 segments, expandable to 4 Filter system Return filter with magnetic rod in the hydraulic Control Single joystick for all blade functions

Refill co	apac	ities in	US ga	llons
	PR 75	4	PR 76	4
Fuel tank	650 I	(171.6 gallons)	860 I	(227 gallons)
Cooling system	74 I	(19.5 gallons)	85 I	(22.4 gallons)
Engine oil with oil filters	43 I	(11.4 gallons)	70 I	(18.5 gallons)
Splitter box	5.5 l	(1.5 gallons)	6.4	(1.7 gallons)
Hydraulic tank	215 I	(56.8 gallons)	281 I	(74.2 gallons)
Final drive, each	18.5 l	(4.9 gallons)	22.5	(5.9 gallons)

## **Dimensions**

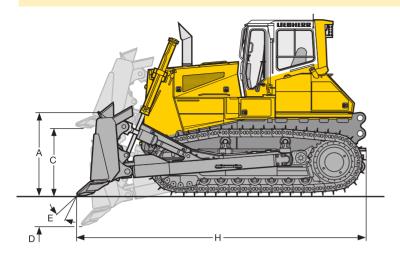


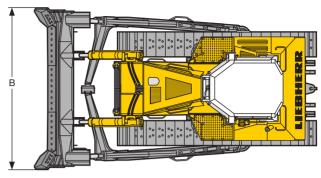


Dimensions		PR :	754	PR 764		
		Rigid undercarriage	Single bogie suspension	Rigid undercarriage	Single bogie suspension	Double link bogie suspension
A Height over cab	mm ft-in	·	630 11"		3,935 12'11"	
B Overall length without attachments	mm ft-in	· ·	375 '0"		5,280 17'4"	
C Distance idler/sprocket center	mm ft-in		174 '5"		3,540 11'7"	
D Height of grousers	mm in	8 3.3	•		84 3.31"	
E Track gauge	mm ft-in	,	180 2"		2,240 7'4"	
F Total width over tracks	mm ft-in	· · · · · · · · · · · · · · · · · · ·	749 0"		2,850 9'4"	
G Total width over blade-mounting trunnions	mm ft-in	·	'4"		3,263 10'8"	
H Ground clearance	mm in	63 25	30 5"		695 27"	
Tractor shipping weight <sup>1</sup>	kg lb	28,947 63,817	29,842 65,790	37,537 82,755	38,037 83,857	38,437 84,739

<sup>&</sup>lt;sup>1</sup> Includes coolant, lubricants, 20% fuel, ROPS/FOPS cab and track shoes 560 mm/22" for PR 754, track shoes 610 mm/24" for PR 764.

## Front attachment

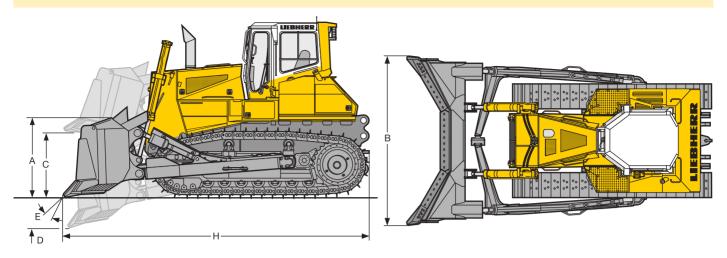




Semi-U	blade	PR :	754		PR 764	
		Rigid undercarriage	Single bogie suspension	Rigid undercarriage	Single bogie suspension	Double link bogie suspension
Blade capacity according to ISO 9246	m³ yd³		.9 .64		13.6 17.79	•
A Height of blade	mm ft-in	, ,	550 5"		1,950 6'5"	
B Width of blade	mm ft-in	,	)30 '3"		4,370 14'4"	
C Lifting height	mm ft-in		100 7"		1,480 4'10"	
D Depth below ground	mm in		70 2"		647 25"	
E Max. blade pitch		1	0°		9.4°	
Max. blade tilt	mm ft-in		72 2"		1,028 3'4"	
H Overall length	mm ft-in	· · · · · · · · · · · · · · · · · · ·	148 '2"		7,022 23'	
Operating weight <sup>1</sup> with track shoes 560 mm / 22"	kg lb	34,990 77,140	35,885 79,113	-	_	-
Ground pressure <sup>1</sup> with track shoes 560 mm / 22"	kg/cm² PSI	0.98 13.94	1.01 14.36	-	-	-
Operating weight <sup>1</sup> with track shoes 610 mm / 24"	kg lb	35,225 77,658	36,120 79,631	44,720 98,591	45,220 99,693	45,620 100,575
Ground pressure <sup>1</sup> with track shoes 610 mm / 24"	kg/cm² PSI	0.91 12.94	0.93 13.22	1.04 14.79	1.05 14.93	1.06 15.09
Operating weight <sup>1</sup> with track shoes 710 mm / 28"	kg Ib	35,695 78,694	36,590 80,667	45,400 100,090	45,900 101,192	46,300 102,074
Ground pressure <sup>1</sup> with track shoes 710 mm / 28"	kg/cm² PSI	0.79 11.23	0.81 11.52	0.90 12.81	0.91 12.94	0.92 13.08
Operating weight <sup>1</sup> with track shoes 760 mm / 30"	kg lb	-	-	45,680 100,707	46,180 101,809	46,580 102,691
Ground pressure <sup>1</sup> with track shoes 760 mm / 30"	kg/cm² PSI	-	-	0.85 12.09	0.86 12.23	0.87 12.37

<sup>&</sup>lt;sup>1</sup> Includes coolant, lubricants, 20% fuel, ROPS/FOPS cab, semi-U blade, operator

## Front attachment

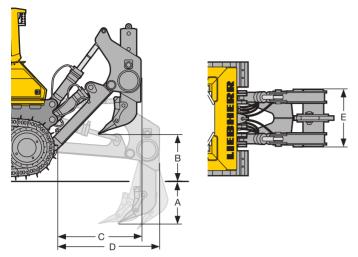


U k	lade *	PR	754		PR 764	
		Rigid undercarriage	Single bogie suspension	Rigid undercarriage	Single bogie suspension	Double link bogie suspension
Blade capacity according to ISO 9246	m³ yd³		1.7 5.3		17.0 22.23	
A Height of blade	mm ft-in	,	650 '5"		1,950 6'5"	
B Width of blade	mm ft-in		325 2'2"		4,650 15'3"	
C Lifting height	mm ft-in	,	400 '7"		1,480 4'10"	
D Depth below ground	mm in		70 2"		647 25"	
E Max. blade pitch		1	0°		9.4°	
Max. blade tilt	mm ft-in	,	043 '5"		1,094 3'7"	
H Overall length	mm ft-in	,	915 2'8"		7,549 24'9"	
Operating weight <sup>1</sup> with track shoes 560 mm / 22"	kg lb	36,090 79,565	36,985 81,538	-	_	-
Ground pressure <sup>1</sup> with track shoes 560 mm / 22"	kg/cm² PSI	1.02 14.50	1.04 14.79	-	-	-
Operating weight <sup>1</sup> with track shoes 610 mm / 24"	kg lb	36,325 77,878	37,220 82,056	45,570 100,465	46,070 101,567	46,470 102,449
Ground pressure <sup>1</sup> with track shoes 610 mm / 24"	kg/cm² PSI	0.94 13.37	0.96 13.65	1.06 15.07	1.07 15.22	1.08 15.36
Operating weight <sup>1</sup> with track shoes 710 mm / 28"	kg lb	36,795 81,119	37,690 83,092	46,250 101,964	46,750 103,066	47,150 103,948
Ground pressure <sup>1</sup> with track shoes 710 mm / 28"	kg/cm² PSI	0.82 11.66	0.84 11.94	0.92 13.08	0.93 13.22	0.94 13.37
Operating weight <sup>1</sup> with track shoes 760 mm / 30"	kg Ib	_	-	46,530 102,581	47,030 103,683	47,430 104,565
Ground pressure <sup>1</sup> with track shoes 760 mm / 30"	kg/cm² PSI	-	-	0.86 12.23	0.87 12.37	0.88 12.51

<sup>\*</sup> Counterweight or rear attachment is recommended for improved performance and balance. 

1 Includes coolant, lubricants, 20% fuel, ROPS/FOPS cab, U blade, operator.

## Rear attachment

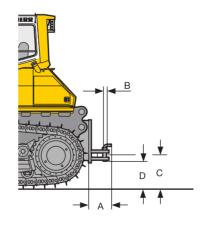


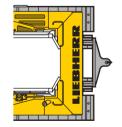
uomen de la companya	
---	--

	Rij Single-sh	Parallelogram with hydraulic pitch adjustment		
			PR 754	PR 764
Α	Ripping depth (max./min.)	mm ft-in	1,201 / 421 3'11" / 1'5"	1,300 / 476 4'3" / 1'7"
В	Lifting height (max./min.)	mm ft-in	1,040 / 260 3'5" / 10"	1,000 / 260 3'3" / 10"
С	Overall length, attachment raised	mm ft-in	1,821 6'0"	1,894 6'3"
D	Overall length, attachment lowered	mm ft-in	2,374 7'9"	2,494 8'2"
Ε	Ripper width	mm ft-in	1,330 4'4"	1,400 4'7"
	Max. shank pitch		31°	31°
	Maximum penetration force	kN lb	118.2 26,563	166.9 37,507
	Pryout force	kN lb	208.8 46,924	291.5 65,509
	Weight	kg Ib	3,631 8,005	4,786 10,551
				•

Maximum penetration force	kN	118.2	166.9
	lb	26,563	37,507
Pryout force	kN	208.8	291.5
	lb	46,924	65,509
Weight	kg	3,631	4,786
	lb	8,005	10,551
Drav	wbar	Rigid	
		PR 754	PR 764
A Additional length	mm	463	434
	in	18"	17"
B Socket pin diameter	mm	60	60
	in	2.36"	2.36"
C Height of jaw	mm	619	678
	in	24"	27"
D Ground clearance	mm	466	528
	in	18"	21"
Jaw opening	mm	105	105
	in	4.13"	4.13"
Weight	kg	660	750
	lb	1,455	1,653
Counterwe	eight	PR 754	PR 764
Counterweight	kg	4,000	5,000
	lb	8,818	11,023
Counterweight with storage compartment	kg lb	3,500 7,716	-

Ripper multi-shank		with hy pi	logram dravlic tch tment	
			PR 754	PR 764
Α	Ripping depth (max./min.)	mm ft-in	791 / 476 2'7" / 1'7"	900 / 520 2'11" / 1'8"
В	Lifting height (max./min.)	mm ft-in	985 / 670 3'3" / 2'2"	1,038 / 658 3'5" / 2'2"
С	Overall length, attachment raised	mm ft-in	1,821 6'0"	1,894 6'3"
D	Overall length, attachment lowered	mm ft-in	2,374 7'9"	2,494 8'2"
Ε	Toolbar width	mm ft-in	2,434 8'0"	2,494 8'2"
F	Distance between shanks	mm ft-in	1,100 3'7"	1,130 3'8"
	Max. shank pitch		31°	31°
	Maximum penetration force	kN lb	120.4 27,057	176.4 39,642
	Pryout force	kN lb	208.8 46,924	291.5 65,509
	Weight	kg Ib	4,725 10,417	6,160 13,580





# **Equipment**



#### **Basic machine**

Tow switch	•
Towing hitch rear	•
Towing lug front	•
Battery compartment, lockable	•
Belly pans, heavy-duty	•
Radiator, wide-meshed	•
Radiator guard, heavy-duty	•
Radiator guard, hinged	•
LiDAT Plus – Data transmission system	•
Liebherr diesel engine	•
Fan, hydraulically driven	•
Fan guard	•
Engine cover, perforated	•
Engine doors, perforated	•
Engine doors, hinged, lockable	•
Lugs for crane lifting	•
Fuel water separator	•
Air filter, dry-type, dual step	•
Pre-cleaner with automatic dust ejector	•
Toolkit	•
Forestry equipment	+
Landfill equipment	+
Filling with bio-degradable hydraulic oil	+
Tank guard, complete	+
Refueling pump, electric	+
Diesel particle filter	+
Special paint	+
Fuel water separator with electric heater	+



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	•



#### **Undercarriage**

Track frame, closed		•
Sprocket segments, bolted		•
Master link, two-piece		•
Tracks oil lubricated		•
Undercarriage, rigid		•
Track frames, oscillating		•
Pivot shaft, separate		•
Track guide center part		•
Track shoes SESS		+
Track shoes with mud hole		+
Track guard		+
Undercarriage with single bogie		
suspension		+
Undercarriage with double link bogie		
suspension	(2)	+
Sprocket segments with recesses		+



## **Electrical system**

Starter motor 7.8 kW	•
Working lights, front, 4 units	•
Working lights, rear, 2 units	•
Batteries, cold start, 2 units	•
Battery main switch, mechanical	•
On-board system 24 V	•
Alternator 80 A	•
Horn	•
Back-up alarm	•
Beacon	+
Immobilizer, electronic	+
Additional lights, rear	+
Additional lights, front, on lift cylinders,	
4 units	+



- Operator's cap	
Storage compartment	•
Armrests 3D adjustable	•
Pressurized cab with air filter	•
Operator's seat, 6-way adjustable	•
Dome light	•
Coat hook	•
Air conditioning	•
Radio pre installation	•
ROPS/FOPS	•
Rear mirror, inside	•
Safety glass, tinted	•
Windshield washer system	•
Windshield wipers front, rear and on the	
doors, with intermittent function	•
Sliding window, left	•
Sliding window, right	•
Sun visor	•
Socket 12 V	•
Warm water heating	•
Operator's seat, air-suspended	+
Fire extinguisher	+
FM radio	+
Protective grids for windows	+
Extension, seat back	+



## Control and warning lights

Display travel speed range (digital)	•
Engine coolant temperature gauge	
(analog)	•
Fuel gauge (analog)	•
Hour meter (analog)	•
Warning light battery charging	•
Warning light diesel engine	•
Warning light electronic travel	
control system	•
Warning light final drive seal,	
each side	•
Warning light parking brake	•
Warning light fuel water separator	•
Warning light fan control	•
Warning light pump replenishing	
pressure	•
Warning light float position blade	•
Warning light oil return filter	•
Warning light air filter	•
Warning light diesel engine preheating	•
Main warning light	•
Warning light hydraulic oil temperature	•
Hydraulic oil temperatur gauge	+
Warning light hydraulic oil level	+



#### **Hydraulic system**

Variable flow pump, load sensing	•
Oil filter in hydraulic tank	•
Blade quick drop	•
Control valve for 2 circuits	•
Float position blade	•
Hydraulic servo control	•
Hydraulic control ripper	+
Hydraulic control winch	+
Hydraulic tank oil level warning light	+



Attachments Attachments	
Mounting plate for external tools	+
Drawbar rear, rigid	+
Counterweight, rear	+
Ripper, 1 shank	+
Ripper, 3 shanks	+
Semi-U blade	+
U blade	+
Winch	+
Spill guard for blade	+

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. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

#### **Exceptional Customer Benefit**

Every product line provides a complete range of models in many different versions. With both their technical excellence and acknowledged quality, Liebherr products offer a maximum of customer benefits in practical application.

#### **State-of-the-art Technology**

To provide consistent, top quality products, Liebherr attaches great importance to each product area, its components and core technologies. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for construction equipment and mining trucks.

#### **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 120 companies with over 35,000 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.us

