# **Technical Description Wheel Loader**

L 544 2plus2

Tipping Load 10600 kg
Bucket Capacity 3,0-6,0 m<sup>3</sup>
Operating Weight 15,0 t
Engine Output 121 kW (165 HP)

Liebherr Norm Test 2,6 1/100 t



# LIEBHERR

# **Technical Data**



## **Engine**

Liebherr diesel engine D 924 TI-E A2 4-cylinder, inline engine, water-cooled exhaustturbo charged with intercooler

Power output

according to ISO 9249 \_ 121 kW (165 HP) at 2000 RPM 690 Nm at 1200 RPM Max. torque 6,64 litres Displacement Bore/Stroke 122/142 mm

Air cleaner Dry type with main and safety element, precleaner, service indicator on LCD display

Electrical system Operating voltage

Battery 2 x 110 Ah/12 V

Three-phase AC, 28 V/55 A .24 V/5,4 kW Alternator

Starter motor



#### **Travel Gear**

Stepless hydrostatic travel drive Type "2plus2" Variable-pitch swashplate pump and two axial piston motors in closed circuit with one axle transfer case

Filtering system Suction-side filter for the closed circuit Control By travel and inching pedal. The inching pedal makes it possible to control the tractive and

thrust forces steplessly at full engine speed. The Liebherr joystick is used to control forward and

Forwards and in reverse with tyre size 23.5R25

reverse travel Travel speeds Stage 1 0 - 10.0 km/hStage 2 and A2 0-20.0 km/h 0-40,0 km/h Stage A3



. Fixed
Centre pivot, with 13° oscillating angle to each
side. Obstacles up to 490 mm in height can be
driven over (with all four wheels remaining in con-
tact with the ground)
Automatic limited-slip differentials with 45 % lok-
king action in both axles
Planetary final drive in the wheel hubs
2000 mm with all types of tyres



Wear-free service brake Self-locking of the hydrostatic travel drive (acting on all four wheels) and additional pump-accumulator brake system with wet multi-disc brakes located in the wheel hubs. Two separate brake Electro-hydraulically actuated spring-loaded Parking brake brake system on the transmission

The braking-system meets the requirements of the EC guidelines 91/320.



Available sizes	_23.5R25
	_ 20.5R25
	Tubeless radial or cross-ply tyres on well-base
	rims
Special tyres	By arrangement with the manufacturer



#### **Steering**

"Load-sensing" variable axial piston pump. Design Central pivot with two double-acting, damped steering cylinders Angle of articulation 40° (to each side) Emergency steering Electro-hydraulic emergency steering system



## **Attachment Hydraulics**

Design	"Load-sensing" variable axial piston pump with
	output control and pressure cutoff
Max. flow	230 l/min.
Max. operating pressure	290 bar
Cooling	Hydraulic oil cooling using thermostatically
•	controlled fan and oil cooler
Filtering	Return-line filter in the hydraulic reservoir
Control	"Liebherr-Joystick" with hydraulic servo control
Lift circuit	Lifting, neutral, lowering
	and float positions controlled by Liebherr joystick
	with detent; automatic lifting-limit circuit
Tilt circuit	Tilt back, neutral, dump
	automatic bucket positioning



### **Attachments**

Geometry	Powerful Z-pattern linkage cast steel cross-tube	with tilt cylinder and
Bearings	Sealed	
Cycle time at nominal load	Lifting	5,7 sec.
•	Dumping	2,3 sec.
	Lowering (empty)	2,7 sec.



### **Operator's Cab**

Design	ROPS/FOPS cab resiliently mounted on rear section of vehicle and noise-damped; lockable door with sliding window and 180° opening angle; emergency exit; toughened safety glass windows, tinted; adjustable steering column and joystick bracket as standard equipment; ROPS roll-over protection according to DIN/ISO 3471/EN 474-3 and
	FOPS falling objects protection according to DIN/ISO 3449/EN 474-1
Operator's seat	6 way adjustable seat with seat belt, adjustable
Operator's seat	
0.1.1	for operator's weight
Cab heating and ventilation	With defrosting, fresh-air filter, air-recirculated-air mode and heater supplied from engine's cooling system. Air conditioning is standard equipment.



## **Noise Emission**

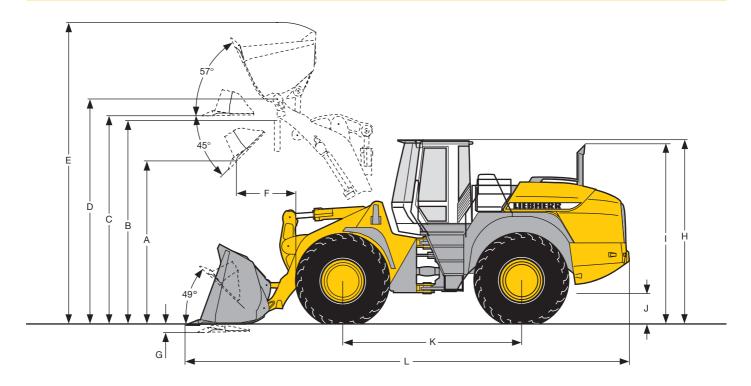
	In the operator's cab	
	Without blower	69 dB(A)
ISO 6396	Max. blower output	71 dB(A)
2000/14/EC	Outside cab	104 dB(A)



#### **Capacities**

Fuel tank	_ 260	1
Engine oil (including filter change)	18,5	1
	2,5	1
Transmission "2plus2"	11,5	1
Front axle/wheel hubs	28	1
Rear axle/wheel hubs	28	I
Hydraulic tank	_ 120	1
Hydraulic system, total	_ 220	1
Air condition system (R134a)	1800	g

# **Dimensions**

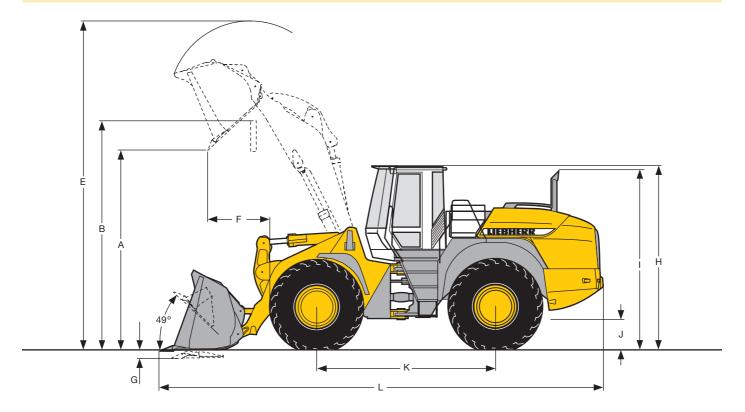


					<b>S</b>	
L	oading Bucket					
	Cutting tools		T	Т	Т	Т
	Bucket capacity	m <sup>3</sup>	3,0	3,0	3,3	3,3
	Bucket width	mm	2700	2700	2700	2700
	Specific material weight	t/m³	1,8	1,7	1,6	1,5
Α	Dumping height at max. lift height and 45° discharge	mm	2920	2760	2880	2760
В	Dump-over height	mm	3500	3500	3500	3500
С	Max. height of bucket bottom	mm	3645	3655	3645	3655
D	Max. height of bucket pivot point	mm	3915	3915	3915	3915
E	Max. operating height	mm	5350	5430	5395	5510
F	Reach at max. lift height and 45° discharge	mm	1040	1225	1085	1225
G	Digging depth	mm	85	70	85	70
Н	Height above cab	mm	3355	3355	3355	3355
1	Height above exhaust	mm	3310	3310	3310	3310
J	Ground clearance	mm	530	530	530	530
K	Wheelbase	mm	3150	3150	3150	3150
L	Overall length	mm	7785	8030	7845	7950
	Turning circle radius over outside bucket edge	mm	6235	6300	6250	6275
	Lifting force (SAE)	kN	170	170	170	170
	Breakout force (SAE)	kN	125	105	120	101
	Tipping load, straight*	kg	12020	11070	11910	11030
	Tipping load, articulated at 35°*	kg	10910	10060	10815	10020
	Tipping load, articulated at 40° *	kg	10600	9760	10500	9720
	Operating weight*	kg	15300	15630	15350	15670

<sup>\*</sup> The figures shown here are valid with Michelin XHA 23.5R25 tyres and include all lubricants, a full fuel tank, the ROPS/FOPS cab and the

Different tyres and optional equipment will change the operating weight and tipping load. T = Welded-on tooth holder with add-on teeth

## **High Lift**



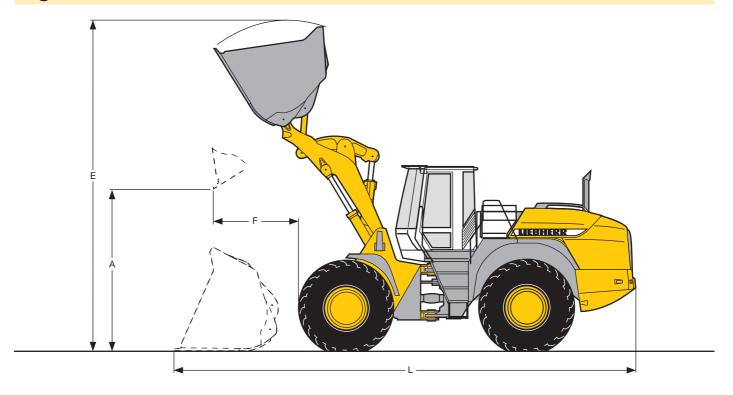
H	ligh Lift				
	Cutting tools		T	Т	Т
	Bucket capacity	m <sup>3</sup>	2,8	3,0	4,0
	Bucket width	mm	2700	2700	2700
	Specific material weight	t/m³	1,6	1,4	1,0
Α	Dumping height at max. lift height and 45° discharge	mm	3670	3620	3330
В	Dump-over height	mm	4000	4000	4000
С	Max. height of bucket bottom	mm	4330	4330	4330
D	Max. height of bucket pivot point	mm	4600	4600	4600
Е	Max. operating height	mm	6000	6040	6250
F	Reach at max. lift height and 45° discharge	mm	845	895	1200
G	Digging depth	mm	130	130	130
Н	Height above cab	mm	3355	3355	3355
1	Height above exhaust	mm	3310	3310	3310
J	Ground clearance	mm	530	530	530
K	Wheelbase	mm	3150	3150	3150
L	Overall length	mm	8300	8360	8630
	Turning circle radius over outside bucket edge	mm	6450	6500	6600
	Lifting force (SAE)	kN	120	120	120
	Breakout force (SAE)	kN	130	120	85
	Tipping load, straight*	kg	9880	9800	9180
	Tipping load, articulated at 40° *	kg	8700	8630	8090
	Operating weight*	kg	15750	15800	16100

 $<sup>^{\</sup>star}$  The figures shown here are valid with Michelin XHA 23.5R25 tyres and include all lubricants, a full fuel tank, the ROPS/FOPS cab and the

Different tyres and optional equipment will change the operating weight and tipping load.

T = Welded-on tooth holder with add-on teeth

## **Light Material Bucket**

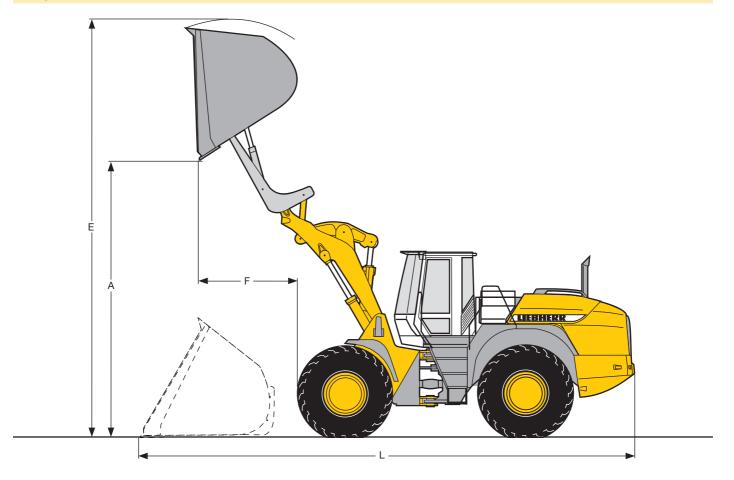


Light Material Bucket with Bolt-On Cutting Edge			DA		
Bucket capacity	m <sup>3</sup>	5,0	5,00	6,0	6,0
Bucket width	mm	2950	2950	2950	2950
Specific material weight	t/m³	0,8	0,7	0,6	0,5
A Dumping height at max. lift height	mm	2590	2490	2450	2360
E Max. operating height	mm	5585	5690	5785	5890
F Reach at maximum lift height	mm	1345	1505	1490	1640
L Overall length	mm	8050	8120	8170	8240
Tipping load, straight *	kg	10760	10360	10610	10250
Tipping load, articulated at 40° *	kg	9480	9150	9340	9020
Operating weight *	kg	15410	15780	15480	15890

<sup>\*</sup> The figures shown here are valid with Michelin XHA 23.5R25 tyres and include all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator.

Different tyres and optional equipment will change the operating weight and tipping load.

## **High-Dump Bucket**

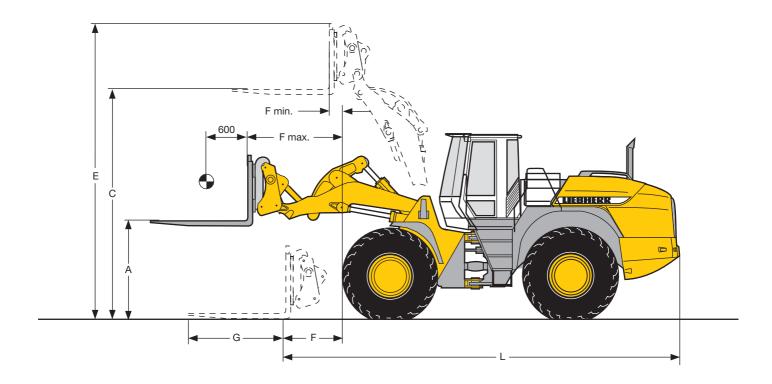


H	ligh-Dump Bucket ith Bolt-On Cutting Edge			
	Bucket capacity	m³	4,5	4,5
	Bucket width	mm	2700	2700
	Specific material weight	t/m³	0,8	0,7
Α	Dumping height at max. lift height	mm	4600	4760
E	Max. operating height	mm	6405	6565
F	Reach at maximum lift height	mm	1730	1850
L	Overall length	mm	8525	8730
	Tipping load, straight*	kg	8930	8620
	Tipping load, articulated at 40° *	kg	7850	7590
	Operating weight*	kg	15420	15810

<sup>\*</sup> The figures shown here are valid with Michelin XHA 23.5R25 tyres and include all lubricants, a full fuel tank, the ROPS/FOPS cab and the operator.

Different tyres and optional equipment will change the operating weight and tipping load.

## **Fork Carrier and Fork**



FEM IV Fork Carrier and Fork with Quick Change Device					
Α	Lifting height at max. reach	mm	1780	1780	
С	Max. lifting height	mm	3675	3675	
Е	Max. operating height	mm	4685	4685	
F	Reach at loading position	mm	1020	1020	
F max.	Max. reach	mm	1655	1655	
F min.	Reach at max. lifting height	mm	835	835	
G	Fork length	mm	1200	1500	
L	Length – basic machine	mm	6885	6885	
	Tipping load, straight*	kg	8280	8280	
	Tipping load, articulated at 40° **	kg	7290	7250	
	Operating weight*	kg	14930	14980	

<sup>\*</sup> The figures shown here are valid with Michelin XHA 23.5R25 tyres and include all lubricants, a full fuel tank, the ROPS/FOPS cab and the

Different tyres and optional equipment will change the operating weight and tipping load.

\*\*Recommended payload (ISO 8313): for uneven ground = 60 % of tipping load (articulated at 40°) for smooth surfaces = 80 % of tipping load (articulated at 40°)

# **Tipping Load**



#### What is tipping load?

Load at centre of gravity of working equipment, so that the wheel loader just begins to tip over the front axle.

This the most unfavourable static-load position for the wheel loader.

Liftings arms horizontal, wheel loader fully articulated at centre pivot.

#### Pay load.

The pay load must not exceed 50 % of the tipping load when articuladed.

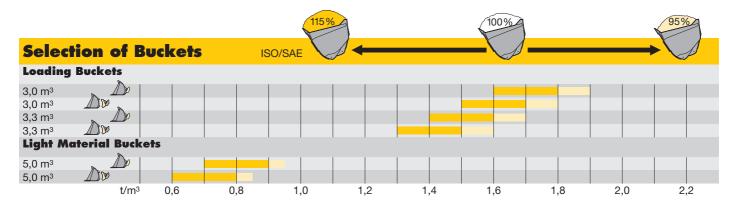
This is equivalent to a static stability-margin factor of 2,0.

#### **Bucket capacity.**

The bucket volume is determined from the pay load.

Pay load = Tipping load, articulated

Bucket capacity = Pay load (kg)
Specific bulk weight of material (t/m³)



<b>Bulk Material</b>	Densit	ies a	nd Bucket Filling	Facto	ors			
	t/m³	%		t/m³	%		t/m³	%
Gravel, moist	1,9	105	Clay, natural	1,6	110	Granite	1,8	95
dry	1,6	105	dry	1,4	110	Limestone,		
wet, 6-50 mm	2,0	105	wet	1,65	105	hard	1,65	95
dry, 6-50 mm	1,7	105	Clay and gravel,			soft	1,55	100
crushed stone	1,5	100	dry	1,4	110	Sandstone	1,6	100
Sand, dry	1,5	110	wet	1,6	100	Slate	1,75	100
moist	1,8	115	Earth, dry	1,3	115	Bauxite	1,4	100
wet	1,9	110	wet excavated	1,6	110	Gypsum, broken	1,8	100
Gravel and sand,			Topsoil	1,1	110	Coke	0,5	110
dry	1,7	105	Weathered rock			Slag, broken	1,8	100
wet	2,0	100	50 % rock, 50 % earth	1,7	100	Coal	1,1	110
Sand and clay	1,6	110	Basalt	1,95	100			

Tyre Sizes	Width over tyres	Change in vertical dimensions	Use					
	mm	mm						
20.5R25 Dunlop T7LD	2560	<b>–</b> 20	Gravel					
23.5R25 Dunlop T7LD	2625	+ 30	Gravel					
23.5R25 Dunlop PG 120	2610	+ 50	Stone					
20.5R25 Michelin XHA	2530	- 40	Gravel					
23.5R25 Michelin XHA	2610	+ 0	Gravel/Sand					
625/70R25 Michelin XLD 70	2620	- 60	Gravel					
20.5R25 Michelin X-MINE D2	2530	+ 0	Stone/Scap material					
20.5R25 Michelin XLD D2	2540	<b>– 10</b>	Stone/Mining spoil					
23.5R25 Good Year RL2+	2620	+ 30	Gravel					
23.5R25 Good Year GP2B	2620	+ 30	Sand					
Before operating the vehicle with tire for	Before operating the vehicle with tire foam filling or tire protection chains, please discuss this with Liebherr-Werk Bischofshofen.							

# **Equipment**

Liebherr-2plus2-travelgear Ride control Liebherr shock absorbing element Automatic travel mode Kick-Down 20 km/h speed limiting Electronical theft protection Creep speed/Cruise control Electronic crowding force control Combined inching-braking system Multi-disc limited slip differentials in both axles Air cleaner system with pre-filter Particle protection for radiator Emergency steering system Bio degredable hydraulic oil Headlights Tail lights Working area lights at front Working area lights at rear Battery master switch Pre-heat system for cold starting Towing hitch Lockable doors, service flap an engine hood Toolbox with toolkit Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Road ballast  V x			
Ride control Liebherr shock absorbing element Automatic travel mode Kick-Down 20 km/h speed limiting Electronical theft protection Creep speed/Cruise control Electronic crowding force control Combined inching-braking system Multi-disc limited slip differentials in both axles Air cleaner system with pre-filter Particle protection for radiator Emergency steering system Bio degredable hydraulic oil Headlights Tail lights Working area lights at front Working area lights at rear Battery master switch Pre-heat system for cold starting Towing hitch Lockable doors, service flap an engine hood Toolbox with toolkit Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Basic Machine	S	0
Liebherr shock absorbing element  Automatic travel mode  Kick-Down  20 km/h speed limiting  Electronical theft protection  Creep speed/Cruise control  Electronic crowding force control  Combined inching-braking system  Multi-disc limited slip differentials in both axles  Air cleaner system with pre-filter  Particle protection for radiator  Emergency steering system  Bio degredable hydraulic oil  Headlights  Tail lights  Working area lights at front  Working area lights at rear  Battery master switch  Pre-heat system for cold starting  Towing hitch  Lockable doors, service flap an engine hood  Toolbox with toolkit  Dust filter system  Protective ventilation system  Amber beacon  Acustical warning device for travel in reverse  Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	Liebherr-2plus2-travelgear	•	
Automatic travel mode Kick-Down 20 km/h speed limiting Electronical theft protection Creep speed/Cruise control Electronic crowding force control Combined inching-braking system Multi-disc limited slip differentials in both axles Air cleaner system with pre-filter Particle protection for radiator Emergency steering system Bio degredable hydraulic oil Headlights Tail lights Working area lights at front Working area lights at rear Battery master switch Pre-heat system for cold starting Towing hitch Lockable doors, service flap an engine hood Toolbox with toolkit Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Ride control	•	
Kick-Down 20 km/h speed limiting Electronical theft protection Creep speed/Cruise control Electronic crowding force control Combined inching-braking system Multi-disc limited slip differentials in both axles Air cleaner system with pre-filter Particle protection for radiator Emergency steering system Bio degredable hydraulic oil Headlights Tail lights Working area lights at front Working area lights at rear Battery master switch Pre-heat system for cold starting Towing hitch Lockable doors, service flap an engine hood Toolbox with toolkit Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Liebherr shock absorbing element		Х
20 km/h speed limiting Electronical theft protection Creep speed/Cruise control Electronic crowding force control Combined inching-braking system Multi-disc limited slip differentials in both axles Air cleaner system with pre-filter Particle protection for radiator Emergency steering system Bio degredable hydraulic oil Headlights Tail lights Working area lights at front Working area lights at rear Battery master switch Pre-heat system for cold starting Towing hitch Lockable doors, service flap an engine hood Toolbox with toolkit Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Automatic travel mode	•	
Electronical theft protection  Creep speed/Cruise control  Electronic crowding force control  Combined inching-braking system  Multi-disc limited slip differentials in both axles  Air cleaner system with pre-filter  Particle protection for radiator  Emergency steering system  Bio degredable hydraulic oil  Headlights  Tail lights  Working area lights at front  Working area lights at rear  Battery master switch  Pre-heat system for cold starting  Towing hitch  Lockable doors, service flap an engine hood  Toolbox with toolkit  Dust filter system  Protective ventilation system  Amber beacon  Acustical warning device for travel in reverse  Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	Kick-Down	•	
Creep speed/Cruise control  Electronic crowding force control  Combined inching-braking system  Multi-disc limited slip differentials in both axles  Air cleaner system with pre-filter  Particle protection for radiator  Emergency steering system  Bio degredable hydraulic oil  Headlights  Tail lights  Working area lights at front  Working area lights at rear  Battery master switch  Pre-heat system for cold starting  Towing hitch  Lockable doors, service flap an engine hood  Toolbox with toolkit  Dust filter system  Protective ventilation system  Amber beacon  Acustical warning device for travel in reverse  Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	20 km/h speed limiting		•
Electronic crowding force control  Combined inching-braking system  Multi-disc limited slip differentials in both axles  Air cleaner system with pre-filter Particle protection for radiator Emergency steering system  Bio degredable hydraulic oil Headlights Tail lights Working area lights at front Working area lights at rear  Battery master switch Pre-heat system for cold starting Towing hitch Lockable doors, service flap an engine hood Toolbox with toolkit Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Electronical theft protection		•
Combined inching-braking system  Multi-disc limited slip differentials in both axles  Air cleaner system with pre-filter Particle protection for radiator  Emergency steering system Bio degredable hydraulic oil Headlights  Tail lights  Working area lights at front Working area lights at rear  Battery master switch Pre-heat system for cold starting Towing hitch Lockable doors, service flap an engine hood Toolbox with toolkit Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Creep speed/Cruise control	•	
Multi-disc limited slip differentials in both axles  Air cleaner system with pre-filter Particle protection for radiator  Emergency steering system Bio degredable hydraulic oil Headlights  Tail lights  Working area lights at front Working area lights at rear Battery master switch Pre-heat system for cold starting Towing hitch Lockable doors, service flap an engine hood Toolbox with toolkit Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Electronic crowding force control	•	
Air cleaner system with pre-filter Particle protection for radiator Emergency steering system Bio degredable hydraulic oil Headlights Tail lights Working area lights at front Working area lights at rear Battery master switch Pre-heat system for cold starting Towing hitch Lockable doors, service flap an engine hood Toolbox with toolkit Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Combined inching-braking system	•	
Particle protection for radiator  Emergency steering system  Bio degredable hydraulic oil  Headlights  Vorking area lights at front  Working area lights at rear  Battery master switch  Pre-heat system for cold starting  Towing hitch  Lockable doors, service flap an engine hood  Toolbox with toolkit  Dust filter system  Protective ventilation system  Amber beacon  Acustical warning device for travel in reverse  Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	Multi-disc limited slip differentials in both axles	•	
Emergency steering system  Bio degredable hydraulic oil Headlights  Tail lights  Working area lights at front Working area lights at rear  Battery master switch Pre-heat system for cold starting Towing hitch Lockable doors, service flap an engine hood Toolbox with toolkit Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Air cleaner system with pre-filter	•	
Bio degredable hydraulic oil  Headlights  Tail lights  Working area lights at front  Working area lights at rear  Battery master switch  Pre-heat system for cold starting  Towing hitch  Lockable doors, service flap an engine hood  Toolbox with toolkit  Dust filter system  Protective ventilation system  Amber beacon  Acustical warning device for travel in reverse  Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	Particle protection for radiator		•
Headlights  Tail lights  Working area lights at front  Working area lights at rear  Battery master switch  Pre-heat system for cold starting  Towing hitch  Lockable doors, service flap an engine hood  Toolbox with toolkit  Dust filter system  Protective ventilation system  Amber beacon  Acustical warning device for travel in reverse  Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	Emergency steering system	•	
Tail lights  Working area lights at front  Working area lights at rear  Battery master switch  Pre-heat system for cold starting  Towing hitch  Lockable doors, service flap an engine hood  Toolbox with toolkit  Dust filter system  Protective ventilation system  Amber beacon  Acustical warning device for travel in reverse  Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	Bio degredable hydraulic oil		•
Working area lights at front Working area lights at rear  Battery master switch Pre-heat system for cold starting Towing hitch Lockable doors, service flap an engine hood Toolbox with toolkit  Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Headlights	•	
Working area lights at rear  Battery master switch  Pre-heat system for cold starting  Towing hitch Lockable doors, service flap an engine hood  Toolbox with toolkit  Dust filter system  Protective ventilation system  Amber beacon  Acustical warning device for travel in reverse Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	Tail lights	•	
Battery master switch Pre-heat system for cold starting Towing hitch Lockable doors, service flap an engine hood Toolbox with toolkit Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Working area lights at front	•	
Pre-heat system for cold starting  Towing hitch Lockable doors, service flap an engine hood  Toolbox with toolkit  Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Working area lights at rear	•	
Towing hitch Lockable doors, service flap an engine hood  Toolbox with toolkit  Dust filter system Protective ventilation system Amber beacon Acustical warning device for travel in reverse Exhaust pipe – special steel Noise suppression package "101" Automatic central lubrication system	Battery master switch	•	
Lockable doors, service flap an engine hood  Toolbox with toolkit  Dust filter system  Protective ventilation system  Amber beacon  Acustical warning device for travel in reverse Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	Pre-heat system for cold starting	•	
Toolbox with toolkit  Dust filter system  Protective ventilation system  Amber beacon  Acustical warning device for travel in reverse  Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	Towing hitch	•	
Dust filter system  Protective ventilation system  Amber beacon  Acustical warning device for travel in reverse  Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	Lockable doors, service flap an engine hood	•	
Protective ventilation system  Amber beacon  Acustical warning device for travel in reverse  Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	Toolbox with toolkit	•	
Amber beacon Acustical warning device for travel in reverse  Exhaust pipe – special steel Noise suppression package "101"  Automatic central lubrication system	Dust filter system		•
Acustical warning device for travel in reverse  Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system	Protective ventilation system		•
Exhaust pipe – special steel  Noise suppression package "101"  Automatic central lubrication system  •	Amber beacon		•
Noise suppression package "101"   Automatic central lubrication system   •	Acustical warning device for travel in reverse		•
Automatic central lubrication system •	Exhaust pipe – special steel	•	
	Noise suppression package "101"		•
Road ballast x	Automatic central lubrication system		•
	Road ballast		Х

Operator's Cab	s	0
Driver's cab with reduced overall heat – 90 mm		•
Noise-damped ROPS/FOPS cab with tinted safety glass	•	
Joystick steering		•
2in1 steering system – changeable		•
Hot-water heater with defroster and recirculated-air system	•	
Adjustable steering column	•	
Liebherr joystick control – adjustable	•	
Air conditioning system	•	
Liebherr operator's seat – adjustable in 6 ways	•	
Air sprung operator's seat with seat belt		•
Sliding window	•	
Emergency exit	•	
Floor mat	•	
Wash/wipe system for windscreen and rear window	•	
Interior rear-view mirror	•	
Sun visor	•	
Bottle holder	•	
Clothes hook	•	
Storage box with cooling funktion	•	
Storage compartment	•	
Plug	•	
Ashtray	•	
Horn	•	
Provision for radio including loudspeaker		•
Radio set		•
Tool kit	•	
Operator's package	•	

s	0
•	
•	
•	
•	
•	
•	
•	
	•

Reverse travel	•	
Speedometer	•	
Rev. counter	•	
Clock	•	
Safety belt		Х
Flashing turn indicators	•	
High-beam headlights	•	
Diagnosis system	•	

<u>*</u>					
Warning Lights for:	s	0			
Engine oil pressure	•				
Engine overheat	•				
Parking brake					
Hydraulic oil temperature					
Air cleaner blockage					
Battery charge					
Flow through emergency steering system					
Road travel		Х			

<b>-4</b> :		
Audible Warnings for:	S	0
Engine oil pressure	•	
Engine overheat	•	
Overheat of hydraulic fluid	•	
Emergency steering system		х

Function Keys for:	S	0
Speed range selection	•	
Air conditioning	•	
Hazard warning flashers	•	
Parking brake	•	
Electronic tractive force adaptation	•	
Creep speed	•	
Ride control	•	
Automatic bucket positioner	•	
Hoist kick-out	•	
Additional hydraulics	•	
Float position	•	
Headlights	•	
Working lights front	•	
Working lights rear	•	
Road travel	•	
Wash/wipe system for rear window	•	
Amber beacon	•	
Mode switch	•	
Blower	•	
Heater	•	
Adjusting the crowding force counter	•	

<u> </u>		
Equipment	s	0
Z-bar linkage	•	
Z-bar linkage "High Lift"		•
Industrial Z-bar linkage		•
Parallel linkage		Х
Hydraulic servo control of working hydraulics	•	
Automatic bucket positioner – adjustable	•	
Automatic hoist kick out – adjustable	•	
Float position	•	
Loading buckets with and without teeth, or bolt-on cutting edge		•
High-dump bucket		•
Light material bucket		•
Fork carrier and lift forks		•
Hydraulic quick-change device		•
3rd hydraulic control circuit		•
3rd and 4th hydraulic control circuits		•
Comfort control		•
Country-specific versions		•

S = Standard, O = Option, X = not available

# **The Liebherr Wheel Loaders**

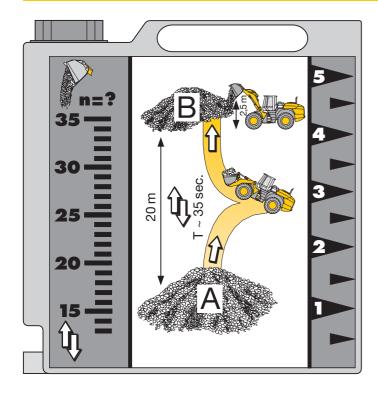
		0-0			∏∏Î.	/TI	,/TL
Stereoloader							
		L 506	L 507	L 508	L 509	L 512	L 514
Tipping load	kg	3215	3465	3895	4440	4615	5305
Bucket capacity	m <sup>3</sup>	0,8	0,9	1,0	1,1	1,3	1,5
Operating weight	kg	4810	4930	5310	5740	7000	7700
Engine output	kW/HP	44/60	46/63	49/67	52/71	59/80	72/98

Wheel Loader		DO			DO
		L 524	L 534	L 538	<b>L 544</b> 2plus2
Tipping load	kg	7005	8625	9000	10600
Bucket capacity	m <sup>3</sup>	2,0	2,4	2,5	3,0
Operating weight	kg	10100	12100	12380	15300
Engine output	kW/HP	81/110	100/136	100/136	121/165

		DOME			
		L 554 2plus2	<b>L 564</b> 2plus2	<b>L 574</b> 2plus2	<b>L 580</b> 2plus2
Tipping load	kg	12270	15285	16690	17850
Bucket capacity	m <sup>3</sup>	3,5	4,0	4,5	5,0
Operating weight	kg	17300	22450	24220	24740
Engine output	kW/HP	145/198	183/249	195/265	195/265

01.03

## **Environmental protection can help you earn money!**



## The Liebherr Standard Consumption Test - easy to reproduce and practical.

Every Liebherr dealer will provide you with this measuring-tank kit free of charge or, on request, will carry out the standard fuel consumption test on your premises. It's so easy: you simply determine the number of loading cycles that can be carried out with 5 litres of diesel. The material is taken from pile A and carried over a distance of 20 metres to point B. The time needed for each working cycle should be 35 seconds. Discharge at point B should take place from a height of 2,5 m. The working cycles continue until the 5 litres of diesel in the external measuring tank have been used up. The loader's fuel consumption per operating hour is calculated as follows:

400	_	consumption
Number of loading cycles	_	per hour

Values for the Liebherr Wheel Loaders						
	Numbers of	Litres/	Litres/			
	working cycles	100 tons	hour			
L 524: 2,0 m <sup>3</sup>	n = 48	2,9	8,3			
L 534: 2,4 m <sup>3</sup>	n = 40	2,8	10,0			
L 538: 2,5 m <sup>3</sup>	n = 40	2,8	10,0			
L 544: 3,0 m <sup>3</sup>	n = 35	2,6	11,4			
L 554: 3,5 m <sup>3</sup>	n = 33	2,4	12,1			
L 564: 4,0 m <sup>3</sup>	n = 24	2,9	16,7			
L 574: 4,5 m <sup>3</sup>	n = 23	2,7	17,4			
L 580: 5,0 m <sup>3</sup>	n = 22	2,7	18,2			