

Technical description

Crawler loader

LR 622
Litronic®

Engine output 97 kW/132 HP

Operating weight 15.4 - 17.0 t/34,000 - 37,500 lb

Bucket capacity 1.54 - 1.80 m³ / 2.01 - 2.35 cu.yd.

Hydrostatic travel drive with electronic control



LIEBHERR

The Better Machine.



Diesel Engine

Liebherr-Diesel Engine	D 924 T-E
Rating per ISO 9249	97 kW (132 HP) at 2000 RPM
Displacement	6,7 l (409 cu.in)
Bore/stroke	122 mm/142 mm (4.8/5.6 in)
Design	4 cylinder in-line engine, water-cooled, turbocharged, rear engine installation
Injection	direct fuel injection with distributor injection pump, mechanical governor
Fuel filter	pre-cleaner with water separator and micro filters
Lubrication	pressurized lube system with full flow filter and integrated oil cooler, deep oil pan for inclinations, engine lubrication to an inclination of up to 45° to each side
Air filter	dry type air filter with main and safety element
Operating voltage	24 V
Alternator	55 Amp.
Starter	5,4 kW (7.3 HP)



Travel Drive

Design	closed-loop hydrostatic drive, each track is driven by one variable flow swash plate-type pump and one variable displacement motor
Pump flow	max. 164 l/min (41 gpm)
Max. pressure	adjusted to 420 bar (6090 PSI)
Travel speed	0 - 11 km/h (0 - 6.8 mph) infinitely variable, forward and reverse
Steering	hydrostatic
Service brake	hydrostatic
Parking/emergency brake	automatic spring-activated parking brake, released by servo-pressure during travel
Cooling system	hydraulic oil cooler with separate cooling circuit with gear pump and rear mounted cooler
Filter system	cartridge micro filters in the cooling circuit



Final Drive

Concept	2-stage planetary reduction gear with hydraulic travel motor directly flanged to travel gear
Design	compact unit, protected and integrated into the track roller frame



Track Frame

Design	maintenance-free tractor-type track frames
Mount	elastic components at the pivot shaft and the oscillating equalizer bar
Chains	lubricated, track chain tension through grease tensioner cylinders, double or triple grouser pads
Chain links	42
Track rollers	6
Carrier rollers	1



Attachments

Z-bar linkage	gives maximum of breakout-force and optimum of working speed, the single tilt cylinder allows optimum view of the bucket
Buckets	standard and multi-purpose bucket are equipped with 8 replaceable teeth
Cycle times	lifting 6,5 seconds lowering 2,1 seconds tilting out 1,5 seconds



Travel Control

1 joystick lever	with electronic control for all travel functions: travel direction, speed, steering and counter-rotation
Low speed range	0 - 5 km/h (0 - 3.1 mph)
High speed range	0 - 11 km/h (0 - 6.8 mph)
Electronic engine speed sensing control	electronic regulation assures a constant balance between travel speed and necessary drawbar pull through engine speed sensing avoiding engine overload, even in partial load range
Straight line travel	electronically controlled
Parking/emergency brake	automatically applied after the joystick lever is put in neutral position
Safety lever	inactivates complete travel and working hydraulic circuit and automatically activates parking brake
Emergency shut off	push button on instrument panel immediately activates parking and emergency brake



Attachment Hydraulics

Hydraulic system	load sensing proportional pump flow control, variable flow swash plate piston pump and pressure compensation
Pump flow	max. 156 l/min (41 gpm)
Pressure limitation	max. 280 bar (4060 PSI)
Control valve	2 spool control block, can be expanded to 4 circuits
Filter system	return filter with magnetic rod in hydraulic tank
Control	single servo-assisted joystick lever for all bucket functions, electrical switches for bucket positioning and bucket-float



Operator's Compartment

Cab	resiliently mounted, with integrated ROPS (Roll Over Protective Structure, ISO 3471) and FOPS (Falling Objects Protective Structure, ISO 3449), can be tilted with hand pump to the rear for accessibility to machine components, all around safety glass
Operator's seat	fully adjustable, suspended seat, adjustable to operator weight
Instrument panel	comprehensive instrument panel on the right side of the operator's seat
Ventilation	pressurized filtered air ventilation, 2 stage blower
Heater	hot water heater

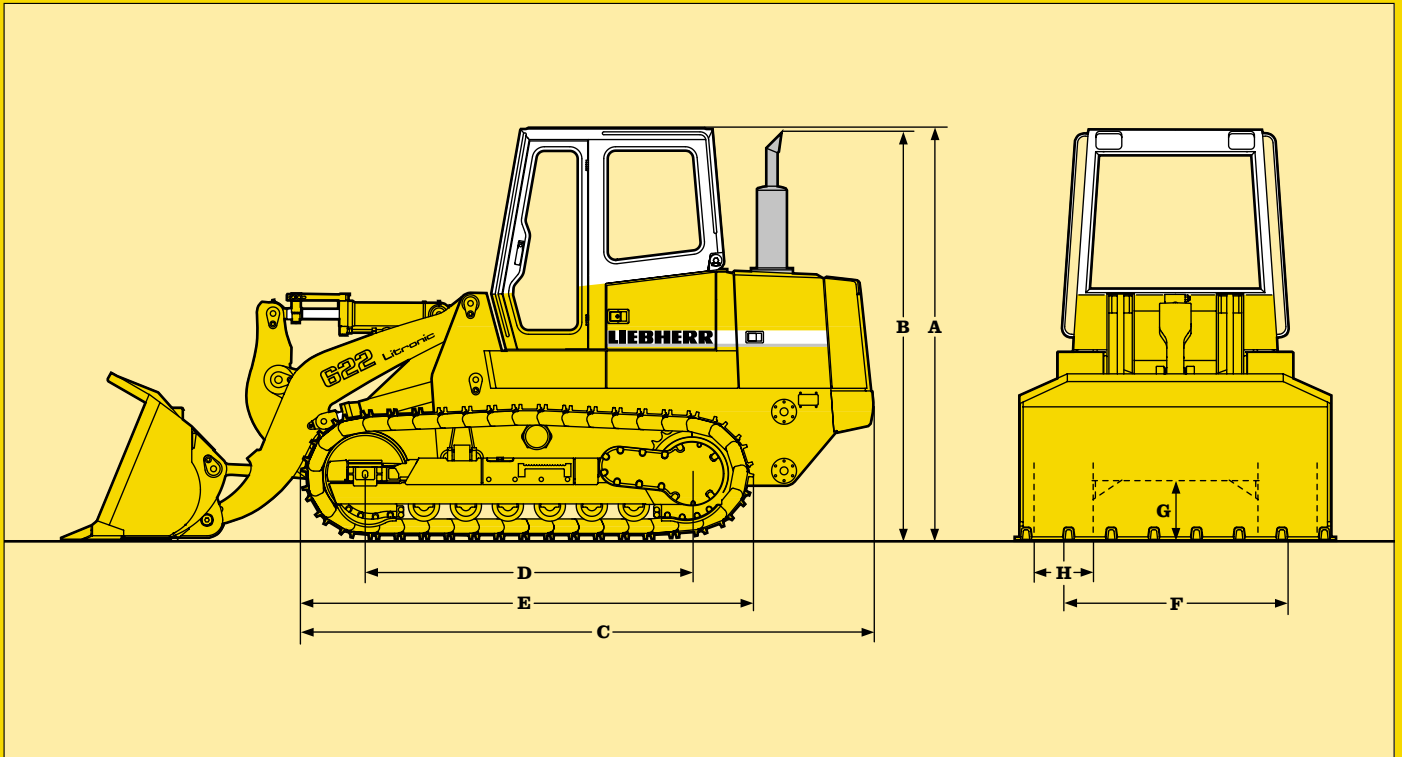


Refill Capacities

Fuel tank	320 l (84.5 gal)
Cooling system	59 l (15.6 gal)
Engine oil	23 l (6.1 gal)
Splitterbox	3 l (0.8 gal)
Hydraulic tank	175 l (46.2 gal)
Final drive, each	18 l (4.8 gal)

Technical Data

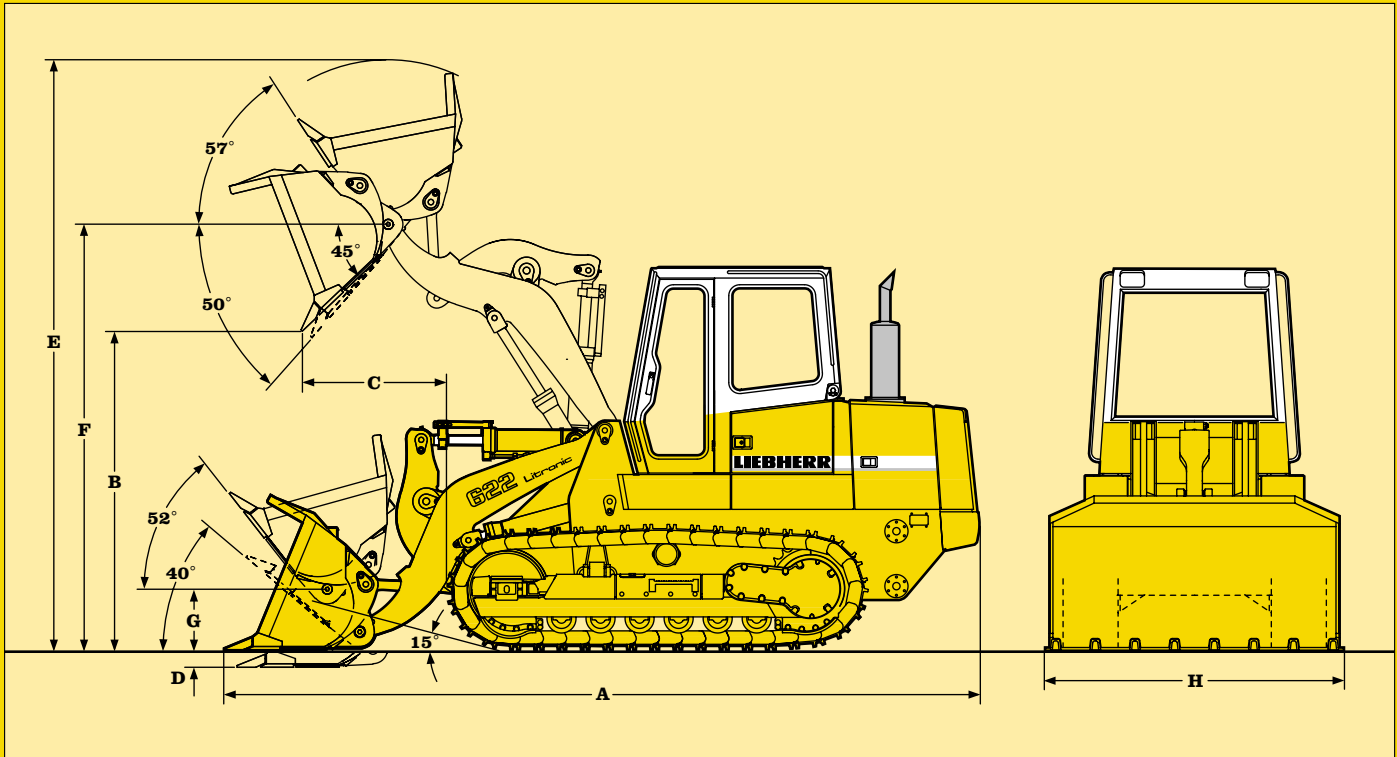
Basic Machine



	LR 622	LR 622 M
Dimensions	mm/ft-in	mm/ft-in
A Height over cab	3129/10'3"	3129/10'3"
B Height over exhaust pipe	3092/10'2"	3092/10'2"
C Overall length without attachment	4339/14'3"	4339/14'3"
D Distance idler/sprocket center	2478/8'2"	2478/8'2"
E Crawler length	3418/11'3"	3418/11'3"
F Track gauge	1680/5'6"	1780/5'10"
G Ground clearance	395/1'4"	395/1'4"
H Width of trackpads	457/508/560/18"/20"/22"	660/26"
Ground contact area:		
trackpad-width 457 mm/18"	2,26 m ² /3,500 sq.in	-
508 mm/20"	2,52 m ² /3,900 sq.in	-
560 mm/22"	2,77 m ² /4,300 sq.in	-
660 mm/26"	-	3,27 m ² /5,070 sq.in

Dimensions

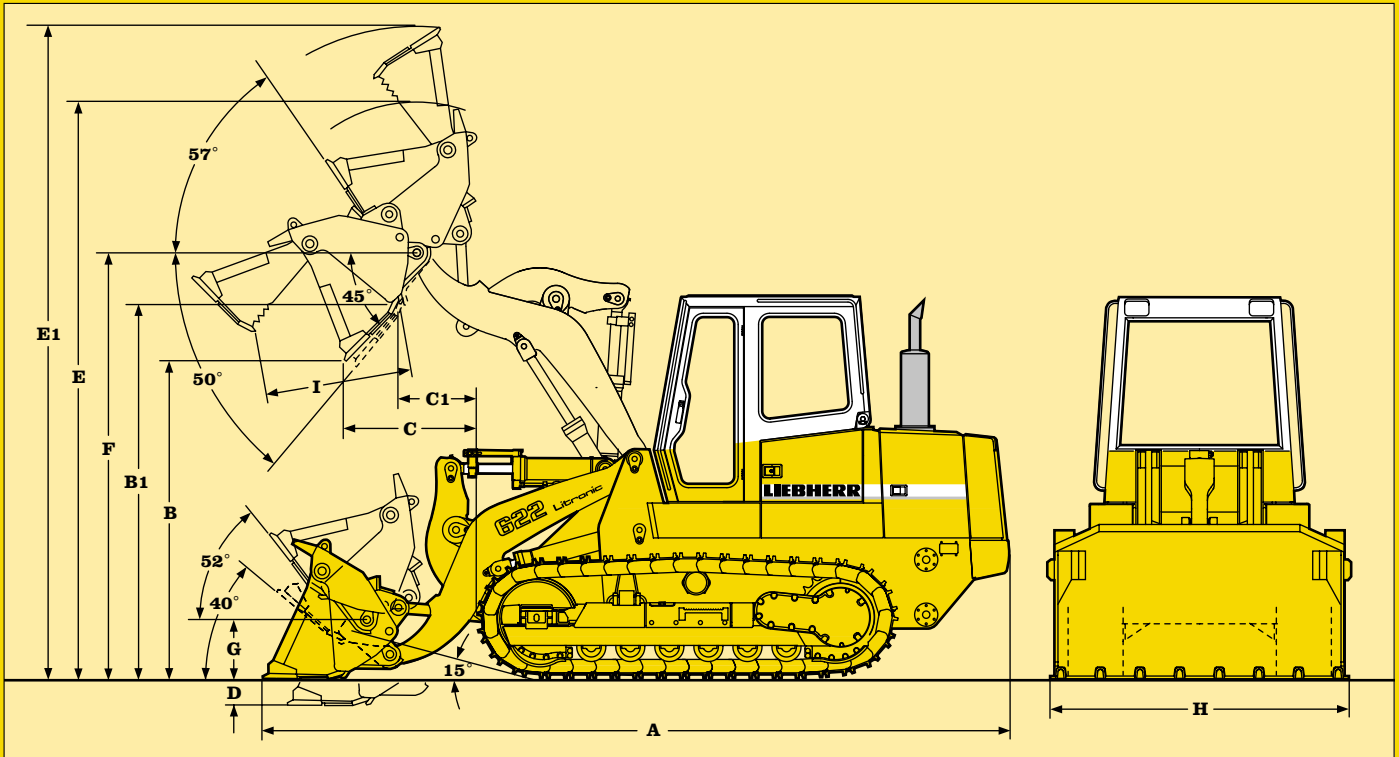
Standard Bucket



	LR 622	LR 622	LR 622 M
	Version with weld-on teeth	Version with bolt-on teeth and segments	Version with weld-on teeth
Capacity ISO heaped	1,75 m ³ /2.29 cu.yd	1,8 m ³ /2.35 cu.yd	1,75 m ³ /2.29 cu.yd
Breakout force	147 kN (14940 kg)/32,943 lb	137 kN (13960 kg)/30,782 lb	151 kN (15410 kg)/33,979 lb
Static tipping load	10600 kg/23,373 lb	10470 kg/23,086 lb	10950 kg/24,145 lb
Dimensions	mm/ft-in	mm/ft-in	mm/ft-in
A Overall length	6117/20'1"	6191/20'4"	6092/20'
B Dumping height at 45°	2905/9'6"	2849/9'4"	2923/9'7"
C Reach at 45°	1025/3'4"	1048/3'5"	1007/3'4"
D Max. digging depth below grade	110/0'4"	132/0'5"	110/0'4"
E Overall height	5000/16'5"	5000/16'5"	4978/16'4"
F Max. height of hinge pin	3662/12'0"	3662/12'0"	3662/12'0"
G Height of hinge pin transport position	503/1'8"	503/1'8"	503/1'8"
H Width of bucket	2450/8'0"	2440/8'0"	2600/8'6"
Operating Weights	kg/lb	kg/lb	kg/lb
Standard bucket	1070/2359	1190/2,624	1120/2,470
Basic machine with standard bucket and triple-grouser trackpads 457 mm/18"	15400/33,957	15520/34,222	-
double-grouser trackpads 508 mm/20"	15400/33,957	15520/34,222	-
double-grouser trackpads 560 mm/22"	15500/34,117	15620/34,442	-
double-grouser trackpads 660 mm/26"	-	-	15900/35,059
Ground Pressures	kg/cm²/PSI	kg/cm²/PSI	kg/cm²/PSI
Basic machine with standard bucket and triple-grouser trackpads 457 mm/18"	0,68/9.67	0,69/9.67	-
double-grouser trackpads 508 mm/20"	0,61/8.68	0,62/8.82	-
double-grouser trackpads 560 mm/22"	0,56/7.97	0,56/7.97	-
double-grouser trackpads 660 mm/26"	-	-	0,49/6.97

Standard Bucket

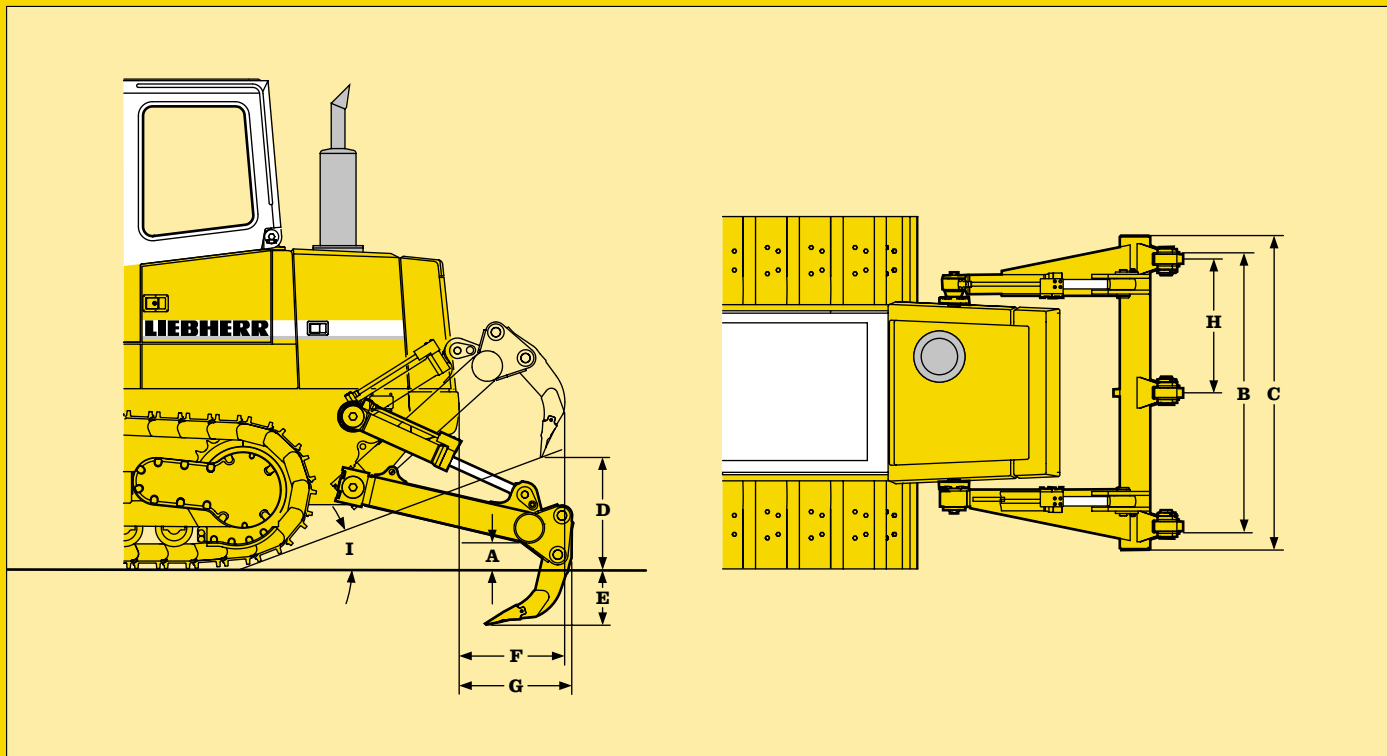
Multi-purpose Bucket



	LR 622	LR 622
	Version with weld-on teeth	Version with bolt-on teeth and segments
Capacity ISO heaped	1,54 m ³ /2.01 cu.yd	1,6 m ³ /2.09 cu.yd
Breakout force	130 kN (13225 kg)/29,161 lb	122 kN (12440 kg)/27,430 lb
Static tipping load	9325 kg/20,562 lb	9185 kg/20,253 lb
Max. clamping force	91,7 kN (9345 kg)/20,606 lb	91,7 kN (9345 kg)/20,606 lb
Dimensions	mm/ft-in	mm/ft-in
A Overall length	6250/20'6"	6330/20'9"
B Dumping height at 45° (bucket)	2796/9'2"	2741/9'0"
B1 Dumping height at 45° (blade)	3252/10'8"	3252/10'8"
C Reach at 45° (bucket)	1064/3'6"	1089/3'7"
C1 Reach at 45° (blade)	629/2'1"	629/2'1"
D Max. digging depth below grade	160/0'6"	180/0'7"
E Overall height	4896/16'1"	4896/16'1"
E1 Overall height	5505/18'1"	5556/18'3"
F Max. height of hinge pin	3662/12'0"	3662/12'0"
G Max. height of hinge pin, transport position	503/1'8"	503/1'8"
H Width of bucket	2450/8'0"	2440/8'0"
I Width of opening	1212/4'0"	1212/4'0"
Operating Weights	kg/lb	kg/lb
Multi-purpose bucket	1615/3,561	1750/3,859
Basic machine with multi-purpose bucket and triple-grouser trackpads 457 mm/18"	16000/35,280	16135/35,578
double-grouser trackpads 508 mm/20"	16000/35,280	16135/35,578
Ground Pressures	kg/cm²/PSI	kg/cm²/PSI
Basic machine with multi-purpose bucket and triple-grouser trackpads 457 mm/18"	0,71/10.1	0,71/10.1
double-grouser trackpads 508 mm/20"	0,64/9.1	0,64/9.1

Multi-purpose Bucket

Ripper



Radial ripper, 3 shank rigid-type equipped with 3 shanks
Ripper tips: ESCO

Dimensions

- A Ground clearance below toolbar
- B Ripping width
- C Toolbar width
- D Lifting height
- E Ripping depth reach
- F Additional length attachment raised
- G Additional length attachment lowered
- H Distance between teeth
- I Angle

mm/ft-in

166/0'7"
1760/5'9"
1996/6'7"
712/2'4"
352/1'2"
676/2'3"
729/2'5"
850/2'9"
21°

Weight

Ripper complete

kg/lb

790/1,742

Ripper

Standard Equipment *

Diesel Engine:

- Fuel system with pre-filter, water separator and micro filters
- Dry-type air cleaner with main and safety element
- Air filter with automatic dust ejector
- Alternator, 55 Amp
- Starter motor 5,4 kW (7.3 HP)
- Electrically activated battery master switch
- Two HD cold start batteries - 110 Ah
- Glow plug cold starting aid

Track Components:

- Maintenance-free track components, sealed and lubricated rollers, idlers and sprockets
- Segmented, bolted sprocket rims

Travel Drive:

- Hydrostatic drive with electronic control
- Automatic parking brake

Attachment Hydraulics:

- 2-spool control block
- Electrical switches for bucket positioning and bucket-float
- Z-bar linkage

Operator's Compartment:

- Cab with integrated ROPS/FOPS, hot water heater, pressurized and filtered ventilation
- Fully adjustable suspension seat with seatbelt
- Windshield wipers front and rear
- Windshield washer system
- Dome light, rear view mirror, sun shade
- Safety glass, tinted glass
- Lockable doors
- Two front and two rear working lights
- Lighted instrument panel with engine oil pressure and engine coolant temperature gauge, hour meter and fuel gauge

Basic Machine:

- Tool kit
- Rear drawbar hitch

* Standard and optional equipment may vary.

Optional Equipment

- Perforated engine side covers
- Backup alarm
- Air conditioner
- Cab protection screens
- Power adjustable, air suspension seat
- Electric fuel pump
- Full length track guard
- Track guide, center
- Extra hydraulic controls
- Hydraulic winch
- Swinging drawbar
- Remote radio control
- Landfill package
- Forestry package
- Special paint, one or two tone
- Special buckets
- Lifting lugs

Other optional items on request

Standard and Optional Equipment

LIEBHERR-WERK TELFS GMBH, Postfach 49, A-6410 Telfs, ☎ (0 52 62) 6 00, Fax (0 52 62) 6 00 72

With compliments: