

# Technical Description Crawler Loader

# LR 611

**Engine output 66 kW/90 HP**

**Bucket capacity 1.0 – 1.2 m<sup>3</sup>/1.31 – 1.57 cu.yd.**

**Hydrostatic travel drive**



# LIEBHERR

The Better Machine.



## Diesel Engine

Liebherr-Diesel Engine	D 924 T-E
Rating per ISO 9249	66 kW (90 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, watercooled, turbocharged, rear engine installation
Injection	direct fuel injection with injection pump, mechanical governor
Fuel filter	pre-cleaner with water separator and 2 fine 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	4 kW (5.4 hp)
Batterie	110 Ah



## 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. 114 l/min (30 gpm)
Max. pressure	adjusted to 420 bar (6090 PSI)
Travel speed	0 - 9.5 km/h (0 to 5.9 mph) infinitely variable, forward and reverse
Steering	hydrostatic
Service brake	hydrostatic
Parking/emergency brake	automatic spring-activated parking brake, released by servopressure during travel
Cooling system	hydraulic oil cooler with separate cooling circuit with 2 gear pumps and rear mounted cooler
Filter system	cartridge fine filters in the cooling circuit
Final Drive	3-stage spur gear drives formed as modular components



## Track Frame

Design	maintenance-free standard or low ground pressure (M) tractor-type track frames
Chains	sealed or lubricated, track chain tension via grease tensioner cylinders, double or triple grouser pads
Chain links	40
Sprockets	2 replaceable segments
Track rollers	6
Carrier rollers	1



## Travel Control

1 joystick lever	with servo-control for all travel functions: travel direction, speed, steering and counter-rotation
Low speed range	for difficult applications the maximum travel speed can be limited to 4 km/h (2.5 mph)
Engine speed sensing control	the engine speed sensing control assures constant balance between traction and travel speed guarantees maximum utilization of available engine horsepower and protects the Diesel engine from overload
Safety lever	inactivates complete travel and working hydraulic circuit and automatically activates parking brake



## Implement Hydraulic

Hydraulic system	variable flow piston pump for operation of front and rear-mounted attachments. The regulation of the variable flow pump causes an automatic proportioning of lift and tilt speed
Pump flow	max. 114 l/min (30 gpm)
Pressure limitation	max. 260 bar (3770 PSI)
Control valve	3 spool control block
Filter system	return filter with magnetic rod in hydraulic tank
Control	single servo-assisted joystick lever for all bucket functions, adjustable electrical switches for lift stop, bucket positioning and bucket-float



## Attachments

Z-bar linkage	gives maximum of breakout-force and optimum of working speed, the 2 lift cylinders are protected by the main frame, the single tilt cylinder allows optimum view of the bucket
Buckets	standard and multi-purpose bucket are equipped with 8 replaceable teeth (LR 611 M: 10 replaceable teeth)
Cycle times	lifting 6.3 seconds lowering 2.0 seconds tilting out 1.2 seconds



## Operator's Compartment

Cab	resiliently mounted, with integrated ROPS (Roll Over Protective Structure, SAE J1040/ISO 3471) and FOPS (Falling Objects Protective Structure, SAE J231/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 swing seat, adjustable to operator weight
Instrument Panel	comprehensive instrument panel with acoustical warning buzzers, on the right side of the operator's seat
Ventilation	pressurized filtered air ventilation, 3 stage blower, 4 air nozzles
Heater	hot water heater



## Refill Capacities

Fuel tank	250 l (66 gal)
Cooling system	27 l (7.1 gal)
Engine oil	22 l (5.8 gal)
Splitterboxe	1.5 l (0.4 gal)
Hydraulic tank	130 l (34 gal)
Final drive, each	18 l (4.8 gal)

# Technical Data

ZEICHNUNG BEI DER DRUCKEREI

	LR 611	LR 611 M
<b>Dimensions</b>	<b>ft-in/mm</b>	<b>ft-in/mm</b>
C Height over cab	9'11"/3020	9'11"/3020
D Height over exhaust pipe	9'11"/3010	9'11"/3010
Q Ground clearance	1'3"/380	1'3"/380
F Overall length without attachment	13'1"/4000	13'1"/4000
L Distance idler/sprocket center	7'5"/2270	7'5"/2270
M Crawler length	10'5"/3170	10'5"/3170
W Track gauge	5'1"/1550	5'8"/1720
N Width of trackpads	15"/381 18"/457	26"/660
Ground contact ares: trackpad-width 15"/381 mm 18"/457 mm 26"/660 mm	2,680 sq.in./1.73 m <sup>2</sup> 3,210 sq.in./2.07 m <sup>2</sup>	4,650 sq.in./3.0 m <sup>2</sup>

## Dimensions

## Standard Bucket

ZEICHNUNG BEI DER DRUCKEREI

	LR 611	LR 611 M
Capacity ISO heaped Breakout-force Static tipping load	1.57 cu.yd./1.2 m <sup>3</sup> 22,900 lbs/102 kN (10400 kg) 18,000 lbs/8155 kg	1.57 cu.yd./1.2 m <sup>3</sup> 26,000 lbs/116 kN (11800 kg) 18700 lbs/8465 kg
<b>Dimensions</b>	<b>ft-in/mm</b>	<b>ft-in/mm</b>
E Overall length	17'11"/5460	17'8"/5375
H Dumping height at 45°	8'11"/2710	9'1"/2770
I Reach at 45°	3'7"/1090	3'5"/1030
K Max. digging depth below grade	2 <sup>9</sup> / <sub>16</sub> "/65	2 <sup>9</sup> / <sub>16</sub> "/65
U Overall height	14'10"/4520	14'8"/4480
T Max. height of hinge pin	11'1"/3370	11'1"/3370
T1 Height of hinge pin with maximum bucket tilt	1'4"/405	1'4"/405
W Width of bucket	7'1"/2150	8'2"/2500
N Width of trackpads	15"/381/18"/457	26"/660
<b>Operating Weights</b>	<b>lbs/kg</b>	<b>lbs/kg</b>
Standard bucket	1,540/700	1,610/730
Basic machine with standard bucket and triple-grouser trackpads 15"/381 mm	26,400/11990	-
double-grouser trackpads 18"/457 mm	26,500/12040	-
double-grouser trackpads 26"/660 mm	-	27,800/12595
<b>Ground Pressures</b>	<b>PSI/kg/cm<sup>2</sup></b>	<b>PSI/kg/cm<sup>2</sup></b>
Basic machine with standard bucket and triple-grouser trackpads 15"/381 mm	9.96/0.70	-
double-grouser trackpads 18"/457 mm	8.25/0.58	-
double-grouser trackpads 26"/660 mm	-	5.97/0.42

## Attachments

## Multi-purpose Bucket

ZEICHNUNG BEI DER DRUCKEREI

	LR 611	LR 611 M
Capacity ISO heaped Breakout-force Static tipping load Max. clamping force	1.3 cu.yd./1.0 m <sup>3</sup> 20,950 lbs/94 kN (9500 kg) 16,800 lbs/7605 kg 11,000 lbs/49 kN (5000 kg)	1.3 cu.yd./1.0 m <sup>3</sup> 23,800 lbs/106 kN (10800 kg) 17,400 lbs/7900 kg 11,000 lbs/49 kN (5000 kg)
<b>Dimensions</b>	<b>ft-in/mm</b>	<b>ft-in/mm</b>
E Overall length	18'3"/5575	18'1"/5505
H Dumping height at 45° (bucket)	8'7"/2625	8'10"/2690
H1 Dumping height at 45° (blade)	9'10"/3000	9'10"/3000
I Reach at 45° (bucket)	3'8"/1105	3'5"/1040
I1 Reach at 45° (blade)	2'6"/755	2'6"/755
K Max. digging depth below grade	4 <sup>1</sup> / <sub>2</sub> "/115	4 <sup>1</sup> / <sub>2</sub> "/115
U Overall height	14'9"/4495	14'6"/4410
U1 Overall height	16'7"/5045	16'4"/4990
T Max. height of hinge pin	11'1"/3370	11'1"/3370
T1 Max. height of hinge pin, transport position	1'4"/405	1'4"/405
V Width of opening	3'8"/1125	3'8"/1125
W Width of bucket	7'1"/2150	8'2"/2500
N Width of trackpads	15"/381/18"/457	26"/660
<b>Operating Weights</b>	<b>lbs/kg</b>	<b>lbs/kg</b>
Multi-purpose bucket	2,450/1100	2,500/1130
Basic-machine with multi-purpose bucket and triple-grouser trackpads 15"/381 mm	27,300/12390	-
double-grouser trackpads 18"/457 mm	27,400/12440	-
double-grouser trackpads 26"/660 mm	-	28,600/12995
<b>Ground Pressures</b>	<b>PSI/kg/cm<sup>2</sup></b>	<b>PSI/kg/cm<sup>2</sup></b>
Basic-machine with multi-purpose bucket and triple-grouser trackpads 15"/381 mm	10.24/0.72	-
double-grouser trackpads 18"/457 mm	8.54/0.60	-
double-grouser trackpads 26"/660 mm	-	6.26/0.44

## Ripper

ZEICHNUNG BEI DER DRUCKEREI

<b>Radial ripper, 5 shank rigid-type equipped with 3 shanks</b> <b>Ripper tips: ESCO</b>	
<b>Dimensions</b> <b>D</b> Ground clearance below toolbar <b>F</b> Ripping width <b>G</b> Toolbar width <b>H</b> Lifting height <b>K</b> Ripping depth <b>M</b> Overall length attachment raised <b>M1</b> Overall length attachment, teeth angled in <b>N</b> Overall length attachment lowered <b>W</b> Distance between teeth <b>X</b> Angle <b>X1</b> Angle, teeth angled in	<b>ft-in/mm</b>  10 <sup>1</sup> / <sub>2</sub> "/265 5'1"/1560 6'0"/1820 2'2"/660 1'0"/305 5'9"/1750 4'11"/1510 5'7"/1700 2'6"/750 18° 24°
<b>Weight</b> <b>Ripper complete</b>  <b>When mounting the ripper, the rear 276 lbs/125 kg counterweight must be removed</b>	<b>lbs/kg</b>  1,760/800

## Attachments

## Standard Equipment\*

### Diesel Engine:

- Fuel system with pre-filter, water separator and fine filters
- Dry-type air cleaner with main and safety element
- Alternator, 55 Amp
- Starter motor 4 kW/5.4 hp
- Electrically activated battery master switch
- Two HD cold start batteries - 110 Ah

### Track Components:

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

### Travel Drive:

- Hydrostatic drive with hydraulic control
- Automatic parking brake

### Attachment Hydraulics:

- 3-spool control block
- Electrical switches for lift stop, 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
- Preparation kit to install fire extinguisher and beacon
- Safety glass, tinted glass
- 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
- Final drive protection
- Extra hydraulic controls
- Hydraulic winch
- Swinging drawbar
- Remote radio control
- Landfill package
- Forestry package
- Steel mill package
- Special paint, one or two tone
- Special buckets
- Lifting lugs

Other optional items on request

# Standard and Optional Equipment

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