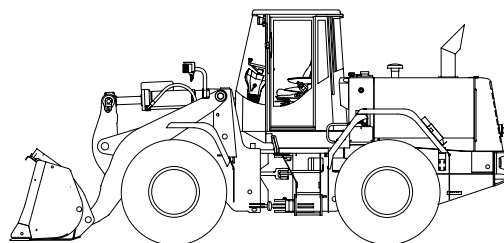


# HITACHI LX170E

engine rated power  
**123 kW / 165 HP**

operating weight  
**13 630 - 14 690 kg**

bucket capacity  
**2.5 - 2.7 m<sup>3</sup>**



# HITACHI

## Engine

Make ..... Isuzu  
 Model ..... 6BG1T  
 Type ..... 6 cylinders, diesel, direct injection turbocharged low emission engine  
 Coolant ..... Water  
 Displacement ..... 6.494 l  
 Engine Power ..... at 2 200 rpm according to ISO 3046 123 kW / 165 HP / 167 PS  
 Maximum torque ..... 616 Nm / 1 800 rpm  
 Cylinder bore / stroke ..... 105 mm / 125 mm  
 Alternator ..... 24 V / 50 A  
 Starting motor ..... 24 V / 4.5 kW  
 Battery (no maintenance) ..... 2 x 12 V / 140 Ah  
 Low gas emission ..... in compliance with European regulations

## Transmission

### TORQUE CONVERTER

Type ..... 3 elements, single stage, single-phase  
 Torque stall ratio ..... 2.91:1

### TRANSMISSION

Make ..... ZF  
 Type ..... Full power shift automatic transmission  
 Gear change ..... Automatic or manual shift  
 Controls ..... Switch on joystick or on the steering column

## Axles

Make ..... ZF  
 Type ..... "Heavy Duty" with limited slip self-locking differentials, designed for high stress work  
 Front axle ..... Rigid  
 Rear axle ..... Oscillation angle left 9.5°; right 9.5°  
 Final drive ..... Epicycloidal planetary gear; system in the wheel hubs  
 Tyres ..... 20.5 R 25

## Travel speeds

Travel speed (with 20.5R25 tyres) km/h.

	Forward	Reverse
1	7	7
2	13	13
3	23	23
4	35	

Maximum gradeability ..... 30°

## Braking system

Type ..... Wet type oil multidisc brakes on all 4 wheels  
 Control ..... Hydraulically controlled, servo control with electrical switch to release the transmission  
 Safety system ..... Through accumulators for the highest safety  
 Parking brake ..... Disc type, electrically controlled from the dashboard; automatic neutralization of the transmission when the parking brake is applied

## Steering

Type ..... Hydraulic, "Load Sensing" with priority valve  
 Operation ..... By hydraulic system main pump  
 Max. flow ..... 128.3 l/min  
 Max. pressure ..... 186 bar  
 No. of cylinders ..... 2 double acting cylinders  
 Bore ..... 90 mm  
 Emergency steering ..... Bi-directional gear pump driven by the gearbox

## Hydraulic system

Type ..... Open centre; flow dependent of load, adjusted via divider valve  
 Main pump ..... Tandem vane pump  
 Max. flow rate at 2 200 rpm ..... 230 l/min  
 Max. pressure ..... 190 bar  
 Aid pump ..... Gear type  
 Flow rate at 2 200 rpm ..... 22.7 l/min  
 Max. pressure ..... 35 bar  
 Hydraulic control valve ..... 3-spool valve for boom, bucket and auxiliary circuit  
 Standard floating valve filter system ..... 5 µ nominal rate on return to tank

### CYLINDERS

Lifting bore / stroke ..... 140 / 725 mm  
 Bucket bore / stroke ..... 160 / 515 mm  
 Steering bore / stroke ..... 90 / 418 mm  
 Cycle time (at rated speed)  
 Lifting ..... 6.1 s  
 Dumping ..... 1.5 s  
 Lowering ..... 3.5 s  
 Total ..... 11.1 s

## Loader equipment

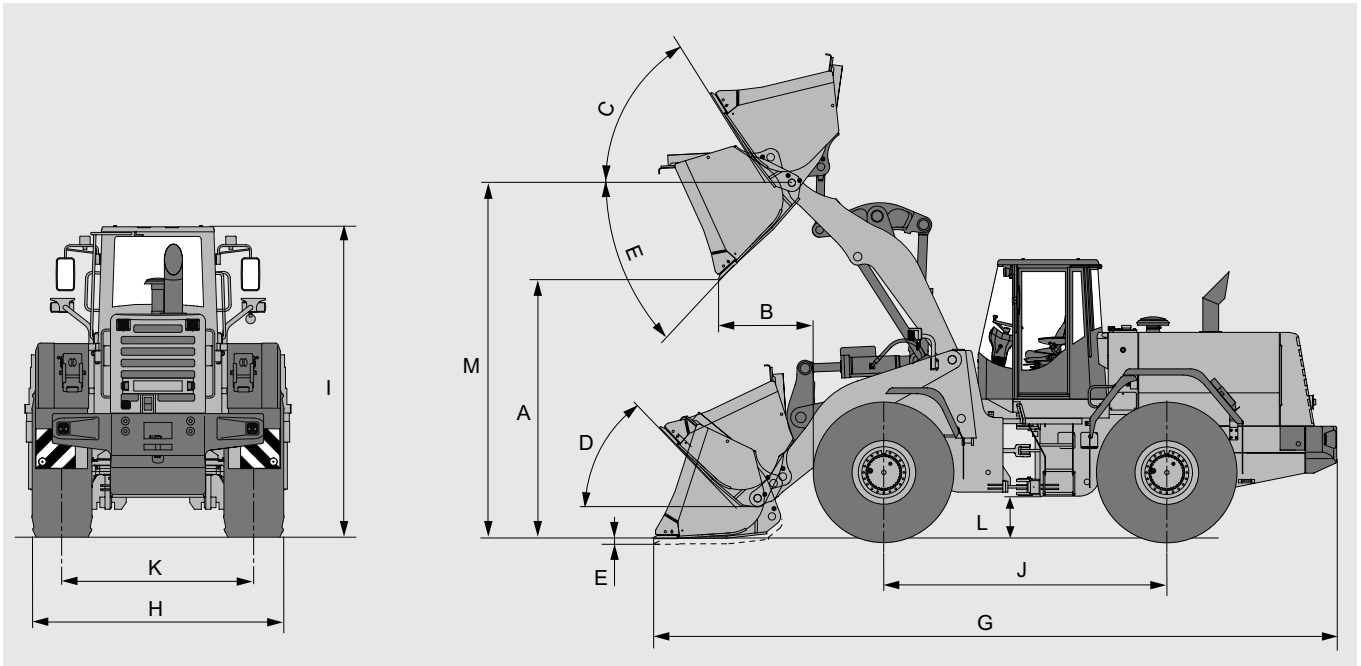
Type ..... Z bar linkage  
 Pins/rings ..... Special coating with special seals  
 Anti-pitching system ..... RCS, Ride Control System (optional)  
 Lubrication ..... Centralized manual lubrication, accessible from the ground  
 Levelling ..... Bucket automatic ground leveller  
 Lift stop ..... Automatic, depending on programmable height  
 Floating position ..... Standard

## Controls

- Control of loader kinematics by one joystick in compliance with ISO standards (2 levers optional).
- Control of auxiliary hydraulic circuit (optional) by means of a separate lever.
- Control locking is possible when driving on the road.
- Reverse/forward shift by switch on equipment joystick or by commodo on steering column.
- Automatic gear selection with "gear-keep function", or manual selection by commodo on the steering column.
- Horn actuation on steering wheel or mono-lever.
- Parking brake application on dashboard.
- Adjustable steering column



## Performances and dimensions



LX170E		Bucket with flat bottom bolted on teeth	Bucket with flat bottom welded on teeth	Rounded bottom bucket with bolted on teeth	Rounded bottom bucket with welded on teeth	Light material bucket with bolted on cutting edge
Bucket capacity (SAE)	m <sup>3</sup>	2.5	2.5	2.5	2.5	2.7
Bucket width	mm	2 535	2 535	2 535	2 535	2 535
<b>Performances</b>						
A Maximum dump height at 45°	mm	2 660	2 680	2 700	2 715	2 715
B Reach at dump height maximum 45°	mm	1 255	1 265	1 305	1 320	1 205
Tipping load, straight	kg	10 570	10 640	10 650	10 720	10 470
Tipping load, articulated, 40°	kg	9 370	9 440	9 450	9 520	9 280
Breakout force	kN	119	119	119	119	109
C Bucket rollback at full height		60	60	60	60	60
D Bucket rollback in carry position (SAE)		47	47	46	46	46
Bucket rollback at ground level		40	40	40	40	40
E Maximum bucket dump angle		46°	46°	48°	48°	46°
F Digging depth	mm	50	50	50	50	45
Minimum turn radius, corner of bucket	mm	6 050	6 050	6 050	6 050	6 035
<b>Dimensions</b>						
G Length (bucket on the ground)	mm	7 550	7 545	7 550	7 545	7 470
H Width over tyre	mm	2 530	2 530	2 530	2 530	2 530
I Height over cab	mm	3 295	3 295	3 295	3 295	3 295
J Wheelbase	mm	3 075	3 075	3 075	3 075	3 075
K Tread	mm	1 960	1 960	1 960	1 960	1 960
L Ground clearance	mm	400	400	400	400	400
M Shovel pin height	mm	3 895	3 895	3 895	3 895	3 895
Operating weight	mm	13 920	13 870	13 840	13 790	13 960

LX170E narrow Specification changes with optional equipment	Dump height Overall height	Overall width	Weight	Tipping load straight	Tipping load full turn
20.5 R 25 VMT (L3)	0	0	0	0	0
20.5 R 25 VKT (L2)	-5	0	-160	-120	-110
20.5 R 25 XHA (L3)	+5	-5	-90	-70	-60
20.5 R 25 VSDL (L5)	+45	-15	+600	+560	+485
20.5 R 25 XLDD (L5)	+25	0	+440	+370	+325
With Ride Control System (RCS)	0	0	+30	+10	+10
With air-conditioner	0	0	+20	+30	+25
With full fender	0	0	+80	+145	+125

## Standard Equipment

Standard equipment may vary by country, so please consult your Hitachi dealer for details.

### LOADER

- Z bar linkage
- Automatic lift stop
- Automatic bucket leveller
- Loader steering by one servo-controlled joystick

### ENGINE

- Dry air filter with safety element
- Soundproof exhaust
- Double fuel filtration

### TRANSMISSION

- Full powershift automatic transmission
- Shift on the loader joystick or with the commodo on the steering console

### AXLES AND BRAKING SYSTEM

- Limited slip front and rear axles
- Electro-hydraulic parking brake
- Front and rear half fenders
- Tyres 20.5R25

### CABIN

- ROPS-FOPS (soundproof and pressurized)
- Air suspension seat
- Radio
- Speedometer
- Heating, de-icing, pressurization, air filtration
- 2 outside retractable rearview mirrors
- 1 inside rearview mirror
- Triplex front windscreen
- Tilttable steering console
- Windscreen wiper and washer (front and rear)
- Tilttable cab for quick maintenance intervention on the hydraulic system and the transmission
- 12 Volt plug for CB

### CONTROL AND SAFETY DEVICES

- Lights : working lights, headlights, stop lights
- Reversing alarm
- Reversing light
- Indicators, light signals, sound signal for coolant and transmission oil temperature, brake pressure, brake oil level, hand brake, steering
- Light on/off switch, headlights indicator
- Hourmeter
- Fuel level
- Pre-selector, gear shift
- Air filter clogging warning light
- Sling points

## Optional Equipment

Optional equipment may vary by country, so please consult your Hitachi dealer for details.

### LOADER

- 2-lever pilot control system
- 3rd function piping
- Anti-pitching system (Ride control system RCS)
- Automatic central lubrication system

### HYDRAULICS

- 3-spool hydraulic control valve

### CABIN

- Air conditioning
- Clock & Thermometer
- Tachometer
- Headrest

### BUCKETS

- 2.3 m<sup>3</sup> Bucket
- 2.5 m<sup>3</sup> Bucket
- 2.7 m<sup>3</sup> Bucket
- 2.5 m<sup>3</sup> Flat bottom Bucket
- Bucket Rubber Bumper

### TYRES

- 20.5 R 25 VKT (L2)
- 20.5 R 25 VMT (L3)
- 20.5 R 25 XHA (L3)
- 20.5 R 25 VSDL (L5)
- 20.5 R 25 XLDD2 (L5)

### OTHER

- Back up alarm
- Beacon lamp
- Bio-degradable oil
- Full rear fenders





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# HITACHI

**Breaking  
new  
ground**