

HITACHI

# *SuperEX* EX220 *V*

Rated Engine HP: 118 kW (160 PS)

Operating Weights

EX220-5: 22 500 kg (49 600 lb)

EX220LC-5: 23 100 kg (50 900 lb)

EX230H-5: 23 700 kg (52 300 lb)

EX230LCH-5: 24 300 kg (53 600 lb)

Bucket Capacity

PCSA Heaped: 0.80—1.40 m<sup>3</sup> (1.05—1.83 yd<sup>3</sup>)

CECE Heaped: 0.70—1.20 m<sup>3</sup>



# The Quest for Real Value: The Super EX-V

Technological advances are limitless.  
The Quest for Real Value — That's Hitachi's  
new challenge.

The result is the Super EX-V, featuring  
responsiveness of human-touch control,  
agile movements, operator-first cab, and an  
environmentally-friendly design.

The Super EX-V is the productive, powerful  
hydraulic excavator, which reduces lifetime  
costs.

The advent of the Hitachi hydraulic excava-  
tor with real value. . . just the beginning of  
Hitachi's next giant stride.

## *SuperEX* V EX220



# Quick-Responding Control Enhances Easy, Productive Operation.

## ① The Advanced Hydraulic System — a Hitachi original — the Heart of the Super EX-V.

Here's versatility . . . a phase of real value. The advanced hydraulic system provides impressive versatility, allowing a variety of operations, such as digging, grading, finishing, and materials handling with power and speed.

This hydraulic system provides:

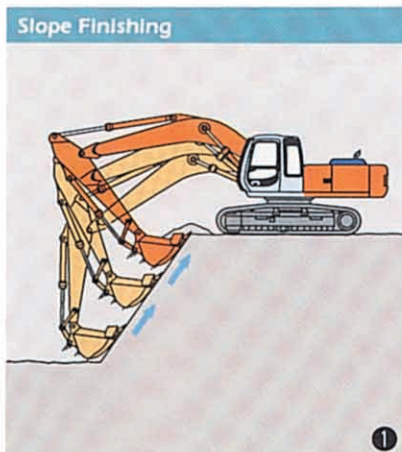
- Smooth operations.
- Matched combined operations.
- Reduces operator fatigue.

In other words, the Super EX-V delivers superior combined operations, quick level finishing, nimble slope tamping, and simple positioning for demolition, as well as straight-line travel and accurate steering.

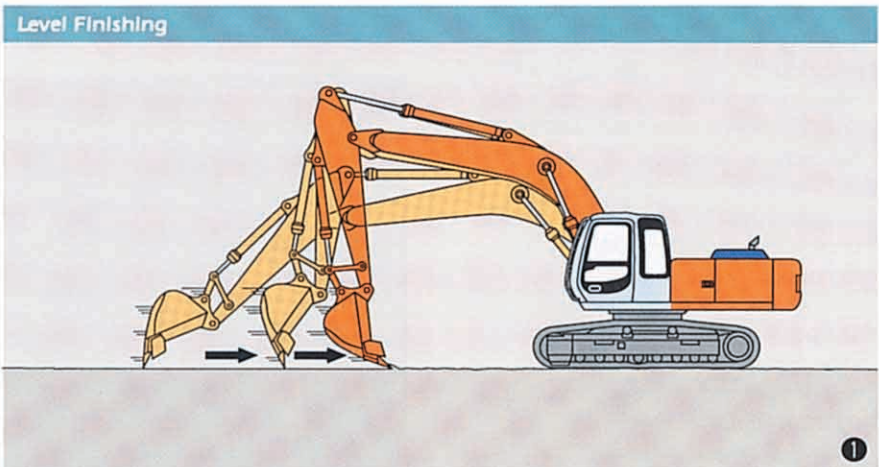
## ② H/P Mode for More Productivity

When power is needed, select the H/P mode. This automatically boosts engine output to 118 kW (160 PS) from 125 kW (170 PS) for increased productivity in heavy-duty operations. In light-duty, such as swing or dumping, engine output is reduced automatically to 118 kW (160 PS) for fuel savings.

Pressing the power boost switch further yields a boost of power.



- Smooth front control



- Increased finishing speed

## ② E Mode for Reduced Fuel Consumption

In light-duty operation, when the E mode is selected, engine speed is reduced for fuel savings. This enhances fuel-efficient operation.



## ③ Four Work Modes for Increased Productivity

- ① General Purpose Mode: For efficient excavation.
- ② Grading Mode: The arm rolls in slowly and powerfully and rolls out quickly for efficient grading.
- ③ Precision Mode: For precision finishing.
- ④ Attachment Mode: Oil flow is adjusted to the special attachment in use, such as a hydraulic breaker.



# Operator Comfort Creates Higher Productivity.

## ● Roomy Cab with Superior Visibility

The operator's cab is spacious, with ample space for legs. The retractable wiper and large overhead window help increase visibility.

## ① Ergonomically Arranged Controls

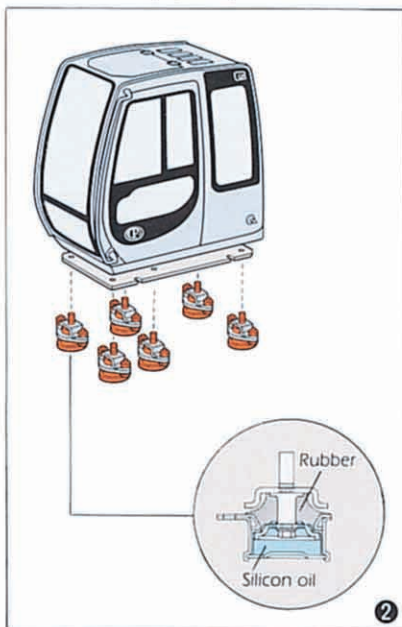
Controls are arranged logically for easy operation. Monitors and switches are placed at the front right position, and engine controls to the right of the operator's seat. Switches are easy to read, and the fuel throttle is dial type.

## ② 6 Fluid-Filled Elastic Mounts

Cab shocks and vibration are dampened with 6 fluid-filled elastic mounts in place of a conventional 4-point mount. This reduces operator's fatigue.

## ● Glove Compartment and Hot-and-Cool Box

A glove compartment (standard) is provided behind the operator's seat for operator convenience. A hot-and-cool box (option) is available.



Show in this photo is fitted with optional equipment.

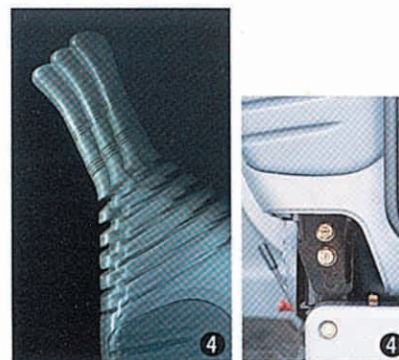


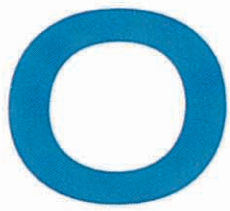
## ③ Fresh Air Type Large-Capacity Air-Conditioner is Optionally Available

Operator comfort is further enhanced with an air-conditioner with ample capacity, 1.5 times that of the previous model, and rotatable blower louvers also serve as defrosters. Thus, rapid air-conditioning can be achieved for operator comfort.

## ④ Tilt-type Seat Cushion and Three-stage Adjustable Controls

The front part and the rear part of the seat cushion can be adjusted up and down independently to help the operator find the most comfortable operating position. Also, the controls can be adjusted in three stages to fit each operator.





# Operator- and Environmentally-Friendly Design Enhances Simplified Maintenance and Reliability

## ① Low Noise Design

The newly developed low-noise pump is employed. The Y-shaped fans reduce air blowing noise and turbulence noise, while increasing air flow. Irritating high-pitch noises have been eliminated.

- Noise Level at Operator's ear: 72 dB (A)
- Noise Level at 7 m (23'0") away: 73 dB (A)

## ② Evacuation Tool and Large Overhead Window

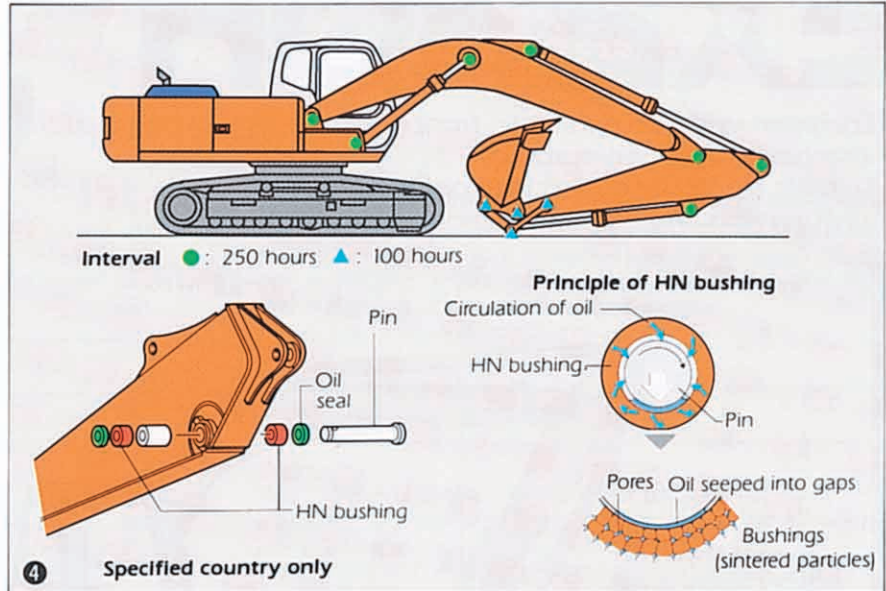
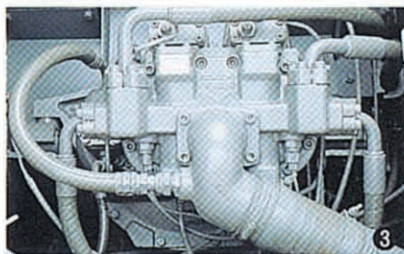
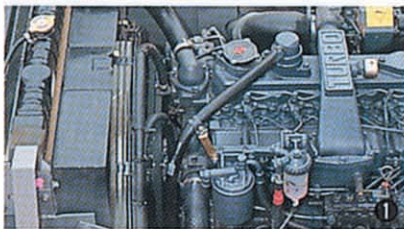
An evacuation tool is provided for emergency evacuation. A large overhead window can be used as an emergency exit.

## ③ Pump Bulkhead

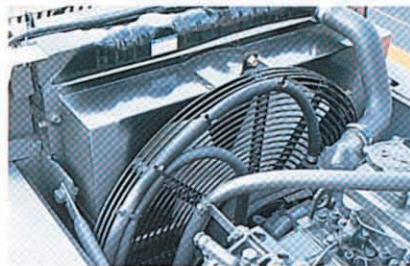
A bulkhead is placed between the pump and engine.

## ④ Easy Maintenance Permitted by HN Bushings

The HN bushings are made of a sintered composite iron alloy with a high-viscosity lubricating oil vacuum



impregnated in micron-sized pores. They are carburized for reliable and durable. (Specified country only).



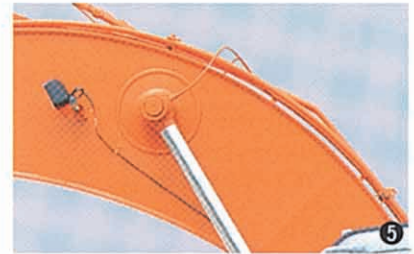
• Radiator fan guard

## ⑤ Dependability and Durability

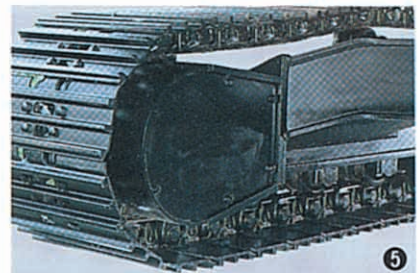
The front attachment, main frame, track frame, and travel motor covers are all reinforced for increased dependability and durability.



• Large handrail



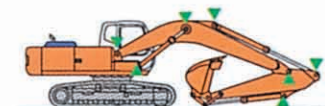
• Round travel motor cover



• Reinforced boom center boss

## ⑥ Auto Lubrication System (Option)

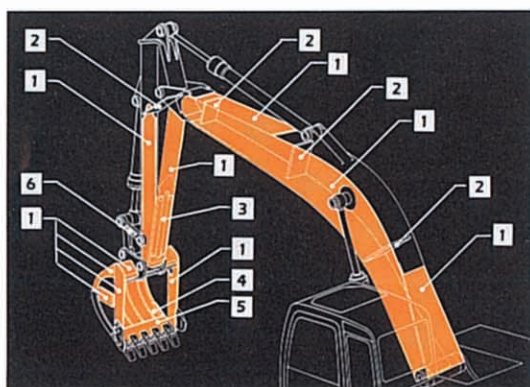
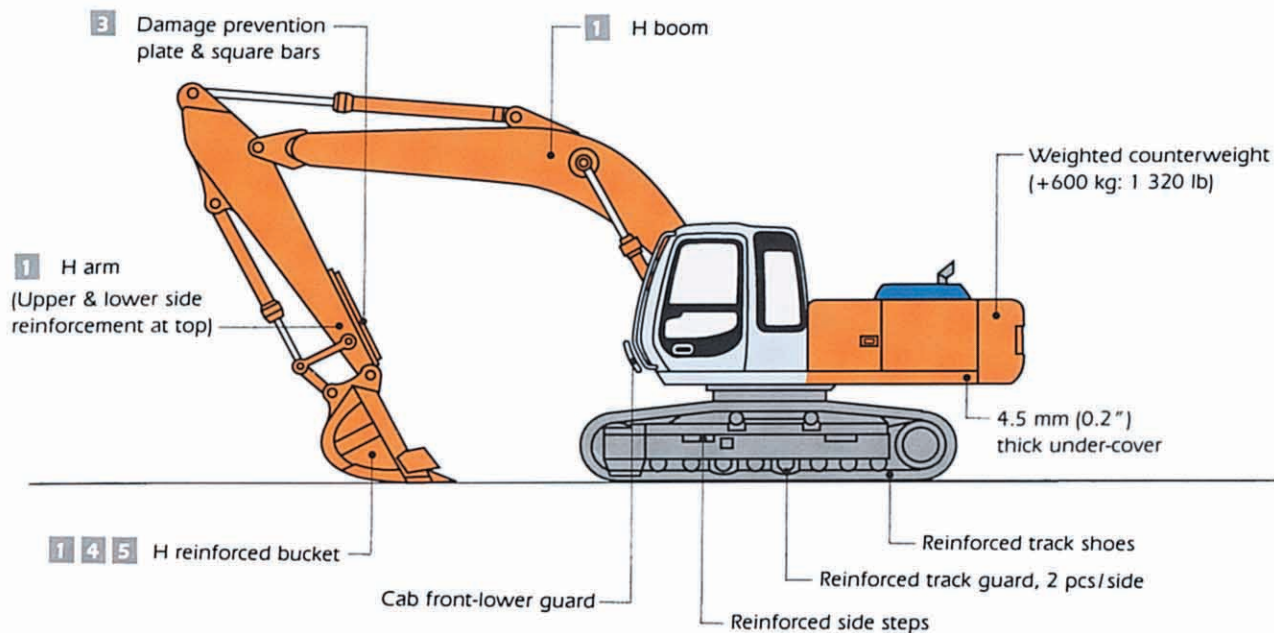
Auto lubrication eases daily maintenance at the boom and arm pins.



▲ Lubricating points

# (Heavy-Duty Version) EX230H

- Equipped with the reinforced front attachment and undercarriage.
- Suitable for heavy-duty operations, such as quarrying and gravel collection.

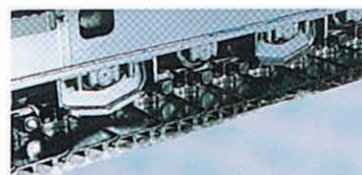


• Reinforcements on the H version, except for 2.

- 1 Increased plate thickness
- 2 Bulkheads
- 3 Damage prevention plates and square bars
- 4 Dual wear plates made of high-strength material
- 5 Cutting edges with reinforcing plate
- 6 Reinforced bucket B-link fitted with square bars for rock excavation



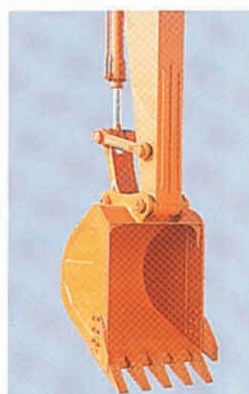
• Reinforced side steps



• Reinforced track guard



• Full track guard (option)



• H front

# SPECIFICATIONS



## ENGINE

Model .....	HINO H07C-TD
Type .....	4-cycle water-cooled, direct injection
Aspiration .....	Turbocharged
No. of cylinders .....	6
Rated flywheel .....	118 kW (160 PS) at 2 000 min <sup>-1</sup> (rpm)
horsepower (DIN 6271, net)	
Rated flywheel .....	116 kW (156 HP) at 2 000 min <sup>-1</sup> (rpm)
horsepower (SAE J1349, net)	
Maximum torque .....	618 N·m (63 kgf·m, 456 lbf·ft)
	at 1 600 min <sup>-1</sup> (rpm)
Piston displacement .....	6.728 L (411 in <sup>3</sup> )
Bore and stroke .....	110 mm × 118 mm (4.3" × 4.6")
Batteries .....	2 × 12 V, 120 AH
Governor .....	Mechanical, speed control with stepping motor



## HYDRAULIC SYSTEM

• Work mode selector	
General purpose mode / Grading mode / Precision mode	
/ Attachment mode	
• Engine speed sensing system	
Main pumps .....	2 variable displacement axial piston pumps
Maximum oil flow .....	2 × 204 L / min (53.9 US gpm, 44.9 Imp gpm)
Pilot pump .....	1 gear pump
Max. oil flow .....	34 L / min. (9.0 US gpm, 7.5 Imp gpm)

### Hydraulic Motors

Travel .....	2 variable displacement axial piston motors
Swing .....	1 axial piston motor

### Relief Valve Settings

Implement circuit .....	34.3 MPa (350 kgf/cm <sup>2</sup> , 4 980 psi)
Swing circuit .....	31.4 MPa (320 kgf/cm <sup>2</sup> , 4 550 psi)
Travel circuit .....	34.3 MPa (350 kgf/cm <sup>2</sup> , 4 980 psi)
Pilot circuit .....	3.7 MPa (38 kgf/cm <sup>2</sup> , 540 psi)
Power boost .....	36.3 MPa (370 kgf/cm <sup>2</sup> , 5 260 psi)

### Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in all cylinders to absorb shocks at stroke ends.

### Dimensions

	Qty.	Bore	Rod diameter
Boom	2	125 mm (4.9")	90 mm (3.5")
Arm	1	135 mm (5.3")	100 mm (3.9")
Bucket	1	125 mm (4.9")	85 mm (3.3")

### Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and 10 µm full-flow filters in the return line and swing/travel motor drain lines.



## CONTROLS

Pilot controls. Hitachi's original shockless valve and quick warm-up system built in the pilot circuit. Hydraulic warm-up control system for engine and hydraulic oil.

Implement levers .....	2
Travel levers with pedals .....	2



## UPPERSTRUCTURE

### Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. D-section frame for resistance to deformation.

### Swing Mechanism

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed .....	13.5 min <sup>-1</sup> (rpm)
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### Operator's Cab

Independent roomy cab, 1 005 mm (40") wide by 1 665 mm (66") high, conforming to ISO\* Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) are openable. Adjustable, reclining seat with armrests; movable with or without control levers.

\* International Standardization Organization



## UNDERCARRIAGE

### Tracks

Tractor-type undercarriage. Welded track frame, using selected materials. Side frame welded to track frame. Lubricated track rollers, idlers, and sprockets with floating seals.

Track shoes with triple grousers made of induction-hardened rolled alloy. Flat and triangular shoes are also available. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

### Numbers of Rollers and Shoes on Each Side

Upper rollers .....	2
Lower rollers .....	8: EX220-s/EX230H-s
	9: EX220LC-s/EX230LCH-s
Track shoes .....	47: EX220-s/EX230H-s
	51: EX220LC-s/EX230LCH-s
Track guard .....	1: EX220-s/EX230H-s
	2: EX220LC-s/EX230LCH-s

Track guard on the EX230H-s and EX230LCH-s are reinforced.

### Traction Device

Each track driven by 2-speed axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable. Parking brake is spring-set/hydraulic-released disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel.

Automatic transmission system: High—Low.

Travel speeds .....	High: 0 to 5.5 km/h (3.4 mph)
	Low: 0 to 3.6 km/h (2.2 mph)

Maximum traction force ..... 186 kN (19 000 kgf, 41 900 lbf)

Gradeability ..... 35° (70 %) continuous

## WEIGHTS AND GROUND PRESSURE

Equipped with 6.00 m (19'8") boom, 2.96 m (9'9") arm and 1.00 m<sup>3</sup> (1.31 yd<sup>3</sup>: PCSA heaped) bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm (24")	22 500 kg (49 600 lb)	49 kPa (0.50 kgf/cm <sup>2</sup> 7.11 psi)
		23 100 kg (50 900 lb)	45 kPa (0.46 kgf/cm <sup>2</sup> 6.54 psi)
	700 mm (28")	22 900 kg (50 500 lb)	43 kPa (0.44 kgf/cm <sup>2</sup> 6.26 psi)
		23 500 kg (51 800 lb)	40 kPa (0.41 kgf/cm <sup>2</sup> 5.83 psi)
	800 mm (31")	23 200 kg (51 200 lb)	38 kPa (0.39 kgf/cm <sup>2</sup> 5.55 psi)
		23 800 kg (52 500 lb)	35 kPa (0.36 kgf/cm <sup>2</sup> 5.12 psi)
Flat	600 mm (24")	23 300 kg (51 400 lb)	51 kPa (0.52 kgf/cm <sup>2</sup> 7.39 psi)
		24 000 kg (52 900 lb)	48 kPa (0.49 kgf/cm <sup>2</sup> 6.97 psi)
Triangular	760 mm (30")	23 500 kg (51 800 lb)	43 kPa (0.41 kgf/cm <sup>2</sup> 5.83 psi)
		24 200 kg (53 400 lb)	38 kPa (0.39 kgf/cm <sup>2</sup> 5.55 psi)
	900 mm (35")	24 500 kg (54 000 lb)	35 kPa (0.36 kgf/cm <sup>2</sup> 5.12 psi)
		25 300 kg (55 800 lb)	33 kPa (0.34 kgf/cm <sup>2</sup> 4.83 psi)

Figures in   are data on the EX220LC-s.

Weights of the basic machines [including 5 100 kg (11 200 lb), 5 700 kg (12 600 lb) H-type counterweight and triple grouser shoes, excluding front-end attachment, fuel, Hyd. oil, Eng. oil and coolant etc.] are:

EX220-s	17 400 kg (38 400 lb) with 600 mm (24") shoes
EX220LC-s	18 700 kg (41 200 lb) with 800 mm (31") shoes
EX230H-s	18 200 kg (40 100 lb) with 600 mm (24") Reinforced shoes
EX230LCH-s	18 800 kg (41 500 lb) with 600 mm (24") Reinforced shoes

## EX230H-s/EX230LCH-s (Heavy-duty version):

Equipped with 6.00 m (19'8") H-boom, 2.96 m (9'9") H-arm, and 1.00 m<sup>3</sup> (1.31 yd<sup>3</sup>: PCSA heaped) H-bucket.

	Shoe width	Operating weight	Ground pressure
EX230H-s	Reinforced Triple grouser 600 mm (24")	23 700 kg (52 300 lb)	52 kPa (0.53 kgf/cm <sup>2</sup> 7.54 psi)
EX230LCH-s		24 300 kg (53 600 lb)	48 kPa (0.49 kgf/cm <sup>2</sup> 6.97 psi)



## SERVICE REFILL CAPACITIES

	liters	US gal	Imp gal
Fuel tank	380.0	100.4	83.6
Engine coolant	23.0	6.1	5.1
Engine oil	26.0	6.9	5.7
Swing mechanism	13.2	3.5	2.9
Travel final device (each side)	6.0	1.6	1.3
Hydraulic system	239.0	63.1	52.6
Hydraulic tank	156.0	41.2	34.3



## BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design. 6.00 m (19'8") boom, and 2.32 m (7'7"), 2.96 m (9'9") and 3.61 m (11'10") arms are available.

Bucket is of welded steel structure. Side clearance adjust mechanism provided on the bucket joint bracket.

## Buckets

Capacity		Width		No. of teeth	Weight	Recommendation					
PCSA heaped	CECE heaped	Without side cutters	With side cutters			EX220-s	EX220LC-s	EX230H-s (LCH)-s			
						2.32 m (7'7") arm	2.96 m (9'9") arm	3.61 m (11'10") arm	2.32 m (7'7") arm	2.96 m (9'9") arm	3.61 m (11'10") arm
0.80 m <sup>3</sup> (1.05 yd <sup>3</sup> )	0.70 m <sup>3</sup>	940 mm (3'1")	1 080 mm (3'7")	4	720 kg (1 590 lb)	●	●	●	●	●	●
1.00 m <sup>3</sup> (1.31 yd <sup>3</sup> )	0.90 m <sup>3</sup>	1 160 mm (3'10")	1 300 mm (4'3")	5	840 kg (1 850 lb)	●	●	○	●	●	●
1.15 m <sup>3</sup> (1.50 yd <sup>3</sup> )	1.00 m <sup>3</sup>	1 270 mm (4'2")	1 410 mm (4'8")	5	880 kg (1 940 lb)	○	○	□	○	○	○
1.25 m <sup>3</sup> (1.63 yd <sup>3</sup> )	1.10 m <sup>3</sup>	1 380 mm (4'6")	1 520 mm (5'0")	5	920 kg (2 030 lb)	○	○	—	○	○	○
1.40 m <sup>3</sup> (1.83 yd <sup>3</sup> )	1.20 m <sup>3</sup>	1 490 mm (4'11")	—	5	880 kg (1 940 lb)	□	—	—	□	—	—
*1 1.00 m <sup>3</sup> (1.31 yd <sup>3</sup> )	0.90 m <sup>3</sup>	1 160 mm (3'10")	1 300 mm (4'3")	5	970 kg (2 140 lb)	●	●	○	●	●	●
*1 1.15 m <sup>3</sup> (1.50 yd <sup>3</sup> )	1.00 m <sup>3</sup>	1 270 mm (4'2")	1 410 mm (4'8")	5	1 020 kg (2 250 lb)	●	●	○	●	●	●
*2 1.00 m <sup>3</sup> (1.31 yd <sup>3</sup> )	0.90 m <sup>3</sup>	1 160 mm (3'10")	1 300 mm (4'3")	5	960 kg (2 120 lb)	●	●	○	●	●	●
*3 1.00 m <sup>3</sup> (1.31 yd <sup>3</sup> )	0.90 m <sup>3</sup>	1 160 mm (3'10")	1 300 mm (4'3")	5	950 kg (2 090 lb)	●	●	○	●	●	●
*4 0.92 m <sup>3</sup> (1.20 yd <sup>3</sup> )	0.80 m <sup>3</sup>	1 120 mm (3'8")	—	3	1 000 kg (2 210 lb)	●	●	●	●	●	●
Ripper bucket: 0.80 m <sup>3</sup> (1.05 yd <sup>3</sup> : CECE heaped), Width 1 000 mm (3'3")					3	1 210 kg (2 670 lb)	●	●	—	●	●
One-point ripper					1	680 kg (1 500 lb)	●	●	—	●	●
Clamshell bucket: 0.60 m <sup>3</sup> (0.78 yd <sup>3</sup> : CECE heaped), Width 870 mm (2'10")					8	960 kg (2 120 lb)	●	●	—	●	●

\*1 Reinforced bucket

\*2 H-bucket

\*3 Level-pin-reinforced bucket

\*4 Rock bucket

● Suitable for materials with density of 2 000 kg/m<sup>3</sup> (3 370 lb/yd<sup>3</sup>) or less

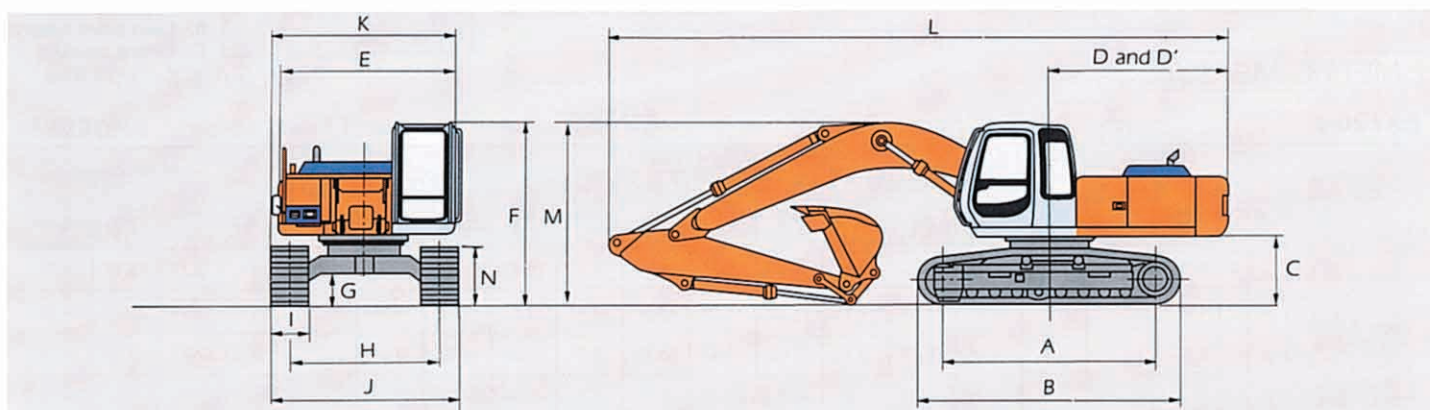
○ Suitable for materials with density of 1 600 kg/m<sup>3</sup> (2 700 lb/yd<sup>3</sup>) or less

□ Suitable for materials with density of 1 100 kg/m<sup>3</sup> (1 850 lb/yd<sup>3</sup>) or less

● Heavy-duty service

— Not recommended

## DIMENSIONS



Unit: mm (ft in)

	EX220-s	EX230H-s	EX220LC-s	EX230LCH-s
A Distance between tumbles	3 460 (11'4")		3 840 (12'7")	
B Undercarriage length	4 260 (14'0")		4 640 (15'3")	
*C Counterweight clearance	1 090 (3'7")		1 090 (3'7")	
D Rear-end swing radius	2 940 (9'8")		2 940 (9'8")	
D' Rear-end length	2 940 (9'8")		2 940 (9'8")	
E Overall width of upperstructure	2 870 (9'5")		2 870 (9'5")	
F Overall height of cab	2 940 (9'8")		2 940 (9'8")	
*G Min. ground clearance	460 (1'6")		460 (1'6")	
H Track gauge	2 390 (7'10")		2 590 (8'6")	
I Track shoe width	G 600 (24")		G 800 (31")	G 600 (24")
J Undercarriage width	2 990 (9'10")		3 390 (11'1")	3 190 (10'6")
K Overall width	2 990 (9'10")		3 390 (11'1")	3 190 (10'6")
L Overall length				
With 2.32 m (7'7") arm	10 260 (33'8")	—	10 260 (33'8")	—
With 2.96 m (9'9") arm	10 140 (33'3")	**10 140 (33'3")	10 140 (33'3")	**10 140 (33'3")
With 3.61 m (11'10") arm	10 200 (33'6")	—	10 200 (33'6")	—
M Overall height of boom				
With 2.32 m (7'7") arm	3 290 (10'10")	—	3 290 (10'10")	—
With 2.96 m (9'9") arm	3 100 (10'2")	**3 100 (10'2")	3 100 (10'2")	**3 100 (10'2")
With 3.61 m (11'10") arm	3 320 (10'11")	—	3 320 (10'11")	—
N Track height				
With triple grouser shoes	945 (3'1")	945 (3'1")	945 (3'1")	945 (3'1")

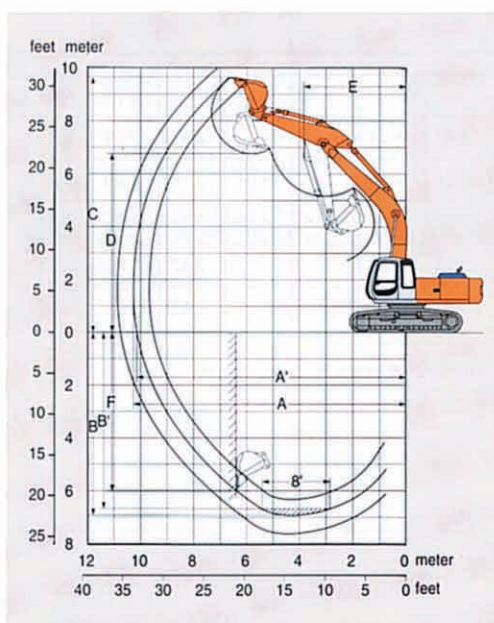
\*Excluding track shoe lug.

G: Triple grouser shoe

\*\*Equipped with H-Front

## WORKING RANGES

Unit: mm (ft in)

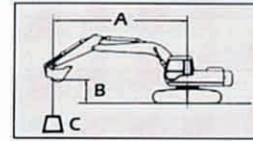


	EX220-s / EX220LC-s			EX230H-s / EX230LCH-s
Arm length	2.32 m (7'7")	2.96 m (9'9")	3.61 m (11'10")	6.00 m (19'8") H-boom 2.96 m (11'10") H-arm
A Max. digging reach	9 710 mm (31'10")	10 270 mm (33'8")	10 900 mm (35'9")	10 270 mm (33'8")
A' Max. digging reach (on ground)	9 530 mm (31'3")	10 100 mm (33'2")	10 730 mm (35'2")	10 100 mm (33'2")
B Max. digging depth	6 300 mm (20'8")	6 950 mm (22'10")	7 590 mm (24'11")	6 950 mm (22'10")
B' Max. digging depth (B' level)	6 070 mm (19'11")	6 740 mm (22'1")	7 430 mm (24'5")	6 740 mm (22'1")
C Max. cutting height	9 410 mm (30'10")	9 630 mm (31'7")	9 990 mm (32'9")	9 630 mm (31'7")
D Max. dumping height	6 540 mm (21'5")	6 760 mm (22'2")	7 100 mm (23'4")	6 760 mm (22'2")
E Min. swing radius	3 960 mm (13'0")	3 870 mm (12'8")	3 890 mm (12'9")	3 870 mm (12'8")
F Max. vertical wall	5 400 mm (17'9")	6 020 mm (19'9")	6 740 mm (22'2")	6 020 mm (19'9")
Bucket digging force*	167 kN (17 000 kgf, 37 500 lbf)			
	144 kN (14 700 kgf, 32 400 lbf)			
Arm crowd force*	146 kN (14 900 kgf, 32 900 lbf)			
	116 kN (11 800 kgf, 26 000 lbf)			
	100 kN (10 200 kgf, 22 500 lbf)			
	116 kN (11 800 kgf, 26 000 lbf)			
SAE: PCSA	139 kN (14 200 kgf, 31 300 lbf)			
	112 kN (11 400 kgf, 25 100 lbf)			
SAE: PCSA	97 kN (9 900 kgf, 21 800 lbf)			
	112 kN (11 400 kgf, 25 100 lbf)			

Excluding track shoe lug

\* At power boost

# LIFTING CAPACITIES



A: Load radius  
B: Load point height  
C: Lifting capacity

## METRIC MEASURE

### EX220-5



Rating over-side or 360 degrees



Rating over-front

Unit: 1 000 kg

Conditions	Load point height	Load radius												At max. reach		
		3 m	4 m	5 m	6 m	7 m	8 m	9 m	10 m	11 m	12 m	13 m	14 m	15 m	16 m	@ m
Boom 6.00 m Arm 2.32 m Bucket PCSA: 1.00 m <sup>3</sup> CECE: 0.90 m <sup>3</sup> Shoe: 600 mm	6 m					*4.51	*4.51	3.97	*4.45					2.79	*3.71	8.45
	4 m		*7.55	*7.55	*6.19	*6.19	4.99	*5.41	3.82	*4.97	2.98	4.50		2.29	3.53	9.14
	2 m		5.96	*8.79	5.94	*8.75	4.53	*6.90	3.54	5.34	2.82	4.33		2.12	3.33	9.29
	0 (Ground)		5.79	9.23	5.56	8.82	4.22	6.58	3.33	5.16	2.68	4.18		2.22	3.50	8.92
	-2 m		8.05	*11.2	5.53	8.80	4.14	6.50	3.26	5.09				2.72	4.23	7.96
	-4 m	*11.88	*11.88	8.2	*11.88	5.70	*8.50	4.27	6.44							
Boom 6.00 m Arm 2.96 m Bucket PCSA: 1.00 m <sup>3</sup> CECE: 0.90 m <sup>3</sup> Shoe: 600 mm	6 m					4.62	*4.16	*3.93	*3.93					*2.38	*2.38	9.07
	4 m				*5.15	*5.15	*4.78	*4.78	3.90	*4.46	3.03	4.29		2.03	*2.46	9.71
	2 m		8.17	10.56	6.14	7.90	4.63	6.35	3.60	5.46	2.84	4.35	2.27	3.53	1.88	9.84
	0 (Ground)		*5.42	*5.42	5.61	8.89	4.25	6.62	3.33	5.18	2.67	4.17	2.16	3.43	1.95	9.51
	-2 m	*6.98	*6.98	7.92	*12.40	5.48	8.75	4.11	6.46	3.22	5.05	2.59	4.09		*2.32	8.62
	-4 m	13.68	*13.79	8.10	*11.15	5.58	8.86	4.16	6.53					3.45	*4.59	6.95

### EX220LC-5



















Rating over-side or 360 degrees



Rating over-front

Unit: 1 000 kg

Conditions	Load point height	Load radius														At max. reach			
		3 m		4 m		5 m		6 m		7 m		8 m		9 m					
																		@ m	
Boom 6.00 m Arm 2.32 m Bucket PCSA: 1.00 m³ CECE: 0.90 m³ Shoe: 600 mm	6 m							*4.51	*4.51	*4.45	*4.45					3.16	*3.72	8.45	
	4 m					*6.19	*6.19	*5.41	*5.41	4.30	*4.97	3.37	*4.77			2.61	*3.81	9.14	
	2 m					6.73	*8.75	5.12	*6.90	4.02	*5.87	3.21	5.14			2.44	3.97	9.29	
	0 (Ground)				6.61	*10.38	6.34	*10.04	4.81	7.90	3.79	6.17	3.07	4.99			2.56	4.18	8.92
	-2 m	*9.34	*9.34	9.23	*11.20	6.32	*9.85	4.73	7.81	3.72	6.09					3.10	5.04	7.96	
	-4 m	*11.87	*11.87	9.46	*10.15	6.49	*8.50	4.86	*7.03										
Boom 6.00 m Arm 2.96 m Bucket PCSA: 1.00 m³ CECE: 0.90 m³ Shoe: 600 mm	6 m							*3.88	*3.88	*3.93	*3.93					*2.39	*2.39	9.07	
	4 m					*5.15	*5.15	*4.78	*4.78	4.38	4.46	3.43	4.29			*2.33	*2.33	9.71	
	2 m				9.31	*10.57	6.95	7.91	5.23	*6.36	4.07	*5.46	3.24	*4.90	2.60	*4.06	2.18	*2.69	9.85
	0 (Ground)				*5.43	*5.43	6.40	*9.71	4.85	*7.67	3.81	6.19	3.06	4.98	2.50	4.10	2.26	*3.13	9.50
	-2 m				*6.98	*6.98	9.10	*12.40	4.70	7.78	3.69	6.05	2.98	4.89			2.67	*4.01	8.62
	-4 m	*13.79	*13.79	9.28	*11.15	6.37	*9.12	4.75	*7.52								3.93	*4.59	6.95

- Notes: 1. Ratings are based on SAE J1097.  
2. Lifting capacity of the Super EX Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.  
3. The load point is a hook (not standard equipment) loaded on the back of the bucket.  
4. \*Indicates load limited by hydraulic capacity.

# METRIC MEASURE

## EX230H-s



















Rating over-side or 360 degrees



Rating over-front

Unit: 1 000 kg

Conditions	Load point height	Load radius														At max. reach		
		3 m		4 m		5 m		6 m		7 m		8 m		9 m				
																		@ m
Boom 6.00 m H-boom Arm 2.96 m H-arm Bucket PCSA: 1.00 m³ CECE: 0.90 m³ H-bucket Shoe: 600 mm Reinforced type	6 m							*3.71	*3.71	*3.76	*3.76					*2.25	*2.25	9.07
	4 m					*4.98	*4.98	*4.61	*4.61	4.11	*4.28	3.19	*4.10			2.12	*3.24	9.70
	2 m			8.71	*10.35	6.53	*7.70	4.91	6.16	3.80	*5.27	2.99	4.58			1.96	*2.56	9.83
	0 (Ground)			*5.23	*5.23	5.97	9.43	4.51	7.01	3.53	5.46	2.81	4.39			2.04	*3.01	9.50
	− 2 m	*6.88	*6.88	8.45	*12.19	5.84	9.28	4.36	6.84	3.40	5.33	2.73	4.30			2.43	3.84	8.62
	− 4 m	*13.53	*13.53	8.64	*10.92	5.94	8.89	4.42	6.84	3.40	5.33					3.64	*4.52	6.94

## EX230LCH-s



















Rating over-side or 360 degrees



Rating over-front

Unit: 1 000 kg

Conditions	Load point height	Load radius														At max. reach			
		3 m		4 m		5 m		6 m		7 m		8 m		9 m					
																		@ m	
Boom 6.00 m H-boom Arm 2.96 m H-arm Bucket PCSA: 1.00 m³ CECE: 0.90 m³ H-bucket Shoe: 600 mm Reinforced type	6 m							*3.71	*3.71	*3.93	*3.93						*2.25	*2.25	9.07
	4 m					*4.98	*4.98	*4.61	*4.61	*4.28	*4.28	3.60	*4.10				*2.32	*2.32	9.70
	2 m			9.90	*10.35	7.37	*7.70	5.53	*6.13	4.29	*5.27	3.40	4.71				2.27	*2.55	9.84
	0 (Ground)			*5.23	*5.23	6.80	*9.48	5.12	7.46	4.12	*6.18	3.22	5.23				2.28	*2.74	9.73
	−2 m	*6.78	*6.87	9.70	*12.19	6.66	*9.84	4.97	7.90	3.89	6.37	3.13	5.14				2.80	*3.89	8.62
	−4 m	*13.53	*13.53	9.89	*10.92	6.77	*8.89	5.03	7.30								4.14	*4.52	6.94

- Notes: 1. Ratings are based on SAE J1097.  
 2. Lifting capacity of the Super EX Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.  
 3. The load point is a hook (not standard equipment) loaded on the back of the bucket.  
 4. \*Indicates load limited by hydraulic capacity.



## STANDARD EQUIPMENT

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

### ENGINE

- H/P mode control
- E mode control
- 40 A alternator
- Dry-type air filter with evacuator valve (with safety element)
- Cartridge-type engine oil filter
- Cartridge-type engine oil bypass filter
- Cartridge type fuel filter
- Air cleaner double element
- Radiator and oil cooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system

### HYDRAULIC SYSTEM

- Work mode selector
- Engine speed sensing system
- E-P control system
- Quick warm-up system for pilot circuit
- Shockless valve in pilot circuit
- Boom-arm anti-drift valve
- Control valve with main relief valve
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter

### CAB

All-weather sound-suppressed steel cab equipped with reinforced, tinted (bronze color) glass windows, 6 fluid-filled elastic mounts, openable front windows-upper, and lower and left side windows with intermittent windshield retractable wipers, front window washer, adjustable reclining seat with adjustable armrests, footrest, electric double horn, auto-tuning radio with digital clock, auto-idle switch, seat belt, cigarette lighter, ashtray, parcel pocket, glove compartment, floor mat, heater, and pilot control shut-off lever.

### MONITOR SYSTEM

- Meters:  
Hourmeter, engine coolant temperature gauge and fuel meter.
- Warning lamps:  
Alternator charge, engine oil pressure, engine overheat, air cleaner clog and minimum fuel level.
- Pilot lamps:  
Engine preheat, engine oil level, engine coolant level and hydraulic oil level.
- Alarm buzzers:  
Engine oil pressure and engine overheat

### LIGHTS

- 2 working lights

### UPPERSTRUCTURE

- Undercover
- 5 100 kg (11 200 lb) counterweight
- Fuel level float
- Hydraulic oil level gauge
- Tool box
- Utility space
- Rearview mirror (right & left side)
- Swing parking brake

### UNDERCARRIAGE

- Travel parking brake
- Travel motor covers
- Track guards and hydraulic track adjuster
- Bolt-on sprocket
- Upper rollers and lower rollers
- Reinforced track links with pin seals
- 600 mm (24") triple grouser shoes.

### FRONT ATTACHMENTS

- HN bushing (Specified country only)
- Bucket clearance adjust mechanism
- Monolithically cast bucket link A
- Centralized lubrication system

- Dirt seals on all bucket pins
- 2.96 m (9'9") arm
- 1.00 m<sup>3</sup> (1.31 yd<sup>3</sup>: PCSA heaped) bucket

### MISCELLANEOUS

- Standard tool kit
- Lockable machine covers
- Lockable fuel filling cap
- Slip resistant tapes and handrails.

### EX230H/EX230LCH (Heavy-duty version)

- H-boom 6.00 m (19'8") and H-arm 2.96 m (9'9")
- 1.00 m<sup>3</sup> (1.31 yd<sup>3</sup>: PCSA heaped) H-bucket
- Reinforced bucket link B
- Front glass lower guard
- Reinforced undercover
- 5 700 kg (12 600 lb) H-counterweight
- 600 mm (24") reinforced triple grouser shoes
- H-track guard
- Reinforced side step (bolt on type)



## OPTIONAL EQUIPMENT

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

- Air conditioner
- Suspension seat
- AM-FM radio
- Hose rupture valves
- Electric fuel refilling pump
- Swing motion alarm device with lamps
- Travel motion alarm device
- Additional pump
- Piping kit for extra valve port
- Additional valve with piping kit
- PTO valve with piping kit
- Auto-lubrication system
- Pre-cleaner
- Tropical cover

- H-boom 6.00 m (19'8")
- H-arm 2.96 m (9'9")
- 1.00 m<sup>3</sup> (1.31 yd<sup>3</sup>: PCSA heaped) H-bucket
- Front glass lower guard
- Reinforced undercover for upperstructure
- 5 700 kg (12 600 lb) H-counterweight
- 600 mm (24") reinforced triple grouser shoes
- H-track guard
- 1.00 m<sup>3</sup> (1.31 yd<sup>3</sup>: PCSA heaped) Level pin-reinforced bucket
- Full track guard
- Ripper bucket for ripping and loading hardpan
- One point ripper for ripping hardpan
- Clamshell bucket for deep vertical excavations such as manholes, pilings, footings, etc.

These specifications are subject to change without notice. Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment, with some differences in color and features.

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