HITACHI

Super

**EX120** 

# NEW uperEX

Rated engine HP: 63kW (85PS)

Operating weight: 11 800 kg (26 000 lb)

**Bucket capacity** 

PCSA heaped: 0.19—0.66 m<sup>3</sup> (0.25—0.86 yd<sup>3</sup>) CECE heaped: 0.17—0.55 m<sup>3</sup>



EM-100 EXCEPTIBLE

# QUICK **RESPONSE**

Smooth, rapid movements and efficient level retraction. The Hitachi EX120 intelligent hydraulic excavator comes with a new level of productivity never before available.

The front attachment works fast and smoothly, with quick response to the operator's will. It moves up and down matching the quick-action control lever. That eases complicated tasks, such as slope finishing and grading.

The renowned EX120 also permits direct access to the skill of an experienced operator thanks to numerous advanced features.

The EX120 is Hitachi's answer to the needs of increasingly tough construction jobs.



Excavation and dumping speeds are increased by increasing the pump delivery flow. Efficient Slope Finishing and Grading:

Efficient level retraction is the big feature. This allows quick, smooth finishing works, like slope finishing and grading.

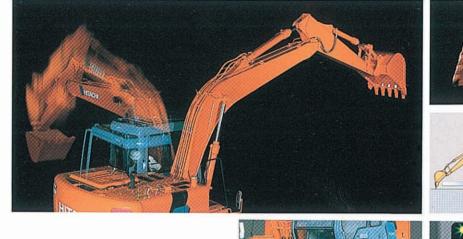
like that of the P (Power) mode.

attachments.

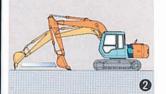
- Rapid, Sure Response: Hitachi design focuses on rapid, sure response to job needs. Control levers and boom respond quickly and agilely, well matching the operator's will. The result is dynamic tamping and rolling.
- Advanced Cab Mount: The fluid-filled elastic mount supporting the cab dampens shocks and vibration significantly, Also, the cab bed is rugged, using thick plates.
- Comfortable Suspension Seat: The comfortdesigned operator seat keeps the operator feeling relaxed. The rugged I-shaped linkage suspension and cold-foamed seat cushions reduce operator fatigue greatly for seating comfort.

- · Sliding Cockpit: Armrest angle can be adjusted steplessly to operator's proportions, with a choice of two control lever heights for operator comfort and convenience.
- Smooth Ride: Smooth ride and steering are achieved with the improved travel shockless relief valve and damper. Shocks at start and stop of travel are dampened dramatically, too.
- Operator -first Design: Operator first is the key cab design concept. Seat belt, and pilotcontrol shutoff lever, which prevent misoperation when getting in and out of the cab, are provided as standard equipment.
- Tested Durability: The machine, before its launch, underwent a number of stringent lowtemperature and endurance tests, demonstrating Hitachi's traditional durability.

# Impressive Versatility







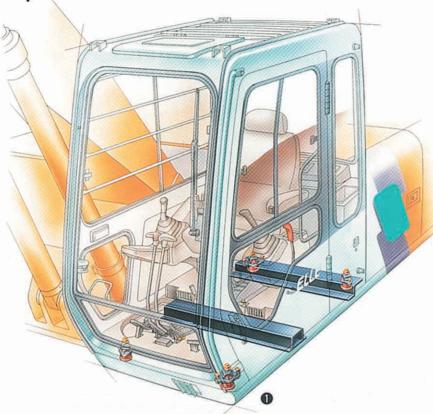


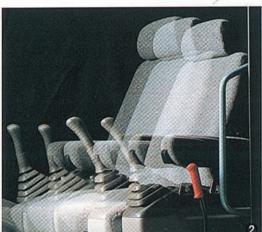


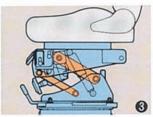
- Advanced Hydraulics for Productivity: Pump delivery flow can be adjusted to the load for efficient digging and dumping onto off-highway trucks. The result: production is up 4% to 5% without increase in fuel consumption (compared to our conventional model).
- @ Efficient Slope Finishing and Grading: Rapid, smooth level retraction can be achieved with the help of the boom pilot sensor. This allows efficient slope finishing and grading during overburden stripping, road maintenance and land
- Rapid Response: Even a slight movement of the control lever is converted into brisk up-anddown movement of the boom. This means both movements are well matched. This advantage is effective in complex operations like tamping in civil engineering jobs and land leveling.
- Smooth Ride: The improved travel shockless relief valve and damper reduce shocks at start and stop of travel. The rugged cab bed and fluidfilled elastic mount help reduce shocks and vibration during travel. These designs ensure smooth ride, reducing operator fatique.
- 4 Work Mode Selector: With the work mode selector, you can select an optimum mode from four work modes - general purpose, trenching, grading and precision modes — to suit job requirements, at one touch of a switch.
- Versatility means productivity: The EX120 is designed keeping in mind versatility, operating efficiency and production, using a variety of front attachments. What's more, optional attachments are applicable through the extra port for added versatility.
- Improved E-P (Engine-Pump) control system to save energy.
- Smoothly combined operations and pleasant control through the ELLE (Electronic Load-sensing Excavation) system.
- Swing dampener mechanism to eliminate coasting at stop of swing.
- Auto idle to save energy when not in operation.
- Shockless valve absorbs shocks when stopping the front.
- Holding valve prevents lowering of the boom and arm under gravity.

2 EX120 EX120 3

# Operator Comfort and Convenience



















- Window washer and intermittent wiper keep the front window clean.
- The front window is spring-assisted for easy storing in the cab.
- Auto-tuning AM radio with digital clock is standard equipment as in automobiles.

### Operator comfort and convenience are the top considerations: boosting productivity in other words. With the fluid-filled elastic mount, the operator cab is insulated from shocks and vibration.

The adjustable suspension seat provides seating comfort. The seat and control levers glide together or separately to accommodate the proportions of the operator, enhancing operating convenience and reducing operator's fatique.

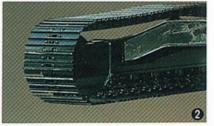
- Shock-dampened, Quiet Cab: Operator comfort is ensured with the fluid-filled elastic mount that effectively dampens shocks and vibration, and sturdy cab bed using thick plates. This brings a smooth ride, protected from shocks and vibration.
- Sliding Cockpit: The operator seat, termed the sliding cockpit, glides separately, or together with control levers and monitor, panel, adjusting to the proportions of any operator.
- Adjustable Suspension Seat: Seating comfort is further enhanced through the use of I-shaped linkage suspension and cold-foamed seat cushions. This keeps the operator feeling relaxed.
- 4 Lever Height/Armrest Angle Adjust Mechanisms: Armrest angle can be adjusted steplessly to operator's proportions, with a choice of two control lever heights for operator comfort and convenience.
- G Ergonomically Designed Control Levers: Pleasant human-touch control is enhanced. Control levers can be shifted with less effort, and lever grips are ergonomically
- 6 Easy-to-Read Monitor and Finger-touch Switches: The monitor is curved for easy reading. Touch switches are resin-molded for dust protection. Each operation can be controlled at the touch of a finger.
- Large Curved Rear Window: The cab rear window glass is curved and large enough to give good rear visibility. Low-profile engine hood helps increase rear visibility.
- Air Conditioner (Optional): An air conditioner, using a freon substitute, maintains the operator comfort all year around, increasing operating efficiency.



# The Edge of Mechatronics

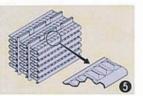










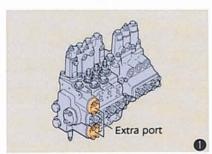




- Sturdy X-type track frame.
- Large reinforced trak links with pin seals.
- Working light provided at the bottom of cab for night-shift work.
- Positive swing parking brake.
- Quick warm-up system for pilot circuit.
- Bucket clearance adjust mechanism.
- Hydraulic warm-up control system for engine and hydraulic oil.
- Ample utility space.

- From the Hitachi EX120, you'll get more than you expect. The secret is the leading edge of mechatronics, built up through Hitachi's high technologies and years of experience. Hitachi expertise always meets job requirements and often exceeds your expectations. Hitachi engineers are constantly addressing job needs ever before they are demanded. That's the way of Hitachi's design approach. The Hitachi EX120 is the fruit of this design approach.
- Rugged D-section Frame Skirt: Rugged
  D-section frame skirt, proven on the EX series,
  provides high resistance to deformation.
- 2 Advanced Travel Mechanism: Three travel speeds — fast, intermediate and slow — can be selected to suit job conditions. Compact travel motors and piping are logically arranged inside the track frame for unobstructed travel on rough terrain.
- Seat Belt Provided as Standard: Seat belt is provided as standard equipment.
- Environment-Friendly Low Noise Design: Machine body is all round-pressed for increased rigidity to avoid resonance. All noise sources are boxed in, using sound-absorbing lining that repels oil. In the E mode, engine speed automatically drops to reduce sound.
- **(5)** Wave-finned Radiator to Avoid Clogging: Radiator is fitted with waved fins to prevent clogging and ensure ease of maintenance.
- **(i)** Dr. EX Self-diagnostic System: A portable self-diagnostic system, Dr. EX, provides instant status check of machine conditions, including engine RPM, hydraulic pressure, oil flow, and electrical systems. Dr. EX enables Hitachi servicemen to service and inspect the machine instantly.

# Versatility Means Productivity.





Extra Port that Sets Optimum Flow to Optional Attachment: The extra port is a hydraulic source for setting and delivering the optimum oil flow to optional attachment that is well matched with the front attachment.
 Attachment Mode Optionally Available: The attachment mode can be selected with the attachment selection switch according to the attachment used. This makes combined operation smooth.

# **ENGINE**

	Isuzu 4BD1T
Type	4-cycle, water-cooled, direct injection Turbochanged
	4
Rated flywheel norsepower (DIN 6271, net)	63 kW (85 PS) at 2 200 min <sup>-1</sup> (rpm)
Rated flywheel horsepower (SAE J1349, net)	60 kW (81 HP) at 2 200 min <sup>-1</sup> (rpm)
Maximum torque	
Piston displacement	3.86 L (235 in <sup>3</sup> )
	102 mm × 118 mm (4.02" × 4.65")
Batteries	2 × 12 V, 65 AH
Governor Mech	nanical, speed control with stepping motor



### HYDRAULIC SYSTEM

ELLE (Electronic Load-sensing Excavation) system designed for job efficiency and controllability.

- Load-sensing system
- Flow dividing control system
- Work mode selector General-purpose mode / Trenching mode Grading mode / Precision mode

Power elector designed for maximum productivity and fuel savings.

Engine speed sensing system P (Power) mode / E (Economy) mode L (Low speed) mode / I (Low idle) mode

Main pump ...... 1 variable displacement axial piston pump Maximum oil flow ...... 1 × 198 L/min (52.3 US gpm, 43.6 lmp qpm) Pilot pump ...... 1 gear pump Maximum oil flow ...... 37.0 L/min (9.8 US gpm, 8.1 Imp gpm)

**Hydraulic Motors** 

piston motors

Swing ...... 1 axial piston motor

Relief Valve Settings

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 dlameter
Boom	2	105 mm (4.13")	70 mm (2.76")
Arm	1	110 mm (4.33")	80 mm (3.15")
Bucket	1	95 mm (3.74")	65 mm (2.56")

#### **Hydraulic Filters**

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in suction line, and 10 µm full-flow filters in 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. Multi selection lever with rotary valve is optionally available for selection of control lever direction. 



### **UPPERSTRUCTURE**

#### Revolving Frame

Welded stundy 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 inductionhardened internal gear. Internal gear and pinion gear are immerse in lubricant. Swing parking brake is spring-set/hydraulic-released d type. Swing dampener valve in the swing circuit prevents coasting when stopping swing. Swing cushion valve built in swing motor absorbs shocks when stopping swing.

Swing speed ...... 11.0 min<sup>-1</sup> (rpm)

#### Operator's Cab

Independent roomy cab, 940 mm (37") wide by 1 620 mm (64") high, conforming to ISO\* Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) are openable and spring-assisted for easy storing in the cab and absorbing shocks during lowering. Adjustable, suspension seat with armrests; movable with or without control levers and monitor panel.

#### UNDERCARRIAGE

#### Tracks

Tractor-type undercarriage. Welded track frame, using carefully 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 also available. Heat-treated conne ing pins with dirt seals. Hydraulic (grease) track adjusters with shock absorbing recoil springs.

#### Numbers of Rollers and Shoes on Each Side

Upper roller	1
Lower rollers	7
Track shoes	

#### **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 stop-

Automatic transmission system: High—Medium

· idioinate transmission system			
Travel speeds	High:	0 to 5.5	km/h (3.4 mph)
			km/h (2.1 mph)
			km/h (1.3 mph)
Maximum traction force	94.1 k	N 19 600	kgf, 21 200 lbf)
Gradeability		35° (7	70%) continuous

<sup>\*</sup> International Standard Organization



### WEIGHTS AND GROUND PRESSURE

Equipped with 4.60 m (15'1") boom, 2.52 m (8'3") arm and 0.55 m3 (0.72 yd3: PCSA heaped) bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
	500 mm	1 1 800 kg	37.3 kPa
	(20")	(26 000 lb)	(0.38 kgf/cm², 5.40 psi)
Triple	600 mm	12 100 kg	31.4 kPa
	(24")	(26 700 lb)	(0.32 kgf/cm², 4.55 psi)
	700 mm	12 300 kg	27.5 kPa
	(28*)	(27 100 lb)	(0.28 kgf/cm², 3.98 psi)
Flat	510 mm	12 300 kg	38.2 kPa
	(20″)	(27 100 lb)	(0.39 kgf/cm², 5.55 psi)
Triangular	700 mm	12 100 kg	27.5 kPa
	(28″)	(26 700 lb)	(0.28 kgf/cm <sup>2</sup> , 3.98 psi)

Operating weight implies total weight of the basic machine plus 2 350 kg (5 180 lb) counterweight and triple grouser shoes, excluding frontend attachment.



FX120 ...... 9 600 kg (21 200 lb) with 500 mm (20 ") shoes.



## SERVICE REFILL CAPACITIES

	liters	US gal	Imp gal
Fuel tank	250.0	66.0	55.0
Engine coolant	16.4	4.3	3:6
Engine oil	16.2	4.3	3.6
Swing mechanism	4.0	1.1	0.9
Travel final drive device (each side)	3.5	0.9	0.8
Hydraulic system	134.0	35.4	29.5
Hydraulic tank	69.0	18.2	15.2



### **BACKHOE ATTACHMENTS**

Boom and arms are of welded, box-section design. 4.60 m (15'1") boom, and 2.10 m (6'11"), 2.52 m (8'3") and 3.01 m (9'11") arms are available. Bucket is of welded steel structure. Side clearance adjust mechanism provided on the bucket joint bracket.

#### **Buckets**

Capac	ity	WI	dth			Recommendation					
PCSA heaped	CECE heaped	Without side cutters	With side cutters	No. of teeth	Weight	2.10 m (6'11") arm	2.52 m (8'3") arm	3.01 m (9'11") arm			
0.19 m <sup>3</sup> (0.25 yd <sup>3</sup> )	19 m³ (0.25 yd³) 0.17 m³ 450 mm (18") 550 mm (22"		550 mm (22")	3	240 kg ( 530 lb)	0	0	0			
0.30 m <sup>3</sup> (0.39 yd <sup>3</sup> )	0.25 m <sup>3</sup>	580 mm (23*)	700 mm (28")	3	280 kg ( 620 lb)	0	0	0			
0.40 m <sup>3</sup> (0.52 yd <sup>3</sup> )	0.33 m <sup>3</sup>	680 mm (27")	800 mm (31")	4	320 kg ( 710 lb)	0	0	0			
0.46 m <sup>3</sup> (0.60 yd <sup>3</sup> )	0.40 m <sup>3</sup>	850 mm (33")	970 mm (38")	5	370 kg ( 820 lb)	0	0	0			
0.55 m <sup>3</sup> (0.72 yd <sup>3</sup> )	0.45 m <sup>3</sup>	890 mm (35*)	1 010 mm (40")	5	390 kg ( 860 lb)	0	0	0.			
0.59 m <sup>3</sup> (0.77 yd <sup>3</sup> )	0.50 m <sup>3</sup>	950 mm (37")	1 070 mm (42")	5	410 kg ( 900 lb)	0	0	-			
0.66 m <sup>3</sup> (0.86 yd <sup>3</sup> )	0.55 m <sup>3</sup>	1 030 mm (41 ")	-	5	400 kg ( 880 lb)	0	=	=			
One-point ripper			•	1	320 kg ( 710 lb)	•	•				
Clamshell bucket: 0.30 m³ (0.39 yd³: CECE heaped) Width-560 mm (22")				6	690 kg (1 520 lb)	0	0	-			
Slope-finishing blade:	Width-1 000 mm (	39"), Length-1 600 n	nm (63 ")		475 kg (1 050 lb)	٥	٥	0			

<sup>\*</sup>With 700 mm (28") shoes only

- © Suitable for materials with density of 2 000 kg/m³ (3 370 lb/yd³) or less

  Suitable for materials with density of 1 600 kg/m³ (2 700 lb/yd³) or less

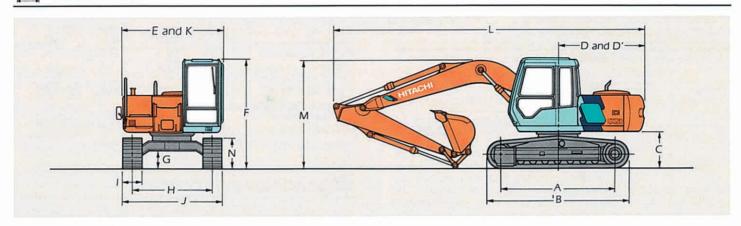
  Suitable for materials with density of 1 100 kg/m³ (1 850 lb/yd³) or less

  Heavy-duty service

  Slope finishing service

  Not recommended

# DIMENSIONS

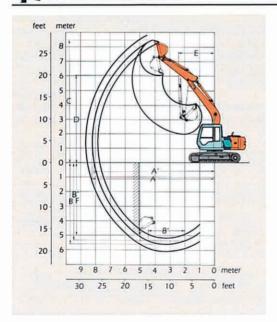


N	Track height With triple grouser shoe		790 m	nm (2'7")								
М	Overall height of boom With 2.10 m (6′11″) arm With 2.52 m (8′3″) arm With 3.01 m (9′11″) arm			nm (8'6″) nm (8'10″) nm (8'9″)								
L	Overall length With 2.10 m (6'11") arm With 2.52 m (8'3") arm With 3.01 m (9'11") arm		7 580 m	nm (24'10") nm (24'10") nm (24'10")								
K	Over width	2 500 mm (8'2")	2 590 mm (8'6")	2 690 mm (8'10")	2 500 mm (8'2")							
J	Undercarriage width	2 490 mm (8'2")	2 590 mm (8'6")	2 690 mm (8'10")	2 500 mm (8'2")							
1	Track shoe width	G 500 mm (20")										
Н	Track gauge		1 990 mn	The state of the s	F 510 mm (20")							
*G	Min. ground clearance		440 mn									
F	Overall height of cab		2 700 mn	n (8'10")								
E	Overall width of upperstructure		2 460 mm (8′1″)									
D'	Rear-end length		2 100 mm (6'11")									
D	Rear-end swing radius		2 130 mm (7′0″)									
*C	Counterweight clearance	890 mm (2′11″)										
В	Undercarriage length	3 580 mm (11'9")										
A	Distance between tumblers		2 880 mm	n (9*5*)								

G: Triple grouser shoe T: Triangular shoe

F: Flat shoe

# **WORKING RANGES**



	Arm length	2.10 m (6'11")	2.52 m (8'3")	3.01 m (9'11")
Α	Max. digging reach	7 900 mm (25'11")	8 270 mm (27'2")	8 740 mm (28'8")
A'	Max. digging reach (on ground)	7 770 mm (25'6")	8 140 mm (26'8")	8 610 mm (28'3")
В	Max. digging depth	5 150 mm (16'11")	5 570 mm (18'3")	6 060 mm (19'11")
B*	Max. digging depth (8' level)	4 920 mm (16'2")	5 360 mm (17'7")	5 880 mm (19'3")
C	Max. cutting height	8 330 mm (27'4")	8 520 mm (27'11")	8 840 mm (29'0")
D	Max. dumping height	5 920 mm (19'5")	6 120 mm (20'1")	6 440 mm (21'2")
E	Min. swing radius	2 370 mm (7'9")	2 390 mm (7'10")	2 620 mm (8'7")
F	Max. vertical wall	4 640 mm (15'3")	4 980 mm (16'4")	5 450 mm (17'11")
Bud	cket digging force	78.5 kN (8 000 kgf. 17 600 lbf)	78.5 kN (8 000 kgf, 17 600 lbf)	78.5 kN (8 000 kgf, 17 600 lbf)
Arm crowd force		64.7 kN (6 600 kgf, 14 600 lbf)	57.9 kN (5 900 kgf, 13 000 lbf)	52.0 kN (5 300 kgf, 11 700 lbf)

Excluding track shoe lug

<sup>\*</sup> Excluding track shoe lug.

\*\* This dimension is shown in the transportation hole position of the arm

# SE STANDARD EQUIPMENT

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

#### **ENGINE**

- 30 A alternator
- Dry-type air filter with evacuator valve (with safety element)
- Cartridge-type engine oil fiter
- Cartridge-type engine oil bypass filter
- Cartridge type fuel filter
- Radiator and oil cooler with dust protective net
- · Radiator reserve tank
- Fan quard
- Isolation-mounted engine
- Auto-idling system

### HYDRAULIC SYSTEM

- Load-sensing system
  Flow dividing control system
  Work mode selector
- · Engine speed sensing system
- E-P control system (power mode selector)
- FPS
- Hydraulic warm-up control system for hydraulic oil
- Quick warm-up system for pilot circuit
- Shockless valve in pilot circuit
- Swing cushion valve in swing circuit

- Accumulator in pilot circuit
- Boom-arm holding 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, openable front windows-upper with assist spring, and lower and both side windows with intermittent windshield wipers, front window washer, curved rear window, adjustable suspension seat with adjustable armrests, footrest, electric double horn, auto-tuning radio with digital clock, auto-idle switch, seat belt, cigarette lighter, ashtray, parcel pocket, rear tray, 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
- Alarm buzzers: Engine oil pressure and engine overheat.

#### LIGHTS

· 2 working lights and 1 cab light

#### **UPPERSTRUCTURE**

hydraulic oil level

- Undercover
- 2 350 kg (5 180 lb) counterweight
- Fuel level gauge
- Hydraulic oil level gauge
- Tool box
- Utility space
- Rearview mirror (right side)
- Swing parking brake

#### UNDERCARRIAGE

- Travel parking brake
- Travel motor covers
- Hydraulic track adjuster
- Bolt-on sprocket
- Upper rollers and lower rollers
- Reinforced track links with pin seals
- 500 mm (20") triple grouser shoes:

#### FRONT ATTACHMENTS

- Bucket clearance adjust mechanism
- Monolithically cast bucket link A
- Centralized lubrication system
- Dirt seals on all bucket pins
- 2.52 m (8'3") arm
- 0.55 m³ (0.72 yd³:PCSA heaped) bucket

#### **MISCELLANEOUS**

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

# OPTIONAL EQUIPMENT

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

- Air conditioner
- Multi selection lever with rotary valve
- Hose rupture valves
- Electric fuel refilling pump
- Swing motion alarm device with lamp
- Travel motion alarm device Additional pump
- Piping kit for extra port
- PTO valve & Additional valve with piping kit

- One-point ripper for ripping hardpan
- Clamshell bucket for deep, vertical excavations like manholes, pilings, footings, etc.
- Slope-finishing blade for slope finishing jobs...scraping up or down, compacting, leveling, grading etc.

### Type of Bucket



One-point ripper



Clamshell bucket



Slope-finishing blade

### Type of Shoe



Triple grouser shoe 600 mm (24"), 700 mm (28")

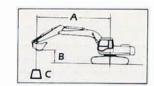


Flat shoe 510 mm (20")



Triangular shoe 700 mm (28")

# **LIFTING CAPACITIES**



A: Load radius B: Load point heigh

C: Lifting capacity

### METRIC MEASURE

IVIETRIC IVIE	ASURE						(	Ratio	ng over-si	de or 360	degrees	Rating	over-fror	nt Unit	: 1 000	kg (1 000 lb
	Load point						77.75.75.75.7	radius					m (ft in)	A	t max. re	each
Conditions	height	2 (6	7")	3 (9	10")	4(13	3'1")	5 (10	6'5")	6 (1	9'8"]	7 (2	3'0")		1	.acm
	m (ft in)	0	ů	0	Ů	0	ů	0	ů	0	ů	0	ů	0	ů	@ m (ft in)
	(19"8")							*1.96 (4.32)	*1.96					*1.39	1.39	6.13
	(16'5")							2.61 (5.76)	*2.95					1.33	1.33	6.81
	(13'1")					*3.27	*3.27 (7.21)	2.56 (5.64)	*3,15	1.84	2.73 (6.02)			1.30	1.30	7.25
	3 (9'10")			*5.37 (11.8)	*5.37 (11.8)	3.57 (7.87)	*4.13	2.47 (5.45)	*3.55 (7.83)	1.80	2.69			1.19	1.32	7.51
Boom 4.60 m [15'1"] Arm 2.10 m [6'11"] Bucket PCSA: 0.55 m <sup>3</sup> [0.72 yd <sup>3</sup> ] CECE: 0.45 m <sup>3</sup> Shoes 500 mm [20"]	(6'7")					3.34 (7.36)	*5.10	2.35	3.54 (7.81)	1.74 (3.84)	2.62	1.31	*1.94	1.13	1.36	7.60
	(3'3")					3.14 (6.92)	4.92	2.24 (4.94)	3.43	1.68	2.55 (5.62)	1.29	1.98	1.13	1.44	7.55
	(Ground)					3.04 (6.70)	4.79 (10.6)	2.17 (4.78)	3.34 (7.36)	1.63	2.50 (5.51)	1.26 (2.78)	1.96 (4.32)	1.17	1.56	7.33
* · · · · · · · · · · · · · · · · · · ·	(-3'3")			4.81 (10.6)	*5.20 (11.5)	3.00 (6.62)	4.75	2.12 (4.67)	3.29 (7.25)	1.60	2.47 (5.45)			1.29 (2.84)	*1.75 (3.86)	6.94
	-2 (-6'7")	*5.33 (11.8)	*5.33 (11.8)	4.85	*7.45 (16.4)	3.00 (6.62)	4.75 (10.5)	2.12 (4.67)	3.29 (7.25)	1.60 (3.53)	2.48 (5.49)			1.51	*2.06 (4.54)	6.34
	-3 (-9'10")	*6.19 (13.6)	*6.19 (13.6)	4.93	*6.60 (14.6)	3.05 (6.73)	4.81	2.15 (4.74)	3.33 (7.34)					1.98	*2.62 (5.78)	5.43 (17'10")
	-4 (-13'1")			*5.02	*5.02 (11.1)	3.15 (6.95)	*3.98 (8.78)									
	6 (19'8")							*2.22	*2.22					*1.18	1.18	6.59
	5 (16'5")							*2.56	*2.56	1.89	*1.99			*1.13	•1.13	7.22 (23°8°)
	(13'1")							2.61	*2.78 (6.13)	1.88	*2.55 (5.62)			*1.12	(2.49) •1.12 (2.47)	7.63
	3 (9.10-)			*3.60	*3.60	*3.45	*3.45	2.51	*3.25	1.83	2.72	1.36	*1.96 (4.32)	1.09	*1.13	7.87
oom 4.60 m (15*1*) rm 2.52 m (8*3*)	(6'7")			5.21	*6.48	3.41	*4.66	2.39	3.59	1.76	2.64	1.33	2.03	1.04	*1.18 (2.60)	7.97
PCSA: 0.55 m <sup>3</sup>	(3'3")					3.18	4.97	2.26 (4.98)	3.45	1.69	2.57	1.29	1.98	1.03	*1.25 (2.76)	7.91
(0.72 yd³) CECE: 0.45 m³ hoes 500 mm (20″)	0 (Ground)		nien.	*3.82	*3.82 (8.42)	3.04	4.80	2.17 (4.78)	3.34 (7.36)	1.63 (3.59)	2.50 (5.51)	1.26	1.95	1.07	*1.36	7.71
	-1 (-3'3")			4.73	*5.85	2.97	4.72	2.11	3.28	1.59	2.46 (5.42)	1.24	1.93	1.16	*1.53 [3.37]	7.34
	-2	*5 18	*5 18	4.76	*7 98	7.96	4.71	2.09	2.76	1.50	7.45	10.1.01	,	1.22	*1.70	4.70

4.76

(10.5)

4.82

(10.6)

4.94

-2 -6'7"

-3 (-9'10"

-4 (-13°1°

\*5.18

[11.4]

•7.03

(15.5)

•7.26 (16.0)

\*5.18

(11.4)

•7.03

(15.5)

\*7.26 (16.0)

\*7.98

(17.6)

\*7.16

(15.8)

\*5.85

2.96

(6.53)

2.99

(6.59)

3.07

4.71

(10.4)

4.74

(10.5)

\*4.61

2.09

(4.61)

2.11

(4.65)

2.18

Ratings are based on SAE J1097.
 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.
 The load point is a hook (not standard equipment) loaded on the back of the bucket.
 \*Indicates load limited by hydraulic capacity.

1.33

(2.93)

1.60

(3.53)

\*1.79

(3.95)

2.48 (5.47)

6.78

5.95

3.26 (7.19)

3.28

(7.23)

3.36

1.58

(3.48)

2.45

(5.40)

# METRIC MEASURE

Rating over-side or 360 degrees Taking over-front Unit: 1 000 kg (1 000 lb)

							Load	radius					m (ft in)			
Conditions	Load point height	2 (6	7")	3 (9	10")	4(13	3'1")	5 (10	5'5")	6 (19	7'8"	7 (2:	3'0")	A	t max. re	ach
Conditions	m (ft in)	0	ů	0	Ů	<b>P</b>	ů	0	Ů	0	ů	0	ů	0	ů	@ m (ft in)
	6 (19'8")									*1.53 (3.37)	*1.53 (3.37)			*1.06 (2.34)	*1.06 (2.34)	7.16 (23'6")
	5 (16'5")									1.97 (4.34)	*2.06			*1.02	*1.02	7.73
	(13'1")							*2.26 (4.98)	*2.26 (4.98)	1.94 (4.28)	*2.27 (5.01)	1.43	*1.79 (3.95)	*1.01 (2.23)	*1.01 (2.23)	8.12 (26'8")
	(9,10,1)					*2.46 (5.42)	*2.46 (5.42)	2.59 (5.71)	*2.60 (5.73)	1.88	*2.55 (5.62)	1.41 (3.11)	*2.11 (4.65)	*0.99	*1.02 (2.25)	8.35 (27'5")
Boom 4.60 m [15'1"] Arm 3.01 m [9'11"]	(6'7")			*5.51 (12.1)	*5.51 (12.1)	3.53 (7.78)	*4.13 (9.11)	2.46 (5.42)	*3.46 (7.63)	1.80	2.69 (5.93)	1.36	2.06 (4.54)	0.95	*1.06 (2.34)	8.43 (27'8")
PCSA: 0.40 m <sup>3</sup> (0.52 yd <sup>3</sup> )	(3'3")					3.28 (7.23)	5.08 (11.2)	2.32 (5.12)	3.51 (7.74)	1.72 (3.79)	2.61 (5.76)	1.32 (2.91)	2.01 (4.43)	0.94 (2.07)	*1.11 (2.45)	8.39 (27'6")
S 500 mm (20")	(Ground)			*4.80	*4.80	3.09 (6.81)	4.86 (10.7)	2.20 (4.85)	3.38 (7.45)	1.65 (3.64)	2.53 (5.58)	1.27	1.97 (4.34)	0.97 (2.14)	*1.21 (2.67)	8.20 (26'11")
	(-3.3.1)	*2.60 (5.73)	*2.60 (5.73)	4.72 (10.4)	*5.78 (12.7)	2.99 (6.59)	4.74 (10.5)	2.12 (4.67)	3.30 (7.28)	1.60 (3.53)	2.47 (5.45)	1.24 (2.73)	1.93 (4.26)	1.03 (2.27)	*1.34 (2.95)	7.86 (25'9")
	-2 (-6'7")	*4.54 (10.0)	*4.54 (10.0)	4.71 (10.4)	*7.87 (17.4)	2.95 (6.50)	4.69 (10.3)	2.09 (4.61)	3.25 (7.17)	1.57 (3.46)	2.44 (5.38)	1.23	1.92	1.16 (2.56)	*1.55 (3.42)	7.35
	-3 (-9'10")	*6.88 (15.2)	*6.88 (15.2)	4.75 (10.5)	*7.74 (17.1)	2.95 (6.50)	4.70 (10.4)	2.08 (4.59)	3.25 (7.17)	1.58 (3.48)	2.45 (5.40)			1.40 (3.09)	*1.90 (4.19)	6.61 (21'8")
	-4 (-13'1")	*8.99 (19.8)	*8.99	4.84	*6.68 (14.7)	3.01 [6.64]	4.76 (10.5)	2.13 (4.70)	3.30 (7.28)					1.91 (4.21)	*2.53 (5.58)	5.54 (18'2")

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) lo₃ded on the back of the bucket.

4. \*Indicates load limited by hydraulic capacity.

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Printed in Japan KS-F[F, H] (GT3-S, KS-G)