HITACHI

■Rated Engine HP (GROSS)

970 kW (1 300 HP)

Operating Weight

Loading Shovel: 238 500 kg (525 800 lb) Diesel Engine

237 000 kg (523 000 lb) Electric Motor

Backhoe: 236 000 kg (520 000 lb) Diesel Engine.

■ Loading Shovel Bucket Capacity

PCSA Heaped:14.0 m³ (18.3 yd³)

Backhoe Bucket Capacity

PCSA Heaped: 13.8 m³ (18.1yd³)

CECE Heaped: 12.2 m3







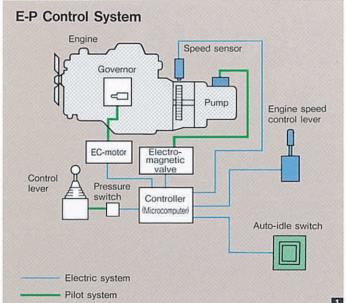
increased production and less downtime. The EX2500 well matches with 150 US ton EX3500.

Through Hitachi's

	Loading Shovel	Backhoe	
Engine HP	970 kW (1 300 HP)		
Bucket Capacity	14.0 m³	13.8 m³	
Max. Digging Forces	918 kN (93 600 kgf,206 400 lbf)	832 kN (84 800 kgf,18 700 lbf)	
Bucket Passes to Dump Trucks	6:150 US ton 3-4:95 US ton	6:150 US ton 3-4:95 US ton	

Technological Edge Packed in a Robust Body.

The robust body gives the power and speed demanded on tough job sites. Long-lasting performance — durability and reliability — is built into the machine. The EX2500 is right there to tackle tough jobs.



Front Attachment

OHS

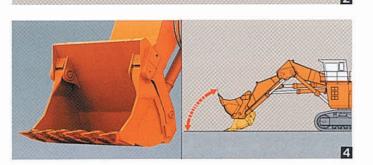
III E-P(computer-aided Engine Pump) control system for optimum control of the engine and pumps. Speedsensing summation system lets the pumps make effective use of the engine power. Result: the EX2500 gives impressive productivity and operating economy.

OHS (Optimum Hydraulic System), with four main pumps and two swing pumps, gives the actuators a high degree of independence to deliver smooth combined operations: swing/front,swing/travel, and travel/front.

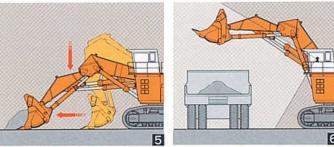


High-Pressure confined job sites.

Two-speed travel increases mobility. Fast speed for rapid job-tojob travel, and slow speed for travel with powerful steering in



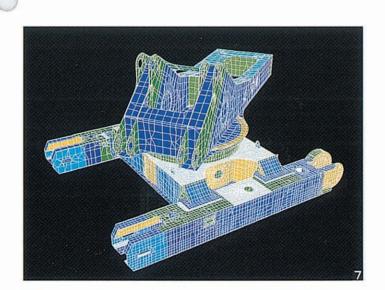
4 Functionally shaped bucket and ample tilt angle boost job efficiency. The bucket is shaped to ease scooping and loading. An ample tilt angle boosts bucket efficiency.



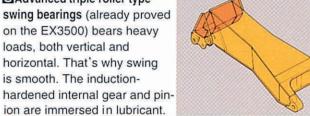
The renowned auto-leveling crowd mechanism, a Hitachi original, brings operating ease and increases job efficiency, by one-lever control. This allows quick leveling and easy foundation digging, while reducing track wear. A high 6.4 m (23 '0") operator eye level plus the forward sloping cab give good downward visibility. The vessel of the dump truck being loaded is always clearly visible to the

The box-section main frame, designed by FEM (Finite Element Method), handles heavy loads, whether bending or torsional forces, as it tackles tough jobs, day to day.

Big Power Calls for a Robust Body.



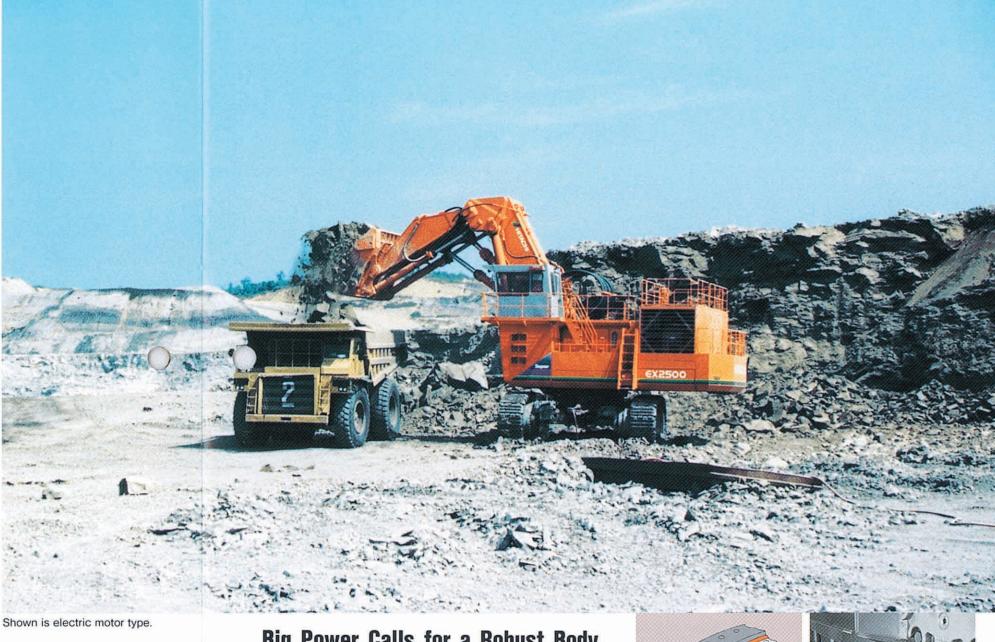
Advanced triple roller type swing bearings (already proved on the EX3500) bears heavy loads, both vertical and horizontal. That's why swing is smooth. The inductionhardened internal gear and pin-



Shovel-type tracks use triple grouser shoes

(already proved on the EX3500) for powerful travel. Upper and lower rollers are guided by the shoes for protection against disengagement.

Front attachment design: The boom and arm are full-box section, using low-stress high-tensile steel at important points and bulkheads for reinforcement.



operator.

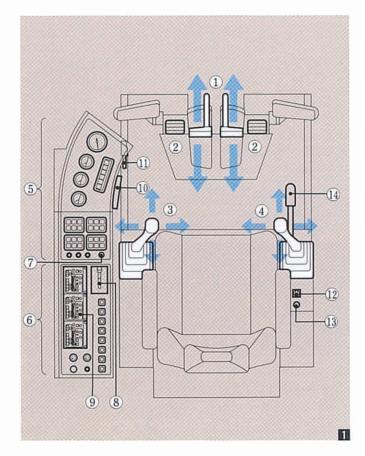
Comfort along with Operating Ease and Convenience.

Design efforts are focused on operator comfort. Roomy cab space with integrated headguard. (meeting SAE FOPS*)

Hitachi's "Sliding Cockpit" with fully adjustable seat and slidable levers.

Ergonomically-curved, easy-to-read monitor/switch panel. The well-arranged air conditioner maintains operator comfort in all seasons. Good visibility is another advantage.

*Falling Object Protective Structure.



Cab layout

- 1 Travel Levers with Pedals
- ② Bucket Open/Close Pedals (Loading Shovel)
- 3 Swing/Arm Control Lever
- Boom/Bucket Control Lever
- ⑤ Monitor Panel and Switch Panel
- 6 Switch Panel
- 7 Dimmer Switch

- 8 Engine Speed Control Lever
- s 9 Air Conditioner Panel
- 10 AM-FM Radio
- ① Emergency Evacuation Hammer
- Emergency Engine Stop Switch
- (3) Engine Starter Switch
- (14) Pilot Control Shut-off Lever

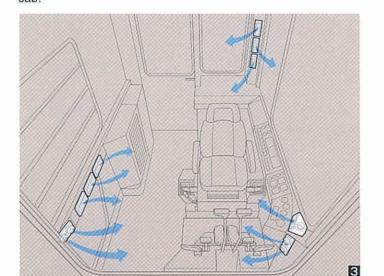




The monitor/switch panel is ergonomically designed to allow for quick reading of gauges and warning indicators.

The switch panel, right beside the operator seat, provides easy access to and handling of switches, and, with the dimmer switch, instrument illumination can be adjusted.

Well-placed air conditioner: Operator comfort is maintained with the well-placed air conditioner (also serves as a defroster). Three independent air outlets — front, right and behind the operator seat — effectively circulate warm or cool air inside the cab.







☑ Three storage spaces for operator convenience. Large space for manuals, lunch box and tool box are provided behind the operator seat.

■ A 12 V power terminal board is installed behind the operator seat to power additional electrical instruments, such as radio transmitters.



G Emergency engine stop switch is provided in the cab.



- •Laminated glass windshield for shatter-prevention.
- Two cab lights at ceiling for brighter lighting.
- Access light remains on and goes off automatically by timer after engine is stopped.

6 EX2500 F

Design Advances for Simple Maintenance and More Production

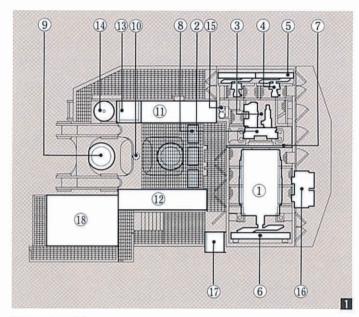
Design effort is focused on service-friendliness, with ample servicing space.

The wide side walk with handrails and functional layout of devices allow easy servicing and inspection.

Use of nonpressure hydraulic oil tank and hydraulic driven grease lubricator to eliminate troubles with air circuit.

These designs slash maintenance costs.





II Functional Layout

- 1 Diesel Engine
- 2 Pump Drive Unit
- 3 Hydraulic Pump×6
- ⊕ Hydraulic Oil Cooling Fan Motor × 2
 ⊕ Battery Unit
- 5 Hydraulic Oil Cooler × 2
- **©**Engine Radiator
- 7 Engine-Pump Bulkhead
- ®Control Valve ×3
- Swing Device ×2

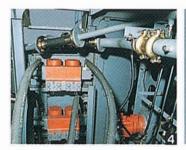
- 10 Center Joint
- 11) Hydraulic Oil Tank
- 12 Fuel Tank
- 11 Lubricator
- 15 High-Pressure Strainer × 6
- 16 Air Filter × 2 (Outer/Inner)
- 17 Retractable-Type Ladder
- 18 Cab





The 1100 mm(3'7") wide side walk, with handrails, facilitates servicing and maintenance.

3 Large access doors provide ample room for inspection and servicing.



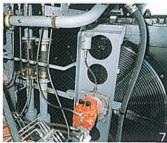


4 Centralized filtering of hydraulic oil filters makes servicing easy. In addition, oil spills are minimized during service due to vertical filter mounting.

High-pressure strainers are located after the pumps in the delivery lines to protect hydraulic lines from damage in the event of pump failure.

Hydraulic driven grease lubricator: A standard 200 liter (55 us gal) grease can is provided.





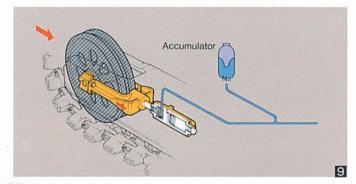
6 Engine-pump bulkhead is provided between the engine and

Mydraulic oil cooler/diesel engine radiator separation:

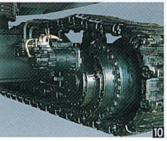
The oil cooler is separated far from the radiator, keeping the hydraulic oil cool and thus boosting durability of the hydraulic equipment.

The pump contamination sensors always monitor the pumps to warn of contamination, such as abrasive particles, to indicate the possibility of trouble before damage might occur to a pump.





☑ Nitrogen gas-filled accumulators absorb abnormal track tension. If track tension exceeds a certain limit, travel is automatically stopped. This enhances durability of the tracks.



III High-mounted compact travel motors stay clear of the ground. This design protects the travel motors from damage by rocks and rough terrain.



The retractable-type ladder is provided on the left side of the basic machine to reduce the possibility of accidental damage.

SPECIFICATIONS

Model		EX2500
	Model & No.	Cummins KTA50-C,1unit
ENGINE	Туре	Water cooled,4-cycle,16-cylinders turbo-charged and after-cooled direct injection diesel engine
S	Flywheel horsepower	
m	DIN 6271 NET kW(PS)	935(1 272)
	SAE J1349 GROSS	970(1 300)
	Piston displacement L (in ³)	50.3(3 070)
	Fuel tank capacity L (US gal,Imp gal)	3 600(951.1,791.9)
ELECTRIC MOTOR	Model	HITACHI TFOA-KK
	Flywheel output kW	860
	Voltage & Frequency V/Hz	6 600/50
T. HYDRAULICS	Main pumps	4 variable displacement axis piston
	Swing pumps	2 variable displaecement axis piston
HI &	Max.oil pressure MPa (kgf/cm²,psi)	29.4(300,4 270)
HA	Max.oil flow L/min(USgpm,Imp gpm)	4×375(99.1,82.5) 2×425(112.3,93.5)
	Swing speed min ⁻¹ (rpm)	3.8: Diesel/3.5: Electric motor
NDERCARRIAGE	Travel speed high/low km/h (mph)	2.3(1.4)/1.6(1.0): Diesel 2.2(1.4)/1.5(0.9): Electric motor
	Max.traction force kN (kgf,lbf)	1 330(135 600,299 000)
DER	Gradeability deg(%)	30(60)
S	Parking brake (swing/travel)	Hydraulic with disc

WEIGHTS AND GROUND PRESSURE

Loading Shovel

Equipped with 14.0 m³ (18.3 yd³; PCSA heaped) bottom dump bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grousers	1 000 mm (39")	238 500 kg (525 800 lb) Diesel engine	173 kPa (1.76 kgf/cm²,25.0 psi)

Backhoe

Equipped with 9.0m (29'6") boom,4.2m (13'9") arm and 13.8m3 (18.1yd3; PCSA heaped) bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grousers	1 000mm (39")	236 000 kg (520 000 lb) Diesel engine	173 kPa (1.76 kgf/cm²,25.0 psi)



LOADING SHOVEL **ATTACHMENTS**

Bucket (PCSA heaped)

Capacity m³(yd³)	Width mm(ft in)	Weight kg(lb)	No.of teeth
14.0(18.3)	3 590(11'9")	20 030(44 200)	6

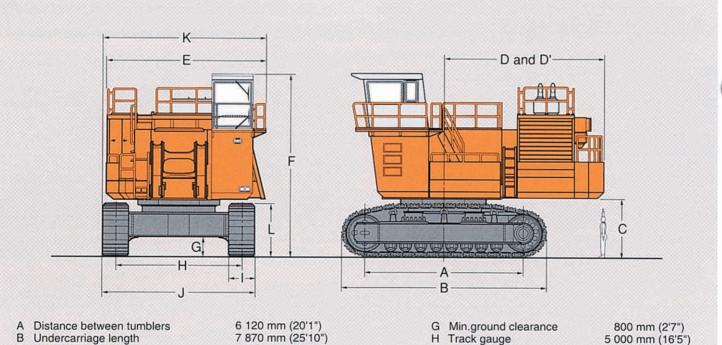


BACKHOE ATTACHMENTS

Bucket

Capacity m³(yd³)		Width mm	Weight	No. of
PCSA heaped	CECE heaped	(ft in)	kg(lb)	teeth
13.8(18.1) General purpose	12.2 General purpose	2 950 (9'8")	11 700 (25 800)	5

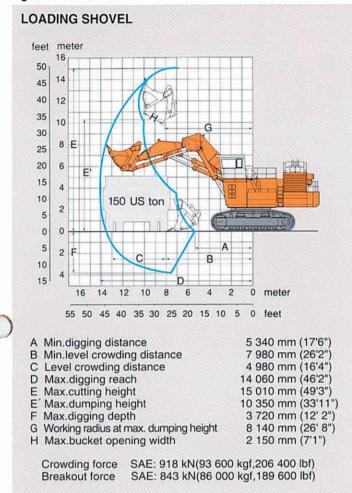
DIMENSIONS

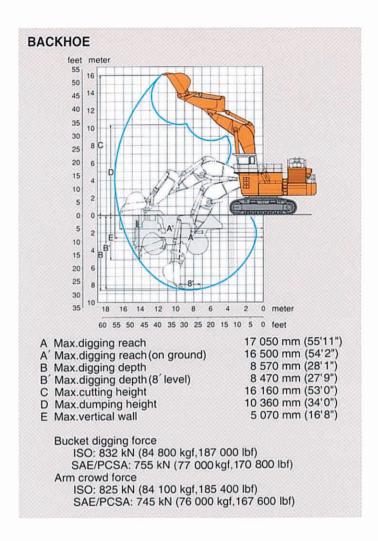


- C Counterweight clearance
- D Real-end swing radius
- Rear end length
- Overall width of upperstructure
- Overall height of cab
- 2 230 mm (7'4")
- 6 290 mm (20'8")
- 6 190 mm (20'4")
- 6 200 mm (20'4") 7 040 mm (23'1")

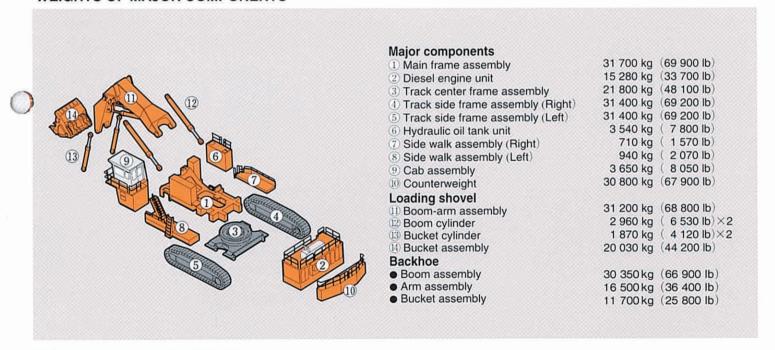
- Track shoe width
- Undercarriage width
- Overall width Track height
- 1 000 mm (39")
- 6 000 mm (19'8")
- 6 350 mm (20'10") 2 060 mm (19'11")

WORKING RANGES





WEIGHTS OF MAJOR COMPONENTS





STANDARD EQUIPMENT

- ●Tool kit ●Suspension seat ●AM-FM radio ●Intermittent windshield wiper with window washer ●Air conditioner ●Defroster
- ●Two cab lights and access light ●12-V power terminal board ●Hydraulic driven grease lubricator ●Pilot control shut-off lever
- ●Handrails and side walks ●Retractable-type ladder with spring-type balancer



■ OPTIONAL EQUIPMENT

Auto-lubrication system (Lincoln)

HITACHI

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Telephone: Tokyo (03)3245-6390 Facsimile: Tokyo (03)3246-2609 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.

KS-E172Q 97.6 (CD/HP, GT₃)