FIANT EX5500



■ Engine Gross Power

: 2 x 1 007 kW (2 x 1 350 hp)

■ Operating Weight

Loading Shovel: 518 000 kg

(1 142 000 lb)

Backhoe : 518 000 kg

(1 142 000 lb)

Loading Shovel Bucket

PCSA Heaped: 27.0 - 30.6 m³

 $(35.5 - 40.0 \text{ yd}^3)$

Backhoe Bucket

PCSA Heaped: 29.0 m³ (38.0 yd³) CECE Heaped: 26.0 m³ (34.0 yd³)

Powerful Engines — Ready for the task.

Time-proven twin Cummins diesel engine produces a total of 1 940 kW (2 600 hp) for handling the big excavation jobs.

1940 kW (2 600 hp)

Emission Control Engine — Helping to protect our environment.

Conforms to U.S. EPA Tier 2 and EC Tier 2 emission regulations.

Efficient E-P Control — Adjusts power output to the work being performed.

Hitachi's computer-aided Engine-Pump Control (E-P Control) coaxes optimum efficiency from the engine and hydraulic pumps. This innovative system senses load demand and controls engine and pump output for maximum operating efficiency.

Larger Bucket Provides High Work Capacity.

Loading shovel bucket:

Backhoe bucket:

27.0 m³ (35.5 yd³)

29.0 m³ (38.0 yd³)

Maximum Excavating Force.

• Loading shovel: Crowding force

> 1570 kN (160 000 kgf, 353 000 lbf)

Breakout force

1570 kN (160 000 kgf, 353 000 lbf) Backhoe:
Arm crowd force

1240 kN (126 000 kgf, 278 000 lbf)

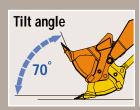
Bucket digging force

1370 kN (140 000 kgf, 309 000 lbf)

Large Bucket — Design for enhanced efficiency.

The large bucket has been shaped specifically to enhance

scooping and loading operations. Its sharp tilt angle helps boost operating efficiency.



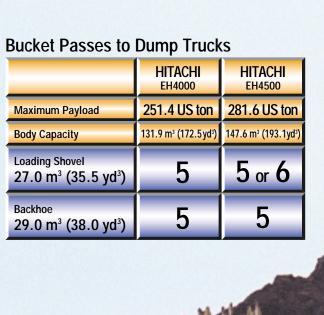


Productivity-boosting Auto-Leveling Mechanism— One-lever leveling control.

This is another unique Hitachi function developed exclusively for more efficient leveling operations.

Note: Photos in this catalog may include optional equipment.

They may also include custom-made options to meet specific user needs.







Each Hitachi generation listens to the needs of the work site and gives birth to an even better new generation.



Rigid Box Design— **Resists bending and** twisting forces.

Computer-assisted analysis was used to check that the frame box can withstand

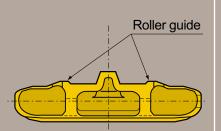


Solid Cast Track Frame — More strength for this key area.

The track frame is cast as a solid unit and includes a flange for improved reliability. This non-welded design is used exclusively on large Hitachi models.



This design has proven itself on Hitachi's popular Giant EX Series. The roller guides have been added to help extend service life.

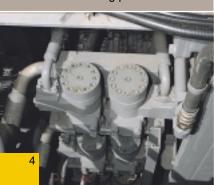


Constant Correct Track Tension — Nitrogen gas accumulators absorb abnormal track tension.

Helps prevent abnormal track tension from causing damage. Travel is automatically stopped if accumulator pressure exceeds a preset level.



Two oil coolers are used for optimal cooling efficiency. They are positioned far from the engine radiator for even better cooling potential.



High-pressure Filter — Provides clean oil.

Hydraulic oil is filtered at high pressure to remove damagecausing contaminants. This filter is positioned down-line from the pumps to help prevent damage in the rare event of pump failure. Positioned for easy maintenance.





High Visibility 7.7 Meter (25' 3") Cab Height — Providing a good view of the work area.

Gives the operator a good view, even when a large 270 US-ton class dump truck is being loaded. This high height and forward-sloping cab provides a view that boosts productivity.

Efficient Cab Layout — All controls within natural reach of operator.

The ergonomic layout of the cab means the operator will do less stretching and reaching when operating the controls. This adds up to less operator fatigue and greater operating efficiency.

Easy-to-Monitor Curved Instrument Panel — **Provides at-a-glance monitoring** of operating status.

Positioned so that the operator can continually monitor the status of key functions during operation. All buttons and instruments are easy to see and operate.

Constant-Cab-Comfort Air Conditioner — Keeps the cab pressurized to keep out dust while maintaining comfortable temperature.

Adjustable Sliding Cockpit— Moves to the best position for the operator.

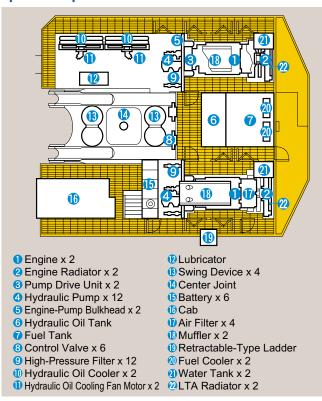
The operator can adjust the position of the levers and the seat to custom-fit his size and operating style.

Comfortable Cab — **Comfort for reducing** operator fatigue.

Fluid-filled elastic mounts help absorb vibration to provide durability and comfortable ride.



Easy Access and Maintenance — Easy access speeds inspections and maintenance.



Counterweight with walkway — Easier access for maintenance.

A walkway around the entire counterweight provides easy access to key rear areas. This means faster and safer inspection and maintenance.



Wide-Open Service Area — Provides the space needed for quick and easy inspection and maintenance.

This area is conveniently located at the center of the body and provides access to the engines as well as the hydraulic and electrical systems.

Auto Lubrication System — Eliminates the need for manual lubrication.

This system automatically lubricates the front joint pins and swing circle. This eliminates cumbersome daily lubrication.

Convenient Centralized Filter System — Designed to make filter inspection and maintenance easier.

Centralized position means that inspection and maintenance can be performed quickly and easily.





The Centralized **Lubrication System:** Fast filling System (option)



Easy Bucket Tooth Replacement — This area is designed to be easily maintained.

Innovative bucket tooth and side shrouds are used to cut maintenance time.

Convenient 24-Volt DC Crane — Helps lift important items into place (option)

This is a handy item when handling heavy tools or other items.

Protective Engine/Pump Bulkhead — Contributes to lower heat and less potential for damage.

Steel barrier keeps these two areas independent.

Low Maintenance Dust Ejector — Automatically expels dust from the air cleaner.

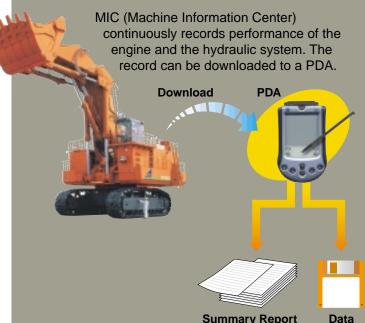
This is one less time-consuming task during routine maintenance.

Contamination Sensor — Alerts the operator of excessive contaminants in the oil.



This system detects accumulated contaminants that could cause damage and alerts the operator before trouble occurs.

ACHINE INFORMATION CENTER



Summary Report

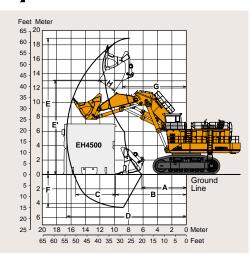
TRANSPORTATION

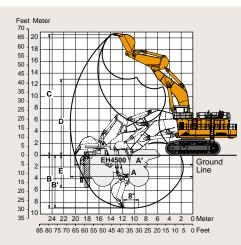
GIANT EX5500

Unit: mm (ft in)

SPECIFICATIONS

WORKING RANGES





Loading Shovel

- A Min. digging distance 6 150 mm (20'2") B Min. level crowding distance
- 9 800 mm (32'2") C Level crowding distance
- 5 550 mm (18'3")
- D Max. digging reach 16 600 mm (54'6")
- E Max. cutting height 18 900 mm (62'0")
- E' Max. dumping height 13 100 mm (43'0")
- F Max. digging depth 4 550 mm (14'11")
- G Working radius at max. dumping height 8 900 mm (29'2")
- H Max. bucket opening width 2 700 mm (8'10")
- Crowding force (SAE) 1 570 kN (160 000 kgf, 353 000 lbf) Breakout force (SAE)

1 570 kN (160 000 kgf, 353 000 lbf)

Backhoe

BE-boom length 10.6 m (34'9") BE-arm length 5.3 m (17'5")

- A Max. digging reach 20 900 mm (68'7")
- 20 900 mm (687)
 A' Max. digging reach (on ground)
 20 100 mm (65'11")
 B Max. digging depth
 9 000 mm (29'6")

- B' Max. digging depth (8' level) 8 900 mm (29'2")
- C Max. cutting height 20 600 mm (67'7")
- D Max. dumping height 13 000 mm (42'8")

E Max. vertical wall 5 500 mm (18'1")

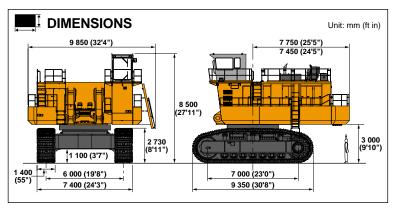
Bucket digging force

1 370 kN (140 000 kgf, 309 000 lbf) SAE: PCSA

1 310 kN (134 000 kgf, 296 000 lbf)

ISO 1 240 kN (126 000 kgf, 278 000 lbf) SAE: PCSÀ

1 230 kN (125 000 kgf, 276 000 lbf)



ENGINE

wodei	Cummins Q5K45-
Rated power	
DIN 6271, net	2 x 971 kW (2 x 1 320 P
	at 1 800 min-1 (rpn
SAE J1995, gross	2 x 1 007 kW (2 x 1 350 h
	at 1 800 min-1 (rpn
Piston displacement	2 x 45 L (2 x 2 746 in
Fuel tank	. 10 400 L (2 750 US gal. 2 290 lmp ga

H HYDRAULIC SYSTEM

Main pumps	8 x variable pistor
Pressure setting	29.4 MPa (300 kgf/cm ² , 4 270 ps
Max. oil flow	8 x 375 L/mi
	(8 x 99.1 US gpm, 8 x 82.5 lmp gpm
Swing pump	4 x variable pistor
Pressure setting	29.4 MPa (300 kgf/cm ² , 4 270 ps
Max. oil flow	4 x 425 L/mi
	(4 x 112.3 US gpm, 4 x 93.5 lmp gpm

■ UPPERSTRUCTURE

. 3.3 min-1 (rpm) Swing speed ..

UNDERCARRIAGE

Travel speeds I	High: 0 to 2.3 km/h (1.4 mph
	Low: 0 to 1.6 km/h (1.0 mph
Maximum traction force 2 230	kN (227 000 kgf, 501 000 lbf
Gradeability	30° (60 %) continuou

WEIGHTS AND GROUND PRESSURE

Loading Shovel

Equipped with 27.0 m³ (35.5 yd³; PCSA heaped)

)	bottom dump bucke			
	Shoo width	On		

Shoe width	Operating weight	Ground pressure
1 400 mm	518 000 kg	230 kPa
(55")	(1 142 000 lb)	(2.35 kgf/cm ² , 33.4 psi)
		•

Backhoe

Equipped with 10.6 m (34'9") BE-boom, 5.3 m (17'5") BE-arm, and 29.0 m³ (38.0 yd³; PCSA heaped) bucket

Shoe width	Operating weight	Ground pressure
1 400 mm	518 000 kg	230 kPa
(55")	(1 142 000 lb)	(2.35 kgf/cm ² , 33.4 psi)

LOADING SHOVEL ATTACHMENTS

Bucket Capacity (PCSA 2:1 heaped) 27.0 m³ (35.5 yd³) : Materials density 1 800 kg/m³ (3 030 lb/yd³) 29.0 m³ (38.0 yd³) : Materials density 1 700 kg/m³ (2 870 lb/yd³) 30.6 m³ (40.0 yd³): Materials density 1 600 kg/m³ (2 700 lb/yd³)

BACKHOE ATTACHMENTS

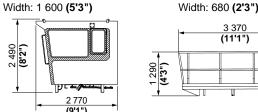
Bucket Capacity (PCSA 1:1 heaped)

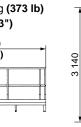
29.0 m³ (38.0 yd³): Materials density 1 800 kg/m³ (3 030 lb/yd³)

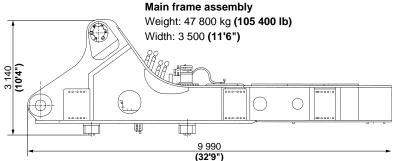
UPPERSTRUCTURE Assembly requires no welding.

Weight: 1 620 kg (3 570 lb)

Weight: 169 kg (373 lb)



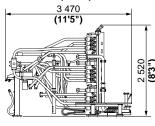




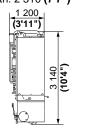
Valve assembly

Cab

Weight: 7 080 kg (15 600 lb) Width: 3 090 (10'2")



Hydraulic oil tank Weight: 6 670 kg (14 700 lb) Width: 2 310 (7'7")

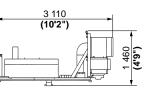


Fuel tank Weight: 4 280 kg (9 400 lb)

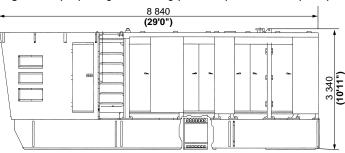
Width: 2 370 (7'9")

Mufflers and air cleaners Weight: 529 kg (1 170 lb) x 2

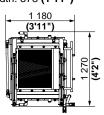
Width: 1 210 (4'0")



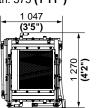
Engine unit (left) Weight: 22 600 kg (49 800 lb); Width: 2 380 (7'10")



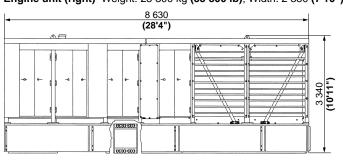
Fuel cooler unit (left) Weight: 178 kg (392 lb) Width: 575 (1'11")



Fuel cooler unit (right) Weight: 174 kg (834 lb) Width: 575 (1'11")

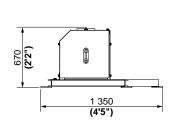


Engine unit (right) Weight: 25 300 kg (55 800 lb); Width: 2 380 (7'10")

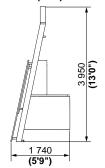


Water tank (left / right) Weight: 148 / 136 kg (326 / 230 lb)

Width: 1 261 / 868 (4'2" / 2'10")



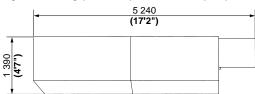
Ladder Weight: 466 kg (1 030 lb) Width: 650 (2'2")



GIANT EX5500

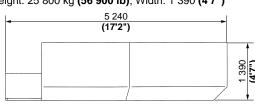
Counterweight (left)

Weight: 25 800 kg (56 900 lb); Width: 1 390 (4'7")

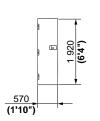


Counterweight (right)

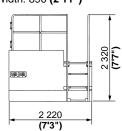
Weight: 25 800 kg (56 900 lb); Width: 1 390 (4'7")



Weight: 29 kg (64 lb) Width: 50 (2.0")



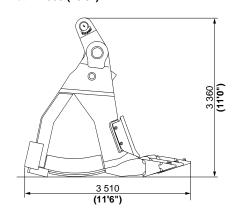
Weight: 281 kg (620 lb) Width: 890 (2'11")



Unit: mm (ft in)

LOADER ATTACHMENT

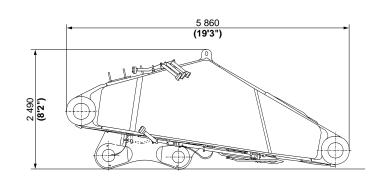
Bucket (front) assembly with bucket points Weight: 20 700 kg (45 640 lb) Capacity: 27.0 m³ (35.3 yd³; PCSA heaped) Width: 4 800 (15'9")



Unit: mm (ft in)

Arm assembly

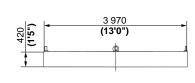
Weight: 21 300 kg (47 000 lb) Width: 3 210 (10'6")



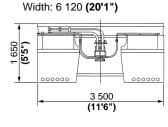
UNDERCARRIAGE

Swing circle

Weight: 13 400 kg (29 500 lb)

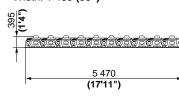


Track center frame assembly Weight: 34 200 kg (75 400 lb)



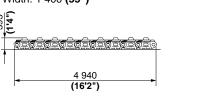
Track links

Weight: 15 400 kg (34 000 lb) x 2 Width: 1 400 (55")



Track links

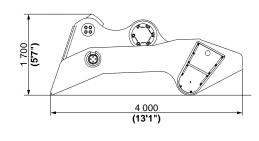
Weight: 14 600 kg (32 200 lb) x 2 Width: 1 400 (55")



Bucket (rear)

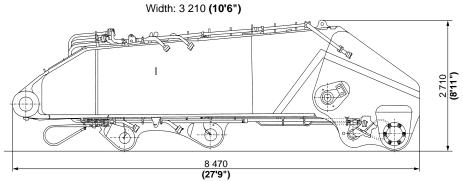
Weight: 20 100 kg (44 300 lb)

Width: 4 790 (15'9")



Boom assembly

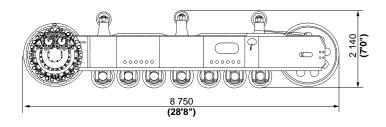
Weight: 36 400 kg (80 200 lb)



Track side frames

Weight: 46 000 kg (101 000 lb) x 2

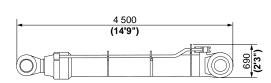
Width: 2 680 (8'10")



Arm cylinder

Weight: 4 320 kg (9 520 lb)

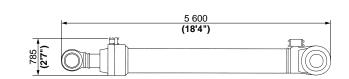
Width: 790 (2'7")



Boom cylinders

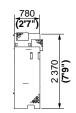
Weight: 6 600 kg (14 600 lb) x 2

Width: 640 (2'1")



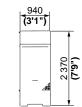
Motor cover Weight: 100 kg (220 lb)

Width: 820 (2'8")



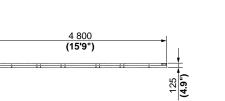
Motor cover Weight: 100 kg (220 lb)

Width: 800 (2'7")



Motor cover stay Weight: 117 kg (258 lb)

Width: 125 (4.9")



Ladder

490 (1'7")

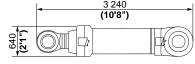
Weight: 32 kg (71 lb) Width: 600 (2'0")



Level cylinder

Weight: 3 840 kg (8 470 lb)

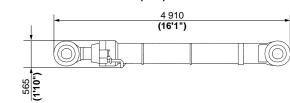
Width: 1 050 (3'5")



Bucket cylinders

Weight: 4 060 kg (8 950 lb) x 2

Width: 980 (3'3")



EX5500.5

BACKHOE ATTACHMENT Bucket assembly with bucket points **BE-Arm assembly** Weight: 29 200 kg (64 390 lb) Weight: 37 000 kg (81 600 lb) Capacity: 29.0 m³ (38.0 yd³; PCSA heaped) Width: 2 360 (7'9") Width: 3 900 (12'10") (23'7")3 670 3 400 4 390 (14'5") **Handrails** Weight: 18 kg (40 lb) x 2 **BE-Boom assembly** Width: 50 (2'0") Weight: 40 900 kg (90 200 lb) 2 140 Width: 2 880 (9'5") (7'0") 3 400 11 200 (36'9") **BE-Boom cylinders** Arm cylinders Weight: 7 390 kg (16 300 lb) x 2 Weight: 4 690 kg (10,340 lb) x 2 Width: 640 (2'1") Width: 865 (2'10") 5 770 4 720 (18'11") (15'6") Travel motor guards for Backhoe **Brackets** Stay Backhoe only Weight: 1 150 kg (2 540 lb) x 2 Weight: 880 kg (1 940 lb) x 2 Weight: 31 kg (68 lb) x 2 Width: 680 (2'3") Width: 570 (1'10") Width: 125 (1'0") (4'4")

HITACHI

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.