

ZAXIS 800/850H

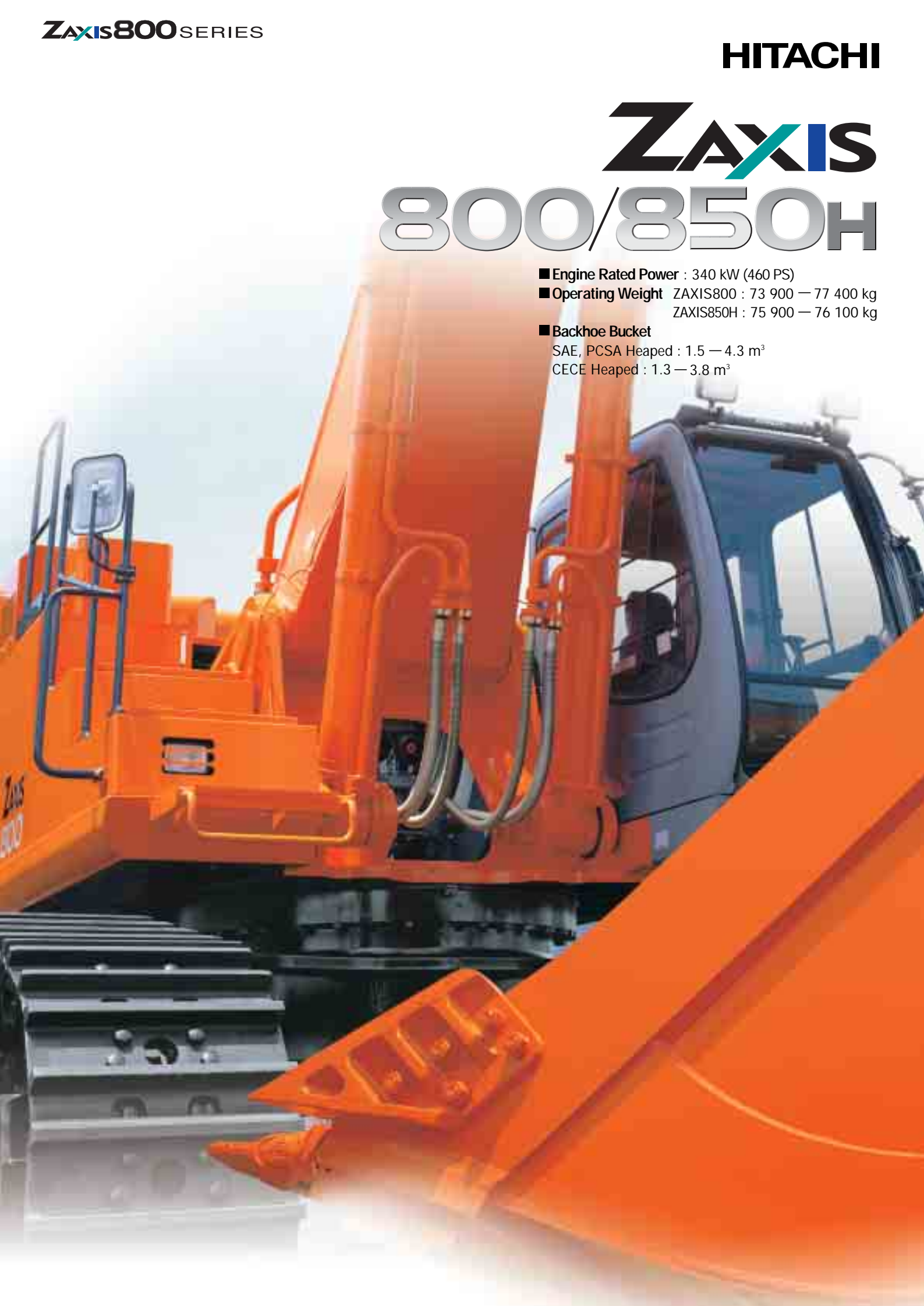
■ Engine Rated Power : 340 kW (460 PS)

■ Operating Weight ZAXIS800 : 73 900 — 77 400 kg
ZAXIS850H : 75 900 — 76 100 kg

■ Backhoe Bucket

SAE, PCSA Heaped : 1.5 — 4.3 m³

CECE Heaped : 1.3 — 3.8 m³



Futuristic Performance



ZAXIS850H



High Productivity

A truly high performance machine

- ZAXIS800: 5% more production in HP mode (compared to EX750-5).
- 340 kW (460 PS) powerful engine.
- H/P mode newly used in this model.
- 3.4 m³ [Heavy-duty version and Standard version] Large capacity bucket.
- ZAXIS850H: 6% [Bucket] / 13% [Arm] more digging force (compared to EX800H-5).
- Less fuel consumption during light-load operation from auto acceleration system.

Lower Running Costs

Stronger Structural component design

- Durable bucket joint.
- Reinforced side steps.

Lower Maintenance Costs

Reduced maintenance time and expense

- Convenient maintenance doors are provided in the engine cover for quick and easy inspections.
- Auto-grease lubricator and electric grease gun (Option).

CRES (Center pillar Reinforced Structure) Cab:

ZAXIS800 series

Rugged Pressurized Cab with Integrated Headguard: ZAXIS850H series

- Low noise and vibration in cab.
- Boom mode selector helps to control shock and vibration.
- Auto control air conditioner.

Notes :

1. Never leave the front attachment in a raised position. Make sure the front attachment is lowered to the ground before leaving the equipment unattended. (Some of the pictures in this catalog show an unmanned machine with attachments in an operating position. These were taken for demonstration purposes only and the actions shown are not recommended under normal operating conditions.)
2. Caution plates on the machine will vary according to country.
3. Photos include optional equipment.

Z A X I S

Improved Productivity & Faster Work Completion

ZAXIS uses advanced technology to reduce costs while working faster.

5% increase in production (in H/P mode) (compared to EX750-5)

Large Displacement Engine Creates Power for High Productivity

● Engine rated power:
324 kW (440 PS) EX750-5 → **340kW (460PS)** ZAXIS800

● Engine displacement:
14.04 L EX750-5 → **15.68 L** ZAXIS800

Excavating Power for Tough Job Site

A powerful engine and efficient hydraulic system team up to boost maximum excavating power. It has the power to take on tough job site.

● Bucket:
332 kN (33 900 kgf) EX750-5 → **342 kN (34 900 kgf)** ZAXIS800

332 kN (33 900 kgf) EX800H-5 → **353 kN (36 000 kgf)** ZAXIS850H

● Arm:
266 kN (27 100 kgf) EX750-5 → **273 kN (27 900 kgf)** ZAXIS800

266 kN (27 100 kgf) EX800H-5 → **300 kN (30 600 kgf)** ZAXIS850H

Large Bucket Capacity Boosts Productivity

The ZAXIS800 has a bucket capacity that contributes to its productivity. It has been designed to reduce wear. The rock bucket has lateral-type wear plates that are easy to replace.

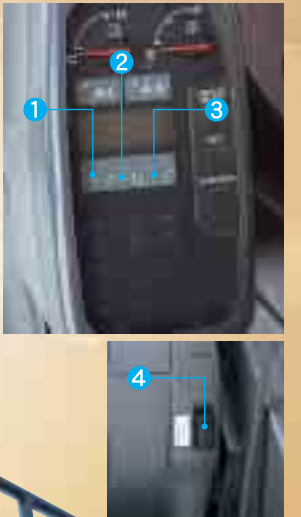
● Backhoe bucket:
3.3 m³ EX750-5 → **3.4 m³** ZAXIS800

● Rock bucket:
3.3 m³ EX800H-5 → **3.4 m³** ZAXIS800

Work Modes for Increased Performance

The four work modes have been enhanced from prior models.

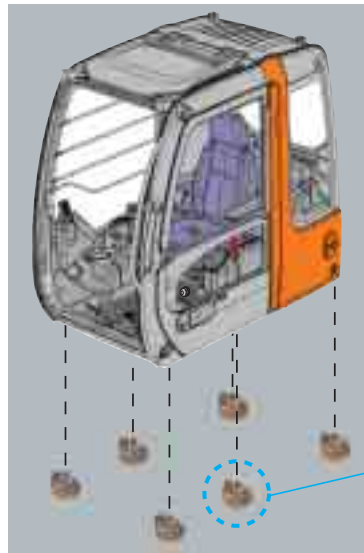
- ① General purpose mode
- ② Trench digging mode
- ③ Attachment mode
- ④ Precision mode



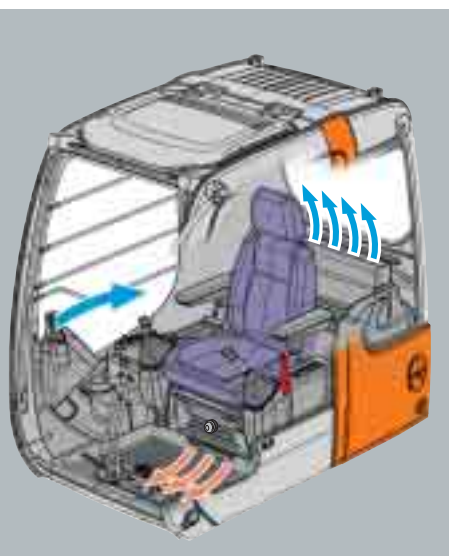
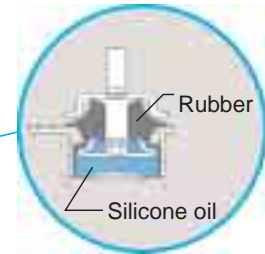
Minimum Effort
Maximum Efficiency

The operator's compartment is designed for both comfort and operating efficiency.

CRES Cab



Comfort Increased to Reduce Operator Fatigue
 A reshaped X-beam track frame, D-type frame and rigid cab bed work together with the silicone-filled rubber cushions to keep noise and vibration. Lower noise and vibration contribute to less operator fatigue.



Auto Control Air Conditioner
 Simply set the temperature and forget about it. Ducts are positioned to promote even air flow throughout the cab.

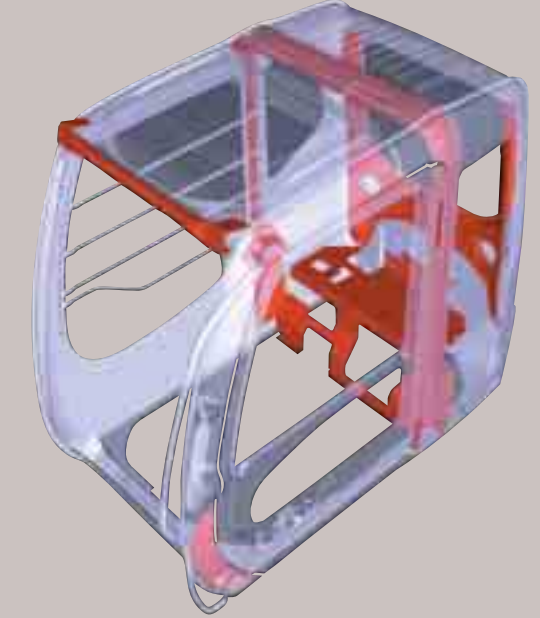
* Illustration shows a sample of the air flow during bi-level control.



Safety

CRES (Center pillar Reinforced Structure) Cab

* The CRES cab meets OPG top guard level I (ISO).
 The cab is designed with "just in case" protection for the operator. The rigid cab design reduces the potential for injury in the event of an accident.



Reinforced sections shown in red



Pilot-control shut-off lever



Emergency evacuation hammer



One-Glance Monitor Panel



Well-Positioned Switches

Boom Mode Selector Helps to Reduce Shaking and Jerking of Body during Scraping Operations.

The amount the body can be lifted or pulled by the front of machine can be **ON** or **OFF** selected. This helps to provide for more comfortable operation and contributes to longer component service life.

<p>ON Comfortable mode</p> <p>There is little lifting or pulling of the body so there is less vibration and shock.</p>	<p>OFF Powerful mode</p> <p>Much lifting and pulling of the body so there is more vibration and shock.</p>
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Improved downward visibility



Storage box (Hot & cool)



Easy lock front window latch



Drink holder (Hot & cool)

Functional & Durable

Extensive steps have been taken to support basic performance and overall durability.

Lower running costs

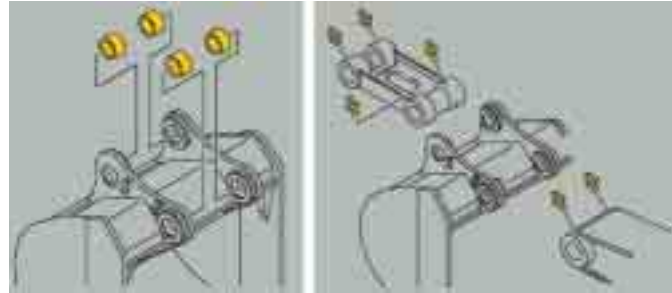
Durable Bucket Joint

A new design is adopted to bucket joints. Bucket pins are solid and large, and lubricated through bosses for more durability. The use of bucket bushing reduces pin wear.



● Bucket bushings

● Boss lubrication to bucket pins



Reinforced Side Steps



Rugged Undercarriage for Withstanding Tough Jobs

A reshaped box design with X-beams helps disperse stress. This design boosts the overall rigidity of the entire undercarriage.

Travel Device Reduce Damage

A compact travel device reduces the potential for damage.



Smart Savings

Advanced technology helps reduce maintenance.

Engine Maintenance Doors

Small maintenance doors are added to the full engine cover. Just open a small maintenance door for easy, quick inspection and maintenance. No need to open the entire engine cover.



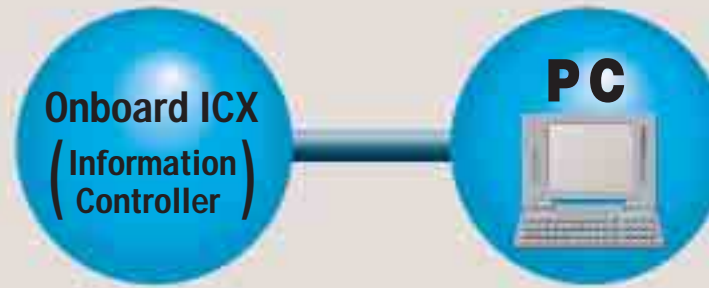
Handy Utility Space



Information Technology Support

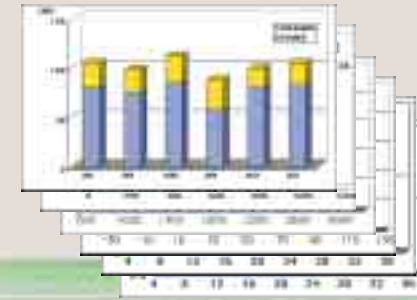
Providing the data for making the right decisions.

Equipment Operation Status Report



Information Services for Equipment

- Operation record
- Error record
- Alarm record
- Frequency distribution
- Radiator coolant / hydraulic temperature etc. and others.



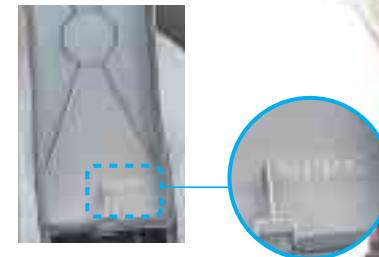
Environmentally Friendly Design

Helping ensure a cleaner tomorrow.

Emissions Control Engine

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

Labeled Plastic Parts Facilitate Efficient Recycling

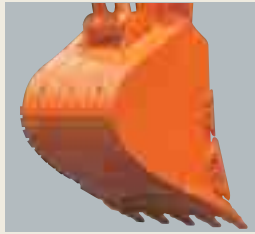


Notes :
The photo shows a cover opened at the time of the inspection. Be sure to close a cover at the time of the operation.

Heavy Duty Version H-Series ZAXIS850H

3.4 m³ rock bucket (Lateral-type wear plates)

The easy-to-replace lateral-type wear plates are standard equipment.



Square bars (5 units)

Helps protect both end surfaces of the area under the arm.



Pressurized cab with integrated overhead guard

An ISO-standard FOPS large-size cab is used. It has an integrated overhead guard to help provide protection from falling objects. An optional guard is available for the front windshield to make the cab OPG level II (ISO) compliant.



FOPS: Falling Object Protective Structure
OPG: Operator Protective Guard

Upper/lower cab front guard (Option)

H-front (Reinforced front) 8.2 m H-boom / 3.6 m H-arm

Thicker steel plates and extra reinforcement help provide reliability during heavy duty operations.

4.5 mm undercover for upper structure



Reinforced side step

Pressurized cab with integrated overhead guard
(Meets ISO FOPS standards)



H-track guard (Dual type - 3 Unit/each side)

* Quarry specifications also available

Base machine for a wide range of jobs.

ZAXIS850H*
8.2m H-Boom/3.6m H-Arm/3.4m³ Rock Bucket

ZAXIS800
8.25m Boom/3.6m Arm/3.4m³ Bucket

ZAXIS800
7.1m BE Boom/2.95m BE Arm/4.3m³ Bucket

ZAXIS850H*
7.1m BE Boom/3.6m H-Arm/3.6m³ Rock Bucket

ZAXIS800
8.25m Boom/4.4m Semi-long Arm/2.8m³ Bucket

ZAXIS800
4.0m³ Bottom dump type loading shovel bucket
4.0m³ Tilt type loading shovel bucket

ZAXIS850H*
7.1m BE Boom/2.95m BE Arm/4.3m³ Rock Bucket

ZAXIS800
8.25m Boom/5.4m Long Arm/2.2m³ Bucket

Backhoe Mounted Barge / Clamshell / Breaker

ZAXIS850H*
3.6m³ Bottom Dump Type Loading Shovel Bucket
4.0m³ Tilt Type Loading Shovel Bucket

ZAXIS800
10.0m Long Boom/5.4m Long Arm/1.8m³ Bucket

ZAXIS800
10.0m Long Boom/9.5m Super-Long Arm/1.5m³ Bucket

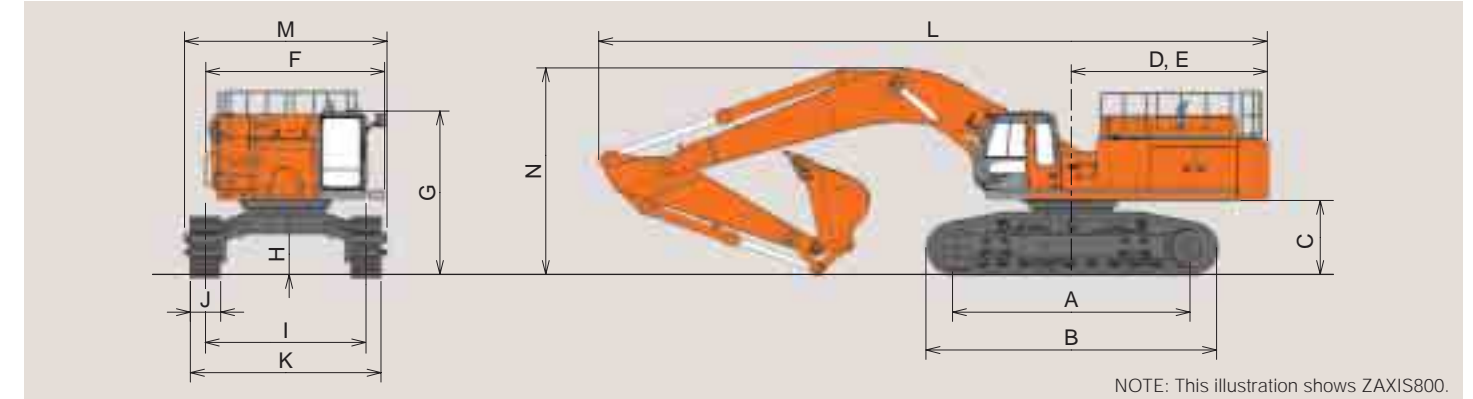
* Quarry specifications also available.



SPECIFICATIONS

DIMENSIONS

BACKHOE

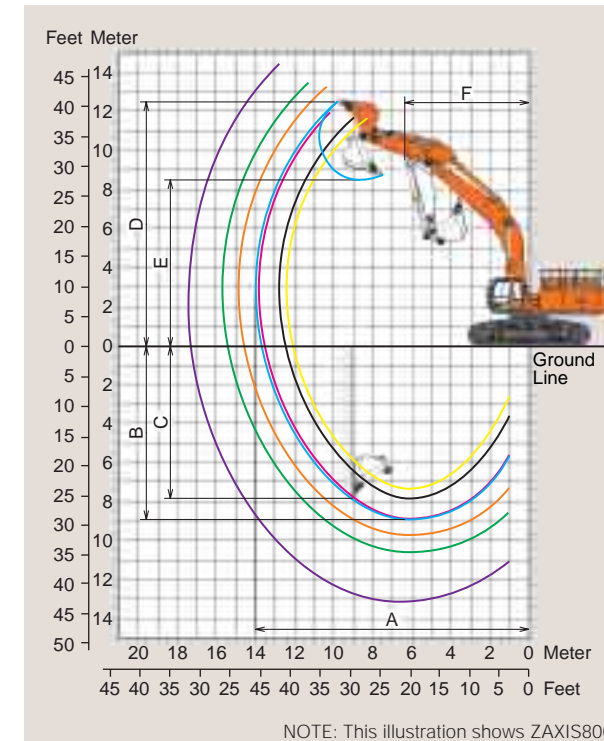


NOTE: This illustration shows ZAXIS800.

	ZAXIS800	ZAXIS850H *2
A Distance between tumbler	5 110 (16'9")	5 110 (16'9")
B Undercarriage length	6 350 (20'1")	6 350 (20'1")
* C Counterweight clearance	1 590 (5'3")	1 590 (5'3")
D Rear-end swing radius	4 300 (14'1")	4 300 (14'1")
E Rear-end length	4 220 (13'1")	4 220 (13'1")
F Overall width of upperstructure	3 850 (12'8")	3 850 (12'8")
G Overall height of cab	3 520 (11'7")	3 640 (11'11")
* H Min. ground clearance	880 (2'11")	880 (2'11")
I Track gauge	3 450 (11'4")	3 450 (11'4")
J Track shoe width	650 (26")	650 (26")
K Undercarriage width extended/retracted	4 100 (13'5") / 3 480 (11'5")	4 100 (13'5") / 3 480 (11'5")
L Overall length	14 320 (46'12")	14 320 (46'12")
M Overall width	4 360 (14'4")	4 360 (14'4")
N Overall height of boom	4 480 (14'8")	4 630 (15'2")

Notes: * Excluding track shoe lug.
*2 Identical to Quarry specifications (Q.S.)

WORKING RANGES



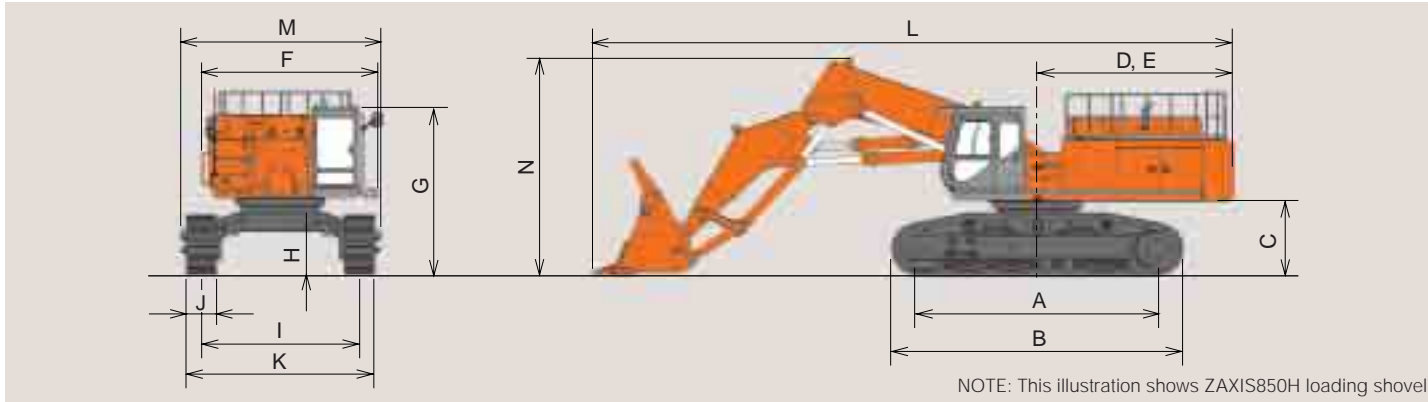
NOTE: This illustration shows ZAXIS800.

	ZAXIS800				ZAXIS850H *2		
	7.1 m (23'4")BE	8.25 m (27'1")	10.0 m (32'1")	7.1 m (23'4")BE	8.2 m (26'11")H	8.2 m (26'11")H	
Boom	7.1 m (23'4")BE	8.25 m (27'1")	10.0 m (32'1")	7.1 m (23'4")BE	8.2 m (26'11")H	8.2 m (26'11")H	
Arm	2.95 m (9'8")BE	3.6 m (11'1")	4.4 m (14'5")	5.4 m (17'9")	2.95 m (9'8")BE	3.6 m (11'1")H	
A Max. digging reach	12 410 (40'9")	13 990 (45'11")	14 870 (48'9")	15 700 (51'6")	17 440 (57'3")	12 410 (40'9")	
+B Max. digging depth	7 240 (23'9")	8 880 (29'2")	9 670 (31'9")	10 550 (34'7")	12 060 (39'7")	7 240 (23'9")	
-C Max. vertical wall	4 340 (14'3")	7 790 (25'7")	8 970 (29'5")	9 200 (30'2")	10 350 (34'0")	4 340 (14'3")	
+D Max. cutting height	11 680 (38'4")	12 530 (41'1")	13 310 (43'8")	13 520 (44'4")	14 490 (47'7")	11 680 (38'4")	
+E Max. dumping height	7 820 (25'8")	8 530 (28'0")	9 210 (30'3")	9 770 (32'1")	10 790 (35'5")	7 820 (25'8")	
F Min. swing radius	5 520 (18'1")	6 360 (20'1")	6 240 (20'6")	6 240 (20'6")	7 620 (25'0")	5 520 (18'1")	
Digging force	438 (44 700, 98 550)	342 (34 900, 76 940)	341 (34 800, 76 940)	281 (28 700, 63 270)	260 (26 500, 58 420)	438 (44 700, 98 550)	
Bucket kN (kgf, lbf)							
Arm kN (kgf, lbf)	325 (33 200, 73 190)	273 (27 900, 61 510)	232 (23 700, 51 510)	206 (21 000, 46 300)	190 (19 400, 42 700)	325 (33 200, 73 190)	

Notes: * Excluding track shoe lug.
*2 Identical to Quarry specifications (Q.S.)

DIMENSIONS

LOADING SHOVEL



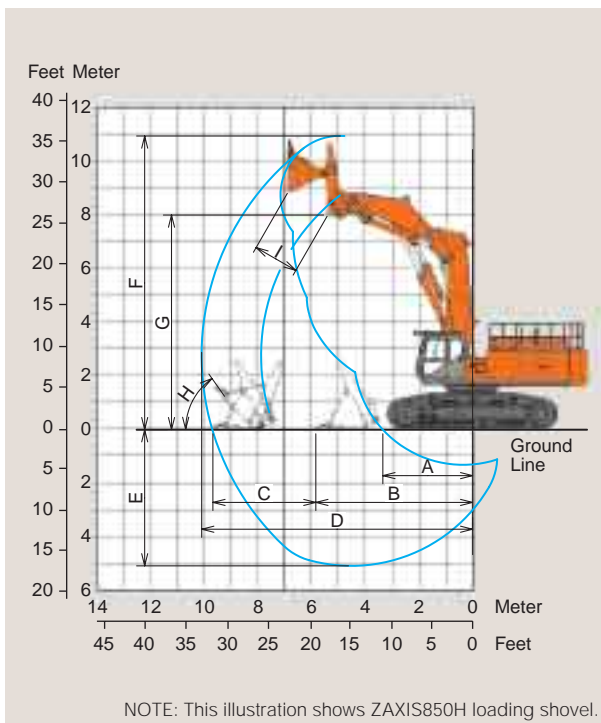
NOTE: This illustration shows ZAXIS850H loading shovel.

Unit: mm (ft in)

	ZAXIS850H
A Distance between tumblers	5 110 (16'9")
B Undercarriage length	6 350 (20'1")
* C Counterweight clearance	1 590 (5'3")
D Rear-end swing radius	4 300 (14'1")
E Rear-end length	4 220 (13'1")
F Overall width of upperstructure	3 850 (12'8")
G Overall height of cab	3 640 (11'11")
* H Min. ground clearance	880 (2'11")
I Track gauge	3 450 (11'4")
J Track shoe width	650 (26")
K Undercarriage width Extended/Retracted	4 100 (13'5") / 3 480 (11'5")
L Overall length	13 850 (45'5")
M Overall width	4 360 (14'4")
N Overall height of boom	4 900 (16'1")

* Excluding track shoe lug.

WORKING RANGES



NOTE: This illustration shows ZAXIS850H loading shovel.

Unit: mm (ft in)

	ZAXIS850H	
	Bottom Dump Type	Tilt Dump Type
A Min. digging distance	3 350 (11'0")	3 160 (10'4")
B Min. level crowding distance	5 780 (19'0")	5 780 (19'0")
C Level crowding distance	3 820 (12'6")	3 820 (12'6")
D Max. digging reach	10 000 (32'1")	10 000 (32'1")
E Max. digging depth	5 060 (16'7")	5 060 (16'7")
F Max. cutting height	10 850 (35'7")	10 850 (35'7")
G Max. dumping height	7 900 (25'11")	4 960 (16'3")
H Max. bucket tilting angle on the ground (°)	55	49
I Max. bucket opening width	1 600 (5'3")	—
Digging force kN (kgf, lbf)	441 (45 000, 32 540)	

ENGINE

Model	Isuzu BB-6WG1T
Type	4-cycle water-cooled, direct injection & aftercooled
Aspiration	Turbocharged
No. of cylinders	6
Rated power	
DIN 6271, net	340 kW (460 PS) at 1 800 min ⁻¹ (rpm)
SAE J1349, net	340 kW (454 hp) at 1 800 min ⁻¹ (rpm)
Maximum torque	1 863 N·m (190 kgf·m, 1 370 lbf·ft) at 1 500 min ⁻¹ (rpm)
Piston Displacement	15.681 L (957 in ³)
Bore and stroke	147 mm x 154 mm (5.7" x 6.1")
Batteries	2 x 12 V, 170 AH
Governor	Mechanical speed control by stepping motor

HYDRAULIC SYSTEM

- Work mode selector
 - General purpose mode / Trench digging mode
 - / Attachment mode
 - / Precision mode
 - Engine speed sensing system
- Main pumps 2 variable displacement axial piston pumps
 Maximum oil flow 2 x 502 L/min (2 x 133 US gpm, 2 x 110 Imp gpm)
- Pilot pump 1 gear pump
 Maximum oil flow 1 x 30.2 L/min (8.0 US gpm, 6.6 Imp gpm)

Hydraulic Motors

Travel 2 axial piston motors with parking brake
 Swing 2 axial piston motors

Relief Valve Settings

Implement circuit 31.9 MPa (325 kgf/cm², 4 620 psi)
 Swing circuit 28.4 MPa (290 kgf/cm², 4 120 psi)
 Travel circuit 34.3 MPa (350 kgf/cm², 4 980 psi)
 Pilot circuit 3.9 MPa (40 kgf/cm², 570 psi)

Hydraulic Cylinders

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

Dimensions

Backhoe:	Qty.	Bore	Rod diameter
Boom	2	200 mm (7.87")	140 mm (5.51")
Arm (For STD. version)	1	215 mm (8.46")	150 mm (5.91")
Arm (For H version)	1	225 mm (8.86")	160 mm (6.3")
Bucket (For STD. version)	1	190 mm (7.48")	140 mm (5.51")
Bucket (For BE version)	1	215 mm (8.47")	150 mm (5.91")

Loading Shovel:

	Qty.	Bore	Rod diameter
Boom	2	200 mm (7.87")	140 mm (5.51")
Arm	1	200 mm (7.87")	140 mm (5.51")
Bucket	2	180 mm (7.09")	130 mm (5.12")
Dump	2	130 mm (5.12")	80 mm (3.15")
Level	1	200 mm (7.87")	140 mm (5.51")

Hydraulic Filters

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

CONTROLS

Pilot controls for all functions. Hitachi's original shockless valve and quick warm-up system built in the pilot circuit.

- 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 Device

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 cushion valve built in swing motor absorbs shocks when stopping swings.
 Swing speed 8.2 min⁻¹ (rpm)

Operator's Cab

Independent, spacious cab, 1 005 mm (40") wide by 1 675 mm (66") high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for visibility. Openable front windows (upper and lower). Adjustable, reclining seat with armrests and seat belt. Right and control levers can be tilted fore and aft.

* International Standard Organisation

ZAXIS850H's Cab:

Cab: 1 005 mm (40") wide, 1 820 mm (72") high

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame, using carefully selected materials for tough jobs. Side frame bolted to track frame. Lubricated track rollers, idlers, and sprockets with floating seals. Track shoes with double grousers made of induction-hardened rolled alloy. 750 mm (30") and 900 mm (35") wide double grouser shoes also available for backhoe. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil spring.

Numbers of Rollers and Shoes on Each Side

Upper rollers 3
 Lower rollers 9
 Track shoes 51
 Track guard 2

Travel Device

Each track driven by axial piston motor through reduction gears for counter-rotation of the tracks. Sprockets are replaceable. Parking brake is spring-set/hydraulic-released disc type.

Travel speeds High: 0 to 4.3 km/h (2.7 mph)
 Low: 0 to 3.1 km/h (1.9 mph)

Maximum traction force 560 kN (57 100 kgf, 126 000 lbf)
 Gradeability 35° (70%) continuous

SERVICE REFILL CAPACITIES

	liters	US gal	Imp gal
Fuel tank	901.0	238.0	198.2
Engine coolant	107.0	28.3	23.5
Engine oil	55.0	14.5	12.1
Pump drive	7.0	1.8	1.5
Swing device (each side)	15.0	4.0	3.3
Travel device (each side)	21.0	5.6	4.6
Hydraulic system			
Backhoe	670.0	177.0	147.4
Hydraulic oil tank	324.0	85.6	71.3

WEIGHTS AND GROUND PRESSURE

Backhoe

ZAXIS800: Equipped with 8.25 m (27'1") boom, 3.6 m (11'1") arm, and 3.4 m³ (4.45 yd³): SAE, PCSA heaped bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Double grouser	650 mm (26")	73 900 kg (162 900 lb)	101 kPa (1.03 kgf/cm ² , 14.6 psi)
	750 mm (30")	74 600 kg (164 500 lb)	88 kPa (0.90 kgf/cm ² , 12.8 psi)
	900 mm (35")	75 600 kg (166 700 lb)	74 kPa (0.75 kgf/cm ² , 10.7 psi)

ZAXIS800: Equipped with 7.1 m (23'4") BE-boom, 2.95 m (9'8") BE-arm, and 4.3 m³ (5.62 yd³): SAE, PCSA heaped rock bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Double grouser	650 mm (26")	75 700 kg (166 900 lb)	103 kPa (1.05 kgf/cm ² , 14.9 psi)
	750 mm (30")	76 400 kg (168 400 lb)	90 kPa (0.92 kgf/cm ² , 13.1 psi)
	900 mm (35")	77 400 kg (170 600 lb)	76 kPa (0.78 kgf/cm ² , 11.1 psi)

ZAXIS850H: Equipped with 8.2 m (26'11") H-boom, 3.6 m (11'1") H-arm, and 3.4 m³ (4.45 yd³): SAE, PCSA heaped rock bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Double grouser	650 mm (26")	75 900 kg (167 300 lb)	103 kPa (1.05 kgf/cm ² , 14.9 psi)

ZAXIS850H: Equipped with 7.1 m (23'4") BE-boom, 3.6 m (11'1") H-arm, and 3.6 m³ (4.71 yd³): SAE, PCSA heaped rock bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Double grouser	650 mm (26")	76 100 kg (167 800 lb)	104 kPa (1.06 kgf/cm ² , 15.0 psi)

Loading Shovel

ZAXIS800: Equipped with 4.0 m³ (5.23 yd³) bottom dump bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Double grouser	650 mm (26")	77 700 kg (171 300 lb)	106 kPa (1.08 kgf/cm ² , 15.4 psi)

ZAXIS850H: Equipped with 3.6 m³ (4.71 yd³) bottom dump rock bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Double grouser	650 mm (26")	78 900 kg (173 900 lb)	107 kPa (1.09 kgf/cm ² , 15.5 psi)

BACKHOE ATTACHMENTS

Boom and arms of all-welded, box-section design. 7.1 m (23'4") BE-boom, 8.25 m (27'1") boom, 10.0 m (32'1") long boom, 8.2 m (26'11") H-boom, 2.95 m (9'8") BE-arm, 3.6 m (11'1") H-arm, 4.4 m (14'5") arm, 5.4 m (17'9") arm and 9.5 m (31'2") long arms are available. Bucket is all-welded, high-strength steel structure. Side clearance adjust mechanism provided on the bucket joint bracket.

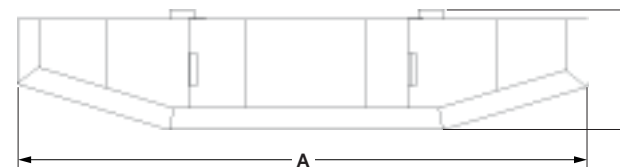
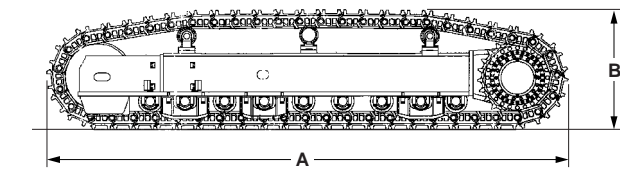
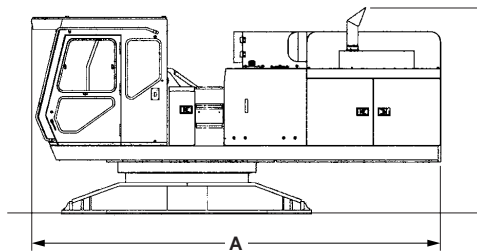
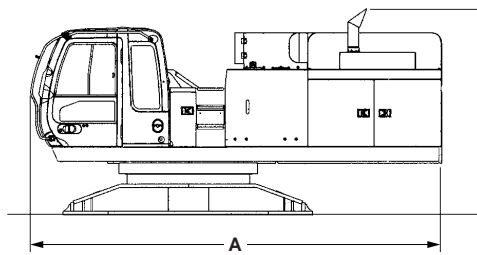
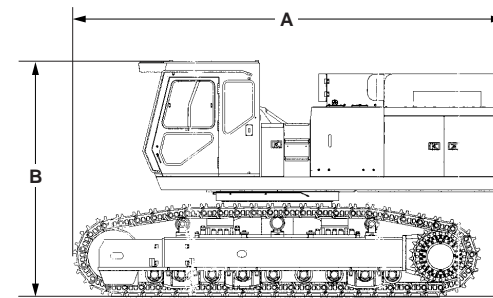
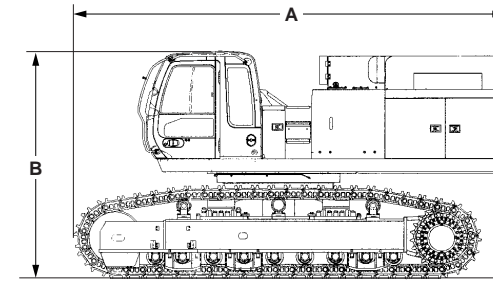
Booms and Arms are available as follows:

	Boom	Arm
ZAXIS800	7.1 m (23'4") BE-boom	2.95 m (9'8") BE-arm
	8.25 m (27'1")	3.6 m (11'1"), 4.4 m (14'5") and 5.4 m (17'9")
	10.0 m (32'1")	5.4 m (17'9") and 9.5 m (31'2")
ZAXIS850H	8.2 m (26'11") H-boom	3.6 m (11'1") H-arm
	7.1 m (23'4") BE-boom	3.6 m (11'1") H-arm
	7.1 m (23'4") BE-boom	2.95 m (9'8") BE-arm

* A variety of front-equipments that meet the quarry specification is provided.

LOADING SHOVEL ATTACHMENTS

Boom and arm are of all-welded, box-section design. Efficient, automatic level crowding achieved by one-lever control because the parallel link mechanism keeps the bucket digging angle constant, and level cylinder circuit maintains the bucket height constant. (Auto-Leveling Crowd Mechanism)



Basic machine (without front attachment, counterweight) : Backhoe

	Shoe width	A	B	Overall width	Weight
ZAXIS800	650 mm (26")	6 720 mm (22'1")	3 570 mm (11'8")	3 490 mm (11'5")	46 300 kg (102 100 lb)
	750 mm (30")	6 720 mm (22'1")	3 570 mm (11'8")	3 580 mm (11'9")	47 000 kg (103 600 lb)
ZAXIS850H*	650 mm (26")	6 720 mm (22'1")	3 690 mm (12'1")	3 490 mm (11'5")	46 600 kg (102 700 lb)

* Identical to Quarry specifications (Q.S.)

Basic machine (without front attachment, counterweight) : Loading Shovel

	Shoe width	A	B	Overall width	Weight
ZAXIS800	650 mm (26")	6 600 mm (22'1")	3 570 mm (11'8")	3 490 mm (11'5")	45 700 kg (102 100 lb)
	750 mm (30")	6 600 mm (22'1")	3 570 mm (11'8")	3 580 mm (11'9")	46 400 kg (103 600 lb)
ZAXIS850H*	650 mm (26")	6 600 mm (22'1")	3 690 mm (12'1")	3 490 mm (11'5")	46 600 kg (102 700 lb)

* Identical to Quarry specifications (Q.S.)

Basic machine (without front attachment, side frame, steps on the hydraulic oil tank and hand rails on the right-hand frame)

	A	B	Overall width	Weight
ZAXIS800	5 760 mm (18'11")	2 890 mm (9'6")	3 200 mm (10'6")	23 100 kg (50 900 lb)
ZAXIS850H*	5 730 mm (18'1")	2 890 mm (9'6")	3 200 mm (10'6")	23 200 kg (51 100 lb)

* Identical to Quarry specifications (Q.S.)

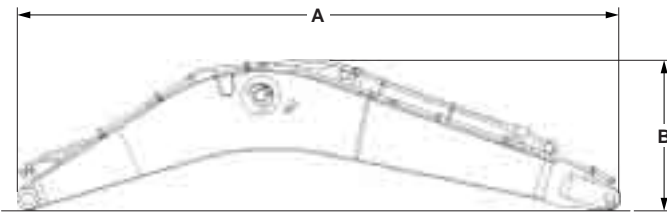
Buckets

Capacity		Width		No. of teeth	Weight	Recommendation								
SAE, PCSA heaped	CECE heaped	Without side cutters	With side cutters			ZAXIS800				ZAXIS850H* ³				
					BE-front	8.25 m (27'1") boom			10.0 m (32'1") boom		BE-front	H-front		
					7.1 m (23'4") BE-boom	3.6 m (11'1") arm	4.4 m (14'5") arm	5.4 m (17'9") arm	5.4 m (17'9") arm	9.5 m (31'2") arm	7.1 m (23'4") BE-boom	3.6 m (11'1") H-arm	3.6 m (11'1") H-arm	8.2 m (26'11") H-boom
1.5 m ³ (1.96 yd ³)	1.3 m ³	1 270 mm (50")	1 400 mm (55")	5	1 130 kg (2 490 lb)	×	×	×	×	○	×	×	×	×
1.8 m ³ (2.35 yd ³)	1.6 m ³	1 220 mm (48")	1 360 mm (54")	5	1 870 kg (4 120 lb)	×	×	○	○	×	×	×	×	×
2.2 m ³ (2.88 yd ³)	2.0 m ³	1 450 mm (57")	1 590 mm (63")	5	2 140 kg (4 720 lb)	×	×	○	—	×	×	×	×	×
2.4 m ³ (3.14 yd ³)	2.2 m ³	1 420 mm (56")	1 560 mm (61")	5	2 350 kg (5 180 lb)	×	○	○	×	×	×	○	—	—
2.8 m ³ (3.66 yd ³)	2.4 m ³	1 510 mm (60")	1 700 mm (67")	5	2 400 kg (5 290 lb)	×	○	○	×	×	×	○	—	—
3.4 m ³ (4.45 yd ³)	3.0 m ³	1 850 mm (73")	2 040 mm (80")	5	2 650 kg (5 840 lb)	×	○	—	×	×	×	○	—	—
4.3 m ³ (5.62 yd ³)	3.8 m ³	—	2 130 mm (84")	5	3 580 kg (7 890 lb)	○	×	×	×	×	○	×	×	×
*1 3.4 m ³ (4.45 yd ³)	3.0 m ³	—	1 940 mm (76")	5	3 460 kg (7 630 lb)	×	—	—	×	×	×	●	●	●
*1 3.6 m ³ (4.71 yd ³)	3.2 m ³	—	1 960 mm (77")	5	3 490 kg (7 690 lb)	×	—	—	×	×	×	●	—	—
*1 4.3 m ³ (5.62 yd ³)	3.8 m ³	—	2 130 mm (84")	5	4 100 kg (9 040 lb)	—	×	×	×	×	●	×	×	×
*2 1.9 m ³ (2.49 yd ³)	1.7 m ³	—	1 490 mm (59")	3	4 100 kg (9 040 lb)	×	—	—	×	×	×	●	●	●
*2 2.2 m ³ (2.88 yd ³)	2.0 m ³	—	1 580 mm (62")	3	4 300 kg (9 480 lb)	—	×	×	×	×	×	●	×	×
One-point Ripper				1	2 600 kg (5 730 lb)	—	×	×	×	×	●	●	●	●

*1 Rock bucket *2 Ripper bucket *3 Identical to Quarry specifications (Q.S.)
 © Suitable for materials with density of 1 800 kg/m³ (3 030 lb/yd³) or less ● Heavy-duty service — Not applicable × Can't installed

Loading Shovel Bucket (PCSA heaped)

Capacity	Max. width	No. of teeth	Weight	Type
3.6 m ³ (4.71 yd ³)	2 300 mm (7'7")	6	6 080 kg (13 410 lb)	Bottom dump type rock bucket
4.0 m ³ (5.23 yd ³)	2 460 mm (8'1")	6	5 620 kg (12 390 lb)	Bottom dump type general purpose bucket
4.0 m ³ (5.23 yd ³)	2 360 mm (7'9")	6	4 980 kg (10 980 lb)	Tilt dump type rock bucket
4.4 m ³ (5.75 yd ³)	2 520 mm (8'3")	6	4 630 kg (10 210 lb)	Tilt dump type general purpose bucket



Boom

	A	B	Overall width	Weight
7.1 m (23'4") BE-boom	7 500 mm (24'7")	2 450 mm (8'0")	1 420 mm (4'8")	7 200 kg (15 900 lb)
8.25 m (27'1")	8 500 mm (27'11")	1 900 mm (6'3")	1 420 mm (4'8")	7 090 kg (15 600 lb)
8.2 m (26'11") H-boom	8 620 mm (28'3")	2 440 mm (8'0")	1 420 mm (4'8")	7 610 kg (16 800 lb)
10.0 m (32'1")	10 310 mm (33'11")	2 320 mm (7'7")	1 420 mm (4'8")	8 020 kg (17 700 lb)

Arm

	A	B	Overall width	Weight
2.95 m (9'8") BE-arm	4 410 mm (14'6")	1 700 mm (5'7")	840 mm (2'9")	4 350 kg (9 600 lb)
3.6 m (11'1")	5 065 mm (16'7")	1 190 mm (3'11")	840 mm (2'9")	3 590 kg (7 900 lb)
3.6 m (11'1") H-arm	5 065 mm (16'7")	1 190 mm (3'11")	840 mm (2'9")	4 010 kg (8 800 lb)
4.4 m (14'5")	5 820 mm (19'1")	1 320 mm (4'4")	840 mm (2'9")	3 900 kg (8 600 lb)
5.4 m (17'9")	6 820 mm (22'5")	1 270 mm (4'2")	840 mm (2'9")	3 990 kg (8 800 lb)

Bucket

Capacity		A	B	Overall width	Weight
SAE, PCSA heaped	CECE heaped				
1.5 m ³ (1.96 yd ³)	1.3 m ³	1 860 mm (6'1")	1 430 mm (4'8")	1 400 mm (5'5")	1 130 kg (2 490 lb)
1.8 m ³ (2.35 yd ³)	1.6 m ³	2 115 mm (6'11")	1 735 mm (5'8")	1 360 mm (4'6")	1 870 kg (4 120 lb)
2.0 m ³ (2.62 yd ³)	1.8 m ³	2 115 mm (6'11")	1 735 mm (5'8")	1 490 mm (4'11")	2 060 kg (4 540 lb)
2.2 m ³ (2.88 yd ³)	2.0 m ³	2 120 mm (6'11")	1 740 mm (5'9")	1 590 mm (6'3")	2 140 kg (4 720 lb)
2.4 m ³ (3.14 yd ³)	2.2 m ³	2 210 mm (7'3")	1 870 mm (6'2")	1 560 mm (5'1")	2 350 kg (5 180 lb)
2.8 m ³ (3.66 yd ³)	2.4 m ³	2 210 mm (7'3")	1 870 mm (6'2")	1 700 mm (5'7")	2 400 kg (5 290 lb)
3.4 m ³ (4.45 yd ³)	3.0 m ³	2 210 mm (7'3")	1 870 mm (6'2")	2 040 mm (6'8")	2 650 kg (5 840 lb)
4.3 m ³ (5.62 yd ³)	3.8 m ³	2 350 mm (7'9")	1 950 mm (6'5")	2 130 mm (6'12")	3 580 kg (7 890 lb)
3.4 m ³ * (4.45 yd ³)	3.0 m ³	2 260 mm (7'5")	1 930 mm (6'4")	1 940 mm (6'4")	3 460 kg (7 630 lb)
3.6 m ³ * (4.71 yd ³)	3.2 m ³	2 260 mm (7'5")	1 930 mm (6'4")	1 960 mm (6'5")	3 490 kg (7 690 lb)
4.3 m ³ * (5.62 yd ³)	3.8 m ³	2 350 mm (7'9")	1 950 mm (6'5")	2 130 mm (6'12")	4 100 kg (9 040 lb)

* Rock Bucket. Identical to Quarry specifications (O.S.)

Boom cylinders

700 kg (1 540 lb) × 2

A	B
2 900 mm (9'6")	530 mm (1'9")

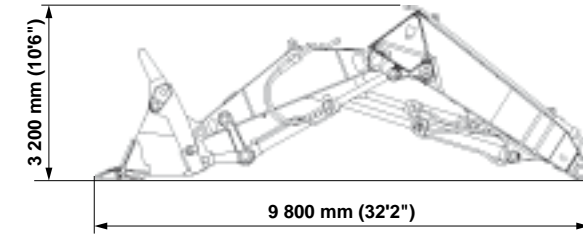
Left sidewalk

	A	B	Weight
Front	2 405 mm (7'11")	340 mm (1'1")	20.2 kg (44.5 lb)
Reverse	2 410 mm (7'11")	425 mm (1'5")	20.7 kg (45.5 lb)

Step

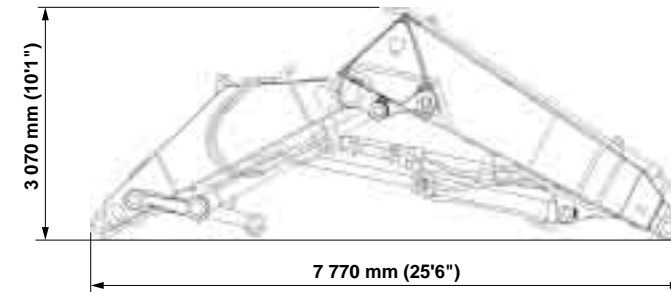
18 kg (40 lb) × 4, 12.7 kg (28 lb) × 4

A	B	C	Overall height
540 mm (1'9")	215 mm (8.5")	90 mm (3.5")	125 mm (4.9")



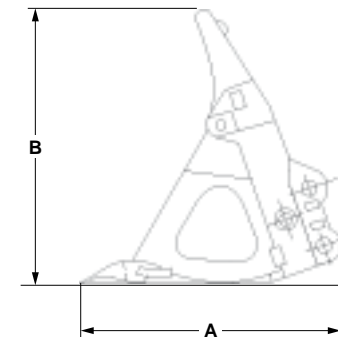
Loading Shovel Front Attachment

Bucket capacity (PCSA heaped)	Weight	Overall width
3.6 m ³ (4.71 yd ³)	17 500 kg (38 600 lb)	2 400 mm (7'1")
4.0 m ³ (5.23 yd ³)	17 000 kg (37 500 lb)	2 560 mm (8'5")



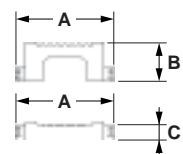
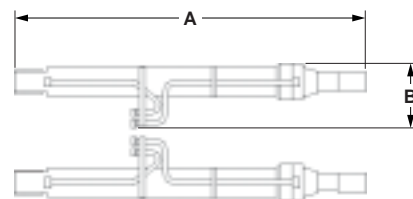
Loading Shovel Front Attachment (Without Bucket)

Weight : 11 450 kg (25 200 lb)
Overall width : 1 450 mm (4'9")



Loading Shovel Bucket

Bucket capacity	A mm(ft in)	B mm(ft in)	Max. width mm(ft in)	Weight kg(lb)	Type
3.6 m ³ (4.7 yd ³)	2 280 (7'6")	2 570 (8'5")	2 300 (7'7")	6 080 (13 410)	Bottom dump type rock bucket
4.0 m ³ (5.23 yd ³)	2 300 (7'7")	2 570 (8'5")	2 460 (8'1")	5 620 (12 390)	Bottom dump type general purpose bucket
4.0 m ³ (5.23 yd ³)	2 290 (7'6")	2 560 (8'5")	2 360 (7'9")	4 980 (10 980)	Tilt dump type rock bucket
4.4 m ³ (5.75 yd ³)	2 290 (7'6")	2 560 (8'5")	2 520 (8'3")	4 630 (10 210)	Tilt dump type general purpose bucket



METRIC MEASURE

Heavy-lifting system
 Rating over-side or 360 degrees
 Rating over-front
 Unit: 1 000 kg

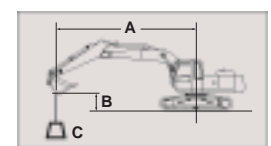
Conditions	Load point height	Load radius												At max. reach		
		4 m		6 m		8 m		10 m		12 m		14 m		meter	meter	
ZAXIS800 Boom 8.25 m Arm 3.6 m Bucket SAE, PCSA: 3.4 m ³ Shoes 650 mm	8 m							*9.0	*9.0					*5.5	*5.5	12.5
	6 m							*9.6	*9.6					*5.6	*5.6	13.1
	4 m					*13.3	*13.3	*10.8	*10.8	8.2	*9.6			*5.9	*5.9	13.4
	2 m					*14.9	*14.9	11.6	*12.1	8.2	*10.9			*6.6	*6.6	13.4
	0 (Ground)					15.7	*15.9	11.0	*12.2	7.9	*10.2			*6.4	*6.4	12.9
	-2 m					15.7	*17.8	11.0	*13.7	7.9	*11.6			6.5	*7.1	12.1
	-4 m					14.9	*17.7	10.5	*13.3	7.7	*10.7			6.8	*7.2	10.7
	-6 m					14.9	*19.7	10.5	*14.9	7.7	*12.1			6.8	*8.0	
						23.1	*25.6	14.5	*18.3	10.2	*13.8			7.7	*8.6	
						23.1	*28.4	14.5	*20.4	10.2	*15.4			7.7	*9.5	
					*24.2	*24.2	23.4	*23.9	14.6	*17.6	10.3	*13.2		9.6	*9.9	
					*25.3	*25.3	23.4	*26.5	14.6	*19.7	10.3	*14.8		9.6	*10.4	
					*27.1	*27.1	*20.4	*20.4	15.0	*15.2						
					*30.2	*30.2	*22.8	*22.8	15.0	*17.0						
ZAXIS800 Boom 8.25 m Arm 4.4 m Bucket SAE, PCSA: 2.8 m ³ Shoes 650 mm	10 m													*4.0	*4.0	12.4
	8 m													*4.5	*4.5	13.4
	6 m							*8.7	*8.7	*8.4	*8.4			*3.8	*3.8	14.1
	4 m							*9.8	*9.8	8.8	*9.4			*4.3	*4.3	14.3
	2 m					*16.7	*16.7	*12.1	*12.1	*10.0	*10.0	8.5	*8.9	*3.9	*3.9	14.2
	0 (Ground)					*18.6	*18.6	*13.5	*13.5	*11.2	*11.2	8.5	*10.1	*4.2	*4.2	13.8
	-2 m							*14.9	*14.9	11.2	*11.5	8.1	*9.7	*4.7	*4.7	11.8
	-4 m							16.1	*16.7	11.2	*12.9	8.1	*11.0	*5.4	*5.4	9.9
	-6 m					*20.0	*20.0	15.1	*17.1	10.6	*12.8	7.8	*10.4	*6.2	*6.2	
	-8 m					*21.1	*21.1	15.1	*19.0	10.6	*14.4	7.8	*11.8	*6.9	*6.9	
ZAXIS800 Boom 8.25 m Arm 5.4 m Bucket SAE, PCSA: 2.2 m ³ Shoes 650 mm	10 m													*3.2	*3.2	13.4
	8 m													*3.7	*3.7	14.3
	6 m									*6.8	*6.8			*3.0	*3.0	14.9
	4 m									*7.5	*7.5			*3.5	*3.5	15.1
	2 m									*7.6	*7.6			*3.5	*3.5	15.1
	0 (Ground)									*8.6	*8.6			*3.5	*3.5	14.7
	-2 m									*9.2	*9.2	*4.4	*4.4	*3.1	*3.1	14.0
	-4 m									*10.4	*10.4	8.9	*9.4	*3.6	*3.6	12.9
	-6 m									*10.9	*10.9	8.5	*9.3	*5.6	*5.6	11.2
	-8 m									*12.2	*12.2	8.5	*10.5	6.2	*6.3	
ZAXIS800 Boom 7.1 m BE-Boom Arm 2.95 m BE-Arm Bucket SAE, PCSA: 4.3 m ³ Shoes 650 mm	8 m													*6.7	*6.7	10.8
	6 m													*7.5	*7.5	11.5
	4 m													*6.6	*6.6	11.8
	2 m													*7.4	*7.4	11.7
	0 (Ground)													*6.8	*6.8	11.2
	-2 m													*7.5	*7.5	10.1
	-4 m													*7.4	*7.4	
														*7.4	*7.4	
														*8.3	*8.3	
														*7.4	*7.4	

METRIC MEASURE

Heavy-lifting system
 Rating over-side or 360 degrees
 Rating over-front
 Unit: 1 000 kg

Conditions	Load point height	Load radius												At max. reach				
		4 m		6 m		8 m		10 m		12 m		14 m		meter	meter			
ZAXIS800 Boom 10.0 m Arm 5.4 m Bucket PCSA: 1.8 m ³ (2.35yd ³) Shoes 900 mm C/W; 13.5 ton	10 m															*3.7	*3.7	15.3
	8 m															*5.9	*5.9	16.1
	6 m															*6.8	*6.8	16.6
	4 m															*7.5	*7.5	16.9
	2 m															*7.4	*7.4	16.8
	0 (Ground)															*6.6	*6.6	16.5
	-2 m															*6.5	*6.5	15.9
	-4 m															*7.1	*7.1	14.9
	-6 m															*7.1	*7.1	13.6
	-8 m															*7.4	*7.4	11.6
ZAXIS850H *2 H-Boom 8.2 m H-Arm 3.6 m Rock Bucket SAE, PCSA: 3.4 m ³ Shoes 650 mm	8 m															*7.7	*7.7	12.4
	6 m															*8.8	*8.8	13.1
	4 m															*8.3	*8.3	13.3
	2 m															*9.5	*9.5	13.2
	0 (Ground)															*9.5	*9.5	12.8
	-2 m															*7.6	*8.1	11.9
	-4 m															*6.0	*6.3	
	-6 m															*5.9	*6.2	
																*5.9	*7.0	
																*6.2	*7.2	
ZAXIS850H *2 BE-Boom 7.1 m BE-Arm 2.95 m Rock Bucket SAE, PCSA: 3.6 m ³ Shoes 650 mm	8 m															*4.1	*4.1	11.3
	6 m															*4.7	*4.7	12.1
	4 m															*9.1	*9.1	12.3
	2 m															*10.1	*10.1	12.2
	0 (Ground)															*11.0	*11.0	11.7
	-2 m															*10.8	*10.8	10.7
	-4 m															*12.4	*12.4	
	-6 m															*13.7	*13.7	
																*13.7	*13.7	
																*14.4	*14.4	
ZAXIS850H *2 BE-Boom 7.1 m BE-Arm 2.95 m Rock Bucket SAE, PCSA: 4.3 m ³ Shoes 650 mm	8 m															*10.3	*10.3	10.8
	6 m															*11.6	*11.6	11.6
	4 m															*12.4	*12.4	11.9
	2 m															*13.0	*13.0	11.8
	0 (Ground)															*10.5	*10.9	11.2
	-2 m															*14.6	*14.6	10.2
	-4 m															*14.9	*14.9	
																*13.4	*13.4	
																*14.1	*14.1	
																*18.9	*18.9	

- Notes: 1. Ratings are based on SAE J1097.
 2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
 3. The load point is a hook (not standard equipment) located on the back of the bucket.
 4. *Indicates load limited by hydraulic capacity.
 5. *2 Identical to Quarry specifications (Q.S.)



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

SE STANDARD EQUIPMENT

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

ENGINE

- H/P mode control
- E mode control
- 50 A alternator
- Dry-type air double filters with evacuator valve (with air cleaner restriction switch for monitor)
- Cartridge-type engine oil filter
- Cartridge-type fuel filter
- Radiator and oil cooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system
- Auto acceleration system
- Quick-idle system

HYDRAULIC SYSTEM

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

CAB

CRES (Center pillar Reinforced Structure) cab

- OPG top guard fitted level I (ISO) compliant cab
- All-weather sound-suppressed steel cab
- Tinted (bronze color) grass windows
- 6 fluid-filled elastic mounts
- Openable windows ; upper, and lower front, and left side windows
- Intermittent windshield retractable wipers
- Front window washer
- Adjustable reclining suspension seat with adjustable armrests
- Footrest
- Electric double horn
- AM - FM radio with digital clock
- Auto-idle / acceleration selector
- Seat belt
- Drink holder
- Cigar lighter
- Ashtray
- Storage box
- Glove compartment
- Floor mat
- Auto control air conditioner
- Pilot control shut-off lever
- Engine stop knob
- 2 cab light

MONITOR SYSTEM

- Meters: Hourmeter and trip-meter, engine coolant temperature gauge and fuel gauge.
- Warning lamps: Alternator charge, engine oil pressure, engine overheat, air filter restriction and minimum fuel level.
- Pilot lamps: Engine preheat, engine oil level, engine coolant level, auto-idle, auto-

- acceleration, digging mode, trench digging mode, attachment mode and precision (or heavy lift) mode
- Alarm buzzers: Engine oil pressure and engine overheat

UPPERSTRUCTURE

- Undercover
- 12 500 kg (27 600 lb) counterweight
- Fuel level float
- Hydraulic oil level gauge
- Tool box
- Rearview mirror (right & left side)
- Swing parking brake

UNDERCARRIAGE

- Travel parking brake
- Travel motor covers
- Track guards and hydraulic track adjuster
- Idler track guard
- Bolt-on sprocket
- Upper rollers and lower rollers
- Reinforced track links with pin seals
- 650 mm (26") double grouser shoes

FRONT ATTACHMENTS

- Flanged pin
- Bucket clearance adjust mechanism
- Monolithically cast bucket link A
- Centralized lubrication system
- Dust seal on all bucket pins
- 8.25 m (27'1") boom
- 3.6 m (11'1") arm
- 3.4 m³ (4.45 yd³ : SAE, PCSA heaped) bucket

MISCELLANEOUS

- Standard tool kit
- Lockable machine covers
- Lockable fuel filling cap
- Skid-resistant tapes, plates,

- handrails and sidewalk
- Travel direction mark on track frame
- Onboard ICX

ZAXIS850H (Heavy-duty version)

- 8.2 m (26'11") H-boom and 3.6 m (11'1") H-arm
- Damage preventive plate and square bars
- 3.4 m³ (4.45 yd³ : SAE, PCSA heaped) rock bucket (with dual type side shrouds)
- Headguard integrated cab with 2 cab lights
- 4.5 mm (0.18") thickness undercover
- H-track guard (dual type)
- Reinforced side steps

ZAXIS850H

Quarry specifications (Q.S.)

- 8.2 m (26'11") QS-boom and 3.6 m (11'1") QS-arm
- Damage preventive plate and 5 square bars
- 3.4 m³ (4.45 yd³ : PCSA heaped) QS-bucket
- reinforced link A
- reinforced link B
- QS-track frame
- Full-length track guard
- Reinforced side steps (bolt mounted)
- Travel motor covers with guard
- Track frame undercover
- 4.5 mm (0.18") thickness undercover (upperstructure)
- Pre-cleaner
- Electric grease gun (grease drum can)
- Fuel refilling pump (with fuel refilling hose)
- OPG top guard fitted level II (ISO) compliant cab

OPTIONAL EQUIPMENT

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

- Hose rupture valves
- Electric fuel refilling pump
- Swing motion alarm device with lamps
- Auto-grease lubricator
- Electric grease gun with hose-reel
- OPG top and front guard fitted level II (ISO) compliant cab
- Travel motion alarm device
- Attachment basic piping
- Accessories for breaker
- Accessories for breaker & crusher
- Accessories for 2 speed selector
- Front glass lower guard
- Front glass upper guard
- Headguard integrated cab
- H-track guard (dual type)
- Full track guard
- Counterweight removal device
- Right sidewalk
- 7.1 m (23'4") BE-boom
- 2.95 m (9'8") BE-arm
- 750 mm (30") double grouser shoes
- 900 mm (35") double grouser shoes

Comparative information based on current Japan domestic model. 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. Before use, read and understand Operator's Manual for proper operation.

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