## **HITACHI**

Reliable Solutions

# ZAXIS400L



#### HYDRAULIC EXCAVATOR

Model code: ZX400L-7G

Engine rated power: 200 kW (268 HP)

Operating weight: 38 300 kg



# GET MORE FROM YOUR MACHINE

You're at the heart of Hitachi Construction Machinery's design for its latest range of excavators. To continuously improve on previous generation machines, we've focused on enhancing your profit in business.

We have made cost reduction for our customers our top priority and, in doing so, have achieved reduced fuel consumption. The cab has been redesigned to improve the operator's working environment and controllability, with production also expected to improve. An engine that already has a proven track record of high reliability has been adopted, and we have placed further work in it to make it even more robust. Remote failure diagnosis, monitoring, and OTA (Over The Air - controller rewriting) are also supported to reduce downtime.



# INSIDE



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# FUEL EFFICIENCY, DURABILITY AND RELIABILITY

Improved HISOIII hydraulic system matched with a new engine improves the ZX-7G fuel efficiency and fuel cost.

#### HIOS III hydraulic system

The hydraulic system developed was based on the concept of a hydraulic system that fits in-line with a sense of human operation.

Efficient hydraulic control achieves smoother and more speedy movement of front attachments.

#### Fine-tuned hydraulic pump control

A solenoid valve mounted on the hydraulic system further controls the pump flow rate to reduce unnecessary load on the engine.

✓ Contributing to low fuel consumption operation



#### Engine with improved reliability and fuel efficiency

Horsepower has been increased to 200 kW (268 HP), 3% up, in the highly reliable engine from the previous model which has now adopted a common rail electronically contolled fuel injection system to boost engine performance and improve efficiency in fuel combustion.

✓ Contributing to high engine power and low fuel consumption.





#### Reinforced High & Wide Track Undercarriage

The undercarriage has 765mm ground clearance with 322 kN (32 800 kgf) traction force, ensuring high stability and maneuverability in the cutover. Its uses thickened plates, and next-larger-class components, including upper and lower rollers, track links, side track frames and travel motors. Track frame height is increased for higher rigidity. Travel devices use heavier motor covers and reinforced block bars for protection against damage. Idler brackets, shoe guides, and upper and lower roller brackets (both-end supported) are employed to further strengthen the undercarriage.



Reinforced Travel Motor Covers (12mm) and Reinforced Block Bars



Strengthened Upper Rollers and Bracket



Reinforced Idler Part of Side Frame



Reinforced Side Step (Bolt Mounted)



#### Increased Work Height and Stability

Log-loading capability is enhanced. A high-lift bracket is installed for improved loading height. The high and wide track frame has been re-designed for improved stability.





Operation is easy with ergonomically designed controls and switches.



Low-reflective color 8" monitor, 42% larger display compared to ZX-5G series. Easier to view and navigate. Bluetooth® and optional USB power supply available.





New designed pilot shut-off lever
The newly designed pilot shut-off lever allows easier locking and unlocking with wrist operation.

# SMOOTH MAINTENANCE

Regular maintenance is essential for the machine to achieve high performance.

ZAXIS excavators are designed for ease of regular maintenance. Simple and easy maintenance keeps the machine in good condition and keeps its high performance.

#### Easy to clean radiator/Oil cooler/Inter cooler core



#### **Dust-proof indoor net**

- Provided at the front of radiator
- ✓ Easy to be removed and cleaned



#### Cleaning port for radiator/ Oil cooler/Inter cooler core

- ✓ The cover can be opened without the need for any tools
- Easy to clean radiator/Oil cooler /Inter cooler core with simple air blowing



#### Easy-access air conditioner condenser

- ✓ The condensor can be opend
- Easy to clean radiator/Oil cooler /Inter cooler core with simple air blowing



#### Easy access to filters

Filter locations are concentrated in the pump room

- 1 Fuel main filter
- 2 Fuel pre-filter with water separator
- Engine oil filter
- 4 Pilot filter



# | MACHINE | MANAGEMENT

Hitachi Construction Machinery offers a wide range of after-sales services to help you feel in total control of your fleet and workload. These initiatives give you access to vital data and tools to manage your machine.





A wide range of data on Global e-Service enhances efficiency.

#### Data report

Regular reports inform you of the machine's operation status. Emergency reports inform you of alarm information.

The stable operation of the machine is further supported with two types of reports visualizing the machine's daily operation status.

#### Monthly report

Regular reports on the operating status of each machine.

#### Alarm report

If an emergency alarm is generated from a sensor mounted on the machine, its alarm content is reported by e-mail in a timely manner. You can receive it on your computer, mobile phone, or smartphone (communication format is via e-mail). movie for further info.

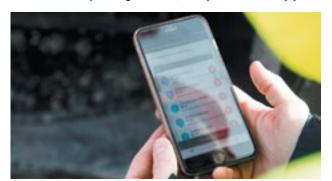




#### **ConSite Pocket**

ConSite Pocket sends you real-time alerts for issues arising with your machine. You'll receive recommendations on what to do and step-by-step help guides. The app also enables you to see the location of your fleet.

- Use your smartphone to check monthly reports, alarm reports, as well as machine operating positions.
- If an alarm report is generated, the system will notify you immediately using a push notification.









movie for further info.



Monthly report

Machine finder Location information



#### ConSite Shot

This is a smartphone application that allows you to easily perform daily inspections of your machines and rental warehousing / delivery management.

- You can easily create high-quality inspection reports and share information within your company or with agents etc.
- Customers who have rental machines can also use it during rental warehousing / delivery inspections.





Load condition





Acceptance or delivery Inspection report with inspection of rental machines

movie for further info.





#### **ConSite OIL**

This system detects if the oil quality has deteriorated, due to contamination or low viscosity. If this happens, you and your authorized dealer will receive an alert. movie for further info.



## **SPECIFICATIONS**

ENGINE	
Model	Isuzu 6HK1
Туре	4-cycle water-cooled, common rail direct injection
Aspiration	Turbocharged, intercooled
No. of cylinders	6
Rated power	
ISO 14396 : 2002 gross	200 kW (268 HP) at 1 900 min-1 (rpm)
ISO 9249 : 2007 net	190 kW (254 HP) at 1 900 min-1 (rpm)
Maximum torque	1 069 Nm (109 kgfm) at 1 500 min <sup>-1</sup> (rpm)
Piston displacement	7.790 L
Bore and stroke	115 mm x 125 mm
Batteries	2 x 12 V

HYDRAULIC SYSTEM					
Hydraulic Pumps					
Main pumps		2 varia	able displacement axial piston pumps		
Maximum oil flov	V	2 x 28	38 L/min		
Pilot pump		1 gear	r pump		
Maximum oil flov	٧	30.2 L	/min		
Hydraulic Mot	ors				
Travel		2 varia	able displacement ax	kial piston motors	
Swing		1 axia	l piston motor		
Relief Valve Se	ettings				
Implement circui	it 34.3 N		1.3 MPa (350 kgf/cm²)		
Swing circuit	32.4 N		2.4 MPa (330 kgf/cm <sup>2</sup> )		
Travel circuit		34.3 N	4.3 MPa (350 kgf/cm²)		
Pilot circuit		3.9 MPa (40 kgf/cm²)			
Power boost		38.0 MPa (338 kgf/cm²)			
Hydraulic Cylinders					
	Quar	ntity	Bore	Rod diameter	
Boom	2		145 mm	100 mm	
Arm	1		170 mm	115 mm	
Bucket	1		140 mm	95 mm	

UPPERSTRUCTURE		
Revolving Frame		
D-section frame for resist	tance to deformation.	
Swing Device		
Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulicreleased disc type.		
Swing speed 10.7 min <sup>-1</sup> (rpm)		
Swing torque 120 kNm (12 200 kgfm)		

UNDERCARRIAGE		
Tracks		
Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.		
Numbers of Rolle	ers and Shoes on Each Side	
Upper rollers	2	
Lower rollers	8	
Track shoes	49	
Track guards Full track guard		
Travel Device		
Each track driven by 2-speed axial piston motor. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low.		
High: 0 to 4.8 km/h		
Travel speeds Low: 0 to 2.7 km/h		
Maximum traction force 322 kN (32 800 kgf)		
Gradeability	70 % (35 degree) continuous	

SERVICE REFILL CAPACITIES		
Fuel tank	630.0 L	
Engine coolant	41.0 L	
Engine oil	41.0 L	
Swing device	15.7 L	
Travel device (each side)	11.0 L	
Hydraulic system	340.0 L	
Hydraulic oil tank	180.0 L	

#### WEIGHTS AND GROUND PRESSURE

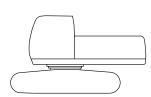
#### Operating Weight and Ground Pressure (without bucket)

Shoe type	Shoe width (mm)	Arm length (m)	Operating weight (kg)	Ground pressure (kPa (kgf / cm²))
Double grouser	600	3.20	38 300	71 (0.72)
Single grouser	600	3.20	38 300	71 (0.72)

#### BASIC MACHINE WEIGHT AND COMPONENTS WEIGHT

#### Basic Machine Weight and Overall Width

Excluding front end attachment, fuel, hydraulic oil and coolant etc. Including counterweight.



		ZX400L-7G	
Shoe type	Shoe width (mm)	Weight (kg)	Overall width (mm)
Double grouser	600	31 200	3 670
Single grouser	600	31 200	3 670

Components Weight Unit: kg

	ZX400L-7G
Counterweight	7 600
Arm (with link and bucket cylinder)	1 860

#### BUCKET AND ARM DIGGING FORCE

	3.20 m	
Arm length	kN	kgf
Bucket digging force* ISO 6015 : 2006	246	25 100
Arm crowd force* ISO 6015 : 2006	185	18 900

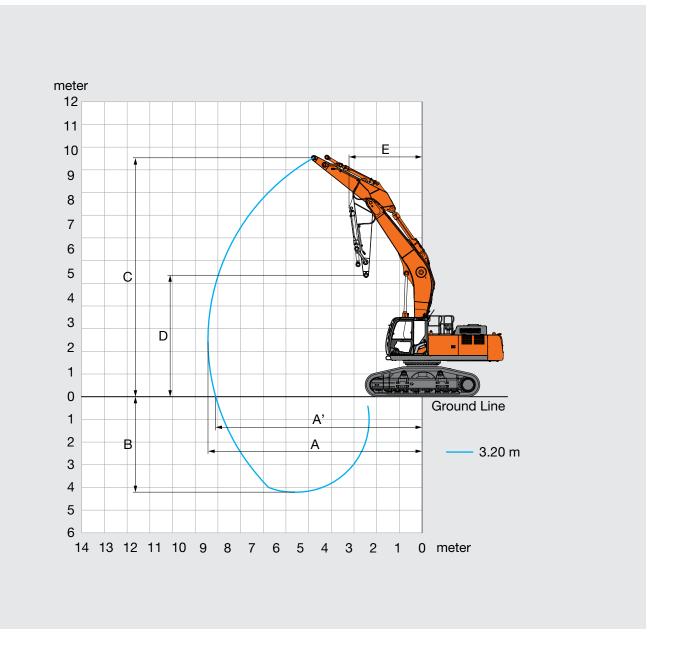
<sup>\*</sup> At power boost

#### BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design. 6.40 m boom and 3.20 m arms are standard.

## **SPECIFICATIONS**

#### WORKING RANGES

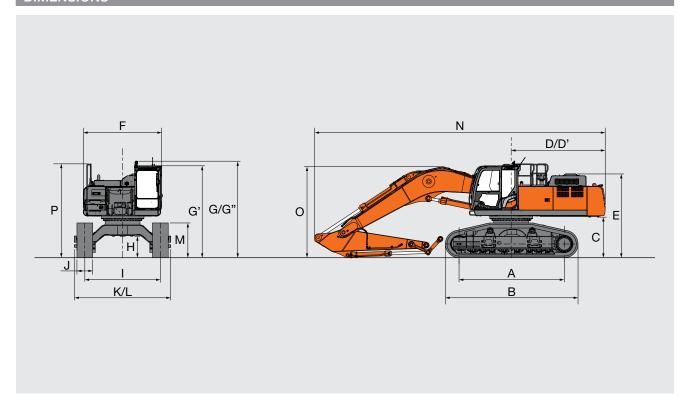


Unit: mm

	Monoblock boom
Arm length	3.20 m
A Max. working reach	9 440
A' Max. working reach (on ground)	9 110
B Max. working depth	4 260
C Max. working height	10 480
D Min. dumping height	5 310
E Min. swing radius	3 220

Excluding track shoe lug

#### DIMENSIONS



Unit: mm

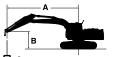
		Monoblock boom
	Arm length	ZX400L-7G
А	Distance between tumblers	4 050
В	Undercarriage length	5 060
*C	Counterweight clearance	*1 490
D	Rear-end swing radius	3 600
D'	Rear-end length	3 590
Е	Engine cover height	3 190
F	Overall width of upperstructure	2 990
G	Cab height	3 680
G'	Cab height (excluding cab light)	3 500
G"	Overall height of upperstructure	3 680
Н	Min. ground clearance	*765
1	Track gauges	2 880
J	Track shoe width	600
K	Undercarriage width	3 670
L	Overall width	3 670
М	Track height with double grouser shoe	1 330
N	Overall length	11 100
0	Overall height of boom	3 470
Р	Handrail height	3 580

<sup>\*</sup> The dimension do not include the height of the shoe lug

### **MACHINE CAPACITIES**

Notes: 1. Ratings are based on ISO 10567 : 2007.

- 2. Machine capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
- 3. The load point is the center-line of the bucket pivot mounting pin on the arm.
- 4. \*Indicates load limited by hydraulic capacity.
- 5. 0 m = Ground.



A: Load radius

B: Load point height

C: Machine capacity

For machine capacities, subtract installed attachment and quick hitch weight from machine capacities.

To determine lifting capacities, apply "Rating over-side or 360 degrees" machine capacities from the table and deduct weight of installed attachment and quick hitch. Optional feature may affect machine performance.

77/1001	70

ZX400L-7G									Rating ov	ver-front 🗖	■ Rating o	ver-side or 3	60 degrees	Unit : kg
	Load point height m	Load radius						- At max, reach						
Conditions		3.0	m	4.5	m	6.0	m	7.5	i m	9.0	) m	,	ti illax. icaci	
		ů	₽	ů	₽	ů	₽	ů	₽	ů	ů	ů	₽	meter
H-Boom with High Boss Bracket Arm 3.2 m Counterweight 7 600 kg	7.5					*11 210	*11 210	*8 860	*8 860			*6 440	*6 440	7.94
	6.0			*13 500	*13 500	*12 060	*12 060	*10 550	*10 550			*6 280	*6 280	8.73
	4.5			*17 220	*17 220	*13 240	*13 240	*11 050	*11 050	*8 200	*8 200	*6 350	*6 350	9.21
Shoe 600 mm	3.0			*19 690	*19 690	*14 390	*14 390	*11 570	*11 570	9 100	*9 730	*6 620	*6 620	9.42
Double Grouser	1.5			*20 440	*20 440	*15 000	*15 000	11 680	*11 820	8 950	*9 630	*7 120	*7 120	9.39
	0 (Ground)	*8 060	*8 060	*19 430	*19 430	*14 730	*14 730	11 480	*11 550	8 870	*9 010	*7 970	*7 970	9.11
	-1.5	*14 920	*14 920	*17 190	*17 190	*13 450	*13 450	*10 470	*10 470			*8 340	*8 340	8.55
	-3.0	*15 760	*15 760	*13 680	*13 680	*10 920	*10 920	*7 880	*7 880			*7 430	*7 430	7.66

# MEM0

### **EQUIPMENT**

ENGINE	ZX400L-7G
Air cleaner double filters	•
Alternator 50 A	•
Auto idle system	•
Auto shut-down control	•
Cartridge-type engine oil filter	•
Cartridge-type fuel main filter	•
Cartridge-type fuel pre-filter with water separator	•
Cold fuel resistence valve	•
ConSite OIL (sensor)*	•
Dry-type air filter with evacuator valve (with air filter restriction indicator)	•
Dust-proof indoor net	•
ECO/PWR mode control	•
Electrical fuel feed pump	•
Engine oil drain coupler	•
Expansion tank	•
Fan guard	•
Fuel cooler	•
Isolation-mounted engine	•
Maintenance free pre-cleaner	•
Radiator, oil cooler and intercooler	•

HYDRAULIC SYSTEM	ZX400L-7G
Auto power lift	•
ConSite OIL (sensor)*	•
Control valve with main relief valve	•
High mesh full flow filter	•
One extra port for control valve	•
Pilot filter	•
Power boost	•
Suction filter	•
Work mode selector	•

CAB	ZX400L-7G
All-weather sound suppressed steel cab	•
Auto control air conditioner	•
Bluetooth® integrated radio	•
Cab : CRES VII (center pillar reinforced structure)	•
Cab : ROPS (ISO12117-2:2008) compliant	•
Console height adjustment	•
Drink holder with hot and cool function	•
Electric double horn	•
Engine shut-off switch	•
Equipped with reinforced, tinted (green color) glass windows	•
Evacuation hammer	•
Fire extinguisher bracket	•
Floor mat	•
Footrest	•
Front window washer (1 point)	•
Glove compartment	•
Hands-free calling device	•
Hot and cool box	•
Intermittent windshield wipers	•
Key cylinder light	•
LED room light	•
Magazine rack	•
Pilot shut-off lever	•
Power outlet 12 V	•
Power outlet 24 V	•
Rear tray	•
Retractable seat belt (2 inch)	•
Rubber radio antenna	•
Seat : air suspension seat with heater	•
Seat adjustment part : backrest, armrest, height and angle, slide forward / back	•
Seat belt reminder	•
Short wrist control levers	•
Smartphone holder	•
USB power supply	•
Windows on front, upper, lower and left side can be opened	•
2 speakers	•
4 fluid-filled elastic mounts	•
8 inch monitor	•
	•

#### 

MONITOR SYSTEM	ZX400L-7G
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc	•
Alarm buzzers: overheat, engine oil pressure, overload, trouble, etc	•
Display of meters: water temperature, hour, fuel rate, clock, etc	•
Other displays: work mode, auto-idle, glow, rear view monitor, operating conditions, etc	•
35 languages selection	•

LIGHTS	ZX400L-7G
Additional boom LED light with cover	•
Additional cab roof rear LED lights	•
2 working LED lights	•

UPPER STRUCTURE	ZX400L-7G
Batteries	•
Counterweight 7 600 kg	•
Fuel level float	•
Hydraulic oil level gauge	•
Lockable fuel refilling cap	•
Lockable machine covers	•
Lockable tool box	•
Platform handrail	•
Platform handrail (additional)	•
Rear view camera	•
Skid-resistant plates	•
Swing parking brake	•
Undercover less	•
Undercover 6.0 mm reinforced	0
Utility space	•
2 way disconnect switch	•

UNDERCARRIAGE	ZX400L-7G
Bolt-on sprocket	•
Full track guard	•
High track	•
Hydraulic track adjuster	•
Lower rollers	•
Reinforced idler bracket	•
Reinforced side step (bolt on type)	•
Reinforced track links with pin seals	•
Reinforced track spring	•
Reinforced travel motor cover	•
Reinforced upper rollers	•
Shoe guide (idler bracket side)	•
Shoe: 600 mm double grouser	•
Shoe: 600 mm single grouser	0
Towing hook	•
Track undercover 9.0 mm reinforced	•
Travel direction mark on track frame	•
Travel parking brake	•

ATTACHMENTS	ZX400L-7G
Attachment basic piping	•
Electric controlled operation for attachment	•

#### ullet : Standard equipment $\,$ O : Optional equipment

MISCELLANEOUS	ZX400L-76
ConSite	•
Global e-Service	•
Onboard information controller	•
Standard tool kit	•

FRONT ATTACHMENTS	ZX400L-7G
Arm tip remote lubrication	•
Arm 3.20 m	•
Boom 6.40 m H with high boss bracket	•
Casted bucket link A	•
Centralized lubrication system	•
Dirt seal on all bucket pins	•
Flanged pin	•
HN bushing	•
Reinfoced link B	•
Reinforced resin thrust plate	•
WC (tungsten-carbide) thermal spraying	•
Without bucket	•

Standard and optional equipment may vary by country, so please consult authorized dealer for details.	
* Engine oil and hydraulic oil monitoring sensor.	
in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory	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 the Operator's Manual for proper operation.
particular country. Please do not export or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your Hitachi dealer in case of questions about compliance.	
CablePrice Pty Ltd	

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