

ZAXIS-7 series

HITACHI

Reliable Solutions

ZAXIS 75US



HYDRAULIC EXCAVATOR

Model code : ZX75US-7

Engine rated power : 50.4 kW (67.6 HP)

Operating weight : 8 340 – 8 880 kg

Bucket capacity : 0.28 m³



YOU'RE IN CONTROL

You're at the heart of Hitachi Construction Machinery design for its latest range of excavators.

To continuously improve on previous generation machines, we've focused on enhancing your experience in the cab as an operator.

We've considered the challenges you face as the owner of a successful business.

By solving these problems, the Zaxis-7 series has improved the following four points.

- "Increased productivity" that can finish projects in shorter time frames
- A more "comfortable cab" with equipment that further helps the operator and reduces fatigue
- "Excellent safety" that can help with potential risks
- "Easier maintenance" that can shorten maintenance time

By putting you at the heart of the Zaxis-7 range, we invite you to take control-over your workspace and your fleet.

And by working in partnership, we will help you to create your vision.



Notes: The pictures of machines shown on the brochure are taken for the sake of demonstrations. When leaving the machine, be sure to set the shut-off lever to LOCK position.

INSIDE



Increased productivity

P4

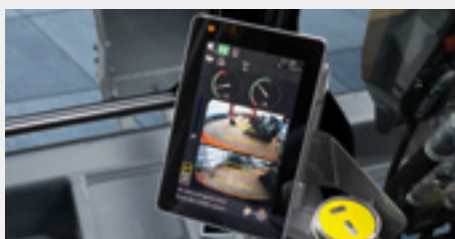
Productivity has been improved by adopting a new high-power engine and improving digging force.



Comfortable cab

P6,7

The expanded cab interior provides a more comfortable working environment.



Excellent safety

P8

Visibility of the job site is excellent thanks to the AERIAL ANGLE camera system and new LCD Monitor.



Easy maintenance

P10,11

Improved access to components ensures maintenance is quick and easy.

INCREASED PRODUCTIVITY

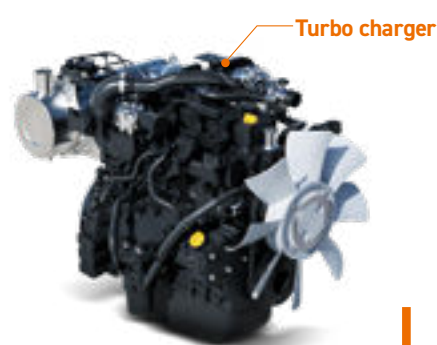
Completing a project on time and on budget depends on the ability of your construction equipment to perform all day, every day. That's why Hitachi Construction Machinery owners have profited from generations of reliable and durable machinery, and the Zaxis-7 range is no exception.

The basic performance-based engine is equipped with a turbocharger to provide sufficient power, and the 4 % improvement in digging power has improved productivity by 6 % compared to the previous model.

The floor of the upper structure has been designed to be 140 mm lower than in the previous model, improving the stability of the body by 10 % and increasing the sense of security when attaching heavy attachments. In consideration of working with attachments, flow rate adjustment, connection kits for Hydraulic quick coupler, Auxiliary Function Lever (AFL), etc. are prepared, making it easier to utilise in a variety of work situations. In terms of durability, the adoption of resin fuel tanks and Reinforced D-frames has made maintenance easier.

High Performance & Clean Engine

The turbocharged engine has a power of 50.4 kW and is an environmentally friendly engine that EPA Final Tier 4 / EU Stage V emission standards. The engine has a diesel particulate filter, EGR and common rail to help further reduce emissions.



Auxiliary flow adjustment switching

The operator can set the desired speed by adjusting the flow rate of the extra attachment piping when fitting attachments. The setting can be easily carried out on the monitor, and can be set in detail within the range of 20 to 136 L/min (every 10 L/min).

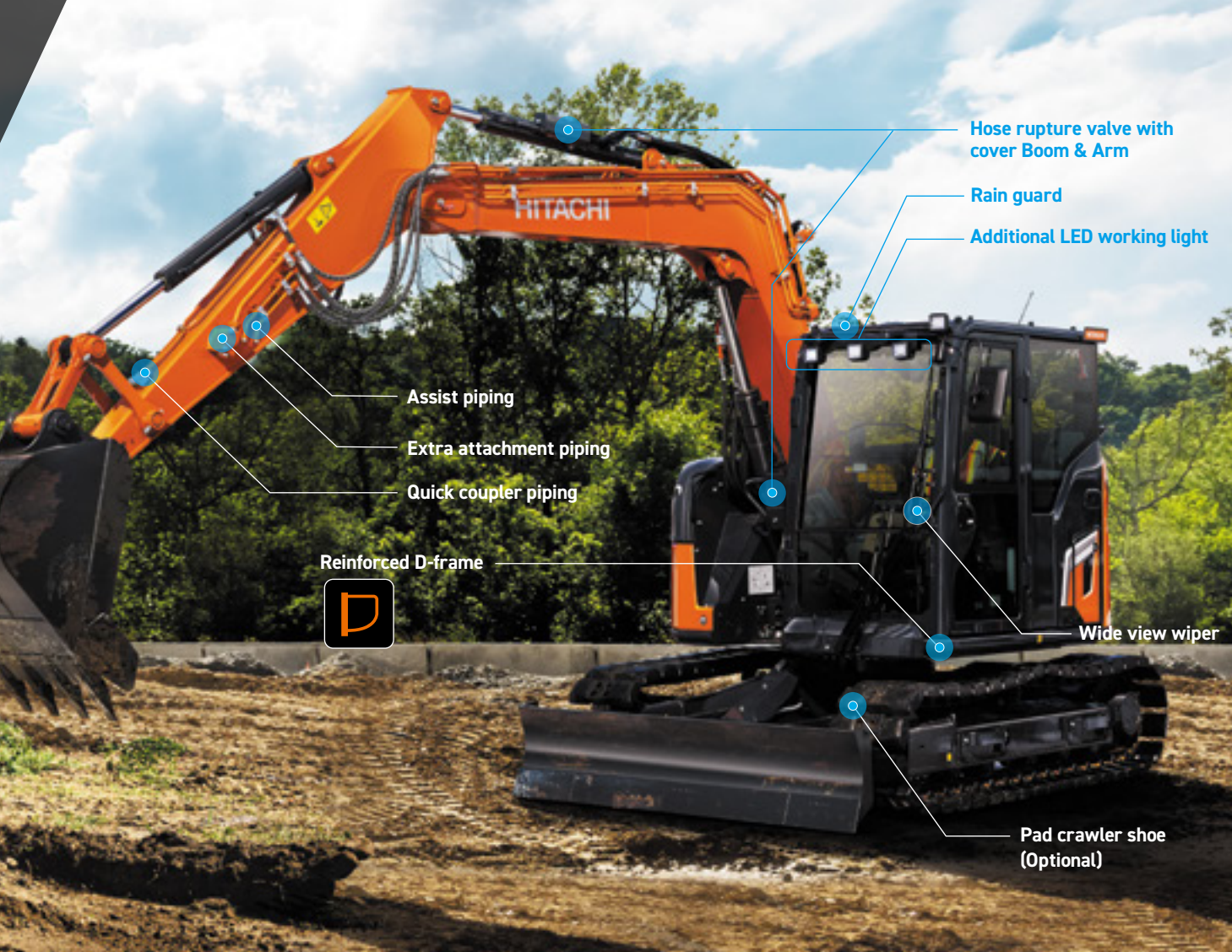


Auxiliary function lever (AFL)

The left and right operation levers have been converted to electric switches. Attachment operations* that involve rotating operations can be easily operated with the switches at hand.

*Assist piping is required.





Connection kit for hydraulic quick coupler

A quick coupler type manifold and a switch (ON: bucket relief) for attachment and detachment are provided so that the hydraulic quick coupler can be more easily installed.



Additional counterweight

An additional counterweight has been prepared. Stability can be improved when a heavy attachment is attached.



Resin fuel tank

A resin fuel tank that does not rust makes maintenance easier. The top surface of the tank is covered with a cover to improve durability over time.



COMFORTABLE CAB

Zaxis-7's sleek new cab delivers effortless operation through a functional operating environment and superior comfort, resulting in increased productivity and reduced operator fatigue.

Each piece of equipment is of industry-leading quality. The console, seat design and pedal layout are ergonomically designed to help reduce operator fatigue. The new 8-inch multi-function monitor uses a high-resolution screen with less reflection and glare. In conjunction with the multi-function controller at hand, operators can quickly navigate through many information menus such as climate control, radio, Bluetooth* and more. With a microphone on the side of the USB power supply, operators can connect smartphones via Bluetooth* and use as a hands-free phone.

*Bluetooth is the registered trademark of Bluetooth SIG, Inc.



**Low-reflective collar
8inch LCD monitor**



**Multifunction controller and
switch box**



**USB power supply and
hot & cool drink holder**



Smartphone holder



**Hot & cool drink holder and
storage space**



**Toolless height and angle
adjustable armrest**



EXCELLENT SAFETY

Your ability to work safely is vital, not only for your own wellbeing, but also for the successful completion of any project. To protect yourself and your machine from potential hazards, the new Hitachi Zaxis-7 excavators give you a superior view of your surroundings, so you can see the job site from all angles.

The visibility you enjoy from the cab includes an exceptional 270-degree bird's-eye view with the AERIAL ANGLE camera system. You can choose from five image options to view the machine's immediate environment, which enables you to control your own safety, as well as that of those around you.

Additionally, to help with potential risks on site, the cab is ROPS (Roll Over Protective Structure) and OPG (Operator Protective Guard) Level 1 compliant to protect operators from machine rollovers and falling objects.

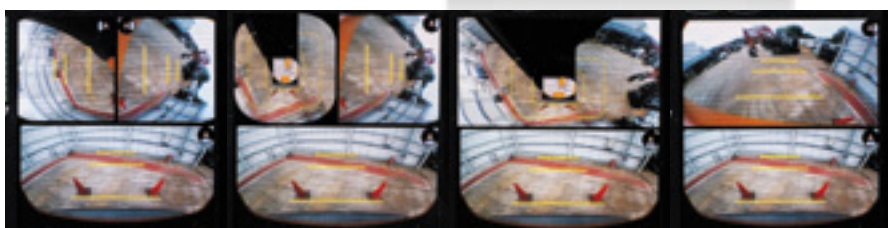


AERIAL ANGLE 270-degree bird's eye-view camera system

AERIAL ANGLE allows operators to check the image around the machine on the monitor. Operators can choose from 5 types of images that are easy to use.



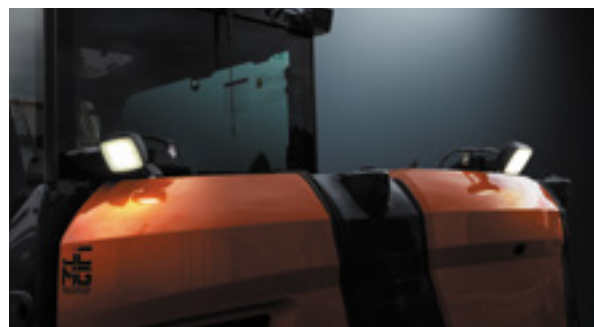
AERIAL ANGLE Switch



Five image patterns

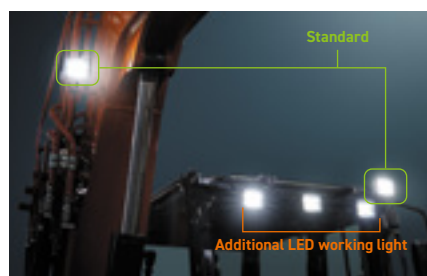
Three ambient light

Equipped with three LED ambient lights on the left, right, and rear of the machine. Operators can improve the visibility of night work and AERIAL ANGLE.





Shown equipped with additional counterweight and ambient LED lights, assist piping, pad crawler shoe (optional).



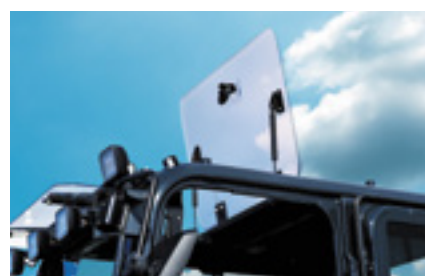
LED working lights with wider illumination range

By reviewing the mounting position of each light, it is possible to illuminate a wider range and work more safely. By installing additional LED working lights, operators can create a brighter environment.



Wide view wiper

The wiper with a parallel link mechanism is available. A wiper has also been added to the lower window, increasing the window wiping area by 183% compared to the previous model.



Overhead window

The overhead window that can be opened and closed is made of polycarbonate, so operators can check the upper area even when it is closed. It is also possible to escape from this window in the event of a fall.



Side mirror

The side mirror can be folded in three stages without using tools, making it easier to switch the mirror position during transport and when on the worksite.

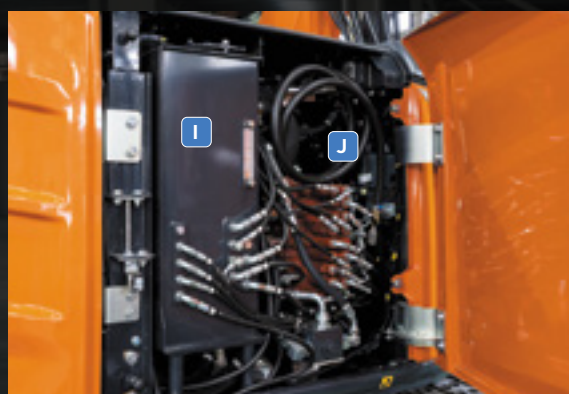


Shown equipped with additional counterweight and ambient LED lights, assist piping, pad crawler shoe (optional), electric refuel pump.

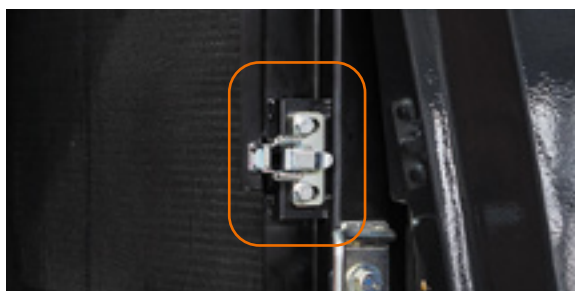
EASY MAINTENANCE

Prolonging the life of the machine requires regular maintenance. Hitachi Construction Machinery is devising every aspect to make these things speedier and more convenient. For example, the dustproof net on the radiator can be removed with one touch without using tools, and can be easily put back after cleaning with an air compressor, shortening the cleaning time. The wide opening of each cover also provides excellent access to each maintenance point.

Prioritising ease of maintenance and cleaning will save on time and money.



- | | | |
|---|-------------------------------------|---|
| A Fuel filter | E Oil filter | I Hydraulic oil tank |
| B Fuel filter with water separator | F Coolant reserve tank | J Electric refuel pump(Optional) |
| C Swing drain filter | G Air cleaner double filters | |
| D Pilot filter | H Battery disconnect switch | |



One touch lock type dust-proof net

Uses a dustproof net that can be easily removed and installed using a one touch system.



Fuel tank designed for easier refueling

Refueling can be done easily by designing the refueling port of the fuel tank lower than the conventional model.



Windshield washer tank

The windshield washer tank has been moved from the engine room of the conventional machine to inside the cab, making it easier to replenish and manage the windshield washer.



Tool box

The tool box is installed in the front part of the upperstructure. Grease gun etc. can be stored.

SPECIFICATIONS

ENGINE	
Model	4TNV98CT
Type	4-cycle water-cooled, common rail direct injection exhaust turbo charger
Aspiration	Cooled EGR
Aftertreatment	Muffler filter
No. of cylinders	4
Rated power	
ISO 14396 : 2002 gross	50.4 kW (67.6 HP) at 2 000 min ⁻¹
ISO 9249 : 2007 net	49.8 kW (66.8 HP) at 2 000 min ⁻¹
Maximum torque	292.9 Nm (29.8 kgfm) at 1 300 min ⁻¹
Piston displacement	3.318 L
Bore and stroke	98 mm x 110 mm
Batteries	2 x 12 V / 60 Ah

HYDRAULIC SYSTEM				
Hydraulic Pumps				
Main pumps	3 variable displacement axial piston pumps			
Maximum oil flow	2 x 72 L/min			
	1 x 56 L/min			
Pilot pump	1 gear pump			
Maximum oil flow	20.0 L/min			
Hydraulic Motors				
Travel	2 variable displacement axial piston motors			
Swing	1 axial piston motor			
Relief Valve Settings				
Implement circuit	28.0 MPa (285 kgf/cm²)			
Swing circuit	26.5 MPa (270 kgf/cm²)			
Travel circuit	31.4 MPa (320 kgf/cm²)			
Pilot circuit	3.9 MPa (39 kgf/cm²)			
Hydraulic Cylinders				
	Quantity	Bore	Rod diameter	Stroke
Boom	1	115 mm	70 mm	885 mm
Arm	1	95 mm	60 mm	900 mm
Bucket	1	85 mm	55 mm	730 mm
Blade	1	120 mm	70 mm	145 mm

UPPERSTRUCTURE	
Revolving Frame	
D-section frame for resistance 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/hydraulic-released disc type.	
Swing speed	10.1 min ⁻¹
Swing torque	16.6 kNm (1 690 kgfm)
Operator's Cab	
Independent spacious cab, 1 025 mm wide by 1 654 mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) can be opened. Reclining seat. * International Organisation for Standardisation	

UNDERCARRIAGE	
Tracks	
Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame	
Numbers of Rollers on Each Side	
Upper rollers	1
Lower rollers	5
Track shoes	40
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.	
Travel speeds	High : 0 to 5.0 km/h
	Low : 0 to 3.1 km/h
Maximum traction force	65.2 kN (6 650 kgf)
Gradeability	70% (35 degree) continuous

SERVICE REFILL CAPACITIES	
Fuel tank	125.0 L
Engine coolant	13.1 L
Engine oil	12.3 L
Travel device (each side)	1.2 L
Hydraulic system	100.0 L
Hydraulic oil tank	52.0 L

ENVIRONMENT	
Engine Emissions	EPA Final Tier 4 / EU Stage V
Air Conditioning System	
The air conditioning system contains fluorinated greenhouse gases. Refrigerant type: HFO-1234yf, GWP: 4, Amount: 0.65 kg, CO ₂ e: 1.22 ton	

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

Shoe type	Shoe width (mm)	Arm length (m)	Operating weight	Ground Pressure	
			kg	kPa	kgf/cm ²
Grouser shoe	450	1.62	8 340	37	0.38
		2.12	8 410	37	0.38
Pad crawler shoe	450	1.62	8 380	37	0.38
		2.12	8 450	37	0.38

Including 0.28 m³ (ISO 7451:2007 heaped) bucket weight 211 kg and counterweight 1 165 kg.

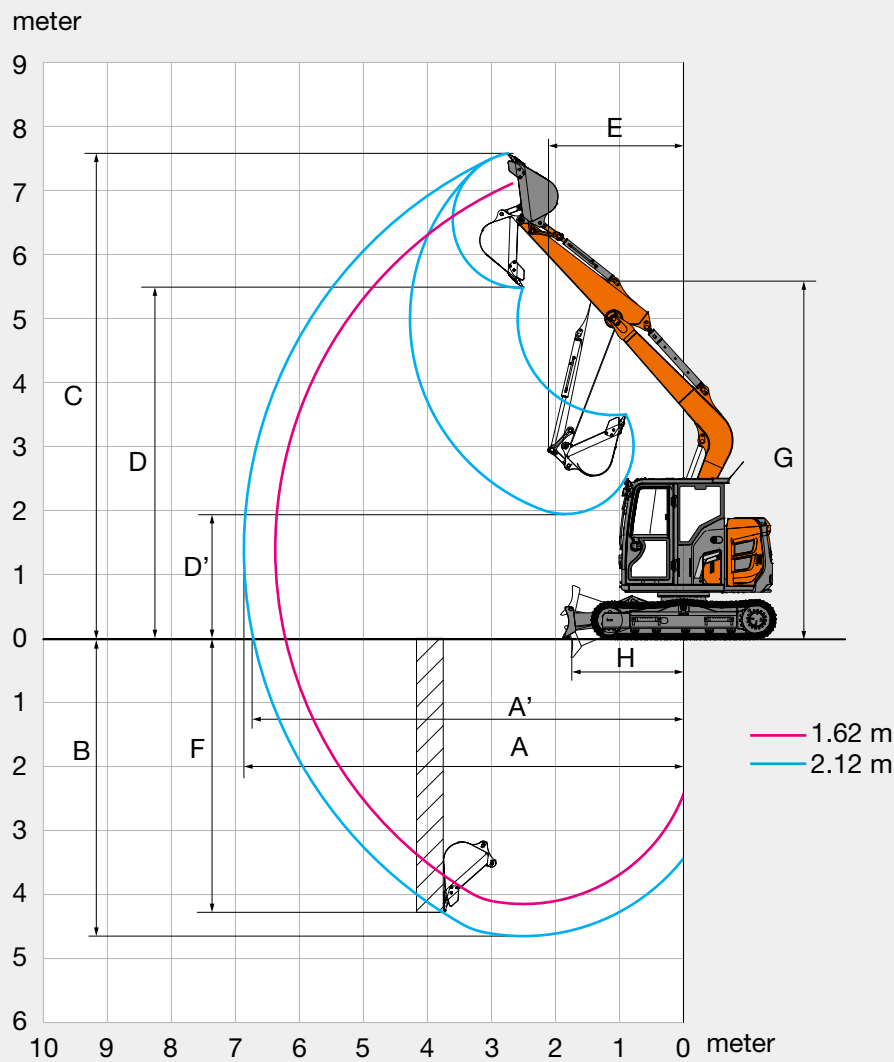
BUCKET AND ARM DIGGING FORCE

Arm length	1.62 m		2.12 m	
	kN	kgf	kN	kgf
Bucket digging force* ISO 6015 : 2006	57.5	5 870	57.5	5 870
Bucket digging force SAE: PCSA	50.1	5 110	50.1	5 110
Arm crowd force* ISO 6015 : 2006	40.2	4 100	34.5	3 520
Arm crowd force SAE : PCSA	38.1	3 890	33.0	3 370

* At power boost

SPECIFICATIONS

WORKING RANGES

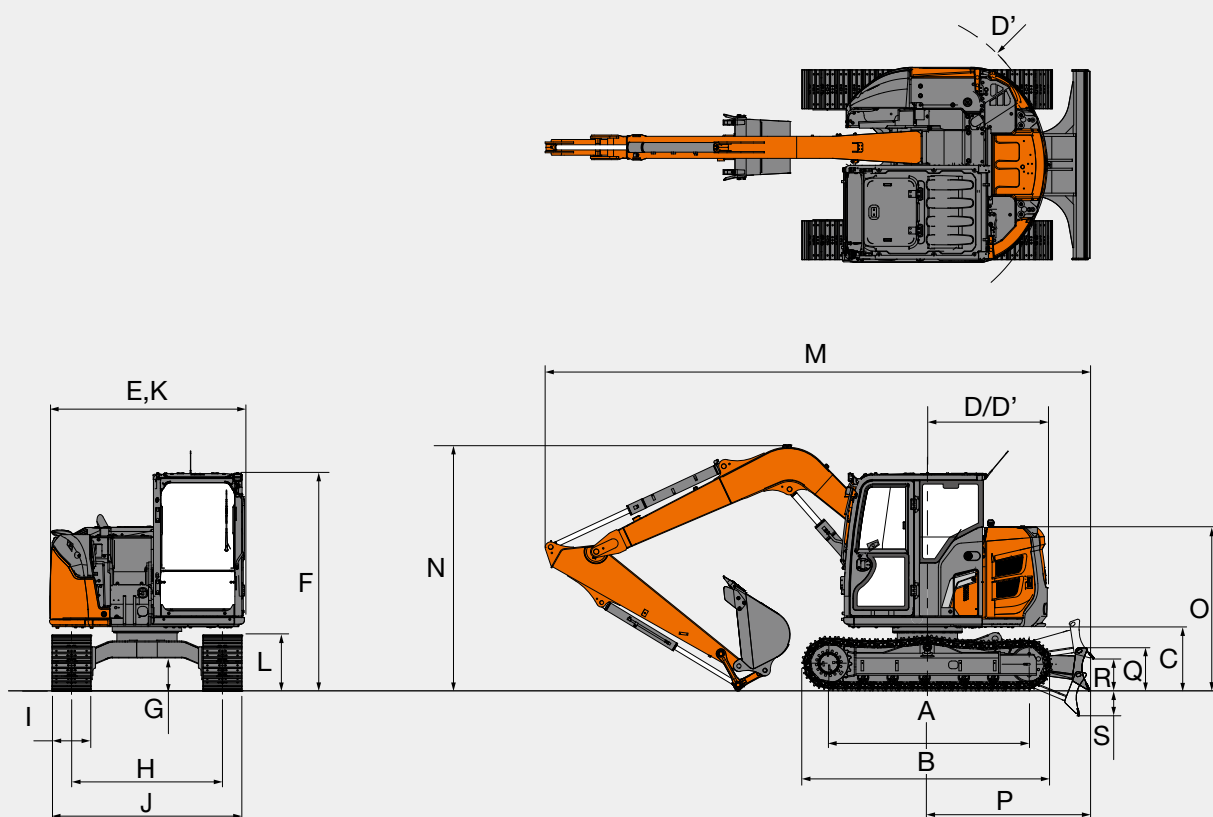


Unit: mm

Arm length	ZX75US-7	
	1.62 m	2.12 m
A Max. digging reach	6 380	6 870
A' Max. digging reach (on ground)	6 220	6 720
B Max. digging depth	4 150	4 650
C Max. cutting height	7 180	7 580
D Max. dumping height	5 080	5 480
D' Min. dumping height	2 360	1 950
E Min. swing radius	1 760	2 120
F Max. vertical wall	3 730	4 260
G Front height at Min. swing radius	5 550	5 570
H Min. level crowding distance	1 720	1 630

Excluding track shoe lug

DIMENSIONS



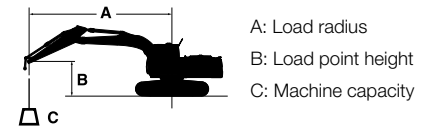
Unit: mm

	ZX75US-7
A Distance between tumblers	2 295
B Undercarriage length	2 900
* C Counterweight clearance	720
D Rear-end swing radius	1 390
D' Rear-end length	1 390
E Overall width of upperstructure	2 260
F Overall height of cab	2 530
* G Min. ground clearance	360
H Track gauge	1 750
I Track shoe width	450
J Undercarriage width	2 200
K Overall width	2 260
L Track height	610
Overall length	
M With Arm 1.62 m	6 270
With Arm 2.12 m	6 330
Overall height of boom	
N With Arm 1.62 m	2 650
With Arm 2.12 m	2 930
O Engine cover-height	1 880
P Distance between the front end of blade and the axis of rotation	1 890
Q Blade height	472
R Blade bottom highest position above ground	370
S Blade bottom lowest position above ground	290

* Excluding track 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.



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.

ZX75US-7 Monoblock boom, Blade above Ground

Rating over-front Rating over-side or 360 degrees Unit : kg

Conditions	Load point height (m)	Load radius												At max. reach		
		1.0 m		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
																meter
Boom 3.72 m Arm 1.62 m Counterweight 1 165 kg Grouser shoe 450 mm	5.0					*1 690	*1 690							*1 720	*1 720	3.87
	4.0					*1 860	*1 860	*1 820	*1 820					*1 590	1 540	4.62
	3.0			*3 360	*3 360	*2 380	*2 380	*2 030	1 900	1 650	1 340			*1 570	1 310	5.07
	2.0					*3 070	2 780	2 280	1 830	1 620	1 310			1 480	1 200	5.28
	1.0					3 430	2 640	2 200	1 750	1 580	1 280			1 450	1 170	5.30
	0 (Ground)					3 350	2 560	2 150	1 700	1 560	1 250			1 500	1 210	5.12
	-1.0	*3 040	*3 040	*4 600	*4 600	3 330	2 550	2 130	1 690					1 680	1 350	4.73
	-2.0	*5 190	*5 190	*4 770	*4 770	3 360	2 570	2 150	1 710					2 120	1 680	4.04
	-3.0			*3 460	*3 460									*2 410	*2 410	2.88
Boom 3.72 m Arm 2.12 m Counterweight 1 165 kg Grouser shoe 450 mm	5.0							*1 480	*1 480					*1 420	*1 420	4.52
	4.0					*1 450	*1 450	*1 520	*1 520	*1 600	1 360			*1 330	1 280	5.18
	3.0			*2 380	*2 380	*1 940	*1 940	*1 750	*1 750	1 650	1 340			*1 310	1 110	5.58
	2.0					*2 650	*2 650	*2 090	1 830	1 610	1 300			1 270	1 030	5.78
	1.0					*3 310	2 640	2 190	1 740	1 560	1 260			1 250	1 000	5.79
	0 (Ground)					3 320	2 530	2 120	1 670	1 520	1 220			1 280	1 030	5.63
	-1.0	*2 410	*2 410	*3 890	*3 890	3 270	2 490	2 080	1 640	1 510	1 200			1 400	1 120	5.27
	-2.0	*3 960	*3 960	*5 210	4 980	3 280	2 490	2 080	1 640					1 670	1 330	4.67
	-3.0			*4 260	*4 260	*2 950	2 550							*2 210	1 880	3.71

ZX75US-7 Monoblock boom, Blade on Ground

















Rating over-front



Rating over-side or 360 degrees

Unit : kg

Conditions	Load point height (m)	Load radius												At max. reach		
		1.0 m		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m				
																meter
Boom 3.72 m Arm 1.62 m Counterweight 1 595 kg Grouser shoe 450 mm	5.0					*1 690	*1 690							*1 720	*1 720	3.87
	4.0					*1 860	*1 860	*1 820	*1 820					*1 590	*1 590	4.62
	3.0			*3 360	*3 360	*2 380	*2 380	*2 030	*2 030	1 860	1 520			*1 570	1 490	5.07
	2.0					*3 070	*3 070	*2 330	2 070	1 830	1 490			*1 620	1 370	5.28
	1.0					*3 620	2 990	2 490	1 990	1 790	1 460			1 640	1 340	5.30
	0 (Ground)					3 790	2 920	2 430	1 940	1 770	1 440			1 710	1 390	5.12
	-1.0	*3 040	*3 040	*4 600	*4 600	*3 760	2 900	2 410	1 930					1 900	1 540	4.73
	-2.0	*5 190	*5 190	*4 770	*4 770	*3 390	2 930	*2 430	1 950					*2 380	1 920	4.04
	-3.0			*3 460	*3 460									*2 410	*2 410	2.88
Boom 3.72 m Arm 2.12 m Counterweight 1 595 kg Grouser shoe 450 mm	5.0							*1 480	*1 480					*1 420	*1 420	4.52
	4.0					*1 450	*1 450	*1 520	*1 520	*1 600	1 550			*1 330	*1 330	5.18
	3.0			*2 380	*2 380	*1 940	*1 940	*1 750	*1 750	*1 670	1 530			*1 310	1 270	5.58
	2.0					*2 650	*2 650	*2 090	2 070	1 820	1 490			*1 340	1 180	5.78
	1.0					*3 310	3 000	*2 430	1 980	1 770	1 440			1 420	1 160	5.79
	0 (Ground)					*3 680	2 890	2 400	1 910	1 740	1 400			1 460	1 190	5.63
	-1.0	*2 410	*2 410	*3 890	*3 890	3 710	2 850	2 370	1 880	1 720	1 390			1 590	1 290	5.27
	-2.0	*3 960	*3 960	*5 210	*5 210	*3 570	2 850	2 370	1 880					1 900	1 530	4.67
	-3.0			*4 260	*4 260	*2 950	2 910							*2 210	2 140	3.71

EQUIPMENT

● : Standard equipment ○ : Optional equipment

ENGINE	ZX75US-7
Aftertreatment device	●
Air cleaner double filters	●
Alternator 24 V - 60 A	●
Auto idle system	●
Auto shut-down control	●
Cartridge-type engine oil filter	●
Cartridge-type fuel main filter	●
Dry-type air filter with evacuator valve (with air filter restriction indicator)	●
Engine oil drain coupler	●
Fan guard	●
Fuel cooler	●
Fuel pre-filter with water separator	●
PWR / ECO mode control	●
Radiator reserve tank	●
Radiator, oil cooler with one touch type dust-proof indoor net	●

HYDRAULIC SYSTEM	ZX75US-7
Auxiliary flow adjustment switching	●
Boom anti-drift valve	●
Extra port for control valve	●
Full-flow filter	●
Hose rupture valve for arm cylinder	●
Hose rupture valve for boom cylinder	●
Hydraulic pilot type control levers	●
Low-temperature starting speed control	●
Main pump pressure and temperature sensor	●
Pilot control shut-off lever with neutral engine start system	●
Pilot filter	●
Suction filter	●
Swing drain filter	●
Swing parking brake	●
Travel parking brake	●
Two-speed travel system	●
Valve for extra piping	●
Variable relief valve for breaker and crusher	●
Work mode selector	●

CAB	ZX75US-7
AUX function lever (breaker)	●
AUX function lever (assist)	●
Blade lever with two-speed travel switch	●
Bluetooth® integrated radio	●
Control lever auto-lock	●
Defroster	●
Drink holder with hot and cool function	●
Electric horn	●
Engine shut-off switch	●
Equipped with reinforced glass windows	●
Evacuation hammer	●
Fire extinguisher mounting seat	●
Footrest	●
Floor mat	●
Front window washer (2 points) *	●
Hands-free calling device	●
Hot and cool box	●
Intermittent windshield wipers	●
LED room light	●
Lower front window one-touch lock (release lever)	●
Pilot shut-off lever	●
Power outlet 12 V	●
Rain guard (without OPG front guard) **	●
Rear tray	●
Retractable seat belt	●
Rubber radio antenna	●
ROPS (ISO 12117-2 : 2008) compliant cab	●
Seat : air suspension seat with heater	●
Seat adjustment part : backrest, armrest, height and angle, slide forward / back	●
Seat belt reminder	●
Smartphone holder	●
Sunscreen roller type (top window)	●
Transparent roof	●
USB power supply	●
Water level	○
Wide view wiper	●
Windows on front, upper and lower can be opened	●
Window (right side) guard piping	●
4 fluid-filled elastic mounts	●
8 inch monitor	●
2 speakers	●

● : Standard equipment ○ : Optional equipment

MONITOR SYSTEM	ZX75US-7
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, 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 language selection	●

LIGHTS	ZX75US-7
Additional 3 cab roof front LED lights	●
Boom LED lights (boom x 1, cab front x 1)	●
3 ambient LED lights (side and rear view camera)	●

UPPER STRUCTURE	ZX75US-7
Accumulator	●
AERIAL ANGLE (270-degree view camera system)	●
Auxiliary overload relief valve	●
Batteries 2 x 60 Ah	●
Fuel level float	●
Remote swing circle lubrication	●
Lockable tool box	●
Side view mirror (left side)	●
Undercover	●
1 165 kg counterweight	●
430 kg additional counterweight	●
2 way disconnect switch	●

UNDERCARRIAGE	ZX75US-7
Blade	●
Reinforced track links with pin seals	●
Travel motor covers	●
4 tie down hooks	●
450 mm grouser shoe	●
450 mm pad crawler shoe	○

FRONT ATTACHMENTS	ZX75US-7
Assist piping	●
Dirt seal on all bucket pins	●
Extra piping	●
HN bushing	●
HRV cover	●
Quick coupler piping	●
Reinforced resin thrust plate	●
WC (tungsten-carbide) thermal spraying	●
1.62 m arm	○
2.12 m arm	●

MISCELLANEOUS	ZX75US-7
Global e-service	●
Standard tool kit	●
Theft deterrent system ***	●

Standard and optional equipment may vary by country, so please consult authorised dealer for details.

* Double washer is only when equipped with wide-view wipers.

** Rain guard cannot be install when Cab front top guard and cab ceiling tower guard ISO (OPG) Level II conform ance (ISO 10262: 1998) are installed.

*** Hitachi Construction Machinery cannot be held liable for theft, any system will just minimise the risk of theft.

Prior to operating this machine, including satellite communication system, 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 standards (including safety standards) and legal requirements of that 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.

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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.

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