

ZAXIS-5G series

HITACHI

Reliable solutions

ZAXIS470



HYDRAULIC EXCAVATOR

Model Code : ZX470-5G / ZX470LC-5G / ZX470H-5G / ZX470LCH-5G

Engine Rated Power : 235 kW (315 HP)

Operating Weight : ZX470-5G : 45 600 kg / ZX470LC-5G : 46 800 kg

ZX470H-5G : 46 700 kg / ZX470LCH-5G : 47 800 kg

Backhoe Bucket : ISO Heaped : 1.15 - 2.65 m³

ZAXIS Empower your Vision.

A ZAXIS hallmark – industry-leading hydraulic technologies, and performance no other can beat.

New ZAXIS provides reliable solutions: impressive fuel economy, swift front movements, and easy operation. You'll also find

Hitachi technological prowess and expertise, such as the optimized hydraulic system and engine.

New ZAXIS features the key benefits of high quality, low fuel consumption, and high durability, all of which serve to ensure low running costs.

New ZAXIS, which is empowered by comprehensive evolution, will realize customers' visions and dreams, and pioneer your colorful future.

Key Benefits for Low Running Costs



Large Production with Less Fuel

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- 8% reduction in fuel consumption
- More fuel reduction in the ECO mode
- Swift front movements with HIOS IIIB hydraulics
- Enhanced basic performance
- Easy-to-use attachments

Pursuits of Performance and Durability

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- Prestige R&D and quality control
- Durable, reliable engine
- Rock-solid, durable front attachment
- Strengthened fixed gauge undercarriage
- Proven upperstructure



No Compromise on Operator Comfort

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- Comfortable operating environment
- Comfort-designed operator seat
- Robust cab
- New, easy-to-use multifunction monitor



Simplified Maintenance

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- Grouped remote inspection points
- Fast lubrication
- Easy-access to the upperstructure
- Low life cycle costs
- 705 L large capacity fuel tank



Hitachi Support Chain

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- Remote fleet management with Global e-Service
- Parts and service



Large Production with Less Fuel

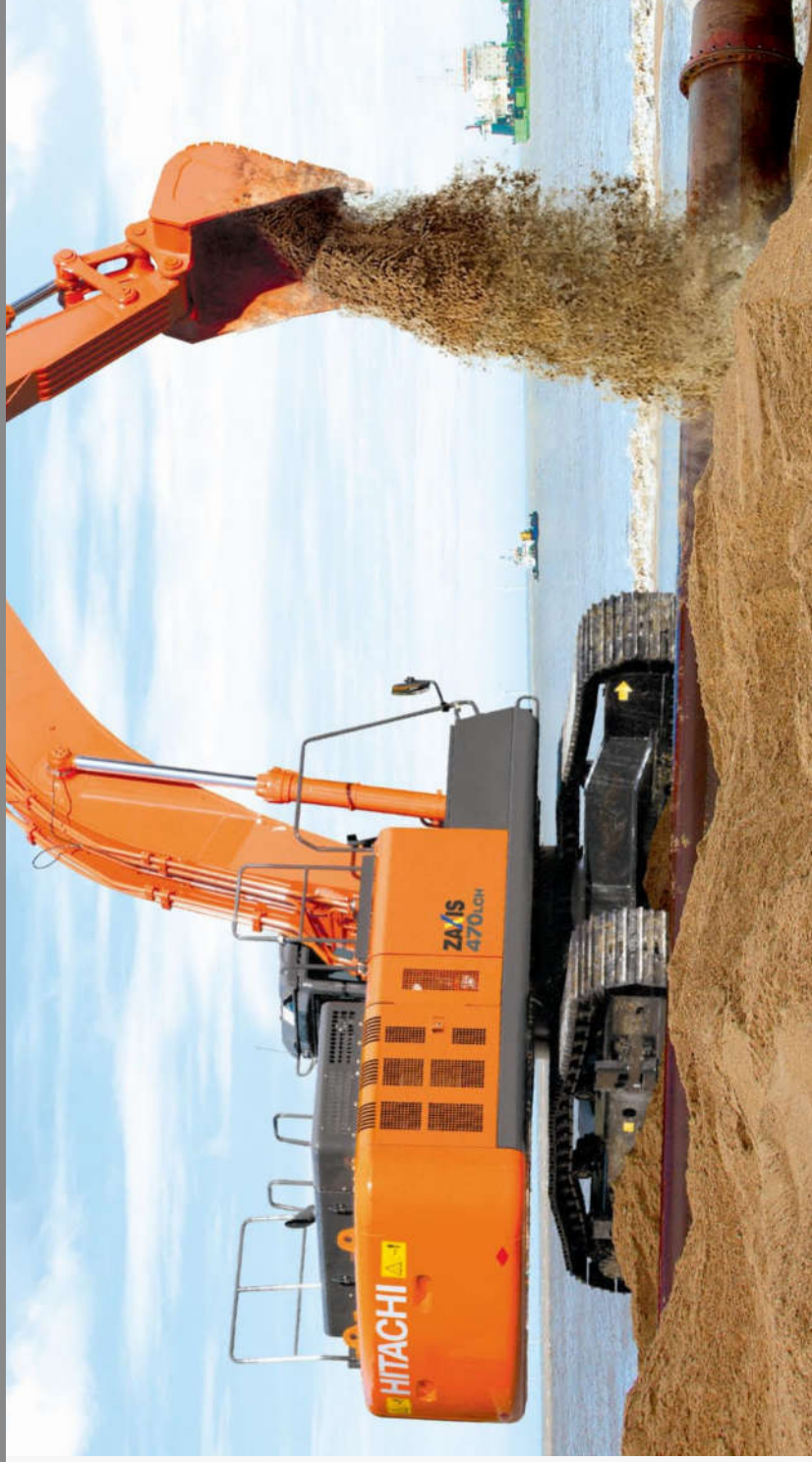
8%* Reduction in Fuel Consumption

New ZAXIS is a fuel-thrifty excavator that can reduce fuel consumption by 8%*, compared to the conventional ZX450-3/ZX450-3F family, thanks to the HIOS IIB hydraulic system and engine control system, thereby reducing CO₂ emissions.

*PWR mode vs. conventional model's P mode

More Fuel Reduction in the ECO mode

The ECO mode, a new economical mode, can further cut fuel consumption by 9% compared to the PWR mode, without sacrificing digging force by optimal matching of operations.



Swift Front Movements with HIOS* IIB Hydraulics

Operating speed increases with less fuel consumption thanks to the HIOS IIB hydraulic system, developed by industry-leading hydraulic technologies and a wealth of experience.

*Human & Intelligent Operation System

Improved Arm Controllability

Improved arm controllability for level lifting and level providing for front movements, including swing operations. The boom regenerative circuit using the boom weight and the newly adopted variable orifice of the swing circuit help ensure hydraulic oil can be effectively allocated and pressure loss can be reduced.



Enhanced Basic Performance

The new ZAXIS offers enhanced basic performance, in addition to a sophisticated hydraulic control system like HIOS IIB.

For example, the boom circuit of the control valve was changed to an external flow combining circuit from the internal one to reduce energy loss when raising or lowering the boom. In addition, the power-boosting pressure function was enhanced to increase basic performance.

- **8% increased in swing torque**
- **3% increased in traction force**
- **3% increased in boom lifting capacities**
- **3% increased in arm digging force***
- **3% increased in bucket digging force***

*compared to the conventional ZX450-3 / ZX450-3 family

*Power boost

Easy-to-Use Attachments

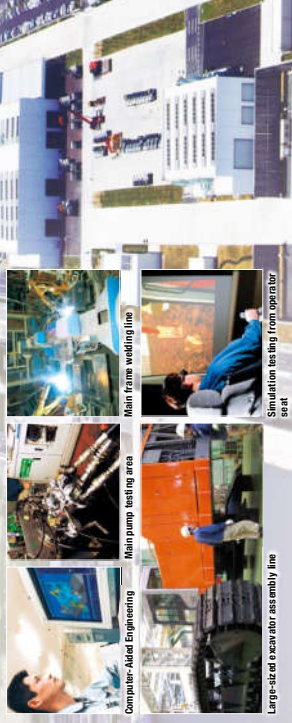
The operator can change over valves, adjust extra circuit flow, and check settings from the multifunction monitor next to the operator seat. What's more, 11 jobs, including flow rate setting, can easily be selected by their identified names.



Pursuits of Performance and Durability

Prestige R&D and Quality Control

Hitachi has earned praise for technological prowess and product performance around the world. R&D Division has a track record – including excellent design, stress analysis expertise using CAE system, and abundant production data base. What's more, a large-scale durability test field (427 hm²) allows for a series of stringent testing of new machines. Production Division strives to automatize production processes, including robotic welding, machining, painting, assembling and transferring.



Computer-aided engineering

Main pump testing area

Main frame welding line

Large-scale excavator assembly line

Durable, Reliable Engine

This engine has a track record showing impressive durability at countless tough job sites around the world.

The engine — associated with a rugged design, a direct fuel injection system and an elaborate governor — goes green, and complies with EU Stage II and US EPA Tier 2 emissions regulations.

A simple cooling system, consisting of a radiator and oil cooler, facilitates smooth cooling air flow for improved cooling efficiency. The combination of a 235 kW (315 HP) engine and the new HIOS III B hydraulic system meets requirements, in terms of both output and fuel consumption.



Rock-Solid, Durable Front Attachment

The new ZAXIS adopts the boom and arm used for heavy-duty versions of the conventional ZAXIS series to the ZX470-5G/ZX470LC-5G standard models to increase the strength, allowing it to function optimally at tough job sites such as mines / quarries, where an endless stream of operations are required. It also has a wide applicable scope by using a bucket for civil engineering work or one for quarrying, depending on the intended use.

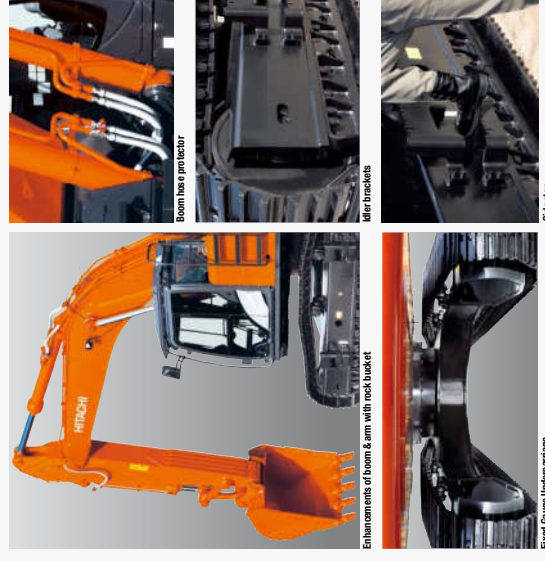
The arm cylinder, boom cylinders and bucket cylinder for the retract side cushion shocks at the stroke ends to reduce noise and extend the service life.

Strengthened Fixed Gauge Undercarriage

The new undercarriage is an integral construction, the track center and side frame of which are welded together. The lower center of gravity of the body improves stability. For idler brackets, where stress is concentrated in transit, the box-structure and reinforcing plates limit deformation and enhance travel stability. An enhanced two-step side step ladder is also provided to facilitate entering/alighting from the cab.

Proven Upperstructure

The upperstructure frame is reinforced with the proven D-section skirt to increase rigidity against damage by obstacles. A large door catch is added to reduce shocks and jolts of the cab and upperstructure.



Boom & arm

Undercarriage

Upperstructure

Side step

Enhancements of boom & arm with rock bucket

Fixed Gauge Undercarriage

No Compromise on Operator Comfort

Comfortable Operating Environment

You'll feel comfortable and confident, with plenty of leg space and excellent visibility when entering the cab. The new compact console gives more leg space. The new door pillar is shifted rearward by 70 mm to widen an entry space for easy access. A new LED room light, interlocked with the door, turns on when the door opens. The front window is easily removed and stored overhead using slide rails (ZX470(LC)-SG only). The overhead window is openable for ventilation. Lots more air vents for air conditioner are located strategically for uniform air circulation inside the cab. The control panel and control levers are arranged within easy reach of the operator. AM/FM radio and AUX port (optional) for a mobile music player are available for a long work day with less fatigue. All these designs focus on operator comfort.

Comfort-Designed Operator Seat

The luxury cloth seat is fitted with a headrest and arm rests for operator comfort. The seat can be adjusted in multiple ways, sliding and reclining, to suit operator's size and preferences. The seat can slide rearward by 40 mm more for added leg space. An air suspension with a heat pad is optional.

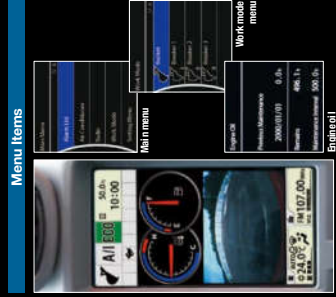
Robust Cab

The robust cab, meeting the OPG (Top Guard Level 1*), protects the operator from falling objects. The pilot control shut-off lever is provided with the neutral engine start system that permits engine starting only when the pilot control shut-off lever is in Lock position. The engine is lockable by entering a password through the 10-key panel.

*The H-series complies with Top Guard Level II.

New, Easy-to-Use Multifunction Monitor

The new multi-language, multifunction monitoring system is composed of a 7-inch high-resolution color monitor and a multifunction controller. The monitor allows the operator to check varying operating variables: oil temperature, fuel level, work mode, full-auto air conditioner, AM/FM radio, rear view monitor camera (optional), maintenance support, and attachment flow adjustment. Menu items can be selected and adjusted by a multifunction controller on the control panel. A new rear view monitor camera always displays the view behind the machine.



The photo shows an optional air suspension seat.



Simplified Maintenance



Grouped Remote Inspection Points

Inspection points are concentrated inside left and right covers that are readily accessible from ground level for convenient servicing and inspection, including water draining from the fuel tank, replenishment of filters. A lid behind the cab door is available for easy replacement of the air conditioner filters for fresh air.

Easy-Access to the Upperstructure

A large sidewalk is provided on the left side of the cab, making it easy to access the engine from the ladder while handrails are provided and sufficient slip-resistant plates for safety.



Inspection points on the left cover



Inspection points on the right cover



Centralized boom and arm greasing points



Electric grease gun with hose-reel (optional)



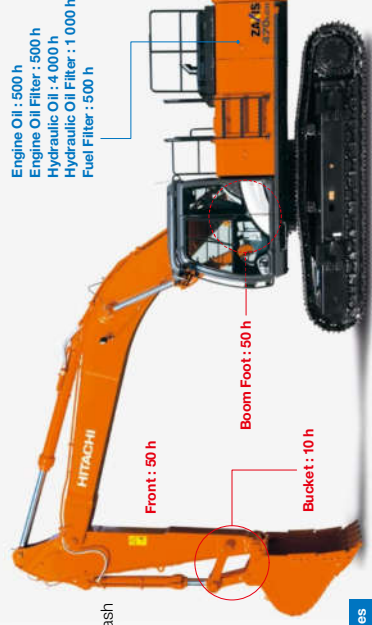
Sidewalk

Low Life Cycle Costs

Service intervals are long enough to slash maintenance costs.

705 L Large Capacity Fuel Tank

Equipped with a large capacity fuel tank for longer operations.



Note: Periodic inspection is required to check oil contamination and levels.

Lubricant Consumables

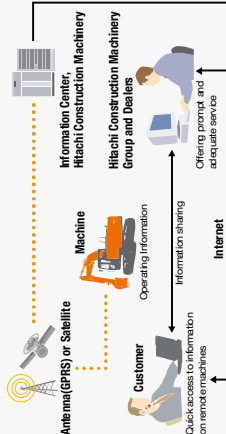
Hitachi Support Chain

Hitachi Support Chain is a full customer support system offered after buying a Hitachi machine.

Remote Fleet Management with Global e-Service

Easy Access to On-Site Machines through the Internet

This on-line fleet management system allows you to access each on-site machine from a PC in your office. You can get its operating information and location to increase productivity of the fleet and reduce downtime. Operating data and log are sent to a Hitachi server for processing, and then to customer and dealers around the world. This system is available 24 hours a day, all the year around.



Note: In Some Regions, Global e-Service is Not Available by Local Regulations.

Main Features of Global e-Service

Functions

Global e-Service provides easy access to a machine on site, conveying operating information and log, including daily operating hours, fuel level, temperatures, pressures, and likes.

Maintenance

Maintenance data and log are displayed on a easy-to-read monitor screen, suggesting recommended maintenance for efficient fleet management.



Parts and Service

Hitachi full customer support is available every area on the globe for full customer satisfaction through Hitachi local dealers.

Parts

Hitachi Global Online Network, a parts supply system, is linked with Japan Parts Center, overseas depots and over 150 dealers abroad to deliver on-line parts information, including in-stock parts, order receptions, shipments and delivery period of over one million parts and components.

Genuine Hitachi Parts

Genuine Hitachi parts, meeting Hitachi stringent quality standards, are guaranteed according to Hitachi warranty standards. The use of genuine Hitachi parts, including engine, fuel, hydraulic oil and filters, may slash running costs, and extend machine life.

Ground Engaging Tools (GETs)

Hitachi provides an array of Hitachi Ground Engaging Tools developed and built for a variety of applications.

Using high-quality, well-maintained GETs will help you get customers' trust.

Note: Some dealers do not handle Hitachi GETs.

Remanufactured Components

Hitachi components are remanufactured according to the stringent remanufacturing standards at four factories around the world. They have high quality equivalent to new ones, and backed up by Hitachi warranty system.

Note: Some dealers do not handle Hitachi Remanufactured Components.

Service

Extended Warranty — HELP

Hitachi Standard Warranty System is available on all new Hitachi machines. In addition, Hitachi offers Hitachi Extended Life Programs (HELPS) to suit customer expectations —

SPECIFICATIONS

ENGINE	
Model	Isuzu AA-6WG1TQA
Type	4-cycle water-cooled, direct injection
Aspiration	Turbocharged
No. of cylinders	6
Rated power	
ISO 9249, net	H/P mode:
(With Fan)	235 kW (315 HP) at 1 800 min ⁻¹ (rpm)
SAE J1349, net	H/P mode:
(With Fan)	231 kW (310 HP) at 1 800 min ⁻¹ (rpm)
Maximum torque	1 275 Nm (130 kgf m) at 1 500 min ⁻¹ (rpm)
Piston displacement	15,681 L
Bore and stroke	147 mm x 154 mm
Batteries	2 x 12 V / 170 Ah

HYDRAULIC SYSTEM

Hydraulic Pumps

Main pumps	2 variable displacement axial piston pumps
Maximum oil flow ..	2 x 360 L/min
Pilot pump	1 gear pump
Maximum oil flow ..	30 L/min

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/cm ²)
Swing circuit	28.4 MPa (290 kgf/cm ²)
Travel circuit	35.3 MPa (360 kgf/cm ²)
Pilot circuit	3.9 MPa (40 kgf/cm ²)
Power boost	35.3 MPa (360 kgf/cm ²)

Hydraulic Cylinders

	Quantity	Bore	Rod diameter
Boom	2	170mm	115 mm
Arm	1	190mm	130 mm
Bucket	1	170mm	120 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 parking brake is spring-set/hydraulic-released disc type.

Swing speed 9.0 min⁻¹ (rpm)

Operator's Cab

ZX470-5g / ZX470LC-5g:

Independent spacious cab, 1 025 mm wide by 1 675 mm high.
The OPG top guard fitted Level I conforms to the related requirements of the International Organization Standardization (ISO) 10262.

ZX470H-5g / ZX470L CH-5g (H/R cab):

Independent spacious cab, 1 025 mm wide by 1 817 mm high.
The OPG top guard fitted Level II conforms to the related requirements of the International Organization Standardization (ISO) 10262.

UNDERCARRIAGE

Tracks

Track shoes with triple grouserers made of induction-hardened rolled alloy.
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	2
Lower rollers	8: ZX470-5g / ZX470H-5g 9: ZX470LC-5g / ZX470LCH-5g 49: ZX470-5g / ZX470H-5g 53: ZX470LC-5g / ZX470LCH-5g
Track shoes	1: ZX470-5g / ZX470LC-5g 2: ZX470-5g
Idler track guard	1: ZX470-5g / ZX470LC-5g
Track guard	2: ZX470LC-5g

Full track guard : ZX470H-5g / ZX470LCH-5g

Travel Device

Each track driven by axial piston motor through reduction gear for counterrotation of the tracks. Parking brake is spring-set/hydraulic-released disc type.

Automatic transmission system: High-Low.

Travel speeds

High : 0 to 5.1 km/h
Low : 0 to 3.8 km/h

Maximum traction force .. 329 kN (33 600 kgf)

Gradeability 70% (35 degree) continuous

SERVICE REFILL CAPACITIES

Fuel tank	705.0 L
Engine coolant	61.0 L
Engine oil	55.0 L
Swing device (each side)	6.5 L
Travel device (each side)	11.0 L
Hydraulic system	510.0 L
Hydraulic oil tank	310.0 L

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

Shoe type	Shoe width	Boom type	Arm type	ZX470-5g		ZX470LC-5g		ZX470H-5g		ZX470LCH-5g	
				kg	kPa (kgf/cm ²)	kg	kPa (kgf/cm ²)	kg	kPa (kgf/cm ²)	kg	kPa (kgf/cm ²)
Triple or double grouser	600 mm	Bucket capacity 6.3 m BE 2.5 m BE	1.9 m ³ 2.5 m ³	45 600	65 (0.87)	46 800	79 (0.81)	46 700	87 (0.89)	47 800	81 (0.83)
				46 000	86 (0.87)	47 400	80 (0.82)	—	—	48 300	82 (0.84)
				46 300	69 (0.70)	47 600	65 (0.66)	—	—	2.5 m ² Rock bucket	—
Triple grouser	750 mm	Bucket capacity 6.3 m BE 2.5 m BE	1.9 m ³ 2.5 m ³	46 700	70 (0.71)	48 100	65 (0.67)	—	—	—	—
				—	—	2.65 m ³	—	—	—	—	—

BUCKET LIST

ZX470-5g

Capacity	ISO heaped	Width		No. of teeth	Weight	Recommendation					
		Without side cutters	With side cutters			2.5 m BE-arm	6.3 m BE-boom	2.9 m BE-arm	3.4 m H-arm	7.0 m H-boom	4.9 m arm
1.15 m ³	1 100 mm	1 210 mm	5	1 070 kg	—	x	x	x	x	x	○
1.40 m ³	1 280 mm	1 410 mm	5	1 170 kg	—	x	x	x	x	x	○
1.60 m ³	1 220 mm	1 360 mm	5	1 480 kg	—	—	—	—	—	—	x
1.90 m ³	1 400 mm	1 540 mm	5	1 590 kg	—	—	—	—	—	—	○
2.10 m ³	1 490 mm	1 630 mm	5	1 650 kg	—	—	—	—	—	—	x
2.30 m ³	1 520 mm	1 660 mm	5	1 800 kg	—	—	—	—	—	—	x
2.50 m ³	1 630 mm	1 770 mm	5	1 870 kg	—	—	—	—	—	—	x
2.65 m ³	1 720 mm	1 860 mm	5	1 830 kg	—	—	—	—	—	—	x

Applicable shoe type

600 mm Triple grouser or double grouser	750 mm Triple grouser
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ZX470LC-5g

Capacity	ISO heaped	Width		No. of teeth	Weight	Recommendation					
		Without side cutters	With side cutters			2.5 m BE-arm	6.3 m BE-boom	2.9 m BE-arm	3.4 m H-arm	7.0 m H-boom	8.2 m boom
1.15 m ³	1 100 mm	1 210 mm	5	1 070 kg	—	x	x	x	x	x	○
1.40 m ³	1 280 mm	1 410 mm	5	1 170 kg	—	x	x	x	x	x	○
1.60 m ³	1 220 mm	1 360 mm	5	1 480 kg	—	—	—	—	—	—	x
1.90 m ³	1 400 mm	1 540 mm	5	1 590 kg	—	—	—	—	—	—	x
2.10 m ³	1 490 mm	1 630 mm	5	1 650 kg	—	—	—	—	—	—	x
2.30 m ³	1 520 mm	1 660 mm	5	1 800 kg	—	—	—	—	—	—	x
2.50 m ³	1 630 mm	1 770 mm	5	1 870 kg	—	—	—	—	—	—	x
2.65 m ³	1 720 mm	1 860 mm	5	1 830 kg	—	—	—	—	—	—	x

Applicable shoe type

600 mm Triple grouser or double grouser	750 mm Triple grouser
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ZX470H-5g/ZX470LCH-5g

Capacity	ISO heaped	Width		No. of teeth	Weight	Recommendation					
		Without side cutters	With side cutters			2.5 m BE-arm	6.3 m BE-boom	2.9 m BE-arm	3.4 m H-arm	7.0 m H-boom	8.2 m H-boom
1.15 m ³	1 100 mm	1 210 mm	5	1 070 kg	—	x	x	x	x	x	○
1.40 m ³	1 280 mm	1 410 mm	5	1 170 kg	—	x	x	x	x	x	○
1.60 m ³	1 220 mm	1 360 mm	5	1 480 kg	—	—	—	—	—	—	x
1.90 m ³	1 400 mm	1 540 mm	5	1 590 kg	—	—	—	—	—	—	x
2.10 m ³	1 490 mm	1 630 mm	5	1 650 kg	—	—	—	—	—	—	x
2.30 m ³	1 520 mm	1 660 mm	5	1 800 kg	—	—	—	—	—	—	x
2.50 m ³	1 630 mm	1 770 mm	5	1 870 kg	—	—	—	—	—	—	x
2.65 m ³	1 720 mm	1 860 mm	5	1 830 kg	—	—	—	—	—	—	x

Applicable shoe type

600 mm Triple grouser or double grouser	750 mm Triple grouser
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● Heavy-duty service

○ Suitable for material with density of 1 600 kg / m³ or less

● Suitable for material with density of 1 800 kg / m³ or less

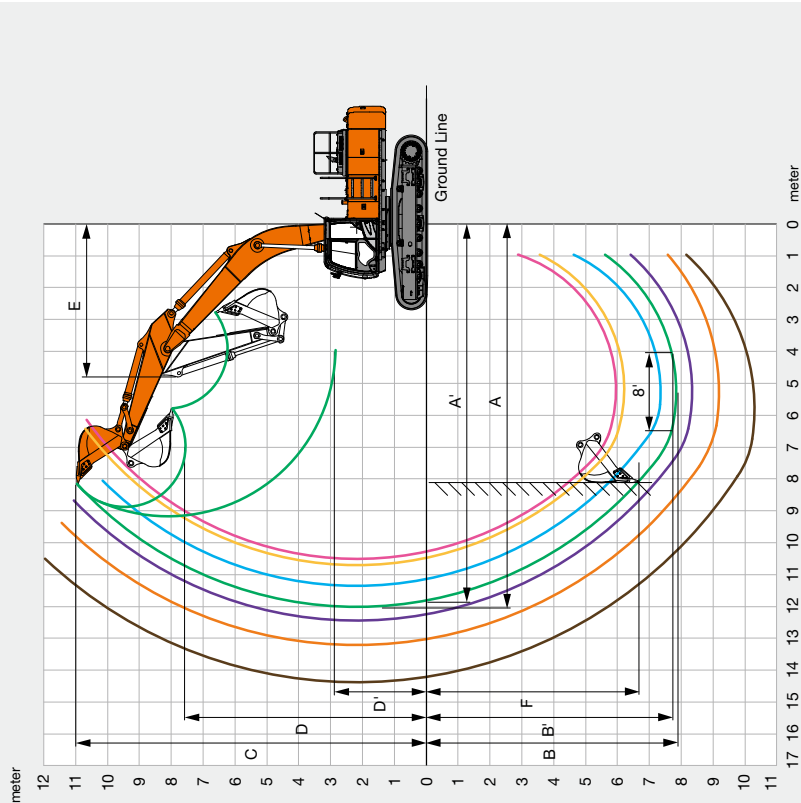
— Not applicable

x Can't be installed

SPECIFICATIONS

WORKING RANGES

ZX470-5g / ZX470LC-5g

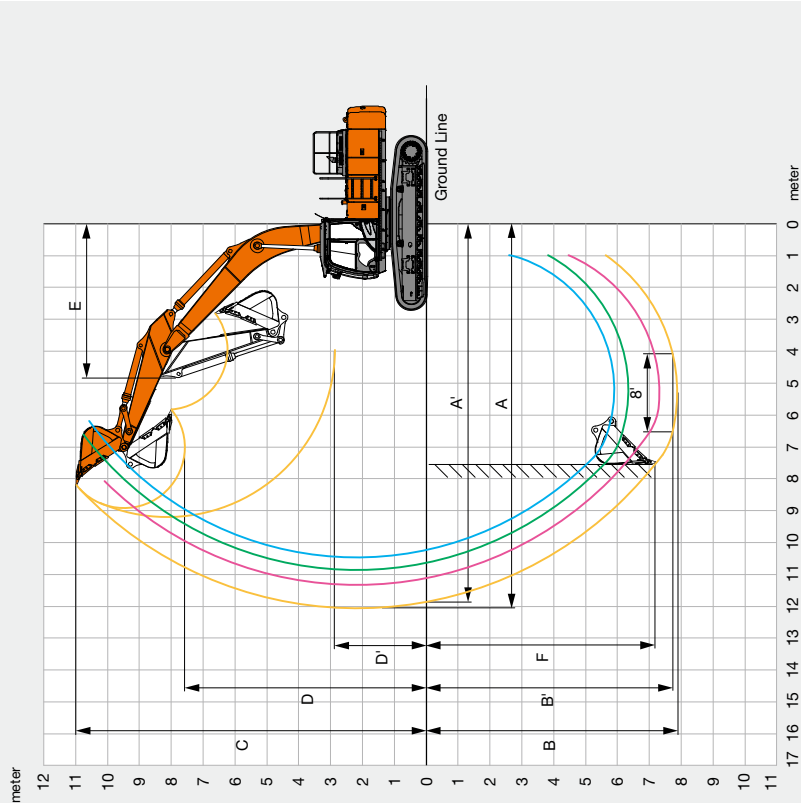


Arm length	ZX470-5g / ZX470LC-5g				ZX470LC-5g	
	6.3 m BE-boom	7.0 m H-boom	7.0 m H-boom	8.2 m Boom	8.2 m Boom	4.9 m Arm
A Max. digging reach	10 460 / 10 550	10 850 / 10 750	11 400 / 11 400	12 060 / 12 060	12 480 / 12 480	13 260 / 13 260
A' Max. digging reach (on ground)	10 240 / 10 320	10 640 / 10 520	11 200 / 11 220	11 860 / 11 860	12 300 / 12 290	13 080 / 13 070
B Max. digging depth	5 920 / 5 960	6 350 / 6 210	7 400 / 7 360	7 890 / 7 850	8 390 / 8 350	9 230 / 9 190
B' Max. digging depth (8' level)	5 740 / 5 780	6 200 / 6 050	7 200 / 7 160	7 750 / 7 710	8 270 / 8 230	9 110 / 9 070
C Max. cutting height	10 530 / 10 660	10 760 / 10 710	10 130 / 10 170	10 920 / 10 960	11 040 / 11 080	11 420 / 11 460
D Max. dumping height	7 190 / 7 160	7 210 / 7 360	6 900 / 6 910	7 530 / 7 570	7 650 / 7 690	8 390 / 8 430
D' Min. dumping height	3 550 / 3 510	3 030 / 3 170	3 320 / 3 330	2 820 / 2 860	2 320 / 2 360	1 490 / 1 530
E Min. swing radius	3 930 / 3 930	3 920 / 3 920	5 020 / 5 020	4 840 / 4 840	4 810 / 4 810	4 850 / 4 850
F Max. vertical wall	4 380 / 4 230	5 150 / 4 740	5 390 / 4 780	6 710 / 6 670	7 100 / 7 060	8 470 / 8 430

Excluding track shoe lug

WORKING RANGES

ZX470H-5g / ZX470LCH-5g

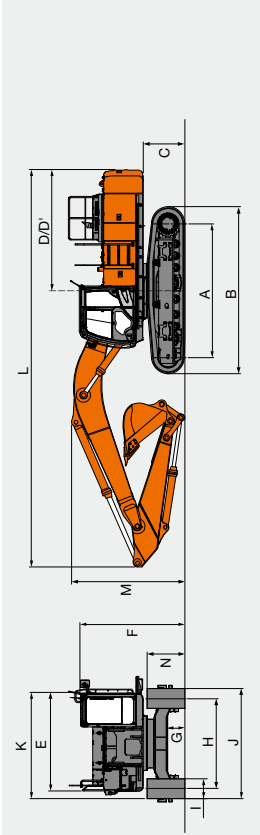


Arm length	ZX470H-5g		ZX470LCH-5g			
	2.9 m BE-arm	3.4 m H-arm	6.3 m BE-boom	2.9 m BE-arm	2.9 m BE-arm	3.4 m H-arm
A Max. digging reach	11 330	12 060	10 460	10 750	11 330	12 060
A' Max. digging reach (on ground)	11 120	11 860	10 230	10 630	11 110	11 860
B Max. digging depth	7 330	7 900	5 880	6 220	7 290	7 860
B' Max. digging depth (8' level)	7 130	7 760	5 710	6 060	7 090	7 720
C Max. cutting height	10 040	10 920	10 570	10 700	10 080	10 960
D Max. dumping height	6 970	7 520	7 230	7 350	7 010	7 560
D' Min. dumping height	3 390	2 810	3 580	3 160	3 430	2 850
E Min. swing radius	5 020	4 840	4 090	3 930	5 020	4 840
F Max. vertical wall	4 400	7 230	4 350	4 740	4 360	7 190

Excluding track shoe lug

SPECIFICATIONS

DIMENSIONS



		Unit: mm	
Fixed gauge		ZX470LC-5g	ZX470H-5g
A	Distance between lumbars	4 040	4 040
B	Undercarriage length	5 040	5 040
*C	Counterweight clearance	1 230	1 270
D	Rear-end swing radius	3 670	3 670
D'	Rear-end length	3 660	3 660
E	Overall width upperstructure	3 480	3 480
F	Overall height of cab	3 170	3 280
*G	Mn. ground clearance	495	495
H	Track gauge	2 740	2 740
I	Track shoe width	600 / 750	600
J	Undercarriage width	3 340	3 340
	with 600 mm shoe	3 490	—
	with 750 mm shoe	3 820	3 820
K	Overall width	3 820	12 050
L	Overall length	12 050	12 040
M	Overall height of boom	4 660	3 740
N	Track height	1 150	1 150

*1 Excluding track shoe lug

BUCKET AND ARM DIGGING FORCES

ZX470-5g / ZX470LC-5g

	ZX470-5g / ZX470LC-5g					
	6.3 m BE-boom		7.0 m H-boom			
	2.5 m BE-arm	2.9 m BE-arm	2.9 m BE-arm	3.4 m H-arm	3.9 m arm	4.9 m arm
Bucket digging force* ISO	285 kN (29 130 kgf)	285 kN (29 130 kgf)	285 kN (29 130 kgf)	286 kN (29 230 kgf)	286 kN (29 230 kgf)	239 kN (24 290 kgf)
Bucket digging force* SAE : PCSA	287 kN (26 240 kgf)	287 kN (26 240 kgf)	287 kN (26 240 kgf)	286 kN (26 140 kgf)	286 kN (26 140 kgf)	219 kN (21 720 kgf)
Arm crowd force* ISO	294 kN (30 050 kgf)	293 kN (26 140 kgf)	293 kN (26 140 kgf)	222 kN (22 640 kgf)	201 kN (20 480 kgf)	177 kN (18 110 kgf)
Arm crowd force* SAE : PCSA	285 kN (29 130 kgf)	248 kN (26 420 kgf)	292 kN (25 730 kgf)	215 kN (21 920 kgf)	196 kN (19 970 kgf)	175 kN (17 800 kgf)

ZX470H-5g / ZX470LCH-5g

	ZX470H-5g		ZX470LCH-5g			
	7.0 m H-boom		7.0 m H-boom			
	2.9 m BE-arm	3.4 m H-arm	2.5 m BE-arm	2.9 m BE-arm	2.9 m BE-arm	3.4 m H-arm
Bucket digging force* ISO	295 kN (30 150 kgf)	296 kN (30 260 kgf)	295 kN (30 150 kgf)	295 kN (30 150 kgf)	295 kN (30 150 kgf)	296 kN (30 260 kgf)
Bucket digging force* SAE : PCSA	266 kN (27 070 kgf)	257 kN (26 240 kgf)	266 kN (27 070 kgf)	266 kN (27 070 kgf)	266 kN (27 070 kgf)	257 kN (26 240 kgf)
Arm crowd force* ISO	263 kN (26 860 kgf)	224 kN (22 850 kgf)	302 kN (30 770 kgf)	283 kN (28 860 kgf)	263 kN (26 860 kgf)	224 kN (22 850 kgf)
Arm crowd force* SAE : PCSA	256 kN (26 140 kgf)	215 kN (21 920 kgf)	294 kN (30 050 kgf)	256 kN (26 140 kgf)	256 kN (26 140 kgf)	215 kN (21 920 kgf)

*At power boost

LIFTING CAPACITIES (Without bucket)

- Notes: 1. Ratings are based on ISO 10567.
2. Lifting 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 lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.

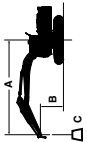


Conditions	Load point height m	Load radius m						At max. reach		
		3.0		4.5		6.0		7.5		9.0
		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
H-Boom 7.0 m G-Arm 3.4 m Counterweight 9 080 kg Shoe 600 mm	7.5 6.0 4.5 3.0 1.5 0 (Ground)			*20 430 *24 960 *15 820 *18 160 *25 000	*20 430 *19 930 *15 420 *17 400 *25 000	*15 620 *13 810 *19 460 *20 170 *19 860	*12 160 *13 190 *14 560 *14 910 *14 300	*10 300 *10 050 *9 640 *9 180 *8 320	*7 710 *7 570 *7 240 *7 000 *6 600	*7 710 *7 570 *7 240 *7 000 *6 600
H-Boom 7.0 m G-Arm 2.9 m Counterweight 9 080 kg Shoe 600 mm	7.5 6.0 4.5 3.0 1.5 0 (Ground)			*22 080	*20 220	*14 460 *13 240 *19 470 *20 840 *19 810	*12 760 *13 240 *14 760 *15 140 *14 970	*9 890 *9 480 *9 060 *8 580 *7 720	*7 140 *6 820 *6 400 *6 220 *5 360	*7 140 *6 820 *6 400 *6 220 *5 360
BE-Boom 6.3 m G-Arm 2.9 m Counterweight 9 080 kg Shoe 600 mm	7.5 6.0 4.5 3.0 1.5 0 (Ground)			*17 910	*20 920 *22 810 *22 660 *26 050 *29 020	*14 790 *16 480 *20 010 *20 580 *19 860	*13 960 *15 560 *16 170 *17 340 *17 550	*9 980 *9 690 *9 170 *8 500 *7 910	*9 010 *8 610 *8 200 *7 630 *7 060	*9 010 *8 610 *8 200 *7 630 *7 060
BE-Boom 6.3 m G-Arm 2.5 m Counterweight 9 080 kg Shoe 600 mm	7.5 6.0 4.5 3.0 1.5 0 (Ground)				*20 830	*14 650 *15 390 *16 930 *20 010 *19 370	*14 460 *14 100 *13 410 *12 640 *11 680	*9 780 *9 520 *9 150 *8 530 *8 620	*11 740 *11 860 *12 000 *12 536 *12 460	*11 740 *11 860 *12 000 *12 536 *12 460

Conditions	Load point height m	Load radius m						At max. reach		
		3.0		4.5		6.0		7.5		9.0
		⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡	⚡
H-Boom 7.0 m H-Arm 3.4 m Counterweight 9 080 kg Shoe 600 mm	7.5 6.0 4.5 3.0 1.5 0 (Ground)			*20 300 *24 860 *15 450 *18 020 *24 770	*20 300 *18 540 *15 450 *16 970 *23 750	*15 560 *13 260 *18 150 *17 670 *17 480	*11 550 *13 150 *12 960 *12 540 *12 480	*10 090 *9 840 *9 440 *8 970 *8 150	*7 710 *7 570 *7 250 *7 070 *6 830	*7 710 *7 570 *7 250 *7 070 *6 830
	-1.5 -3.0 -4.5	*12 850 *21 230 *25 030	*12 850 *21 230 *25 030	*19 990	*17 530	*15 800	*11 900	*8 400	*10 150	*6 700











LIFTING CAPACITIES (Without bucket)

- Notes: 1. Ratings are based on ISO 10567.
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm.
3. The load point is 8% full hydraulic capacity.
4. * Indicates load limited by hydraulic capacity.
5. 0 m = Ground.
- For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.



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

ZX470LCH-5G

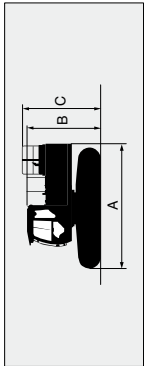
Conditions	Load point height m	Loadradius m										Amx.reach		
		3.0	4.5	6.0	7.5	9.0								
												meter		
H-Boom 7.0 m	7.5											7.710	8.64	
H-Arm 3.4 m	6.0											7.570	6.950	9.41
Counterweight	4.5											7.660	6.860	9.89
0 (Ground)	3.0											7.100	5.990	10.11
Shoe 600 mm	1.5											8.520	7.560	10.11
	-1.5											9.410	5.960	9.91
	-3.0											10.740	6.230	9.45
	-4.5											11.830	7.020	8.70
H-Boom 7.0 m	7.5											11.480	8.640	7.59
BE-Arm 2.9 m	6.0											11.030	7.860	8.68
Counterweight	4.5											11.410	6.980	9.20
0 (Ground)	3.0											11.040	6.510	9.46
Shoe 600 mm	1.5											10.850	6.350	9.47
	-1.5											11.140	6.470	9.23
	-3.0											12.030	6.950	8.73
	-4.5											12.920	8.010	7.92
BE-Boom 6.3 m	7.5											12.470	10.300	6.67
BE-Arm 2.5 m	6.0											11.890	9.400	7.73
Counterweight	4.5											12.000	8.170	8.31
0 (Ground)	3.0											12.550	7.560	8.59
Shoe 600 mm	1.5											12.640	7.380	8.60
	-1.5											13.110	7.600	8.34
	-3.0											14.110	8.350	7.78
	-4.5											13.670	10.100	6.85

ZX470H-5G

Conditions	Load point height m	Load radius m										At max. reach		
		3.0	4.5	6.0			7.5	9.0		reach	weight	meter		
H-Boom 7.0 m	7.5													
H-Arm 3.4 m	6.0													
Counterweight	4.5													
0 (Ground)	3.0													
Shoe 600 mm	1.5													
	0 (Ground)													
	-3.0													
	-4.5													

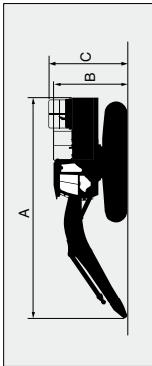
TRANSPORTATION

BASIC MACHINE (WITHOUT COUNTERWEIGHT)



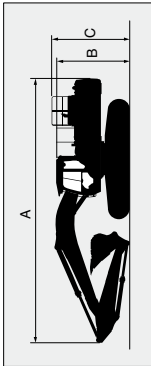
Fixed gauge	Shoe type	Shoe width	Overall width	Weight	A	B	C
ZX470-5G	Triple or double grouser	600 mm	3 340 mm	26 900 kg	5 470 mm	3 200 mm	3 540 mm
	Triple grouser	750 mm	3 490 mm	27 700 kg			
ZX470LC-5G	Triple or double grouser	600 mm	3 340 mm	28 100 kg	5 690 mm	3 240 mm	3 580 mm
	Triple grouser	750 mm	3 490 mm	28 900 kg			
ZX470H-5G	Triple or double grouser	600 mm	3 340 mm	27 500 kg	5 470 mm	3 320 mm	3 540 mm
ZX470LCH-5G	Triple or double grouser	600 mm	3 340 mm	28 700 kg	5 690 mm	3 380 mm	3 580 mm

BASIC MACHINE FITTED WITH BOOM AND NO SIDEWALK



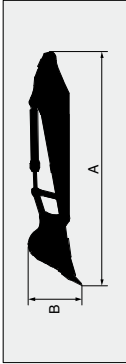
Fixed gauge	Boom length	Shoe type	Shoe width	Overall width	Weight	A	B	C
ZX470-5G	6.3 m BE	Triple or double grouser	600 mm	3 340 mm	32 300 kg	9 170 mm		
	70 m H	Triple or double grouser	750 mm	3 490 mm	33 000 kg		3 200 mm	3 540 mm
ZX470LC-5G	6.3 m BE	Triple or double grouser	600 mm	3 340 mm	33 500 kg	9 170 mm		
	70 m H	Triple or double grouser	750 mm	3 490 mm	34 300 kg		3 240 mm	3 580 mm
ZX470H-5G	6.3 m BE	Triple or double grouser	600 mm	3 340 mm	33 500 kg	9 170 mm		
	70 m H	Triple or double grouser	750 mm	3 490 mm	34 300 kg		3 240 mm	3 580 mm
ZX470LCH-5G	6.3 m BE	Triple or double grouser	600 mm	3 340 mm	34 000 kg	11 130 mm		
	70 m H	Triple or double grouser	750 mm	3 490 mm	34 800 kg		3 380 mm	3 580 mm

BASIC MACHINE WITH FRONT AND SIDEWALK



Fixed gauge	Boom length	2.5 m BE	2.9 m BE	3.4 m H	7.0 m H	3.9 m	4.9 m	8.2 m
ZX470-5G	A	11 490 mm	11 300 mm	12 040 mm	12 040 mm	11 880 mm		
	B							
ZX470LC-5G	A	4 020 mm	4 200 mm	3 450 mm	3 480 mm	4 660 mm		
	B	11 490 mm	11 290 mm	12 070 mm	12 030 mm	11 900 mm		
ZX470H-5G	A	4 020 mm	4 120 mm	3 720 mm	3 470 mm	4 660 mm		
	B	11 490 mm	11 360 mm	12 030 mm				
ZX470LCH-5G	A	4 130 mm	3 880 mm	3 740 mm	3 450 mm			
	B							

ARM AND BUCKET



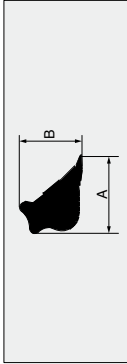
ZX470-5g / ZX470LC-5g

Arm	Bucket Capacity ISO heaped	A	B	Overall width	Weight
2.5 m BE	2.50 m³	5 760 mm	1 400 mm	1 770 mm	4 620 kg
2.9 m BE	2.30 m³	6 030 mm	1 340 mm	1 660 mm	4 350 kg
3.4 m H	1.90 m³	6 430 mm	1 270 mm	1 540 mm	4 150 kg
	2.10 m³	6 430 mm	1 270 mm	1 630 mm	4 210 kg
3.9 m	1.90 m³	6 930 mm	1 270 mm	1 540 mm	4 230 kg
4.9 m	1.40 m³	7 760 mm	1 170 mm	1 410 mm	3 720 kg

ZX470H-5g / ZX470LCH-5g

Arm	Bucket Capacity ISO heaped	A	B	Overall width	Weight
2.5 m BE	2.50 m³	5 650 mm	1 470 mm	1 820 mm	5 010 kg
2.9 m BE	2.30 m³	5 950 mm	1 460 mm	1 700 mm	4 800 kg
3.4 m H	1.90 m³	6 440 mm	1 300 mm	1 500 mm	4 630 kg

BUCKET



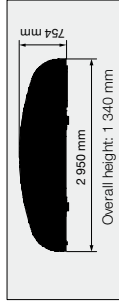
ZX470-5g / ZX470LC-5g (Hoe bucket)

Bucket Capacity ISO heaped	A	B	Overall width	Weight
1.15 m³	1 800 mm	1 350 mm	1 210 mm	1 070 kg
1.40 m³	1 800 mm	1 350 mm	1 410 mm	1 170 kg
1.60 m³	1 960 mm	1 570 mm	1 360 mm	1 480 kg
1.90 m³	1 960 mm	1 570 mm	1 540 mm	1 590 kg
2.10 m³	1 960 mm	1 570 mm	1 630 mm	1 650 kg
2.30 m³	1 950 mm	1 660 mm	1 660 mm	1 800 kg
2.50 m³	1 950 mm	1 660 mm	1 770 mm	1 870 kg
2.65 m³	1 950 mm	1 660 mm	1 860 mm	1 930 kg

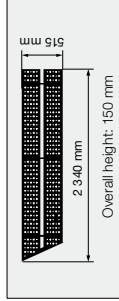
ZX470H-5g / ZX470LCH-5g (Rock bucket)

Bucket capacity ISO heaped	A	B	Overall width	Weight
1.90 m³	2 030 mm	1 480 mm	1 500 mm	2 070 kg
2.10 m³	1 950 mm	1 650 mm	1 580 mm	2 170 kg
2.30 m³	1 950 mm	1 650 mm	1 700 mm	2 260 kg
2.50 m³	1 950 mm	1 650 mm	1 820 mm	2 360 kg

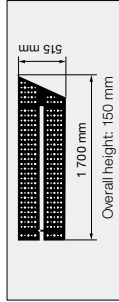
COUNTERWEIGHT 9 080 kg



LEFT FRONT SIDEWALK 44 kg



LEFT REAR SIDEWALK 30 kg



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

● : Standard equipment ○ : Optional equipment — : Not applicable

ENGINE	ZX470-5g	ZX470LC-5g	ZX470H-5g	ZX470LCH-5g
Auto idle system	●	●	●	●
Cartridge-type engine oil filter	●	●	●	●
Cartridge-type fuel filter	●	●	●	●
Dry-type air double filter with evacuator valve(with air filter restriction switch for monitor)	●	●	●	●
Fan guard	●	●	●	●
Fuel pre-filter	●	●	●	●
Power mood control [H/P (High Power) PWR(Power) ECO(Economy)]	●	●	●	●
Isolation-mounted engine	●	●	●	●
Pre-cleaner	○	○	○	○
Radiator, oil cooler with dust protective net	●	●	●	●
Radiator reserve tank	●	●	●	●
50 A alternator	●	●	●	●

HYDRAULIC SYSTEM				
Accessories for breaker	—	—	○	○
Accessories for breaker & crusher	—	—	○	○
Accessories for 2 speed selector	—	—	○	○
Auto power lift	●	●	●	●
Boom mode selector system	●	●	●	●
Control valve with main relief valve	●	●	●	●
Drain filter	●	●	●	●
Engine speed sensing system	●	●	●	●
E-P control system	●	●	●	●
Extra port for control valve	●	●	●	●
Full-flow filter	●	●	●	●
Hose rupture valve	○	○	○	○
Pilot filter	●	●	●	●
Power boost	●	●	●	●
Quick warm-up system for pilot circuit	●	●	●	●
Shockless valve in pilot circuit	●	●	●	●
Suction filter	●	●	●	●
Work mode selector	●	●	●	●

CAB				
Additional fuse box	●	●	●	●
Adjustable armrests	●	●	●	●
All-weather sound suppressed steel cab	●	●	●	●
AM-FM radio	●	●	●	●
Ashtray	●	●	●	●
Auto control air conditioner	●	●	●	●
Auto-idle selector	●	●	●	●
AUX terminal and storage	○	○	○	○
Cab : (Center pillar reinforced structure)	●	●	—	—
OPG top guard fitted Level I (ISO 10262) compliant cab	●	●	—	—
Round tempered glass (green color) front window	●	●	—	—

MONITOR SYSTEM				
Alarm buzzers: overhear, engine oil pressure	●	●	●	●
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, air filter restriction, work mode, etc	●	●	●	●
Display of meters: water temperature, hour, fuel rate, clock	●	●	●	●
Other displays: work mode, auto-idle, glow, operating conditions etc	●	●	●	●

EQUIPMENT

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

● : Standard equipment ○ : Optional equipment — : Not applicable

	ZX470-5G	ZX470LC-5G	ZX470H-5G	ZX470LCH-5G
LIGHTS				
2 working lights	●	●	●	●
2 cab lights	○	○	●	●
4 cab lights	○	○	○	○
Additional working lights (boom right side)	○	○	○	○

UPPER STRUCTURE				
Electric fuel refilling pump with auto stop	○	○	○	○
Auto-grease lubricator	○	○	○	○
Electrical grease pump with hose-reel	○	○	○	○
Fuel level float	●	●	●	●
Hydraulic oil level gauge	●	●	●	●
Ladder	●	●	●	●
Rear view camera	○	○	○	○
Rear view mirror(right & left side)	●	●	●	●
Side walk (cab side)	●	●	●	●
Swing parking brake	●	●	●	●
Tool box	●	●	●	●
Utility space	●	●	●	●
170 Ah batteries	●	●	●	●
2.3 mm thickness undercover	●	●	—	—
4.5 mm thickness undercover	—	—	●	●
9 080 kg counterweight	●	●	●	●

UNDERCARRIAGE				
Bolt-on sprocket	●	●	●	●
Full track guard	—	—	●	●
Hydraulic track adjuster	●	●	●	●
Idler track guard	●	●	—	—
Reinforced track links with pin seals	●	●	●	●
Travel motor covers	●	●	●	●
Travel parking brake	●	●	●	●
Track undercover	○	○	○	○
Upper and lower rollers	●	●	●	●
1 track guard (each side)	●	—	—	—
2 track guard (each side)	—	●	—	—
600 mm triple grouser shoes	●	●	●	●
600 mm double grouser shoes	○	○	○	○
750 mm shoe with standard track guard	○	○	—	—

Before using a machine with a satellite communication system, please make sure that the satellite communication system complies with local regulations, safety standards and legal requirements. If not so, please make modifications accordingly.

	ZX470-5G	ZX470LC-5G	ZX470H-5G	ZX470LCH-5G
FRONT ATTACHMENTS				
Attachment basic piping	○	○	○	○
Centralized lubrication system	●	●	●	●
Damage prevention plate and square bars	●	●	●	●
Dirt seal on all bucket pins	●	●	●	●
Flanged pin	●	●	●	●
Monolithically cast bucket link A	●	●	●	●
1.9 m³ (ISO heaped) bucket	●	○	—	—
2.1 m³ (ISO heaped) bucket	○	●	—	—
1.9 m³ (ISO heaped) rock bucket (with dual type side shrouds)	—	—	●	●
7.0 m H-boom and 3.4 m H-arm	●	●	●	●
6.3 m BE-boom	○	○	○	○
8.2 m boom	—	○	—	—
2.5 m BE-arm	○	○	○	○
2.9 m BE-arm	○	○	○	○
3.9 m arm	○	○	—	—
4.9 m arm	○	○	—	—
Reinforced weld link A	—	—	○	○
Reinforced link B	—	—	○	○

MISCELLANEOUS				
Anti-slip steps and handrails	●	●	●	●
Lockable fuel refilling cap	●	●	●	●
Lockable machine covers	●	●	●	●
Onboard information controller	●	●	●	●
Standard tool kit	●	●	●	●
Theft deterrent system	●	●	●	●
Travel direction mark on track frame	●	●	●	●

OTHERS				
Global e-service	●	●	●	●

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.