

# **ZAXIS470**



## **HYDRAULIC EXCAVATOR**

Model Code : ZX470-5G / ZX470LC-5G / ZX470H-5G / ZX470LCH-5G / ZX470LCR-5G

Engine Rated Power : 235 kW (315 HP)

Operating Weight : ZX470-5G : 45 800 kg / ZX470LC-5G : 47 000 kg

ZX470H-5G : 46 800 kg / ZX470LCH-5G : 47 900 kg

ZX470LCR-5G : 48 500 kg

Backhoe Bucket : ISO Heaped : 1.15 - 2.65 m<sup>3</sup>

# WALK AROUND

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#### Reduction in Fuel Consumption

The HIOS IIIB hydraulic system and engine control system achieves reduction in fuel consumption compared to conventional model.

#### Improved Arm Controllability

Newly adopted variable orifice of the swing circuit help ensure hydraulic oil can be effectively allocated and pressure loss can be reduced.

#### Added Durability

With a strengthened boom and arm, the new ZAXIS 470 can work for lengthy periods in rugged environments.

#### Smooth Operation

The power boosting pressure function was enhanced to increase basic performance.

#### Plenty of Leg Space

The compact console gives more leg space.

#### Rock-solid, durable front attachment

Internal welding and complete welding are performed to enhance the strength and durability of the boom. The thickness of the side frame of the arm is increased to enhance durability.

#### Focused on Safety

There are many handrails promoting safe machine inspections.

#### Ultimate Comfort

Lots more air vents for air conditioner are located strategically for uniform air circulation inside the cab.

#### Quick and Easy Service Access

The air conditioner condenser can be opened for easy cleaning. Inspection parts are conveniently located.



**ZAXIS** Empower your Vision.

# Performance

## Large production with less fuel

### Enhanced basic performance

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

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.

### Lower fuel with higher productivity

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 IIIB hydraulic system and engine control system, thereby reducing CO2 emissions.

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.



\* PWR mode vs. conventional mode's P mode

### Key features

- |  |   |
|--|---|
| ■ 8%* reduction in fuel consumption                  | ■ 3% increased in arm digging force**     |
| ■ 9% less fuel consumption in ECO mode (vs PWR mode) | ■ 3% increased in boom lifting capacities |
| ■ 3% increased in bucket digging force**             | ■ 3% increased in traction force          |
|  | ■ 8% increased in swing torque            |

(compared to the conventional ZX450-3 / ZX450-3F family)

\*\*At power boost

# Productivity

## Improved controllability

### Swift front movements with HIOS\*III Hydraulics

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

### Improved arm controllability

Improved arm controllability for level luffing and level crowding 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.

### 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.



\* Human & Intelligent Operation System

### Key features

- Operating speed increases with less fuel consumption
- Improved arm controllability

# Durability

## Reliability in the toughest conditions

### 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.

### Rock-solid, durable front attachment

**H-Boom**  
Internal welding and complete welding are performed to enhance the strength and durability of the boom. In addition, the single-plate structure of the boom end side plate, increased thickness of the boom end bushing, and other improvements enhance durability.

**H-Arm**  
The thickness of the side frame of the arm is increased to enhance durability. The arm bump prevention plate prevents the arm from deforming when digging and loading limestone and crushed rock.

### Improved cooling efficiency

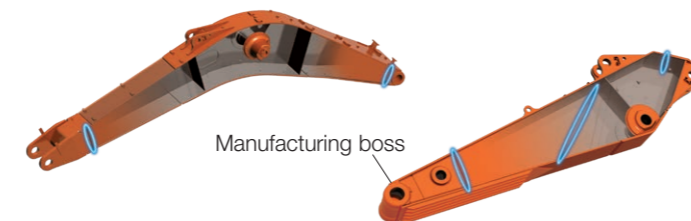
A simple cooling system, consisting of a radiator and oil cooler, facilitates smooth cooling air flow for improved cooling efficiency.

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.

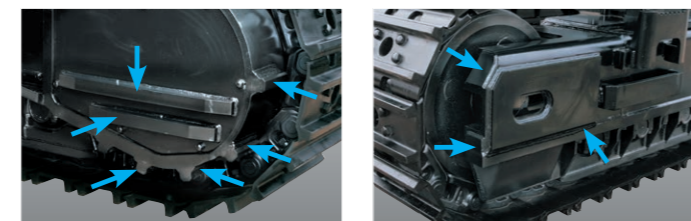
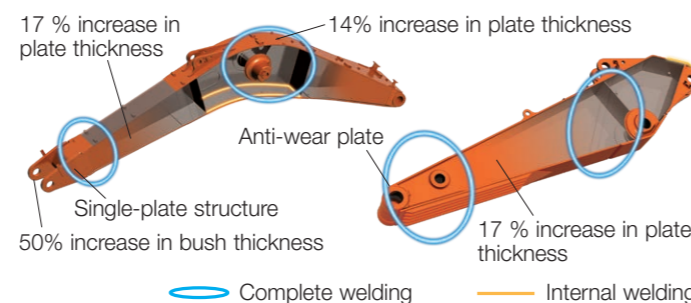
### Tougher undercarriage for rocky ground Condition (ZX470LCR-5G)

The reinforced travel motor cover with square bars and reinforced travel guard protect travel motor from damage by stone projectiles. Rigid structure of side frame withstands frequent shock caused by rock hitting. Track under cover (Optional) protects travel pipings and hoses. Full track guards protect track links and lower rollers from damage and deformation. Moreover, they also keep out stones, preventing overload to the undercarriage to reduce wear and damage.

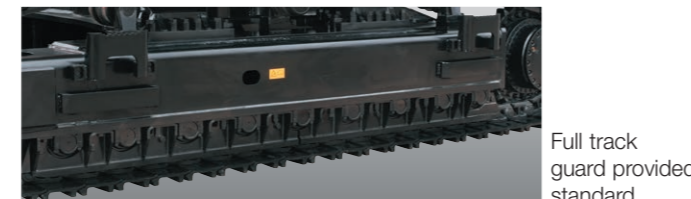
### Conventional ZX470H-5G / ZX470LCH-5G



### ZX470H-5G / ZX470LCH-5G



Reinforced travel motor cover and guard Reinforced idler part of side frame guard



Full track guard provided standard

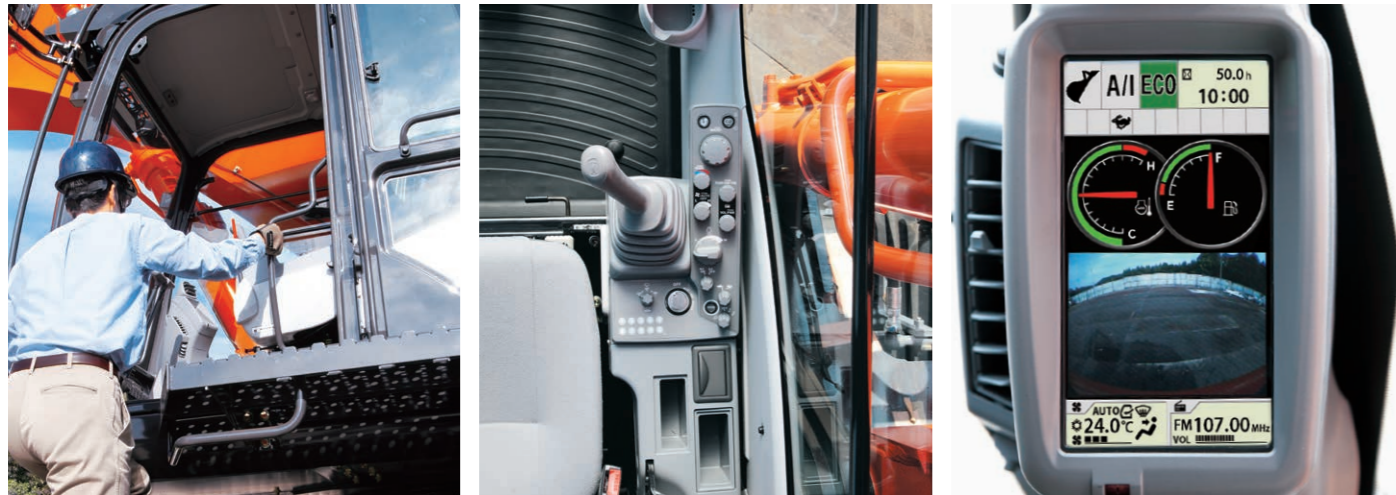
## Key features

- 235 kW (315 HP) engine
- Damage prevention plate and 5 square bars
- Boom hose protector
- Reinforced upperstructure frame with proven D-section skirt
- More complete welding parts on front attachment



# Comfort

## No compromise 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 II\*), protects the operator from falling objects.

### Pilot control shut-off lever

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.

### Easy-to-use multifunction monitor

The 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: hydraulic 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.

### Enjoy your work

FM/AM radio and AUX port (optional) for a mobile music player are available for a long work day with less fatigue.

## Key features

- 7-inch high-resolution color monitor and a multifunction
- Engine is lockable by entering a password through the 10-key panel
- Openable overhead window for ventilation
- Larger leg Space

- New LED room light
- Low vibration with fluid-filled elastic mounts
- Large utility space
- Drink holder and hot & cool box

# Maintenance

## Easily accessible features keep your machine working longer

### Easy access to 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.

### Fast lubrication

The arm and boom have their own centralized greasing points for fast lubrication. An optional electric grease gun with hose-reel or an auto-grease lubricator is also available for faster greasing / lubrication.

### Easy access to 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.



## Key features

- Easy replacement of the air conditioner filters
- Easy replacement of water separator
- Easy to drain from fuel tank

- Convenient with large side walk
- 3-Steps Ladder
- Plenty handrails



## A remote fleet monitoring system to improve overall performance

### ConSite

Our ConSite Data Report Service sends you a monthly email to summarise the information available on Global e-Service for each of your Hitachi machines. It includes a detailed analysis of operational data, ratios and hours, so you can see how productive and efficient your machines have been in the past month. All the information from the report is stored in the Owner's Site as well, for easy reference.

Further into the ConSite Report, you'll see non-operation and swing efficiency ratings and ratios. These compare the machine's performance against the same model class from all Hitachi owners in your region.

The monthly and total number of hours are divided for front, swing, travel and attachment operations. This will help you to determine the actual usage of your machine and maintenance planning.

The monthly analysis of these variables is compared to the total lifetime of the machine in a user-friendly chart. A line graph shows the actual and projected number of hours, which helps you to manage maintenance requirements.

ConSite can also help you in the unlikely event of a fault. It will send you and your authorised Hitachi dealer an Emergency Alarm Report, so you can both respond quickly in order to minimise unscheduled downtime.

We created ConSite to improve your business operations, and enable you to analyze the productivity and efficiency of your equipment. The information it provides on machine usage is intended to help you with maintenance planning and also promotes proactive support from your dealer. Ultimately, it provides you with confidence in your Hitachi construction equipment and peace of mind to focus on other areas of your business.

### Owner's Site

You can find out most of what you need to know about your fleet of Hitachi construction machinery in the field from the comfort of your home or office, thanks to Owner's Site. This online management tool, available at [www.globaleservice.com](http://www.globaleservice.com), is user-friendly and offers extensive and detailed information on your Hitachi Zaxis Excavators and ZW Wheel Loaders.

The data is displayed in a flexible layout, so you can create machine groups per job site or select relevant information, depending on your requirements. As every project is different, you can customize the Owner's Site Dashboard to view data quickly and easily.



Scan this code for our ConSite function explanation & case study video

## Key features

- |   |   |
|---|---|
| ■ Check each of your machines from your office – 24/7                       | ■ See maintenance status and items due for renewal on each of your machines           |
| ■ Have a remote insight into fuel consumption                               | ■ Receive e-mail notifications for any machine alerts, unexpected movements and so on |
| ■ Check the current and previous locations and movements of your machine(s) |   |



## Flexible after-sales programme to protect your investment

### Global e-Service

The new ZAXIS excavator is equipped with a GPRS communication system\*. This sends a wide range of machine data to the Hitachi main server. Via the Global e-Service database, you will have remote access to all of this data. All you need is an internet connection and your Global e-Service log-in details.

Global e-Service enables you and your dealer to download and share this data, helping you to remotely manage your fleet. The online facility also helps your dealer to proactively advise you on preventive maintenance and related special offers.

### Technical support

The professional and highly trained Hitachi service team combine the global expertise and knowledge of Hitachi with your local language and culture. We take a proactive approach towards customer service by continuously training our dealer personnel, so that the available global knowledge is passed on to each individual technician in our dealer network.

### Extended warranty and service contracts

Every new Hitachi model is covered by a full manufacturer's warranty. However, your ZAXIS excavator may require extra protection due to severe working conditions or to minimise equipment repair costs. To meet these demands, our dealers offer the option of a unique extended warranty programme (HELP – Hitachi Extended Life Program) and comprehensive service contracts – the most effective way to optimise the performance of your new ZAXIS excavator.

### Parts and remanufactured components

Hitachi offers different lines of parts and components to suit your specific needs. In addition to our range of genuine parts, there are other options available:

- If your machines have been working for several years, Hitachi can offer a Hitachi Select Parts as an attractively priced solution.
- For that highly demanding application or climate, Hitachi provides a line of parts with extra performance.
- When you are looking for an economical solution for preventive replacements, remanufactured components are the best option.

Whatever choice you make, you can be assured of the renowned Hitachi quality and warranty to give you added peace of mind.

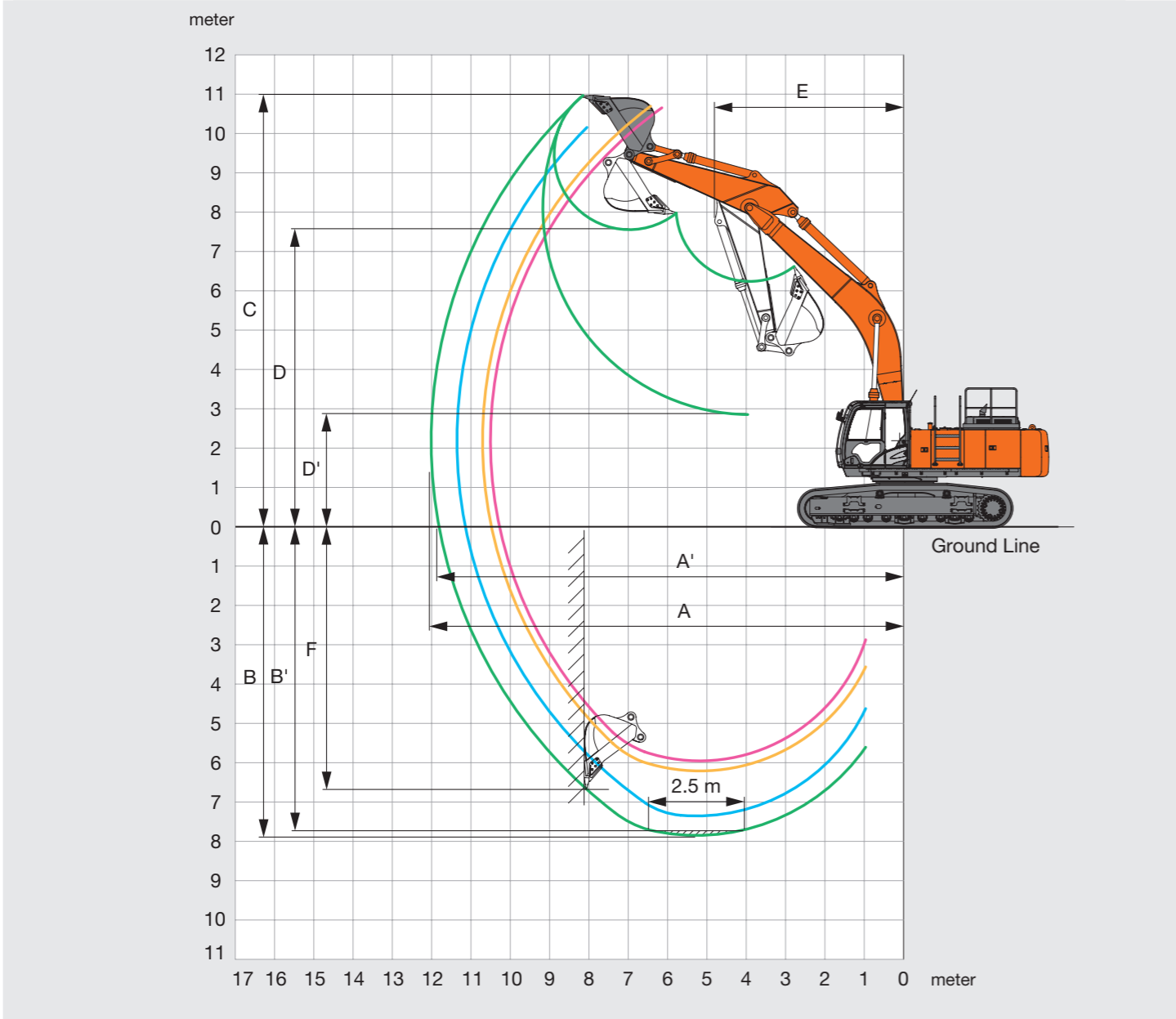
Your Hitachi dealer can supply you with more details on each of the above parts lines.

\* The GPRS communication system is standard equipment for new ZAXIS excavators, however, the availability of the communication system depends on licensing regulations in your country. Please contact your Hitachi dealer for more information or to apply for a Global e-Service account.

## SPECIFICATIONS

WORKING RANGES

ZX470-5G / ZX470LC-5G



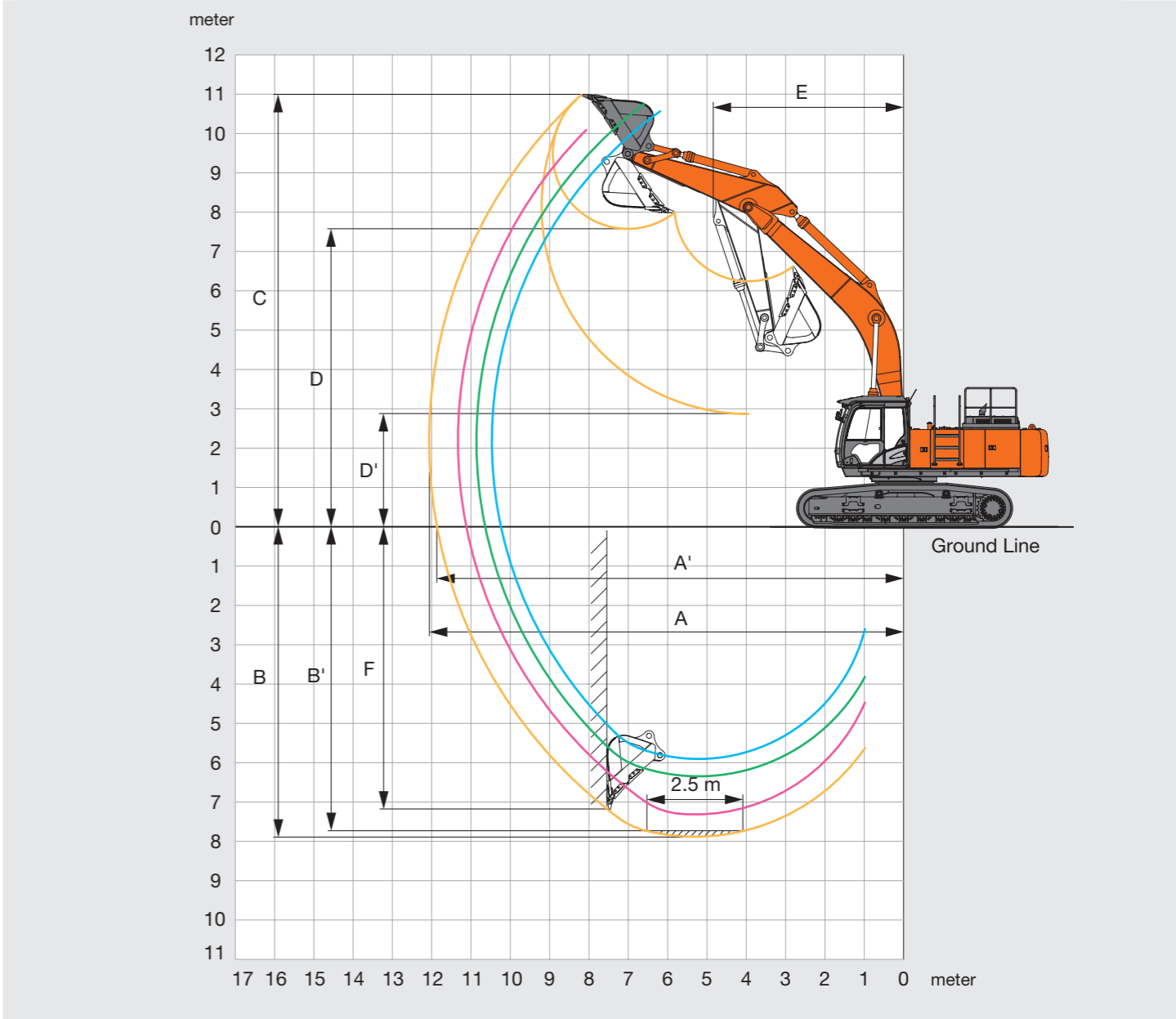
Unit: mm

Arm length	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 H-arm	3.4 m H-arm
A Max. digging reach	10 460 / 10 550	10 850 / 10 750	11 400 / 11 400	12 060 / 12 060
A' Max. digging reach (on ground)	10 240 / 10 320	10 640 / 10 520	11 200 / 11 220	11 860 / 11 860
B Max. digging depth	5 920 / 5 960	6 360 / 6 210	7 400 / 7 360	7 890 / 7 850
B' Max. digging depth (8° level)	5 740 / 5 780	6 200 / 6 050	7 200 / 7 160	7 750 / 7 710
C Max. cutting height	10 530 / 10 660	10 760 / 10 710	10 130 / 10 170	10 920 / 10 960
D Max. dumping height	7 190 / 7 160	7 210 / 7 360	6 900 / 6 910	7 530 / 7 570
D' Min. dumping height	3 550 / 3 510	3 030 / 3 170	3 320 / 3 330	2 820 / 2 860
E Min. swing radius	3 930 / 3 930	3 920 / 3 920	5 020 / 5 020	4 840 / 4 840
F Max. vertical wall	4 380 / 4 230	5 150 / 4 740	5 390 / 4 780	6 710 / 6 670

Excluding track shoe lug

WORKING RANGES

ZX470H-5G / ZX470LCH-5G / ZX470LCR-5G



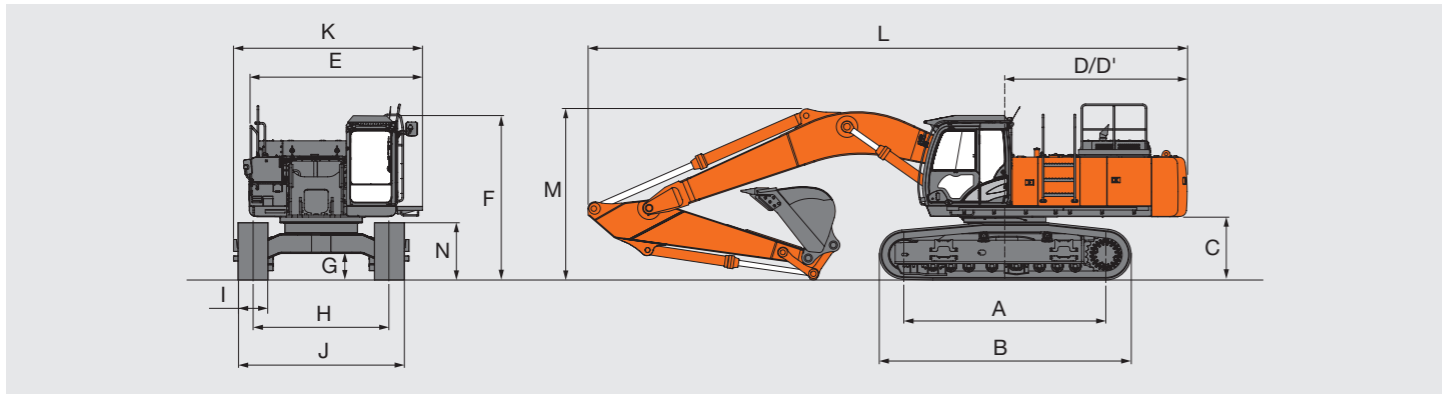
Unit: mm

Arm length	ZX470H-5G		ZX470LCH-5G				ZX470LCR-5G
	7.0 m H-boom		6.3 m BE-boom		7.0 m H-boom		6.3 m BER-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	2.5 m BER-arm
A Max. digging reach	11 330	12 060	10 460	10 750	11 330	12 060	10 460
A' Max. digging reach (on ground)	11 120	11 860	10 230	10 630	11 110	11 860	10 230
B Max. digging depth	7 330	7 900	5 880	6 220	7 290	7 860	5 880
B' Max. digging depth (8° level)	7 130	7 760	5 710	6 060	7 090	7 720	5 710
C Max. cutting height	10 040	10 920	10 570	10 700	10 080	10 980	10 570
D Max. dumping height	6 970	7 520	7 230	7 350	7 010	7 560	7 230
D' Min. dumping height	3 390	2 810	3 580	3 160	3 430	2 850	3 580
E Min. swing radius	5 020	4 840	4 090	3 930	5 020	4 840	4 090
F Max. vertical wall	4 400	7 230	4 350	4 740	4 360	7 190	4 350

Excluding track shoe lug

# SPECIFICATIONS

## DIMENSIONS



Unit: mm

Fixed gauge	ZX470-5G	ZX470LC-5G	ZX470H-5G	ZX470LCH-5G	ZX470LCR-5G
A Distance between tumblers	4 040	4 470	4 040	4 470	4 470
B Undercarriage length	5 040	5 470	5 040	5 470	5 470
*1 C Counterweight clearance	1 230	1 270	1 230	1 270	1 270
D Rear-end swing radius	3 670	3 670	3 670	3 670	3 670
D' Rear-end length	3 660	3 660	3 660	3 660	3 660
E Overall width upperstructure	3 480	3 480	3 480	3 480	3 480
F Overall height of cab	3 280	3 320	3 280	3 320	3 320
*1 G Min. ground clearance	495	535	495	535	535
H Track gauge	2 740	2 740	2 740	2 740	2 740
I Track shoe width	600 / 750	600 / 750	600	600	600
J Undercarriage width	with 600 mm shoe 3 340	3 340	3 340	3 340	3 340
	with 750 mm shoe 3 490	3 490	–	–	–
K Overall width	3 820	3 820	3 820	3 820	3 820
L Overall length	12 050	12 050	12 040	12 040	12 040
M Overall height of boom	4 660	4 660	3 740	4 120	4 120
N Track height	1 150	1 150	1 150	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
Bucket digging force* ISO	285 kN ( 29 130 kgf)	285 kN ( 29 130 kgf)	285 kN ( 29 130 kgf)	286 kN ( 29 230 kgf)
Bucket digging force* SAE : PCSA	257 kN ( 26 240 kgf)	257 kN ( 26 240 kgf)	254 kN ( 25 940 kgf)	256 kN ( 26 140 kgf)
Arm crowd force* ISO	294 kN ( 30 050 kgf)	256 kN ( 26 140 kgf)	259 kN ( 26 450 kgf)	222 kN ( 22 640 kgf)
Arm crowd force* SAE : PCSA	285 kN ( 29 130 kgf)	249 kN ( 25 420 kgf)	252 kN ( 25 730 kgf)	215 kN ( 21 920 kgf)

### ZX470H-5G / ZX470LCH-5G

	ZX470H-5G		ZX470LCH-5G			
	6.3 m BE-boom		6.3 m BE-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)	263 kN (26 860 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)

### ZX470LCR-5G

	ZX470LCR-5G
	6.3 m BER-boom
	2.5 m BER-arm
Bucket digging force* ISO	295 kN (30 150 kgf)
Bucket digging force* SAE : PCSA	266 kN (27 070 kgf)
Arm crowd force* ISO	302 kN (30 770 kgf)
Arm crowd force* SAE : PCSA	294 kN (30 050gf)

\*At power boost

# LIFTING CAPACITIES (Without bucket)

Notes: 1. Ratings are based on ISO 10567.

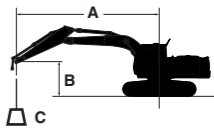
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.

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.



A: Load radius

B: Load point height













C: Lifting capacity

### ZX470LC-5G

Rating over-front

Rating over-side or 360 degrees

Unit : kg













Conditions	Load point height m	Load radius m										At max. reach		
		3.0		4.5		6.0		7.5		9.0				
														meter
H-Boom 7.0 m H-Arm 3.4 m Counterweight 9 080 kg Shoe 600 mm	7.5							*11 560	10 300			*7 710	*7 710	8.64
	6.0							*12 150	10 050	*10 680	7 420	*7 570	6 850	9.41
	4.5			*20 430	*20 430	*15 620	13 510	*13 180	9 640	*11 770	7 240	*7 660	6 170	9.89
	3.0			*24 960	18 930	*17 810	12 630	*14 350	9 180	11 840	7 000	*7 970	5 800	10.1
	1.5			*15 420	*15 420	*19 460	11 920	15 250	8 770	11 580	6 770	*8 520	5 670	10.1
	0 (Ground)			*18 160	17 400	*20 170	11 500	14 910	8 480	11 390	6 600	*9 410	5 770	9.91
	-1.5	*13 070	*13 070	*25 000	17 380	*19 860	11 340	14 760	8 340	11 320	6 530	10 580	6 140	9.45
	-3.0	*21 470	*21 470	*23 670	17 570	*18 500	11 390	*14 640	8 370			*11 830	6 910	8.70
-4.5	*24 850	24 850	*19 860	17 980	*15 700	11 660	*11 760	8 630			*11 480	8 510	7.59	
H-Boom 7.0 m BE-Arm 2.9 m Counterweight 9 080 kg Shoe 600 mm	6.0					*14 460	14 060	*12 780	9 890			*11 030	7 750	8.68
	4.5			*22 080	20 230	*16 440	13 240	*13 720	9 490	11 990	7 140	*11 410	6 880	9.20
	3.0					*18 470	12 380	*14 780	9 050	11 750	6 920	10 880	6 410	9.49
	1.5					*19 840	11 750	15 140	8 680	11 530	6 720	10 690	6 250	9.47
	0 (Ground)			*19 290	17 370	*20 180	11 420	14 870	8 430	11 380	6 590	10 980	6 370	9.23
	-1.5	*15 470	*15 470	*24 940	17 460	*19 510	11 350	14 770	8 350			11 860	6 840	8.73
	-3.0	*26 650	*26 650	*22 250	17 720	*17 750	11 470	*13 970	8 450			*12 920	7 890	7.92
	-4.5			*17 910	*17 910	*14 270	11 830					*12 470	10 240	6.67
BE-Boom 6.3 m BE-Arm 2.9 m Counterweight 9 080 kg Shoe 600 mm	7.5					*13 980	*13 980					*8 010	*8 010	7.13
	6.0					*14 790	14 350	*13 540	9 980			*7 760	*7 760	8.05
	4.5			*20 920	*20 920	*16 490	13 680	*14 230	9 690			*7 840	7 750	8.61
	3.0			*25 210	19 560	*18 480	12 900	*15 170	9 310			*8 200	7 200	8.88
	1.5			*27 650	18 390	*20 010	12 250	15 480	8 960			*8 900	7 030	8.89
	0 (Ground)			*27 690	17 960	*20 550	11 860	15 210	8 730			*10 090	7 210	8.64
	-1.5	*23 600	*23 600	*26 050	17 950	*19 860	11 740	15 140	8 670			*12 190	7 850	8.10
	-3.0	*29 020	*29 020	*22 730	18 210	*17 540	11 880					*13 650	9 300	7.21
BE-Boom 6.3 m BE-Arm 2.5 m Counterweight 9 080 kg Shoe 600 mm	7.5					*14 650	14 460					*12 320	11 740	6.77
	6.0					*15 320	14 100	*14 020	9 780			*11 890	9 280	7.73
	4.5			*21 800	20 830	*16 930	13 410	*14 540	9 520			*12 000	8 060	8.31
	3.0					*18 780	12 640	*15 350	9 150			*12 550	7 450	8.59
	1.5					*20 100	12 020	15 330	8 820			12 460	7 270	8.60
	0 (Ground)			*27 160	17 750	*20 380	11 690	15 100	8 620			12 930	7 490	8.34
	-1.5			*25 130	17 820	*19 370	11 630	*14 960	8 610			*14 100	8 230	7.78
	-3.0			*21 380	18 150	*16 560	11 850					*13 670	9 950	6.85

### ZX470-5G

Rating over-front

Rating over-side or 360 degrees

Unit : kg

Conditions	Load point height m	Load radius m										At max. reach		
		3.0		4.5		6.0		7.5		9.0				
														meter
H-Boom 7.0 m	7.5							*11 550	10 090			*7 710	*7 710	8.61
H-Arm 3.4 m	6.0							*12 120	9 840	*10 850	7 250	*7 570	6 710	9.39
Counterweight 9 080 kg	4.5			*20 300	*20 300	*15 560	13 250	*13 150	9 440	10 410	7 070	*7 660	6 030	9.88
Shoe 600 mm	3.0			*24 860	18 540	*17 760	12 360	13 420	8 970	10 150	6 830	*7 960	5 660	10.1
	1.5			*15 450	*15 450	18 150	11 640	12 960	8 560	9 900	6 600	8 280	5 520	10.1
	0 (Ground)			*18 020	16 970	17 670	11 220	12 640	8 260	9 710	6 430	8 450	5 610	9.92
	-1.5	*12 850	*12 850	*24 770	16 940	17 480	11 050	12 480	8 120	9 640	6 360	9 000	5 960	9.47
	-3.0	*21 230	*21 230	*23 750	17 130	17 530	11 100	12 510	8 150			10 150	6 700	8.73
	-4.5	*25 030	*25 030	*19 990	17 530	*15 800	11 350	*11 890	8 400			*11 490	8 240	7.63

# 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.















## ZX470LCH-5G

Conditions	Load point height m	Loadradius m										Atmax.reach		
		3.0		4.5		6.0		7.5		9.0		Atmax.reach		
														meter
H-Boom 7.0 m H-Arm 3.4 m Counterweight 9 080 kg Shoe 600 mm	7.5							*11 560	10 430			*7 710	*7 710	8.64
	6.0							*12 150	10 180	*10 680	7 520	*7 570	6 950	9.41
	4.5			*20 430	*20 430	*15 620	13 680	*13 180	9 770	*11 770	7 340	*7 660	6 260	9.89
	3.0			*24 960	19 180	*17 810	12 800	*14 350	9 310	12 000	7 100	*7 970	5 890	10.1
	1.5			*15 420	*15 420	*19 460	12 090	*15 340	8 900	11 740	6 870	*8 520	5 760	10.1
	0 (Ground)			*18 160	17 650	*20 170	11 670	15 130	8 610	11 550	6 700	*9 410	5 860	9.91
	-1.5	*13 070	*13 070	*25 000	17 640	*19 860	11 520	14 970	8 470	11 480	6 640	10 740	6 230	9.45
	-3.0	*21 470	*21 470	*23 670	17 830	*18 500	11 570	*14 640	8 500			*11 830	7 020	8.70
H-Boom 7.0 m BE-Arm 2.9 m Counterweight 9 080 kg Shoe 600 mm	-4.5	*24 850	*24 850	*19 860	18 230	*15 700	11 830	*11 760	8 760			*11 480	8 640	7.59
	6.0					*14 460	14 240	*12 780	10 020			*11 030	7 860	8.68
	4.5			*22 080	20 480	*16 440	13 410	*13 720	9 620	12 160	7 240	*11 410	6 980	9.20
	3.0					*18 470	12 550	*14 780	9 180	11 920	7 030	11 040	6 510	9.46
	1.5					*19 830	11 920	15 360	8 810	11 690	6 820	10 850	6 350	9.47
	0 (Ground)			*19 290	17 620	*20 180	11 600	15 080	8 560	11 550	6 690	11 140	6 470	9.23
	-1.5	*15 470	*15 470	*24 940	17 710	*19 510	11 520	14 980	8 480			12 030	6 950	8.73
	-3.0	*26 650	*26 650	*22 250	17 980	*17 750	11 640	*13 970	8 580			*12 920	8 010	7.92
BE-Boom 6.3 m BE-Arm 2.5 m Counterweight 9 080 kg Shoe 600 mm	-4.5			*17 910	*17 910	*14 270	12 000					*12 470	10 390	6.67
	7.5					*14 650	14 630					*12 320	11 880	6.78
	6.0					*15 320	14 280	*14 020	9 910			*11 890	9 400	7.73
	4.5			*21 800	21 080	*16 940	13 590	*14 540	9 650			*12 000	8 170	8.31
	3.0					*18 780	12 810	*15 350	9 280			*12 550	7 560	8.59
	1.5					*20 100	12 190	15 540	8 950			12 640	7 380	8.60
	0 (Ground)			*27 160	18 000	*20 380	11 860	15 310	8 750			13 110	7 600	8.34
	-1.5			*25 130	18 070	*19 370	11 800	*14 960	8 740			*14 110	8 350	7.78
	-3.0			*21 380	18 410	*16 560	12 020					*13 670	10 100	6.85

## ZX470H-5G

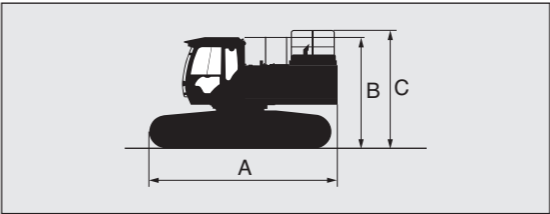
Conditions	Load point height m	Loadradius m										Atmax.reach		
		3.0		4.5		6.0		7.5		9.0		Atmax.reach		
														meter
H-Boom 7.0 m H-Arm 3.4 m Counterweight 9 080 kg Shoe 600 mm	7.5							*11 550	10 220			*7 710	*7 710	8.61
	6.0							*12 120	9 970	*10 580	7 350	*7 570	6 810	9.39
	4.5			*20 300	*20 300	*15 560	13 420	*13 150	9 570	10 560	7 170	*7 650	6 120	9.88
	3.0			*24 860	18 800	*17 760	12 530	13 610	9 100	10 300	6 930	*7 960	5 750	10.1
	1.5			*15 450	*15 450	18 420	11 820	13 160	8 690	10 050	6 700	8 410	5 610	10.1
	0 (Ground)			*18 020	17 230	17 930	11 390	12 830	8 390	9 860	6 530	8 590	5 700	9.92
	-1.5	*12 850	*12 850	*24 770	17 200	17 740	11 230	12 680	8 250	9 790	6 460	9 140	6 060	9.47
	-3.0	*21 230	*21 230	*23 750	17 390	17 790	11 270	12 700	8 280			10 300	6 810	8.73
	-4.5	*25 030	*25 030	*19 990	17 790	*15 800	11 530	*11 890	8 530			*11 490	8 360	7.63

## ZX470LCR-5G

Conditions	Load point height m	Loadradius m														Atmax.reach		
		1.5		3.0		4.5		6.0		7.5		9.0		10.5				
																meter		
BER-Boom 6.3 m BER-Arm 2.5 m Counterweight 9 080 kg Shoe 600 mm	7.5							*14 630	*14 630							*12 320	11 930	6.77
	6.0							*15 310	14 330	*14 010	9 940					*11 890	9 440	7.33
	4.5					*21 780	21 160	*16 920	13 630	*14 520	9 680					*11 990	8 200	8,31
	3.0							*18 760	12 850	*15 340	9 310					*12 550	7 590	8.59
	1.5							*20 080	12 240	15 600	8 980					12 690	7 410	8.6
	0 (Ground)					*27 130	18 060	*20 350	11 900	15 370	8 780					13 170	7 630	8.34
	-1.5					*25 090	18 140	*19 350	11 840	*14 940	8 770					*13 090	8 380	7.78
	-3.0					*21 350	18 480	*16 540	12 060							*13 650	10 130	6.85

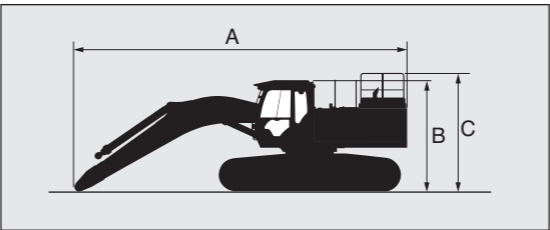
# TRANSPORTATION

## BASIC MACHINE (WITHOUT COUNTERWEIGHT)



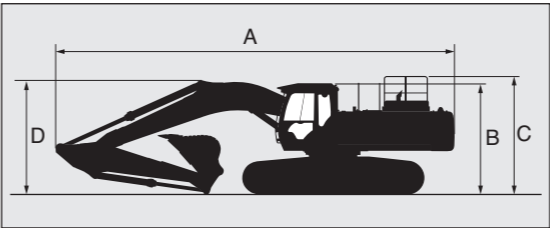
Fixed gauge	Shoe type	Shoe width	Overall width	Weight	A	B	C
ZX470-5G	Triple grouser	600 mm	3 340 mm	27 000 kg	5 470 mm	3 320 mm	3 540 mm
		750 mm	3 490 mm	27 800 kg			
ZX470LC-5G	Triple grouser	600 mm	3 340 mm	28 200 kg	5 690 mm	3 360 mm	3 580 mm
		750 mm	3 490 mm	29 000 kg			
ZX470H-5G	Triple grouser	600 mm	3 340 mm	27 500 kg	5 470 mm	3 320 mm	3 540 mm
ZX470LCH-5G	Triple grouser	600 mm	3 340 mm	28 700 kg	5 690 mm	3 360 mm	3 580 mm
ZX470LCR-5G	Triple grouser	600 mm	3 340 mm	28 900 kg	5 690 mm	3 360 mm	3 580 mm

## BASIC MACHINE FITTED WITH BOOM AND NO SIDEWALK



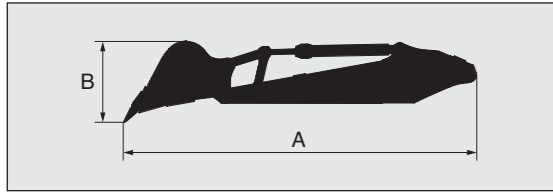
Fixed gauge	Boom length	Shoe type	Shoe width	Overall width	Weight	A	B	C
ZX470-5G	6.3 m BE	Triple grouser	600 mm	3 340 mm	32 400 kg	9 170 mm	3 320 mm	3 540 mm
			750 mm	3 490 mm	33 100 kg			
	7.0 m H	Triple grouser	600 mm	3 340 mm	32 400 kg	9 950 mm		
			750 mm	3 490 mm	33 100 kg			
ZX470LC-5G	6.3 m BE	Triple grouser	600 mm	3 340 mm	33 600 kg	9 160 mm	3 360 mm	3 580 mm
			750 mm	3 490 mm	34 400 kg			
	7.0 m H	Triple grouser	600 mm	3 340 mm	33 600 kg	9 940 mm		
			750 mm	3 490 mm	34 400 kg			
ZX470H-5G	7.0 m H	Triple grouser	600 mm	3 340 mm	32 900 kg	9 950 mm	3 320 mm	3 540 mm
ZX470LCH-5G	6.3 m BE	Triple grouser	600 mm	3 340 mm	34 100 kg	9 160 mm	3 360 mm	3 580 mm
	7.0 m H	Triple grouser	600 mm	3 340 mm	34 000 kg	9 950 mm	3 360 mm	3 580 mm
ZX470LCR-5G	6.3 m BER	Triple grouser	600 mm	3 340 mm	34 300 kg	9 160 mm	3 360 mm	3 580 mm

## BASIC MACHINE WITH FRONT AND SIDEWALK

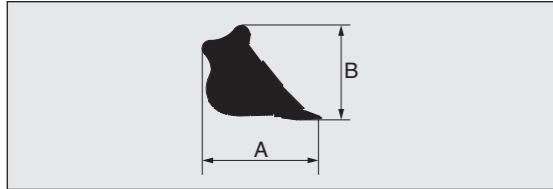


Fixed gauge	Boom length	6.3 m BE		7.0 m H		6.3 m BER
	Arm length	2.5 m BE	2.9 m BE	2.9 m BE	3.4 m H	2.5 m BER
ZX470-5G	A	11 490 mm	11 300 mm	12 060 mm	12 040 mm	
	B	3 320 mm				
	C	3 540 mm				
	D	4 020 mm	4 200 mm	3 860 mm	3 450 mm	
ZX470LC-5G	A	11 490 mm	11 290 mm	12 050 mm	12 070 mm	
	B	3 360 mm				
	C	3 540 mm				
	D	4 200 mm	4 120 mm	3 900 mm	3 720 mm	
ZX470H-5G	A			12 100 mm	12 040 mm	
	B			3 320 mm		
	C			3 540 mm		
	D			3 740 mm	3 450 mm	
ZX470LCH-5G	A	11 490 mm	11 360 mm	12 100 mm	12 030 mm	
	B	3 360 mm				
	C	3 580 mm				
	D	4 130 mm	3 880 mm	3 740 mm	3 450 mm	
ZX470LCR-5G	A					11 490 mm
	B					3 360 mm
	C					3 580 mm
	D					4 130 mm

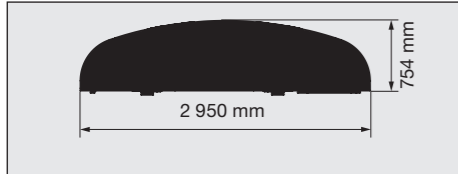
ARM AND BUCKET



BUCKET



COUNTERWEIGHT 9 080 kg



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	4 240 kg
	2.10 m³	6 430 mm	1 270 mm	1 630 mm	4 300 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	4 720 kg

ZX470LCR-5G

Arm	Bucket Capacity ISO heaped	A	B	Overall width	Weight
2.5 m BER	2.50 m³	5 650 mm	1 470 mm	1 820 mm	5 590 kg

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

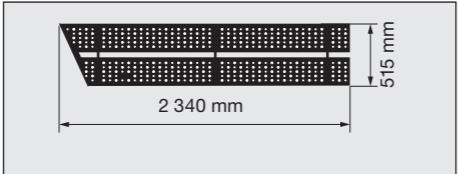
ZX470H-5G / ZX470LCH-5G (Rock bucket)

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

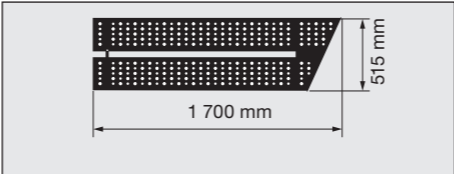
ZX470LCR-5G (Rock bucket)

Bucket capacity ISO heaped	A	B	Overall width	Weight
2.50 m³	1 950 mm	1 650 mm	1 820 mm	2 360 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

	ZX470-5G	ZX470LC-5G	ZX470H-5G	ZX470LCH-5G	ZX470LCR-5G
ENGINE					
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	●	●	●	●	●
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	○	○	○	○	○
H/R cab	●	●	●	●	●
OPG top guard fitted Level II (ISO10262)	●	●	●	●	●
OPG front guard fitted Level II (ISO10262)	○	○	○	○	○
Laminated straight glass front window	●	●	●	●	●
Left side window can be opened	●	●	●	●	●
Cigarette lighter	●	●	●	●	●
Drink holder	●	●	●	●	●
Engine shut-off cable	●	●	●	●	●
Electric double horn	●	●	●	●	●

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	ZX470LCR-5G
Evacuation hammer	●	●	●	●	●
Fire extinguisher bracket	○	○	○	○	○
Floor mat	●	●	●	●	●
Footrest	●	●	●	●	●
Front window washer	●	●	●	●	●
Glove compartment	●	●	●	●	●
Hot & cool box	●	●	●	●	●
Intermittent windshield wiper	●	●	●	●	●
Key cylinder light	●	●	●	●	●
LED room light with door courtesy	●	●	●	●	●
Pilot control shut-off lever	●	●	●	●	●
Rear tray	●	●	●	●	●
Retractable seat belt	●	●	●	●	●
Rubber radio antenna	●	●	●	●	●
Seat : Adjustable reclining mechanical suspension	●	●	●	●	●
Short wrist control levers	●	●	●	●	●
Storage box	●	●	●	●	●
Sun visor (front)	○	○	○	○	○
Sun visor (side)	○	○	○	○	○
Transparent roof with slide curtain	●	●	●	●	●
2 speaker	●	●	●	●	●
6 fluid-filled elastic mounts	●	●	●	●	●
12 V power outlet	○	○	○	○	○
24 V cigarette lighter	●	●	●	●	●

MONITOR SYSTEM

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

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	●	●	●	●	●

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	ZX470LCR-5G
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	●	●	●	●	●
750 mm shoe with standard track guard	○	○	—	—	—

FRONT ATTACHMENTS

Attachment basic piping	○	○	○	○	○
Centralized lubrication system	●	●	●	●	●
Damage prevention plate and square bars	●	●	●	●	●
Dirt seal on all bucket pins	●	●	●	●	●
Flanged pin	●	●	●	●	●
1.9 m³ (ISO heaped) bucket	●	○	—	—	—
2.1 m³ (ISO heaped) bucket	○	●	—	—	—
1.9 m³ (ISO heaped) rock bucket (with dual type side shrouds)	—	—	●	●	—
2.5 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	○	○	○	○	—
2.5 m BE-arm	○	○	○	○	—
2.9 m BE-arm	○	○	○	○	—
6.3 m BER-boom and 2.5 m BER-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	●	●	●	●	●
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**Built on the foundation of superb technological capabilities, Hitachi Construction Machinery is committed to providing leading-edge solutions and services to contribute as a reliable partner to the business of customers worldwide.**



## Hitachi Environmental Vision 2050

Our Environmental Vision envisions a low-carbon society; a resource efficient society; a harmonized society with nature. To achieve such a sustainable society, we have established a set of long-term environmental targets called Hitachi Environmental Innovation 2050.

### Reducing Environmental Impact by New ZAXIS

Hitachi makes a green way to cut carbon emissions for global warming prevention according to LCA\*. New ZAXIS utilizes lots of technological advances, including the new ECO mode, and Isochronous Control. Hitachi has long been committed to recycling of components, such as aluminum parts in radiators and oil cooler. Resin parts are marked for recycling.

\*Life Cycle Assessment – ISO 14040

Before using a machine with a satellite or tele 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.

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.