

ZAXIS series

HITACHI

Reliable solutions

# ZAXIS 490



## HYDRAULIC EXCAVATOR

Model Code: ZX470-5A / ZX470LC-5A / ZX490H-5A / ZX490LCH-5A

Engine Rated Power: 257 kW (345 HP)

Operating Weight ZX470-5A: 45 100 kg

ZX470LC-5A: 46 400 kg

ZX490H-5A: 46 200 kg

ZX490LCH-5A: 49 000 kg

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



# WALK AROUND

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#### Higher productivity

The HIOS IIIB hydraulic system achieves higher productivity with better fuel consumption than the conventional ZAXIS model, which helps to reduce costs.

#### Larger swing power

The increased swing torque makes it easier to dig next to side walls and operate on slopes.

#### Added durability

With a strengthened boom, arm and ROPS cab, the ZAXIS 490 can work for lengthy periods in rugged environments.

#### Faster movement

The new hydraulic system increases the front attachment speed during combined and single operation.

#### Smooth operation

The new engine has improved the speed and precision of light-load operations such as grading.



**ZAXIS** Empower your Vision.

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.

#### **Expanded leg room**

The seat and console can slide further back on the new ZAXIS, providing a more comfortable working environment for the operator. The rightside console has been ergonomically re-designed.

#### **Ultimate comfort**

The heated air suspension seat is ideal in cold climates and absorbs vibration during operation minimising operator fatigue.

#### **Easily accessible information**

The large multi-function LCD monitor screen is easy to view in bright sunlight or darkness and provides technical data.

#### **Quick and easy service access**

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





# MORE PRODUCTION WITH EXCELLENT PERFORMANCE

Tight schedules on large-scale construction projects and production targets in quarries demand a consistently high level of performance from your machine. We understand that this is among the key criteria when customers choose to invest in a large Hitachi excavator. That's why we have prioritised performance characteristics with a variety of measures to increase speed to help you get the most from your machine.



# Enhanced power and speed set a new standard



## Swift Front Movements with HIOS\* IIIB Hydraulics

The HIOS IIIB hydraulic system is designed for efficient use of hydraulic oil pressure in the circuit, by eliminating loss of power and fuel. Swift movements of the front attachment can be achieved by a total control of the boom, arm and bucket regeneration system. This Hitachi technological prowess brings about high performance and fuel economy.

## In Pursuit of Yielding More Production

New ZAXIS 490 delivers extra power in excavation and swinging. More specifically, a great swing torque. This boosts productivity in mining operation. The machine powerfully moves the bucket, full of crushed stones, around on mines, and swiftly loads them onto a dump truck. What's more, the power boost mechanism is added to ensure powerful mining.

## Reduction in Fuel Consumption\*\*

New ZAXIS is a fuel-thrifty excavator that can reduce fuel consumption compared to the conventional model, thanks to the HIOS IIIB hydraulic system and engine control system, thereby reducing CO<sub>2</sub> emissions.

## More Fuel Reduction in the ECO mode

The ECO mode, a new economical mode, can further cut fuel consumption by 8% compared to the PWR mode, without sacrificing digging force by optimal matching of operations.

## 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 Operating System

\*\*17% decreased compared to the ZX450-3 at P mode

## Key features

- Swift Front Movements with HIOS\* IIIB Hydraulics
- In Pursuit of Yielding More Production
- Reduction in Fuel Consumption
- More Fuel Reduction in the ECO mode
- Easy-to-Use Attachments

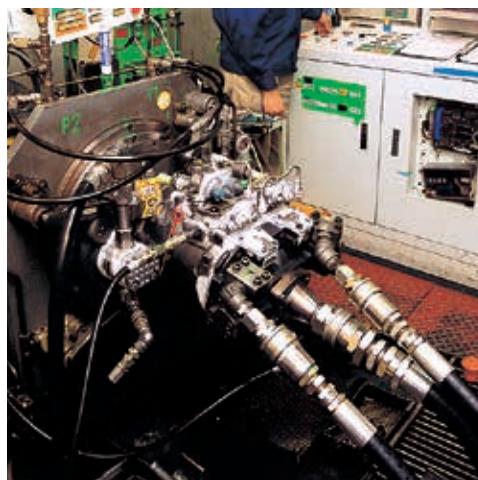


# HIGH QUALITY AND DURABILITY

Hitachi ZAXIS large excavators have gained an industry-leading reputation for reliability and durability. Our expertise in manufacturing high-quality construction machinery has been gained over more than 40 years. It is supported by an advanced technological approach that extends throughout the global Hitachi enterprise. So customers all around the world can be assured that their ZAXIS 490 is built to last and can be relied upon in the most challenging environments.



# Reliability in the toughest conditions



## 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 hm<sup>2</sup>) 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.

## All-New Engine with Enhanced Durability and Reliability

To boost durability and reliability in harsh mining operations, the engine is newly devised, while redesigning its associated systems, such as fuel and coolant lines. This gives an edge in durability. The auto idle stop mechanism is combined to effectively cut fuel consumption and CO<sub>2</sub> emissions.

## Rock-Solid, Durable Front Attachment

A very robust and durable boom and arm are adopted for the Front Attachment, allowing it to function optimally at tough job sites such as mines / quarries, where an endless stream of operations is required. The new ZAXIS adopts H-boom and H-arm, using thick plates for high durability. The arm also includes a damage prevention plate and square bars; improving its durability. 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.

## Tough Undercarriage on Rough Quarry Sites

Tracks are rugged enough to move around on uneven quarry site, with power and stability.

Idler brackets are of box-section structure, and strengthened with reinforcing plates to withstand high stresses and resist deformation. The two-step ladders on the side allow easy access to the cab and riding on the machine.

## Robust Upperstructure

The upperstructure is reinforced with proven D-section skirt for protection against obstacles, reducing deformation. A large door catch is provided to reduce shocks and jolts from the cab and upperstructure.

## Key features

- Prestige R&D and Quality Control
- All-New Engine with Enhanced Durability and Reliability
- Rock-Solid, Durable Front Attachment
- Tough Undercarriage on Rough Quarry Sites
- Robust Upperstructure



# NO COMPROMISE ON OPERATOR COMFORT

Open the door to the cab of the new ZAXIS 490 and it's clear to see that Hitachi engineers have paid just as much attention to the interior of the machine as they have to the exterior. A variety of user-friendly features and enhanced visibility contribute to a comfortable and safe working environment for operators. Our aim is to ensure that the experience of working with large Hitachi excavators is unrivalled in the construction industry.



# The comfort of the cab exceeds expectations



## From the comfort of the cab

It's essential for you to feel comfortable while you work, especially if you are operating an excavator for lengthy periods of time in a quarry or large-scale construction site. Hitachi has reviewed the ergonomic design of its ZAXIS excavator cab to ensure that you can complete your shift with ease and enjoy the rest of your day.

The fully adjustable air-suspension seat absorbs vibrations and helps to minimise operator fatigue. Its new sliding mechanism means that it can be moved back further than ever before. More leg room is also available as the space underneath the monitor has been expanded.

## Enhanced visibility

Health and safety are of paramount importance in busy quarries and construction sites. With the latest innovations from Hitachi, the new ZAXIS offers enhanced visibility, particularly on the right-hand side of the machine, to help you avoid any unnecessary damage, and ultimately save you time and money.

The monitor and door have been repositioned, which improves your view and provides easier access to the cab. The excavator is also equipped with the latest rear-view camera, giving you a broader visual range.

## User-friendly functionality

The advanced technology that is incorporated within the new ZAXIS is one of its many advantages. The ergonomic controls and the easy to view colour monitor place the power firmly in your hands.

The new multi-function LCD monitor with a seven-inch screen displays a comprehensive range of useful technical information. It allows you to check the machine's status and settings at a glance and has multi-lingual support in up to 32 languages.

For easy operation, the monitor and ergonomically designed switches have been repositioned and are both conveniently located on the right-hand side of the cab.

## Enjoy your work

By creating a relaxed and pleasant workspace, our aim was to make your day in the cab of the new ZAXIS more enjoyable and therefore more satisfying.

If you enjoy listening to the radio as you work, you will find that the controls for the AM/FM stereo radio are now fully adjustable from the colour monitor. Alternatively, if you wish to plug in an MP3 player, an auxiliary socket has also been added to the sound system, so that you can work smoothly and efficiently to your favourite music.

## Key features

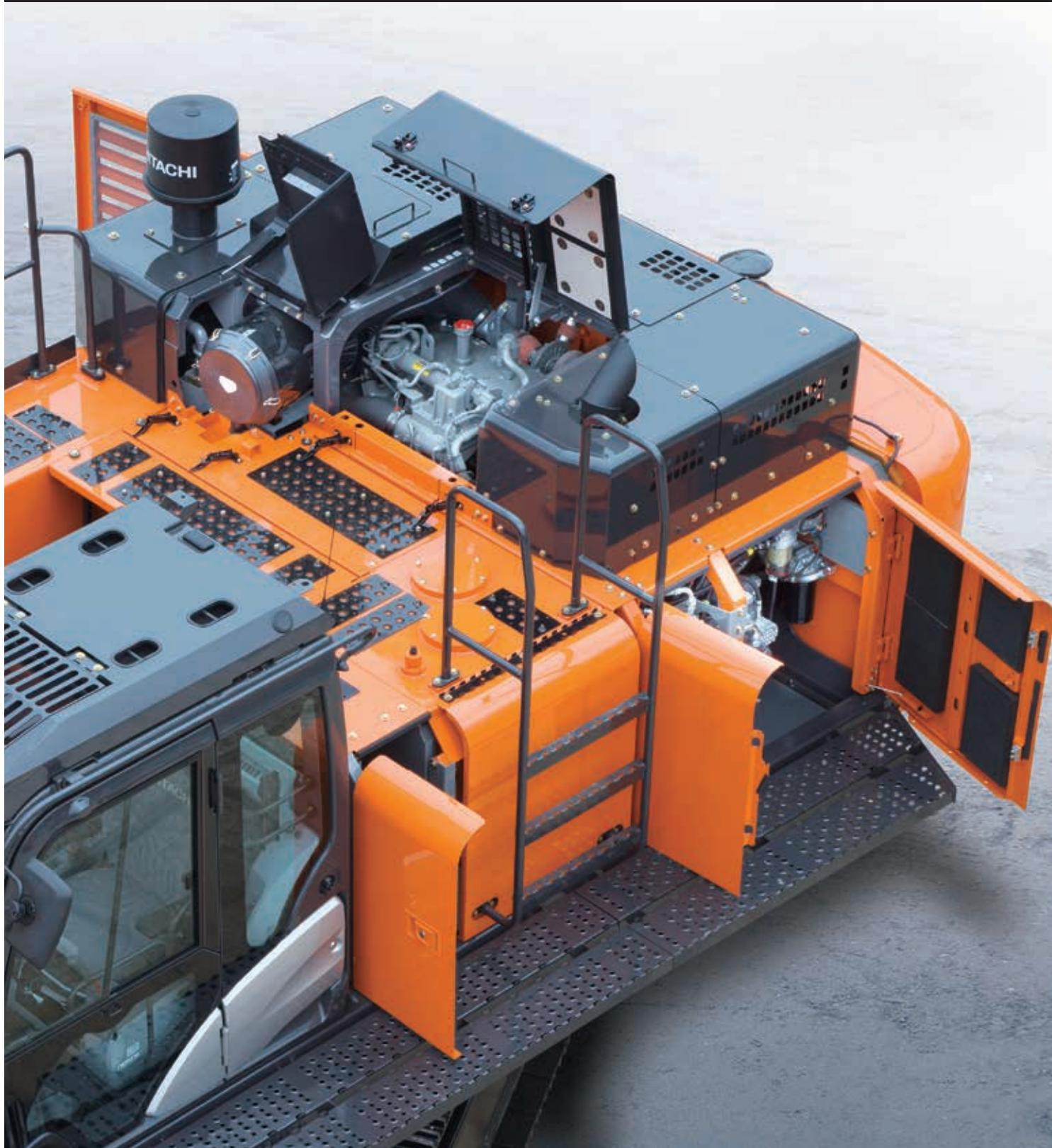
- High-spec ROPS pressurised cab
- Enhanced visibility
- New colour LCD monitor
- Easily accessible real-time information

- Expansive leg room
- Ergonomically designed control panel



# SIMPLIFIED MAINTENANCE

When it comes to the regular maintenance and cleaning of your ZAXIS 490, we know that convenience is of utmost importance. With a range of easily accessible features, Hitachi large excavators are now easier and quicker to maintain than ever before. This gives our customers more time to focus on the job at hand and guarantees the optimum availability that Hitachi machines can deliver.



# Easily accessible features keep your machine working longer



## 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.

## Fast Lubrication

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

## 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.

## Large Capacity Fuel Tank

Equipped with a large capacity fuel tank for longer operations.

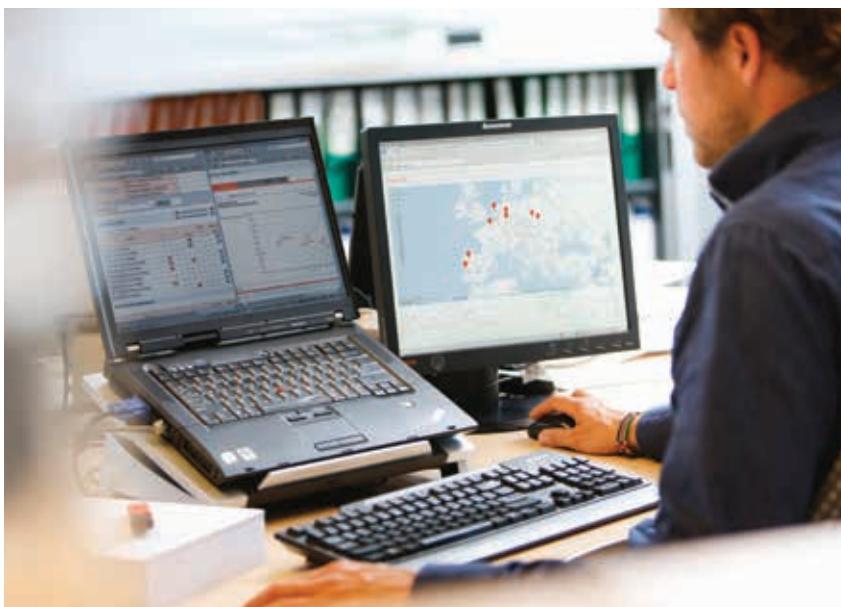
## Key features

- Grouped Remote Inspection Points
- Fast Lubrication
- Easy-Access to the Upperstructure
- Large Capacity Fuel Tank



# SUPPORT CHAIN

As soon as you become a Hitachi customer, you can rely on first-class after-sales service from your authorised dealer. Hitachi provides extensive support to each of the dealers within the global network, so that they can ensure your ZAXIS 490 continues to meet your requirements and exceed expectations. To further protect your investment in Hitachi construction machinery, we have introduced the Hitachi Support Chain after-sales programme. This gives you the flexibility to create a tailor-made service plan from the following key-areas, "links" in the chain of service available from Hitachi via your local dealer.



# 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.

The latest information on the ZAXIS excavator is available 24/7 and includes operational data, such as the number of working hours, fuel consumption figures, working modes and location. This helps you to reduce running costs, plan jobs efficiently and keep up to date with machine maintenance – to ensure optimum performance and minimal downtime.

## Technical support

The professional and highly trained Hitachi service team combine the global expertise and knowledge of Hitachi Construction Machinery 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 second line of genuine 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.

## Key features

- Check each of your machines from your office – 24/7
- Have a remote insight into fuel consumption
- Check the current and previous locations and movements of your machine(s)

- See maintenance status and items due for renewal on each of your machines
- Receive e-mail notifications for any machine alerts, unexpected movements and so on

# SPECIFICATIONS

## ENGINE

Model .....	Isuzu GH-6UZ1XKSA-01
Type .....	4-cycle water-cooled, direct injection
Aspiration .....	Turbocharged, intercooled
No. of cylinders .....	6
Rated power	
ISO 14396 .....	H/P mode: 257 kW (345 HP) at 2 000 min <sup>-1</sup> (rpm)
SAE J1349, net .....	H/P mode: (Without Fan) 257 kW (345 HP) at 2 000 min <sup>-1</sup> (rpm)
Maximum torque .....	1 363 Nm (139 kgf m) at 1 500 min <sup>-1</sup> (rpm)
Piston displacement .....	9.839 L
Bore and stroke .....	120 mm x 145 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 400 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 <sup>2</sup> )
Swing circuit .....	28.4 MPa (290 kgf/cm <sup>2</sup> )
Travel circuit .....	35.3 MPa (360 kgf/cm <sup>2</sup> )
Pilot circuit .....	3.9 MPa (40 kgf/cm <sup>2</sup> )
Power boost .....	35.3 MPa (360 kgf/cm <sup>2</sup> )

## Hydraulic Cylinders

	Quantity	Bore	Rod diameter
Boom	2	170 mm	115 mm
Arm	1	190 mm	130 mm
Bucket	1	170 mm	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 .....

9.5 min<sup>-1</sup> (rpm)

Swing torque .....

148 kNm

### Operator's Cab

#### ZAXIS 470 / ZAXIS 470LC:

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 for Standardization (ISO) 10262.

#### ZAXIS 490H / ZAXIS 490LCH (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 for Standardization (ISO) 10262.

## UNDERCARRIAGE

### Tracks

Track shoes with triple grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

### Numbers of Rollers and Shoes on Each Side

#### [Fixed Undercarriage]

Upper rollers .....	2: ZAXIS 470 / ZAXIS 490H / ZAXIS 470LC / ZAXIS 490LCH
Lower rollers .....	8: ZAXIS 470 / ZAXIS 490H 9: ZAXIS 470LC / ZAXIS 490LCH
Track shoes .....	49: ZAXIS 470 / ZAXIS 490H 53: ZAXIS 470LC / ZAXIS 490LCH
Idler track guard .....	1: ZAXIS 470 / ZAXIS 470LC
Track guards .....	1: ZAXIS 470 2: ZAXIS 470LC
	Full track guard : ZAXIS 490H / ZAXIS 490LCH

#### [Variable Ggauge Undercarriage] : ZAXIS 490LCH

Upper rollers .....	3
Lower rollers .....	9
Track shoes .....	53
Track guards .....	Full track guard

### 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 5.5 km/h Low : 0 to 3.9 km/h
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Maximum traction force ... 329 kN (33 600 kgf)

Gradeability .....

70% (35 degree) continuous

## SERVICE REFILL CAPACITIES

Fuel tank .....	725.0 L
Engine coolant .....	58.0 L
Engine oil .....	41.0 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

#### [Fixed Undercarriage]

Shoe type	Shoe width	Boom type	Arm type	ZAXIS 470		ZAXIS 470LC		ZAXIS 490H		ZAXIS 490LCH	
				kg	kPa (kgf/cm²)	kg	kPa (kgf/cm²)	kg	kPa (kgf/cm²)	kg	kPa (kgf/cm²)
Triple or double grouser	600 mm	7.0 m H	3.4 m H	45 100	84 (0.86)	46 400	79 (0.80)	46 200	86 (0.88)	47 400	80 (0.82)
		Bucket capacity		1.9 m³		2.1 m³		1.9 m³ Rock bucket		2.1 m³ Rock bucket	
		6.3 m BE	2.5 m BE	45 600	85 (0.86)	46 900	79 (0.81)	–	–	47 800	81 (0.83)
		Bucket capacity		2.5 m³		2.65 m³		–		2.5 m³ Rock bucket	
Triple grouser	750 mm	7.0 m H	3.4 m H	45 800	68 (0.70)	47 200	64 (0.65)	–	–	–	–
		Bucket capacity		1.9 m³		2.1 m³		–		–	
		6.3 m BE	2.5 m BE	46 300	69 (0.71)	47 700	65 (0.66)	–	–	–	–
		Bucket capacity		2.5 m³		2.65 m³		–		–	

#### [Variable Gauge Undercarriage]

Shoe type	Shoe width	Boom type	Arm type	ZAXIS 490LCH		
				kg	kPa (kgf/cm²)	
Triple or double grouser	600 mm	7.0 m H	3.4 m H	49 000		83 (0.85)
		Bucket capacity		1.9 m³ Rock bucket		–
		6.3 m BE	2.5 m BE	49 400		84 (0.85)
		Bucket capacity		2.5 m³ Rock bucket		–
		7.0 m H	3.4 m H	49 000		83 (0.85)
		Bucket capacity		1.9 m³ Rock bucket		–
		6.3 m BE	2.5 m BE	49 400		84 (0.85)
		Bucket capacity		2.5 m³ Rock bucket		–
		6.3 m BE	2.9 m BE	49 300		84 (0.85)
		Bucket capacity		2.5 m³ Rock bucket		–

# SPECIFICATIONS

## BUCKET LIST

### ZAXIS 470

Capacity	Width		No. of teeth	Weight	Recommendation							
	Without side cutters	With side cutters			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			
1.15 m <sup>3</sup>	1 100 mm	1 210 mm	5	1 070 kg	x	x	x	x	x	◎		
1.40 m <sup>3</sup>	1 280 mm	1 410 mm	5	1 170 kg	x	x	x	x	x	◎		
1.60 m <sup>3</sup>	1 220 mm	1 360 mm	5	1 480 kg	-	-	◎	◎	◎	x		
1.90 m <sup>3</sup>	1 400 mm	1 540 mm	5	1 590 kg	-	-	◎	◎	○	x		
2.10 m <sup>3</sup>	1 490 mm	1 630 mm	5	1 650 kg	-	-	◎	○	-	x		
2.30 m <sup>3</sup>	1 520 mm	1 660 mm	5	1 800 kg	◎	◎	○	-	-	x		
2.50 m <sup>3</sup>	1 630 mm	1 770 mm	5	1 870 kg	◎	○	-	-	-	x		
2.65 m <sup>3</sup>	1 720 mm	1 860 mm	5	1 930 kg	○	-	-	-	-	x		

Applicable shoe type

600 mm Triple grouser or double grouser

750 mm Triple grouser

### ZAXIS 470LC

Capacity	Width		No. of teeth	Weight	Recommendation							
	Without side cutters	With side cutters			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		
1.15 m <sup>3</sup>	1 100 mm	1 210 mm	5	1 070 kg	x	x	x	x	◎	◎		
1.40 m <sup>3</sup>	1 280 mm	1 410 mm	5	1 170 kg	x	x	x	x	◎	x		
1.60 m <sup>3</sup>	1 220 mm	1 360 mm	5	1 480 kg	-	-	◎	◎	◎	x		
1.90 m <sup>3</sup>	1 400 mm	1 540 mm	5	1 590 kg	-	-	◎	◎	◎	x		
2.10 m <sup>3</sup>	1 490 mm	1 630 mm	5	1 650 kg	-	-	◎	◎	○	x		
2.30 m <sup>3</sup>	1 520 mm	1 660 mm	5	1 800 kg	◎	◎	○	-	-	x		
2.50 m <sup>3</sup>	1 630 mm	1 770 mm	5	1 870 kg	◎	○	-	-	-	x		
2.65 m <sup>3</sup>	1 720 mm	1 860 mm	5	1 930 kg	◎	○	-	-	-	x		

Applicable shoe type

600 mm Triple grouser or double grouser

750 mm Triple grouser

### ZAXIS 490H / ZAXIS 490LCH

Capacity	Width		No. of teeth	Weight	Recommendation							
	Without side cutters	With side cutters			ZAXIS 490H			ZAXIS 490LCH				
					6.3 m BE-boom		7.0 m H-boom		6.3 m BE-boom			
					2.5 m BE-arm	2.9 m BE-arm	2.9 m BE-arm	3.4 m H-arm	2.5 m BE-arm	2.9 m BE-arm		
*¹ 1.90 m <sup>3</sup>	1 480 mm	1 500 mm	5	2 070 kg	●	●	●	●	●	●		
*¹ 2.10 m <sup>3</sup>	1 560 mm	1 580 mm	5	2 170 kg	●	●	●	-	●	●		
*¹ 2.30 m <sup>3</sup>	1 680 mm	1 700 mm	5	2 260 kg	●	-	-	-	●	●		
*¹ 2.50 m <sup>3</sup>	1 800 mm	1 820 mm	5	2 360 kg	-	-	-	-	●	●		
*² 1.30 m <sup>3</sup>	1 170 mm	-	3	2 330 kg	●	●	●	●	●	●		
One-point ripper			1	1 260 kg	●	●	●	●	●	●		

Applicable shoe type

600 mm Triple grouser or double grouser

\*¹ Rock bucket      \*² Ripper bucket

● Heavy-duty service

○ Suitable for material with density of 1 600 kg / m<sup>3</sup> or less

◎ Suitable for material with density of 1 800 kg / m<sup>3</sup> or less

- Not applicable

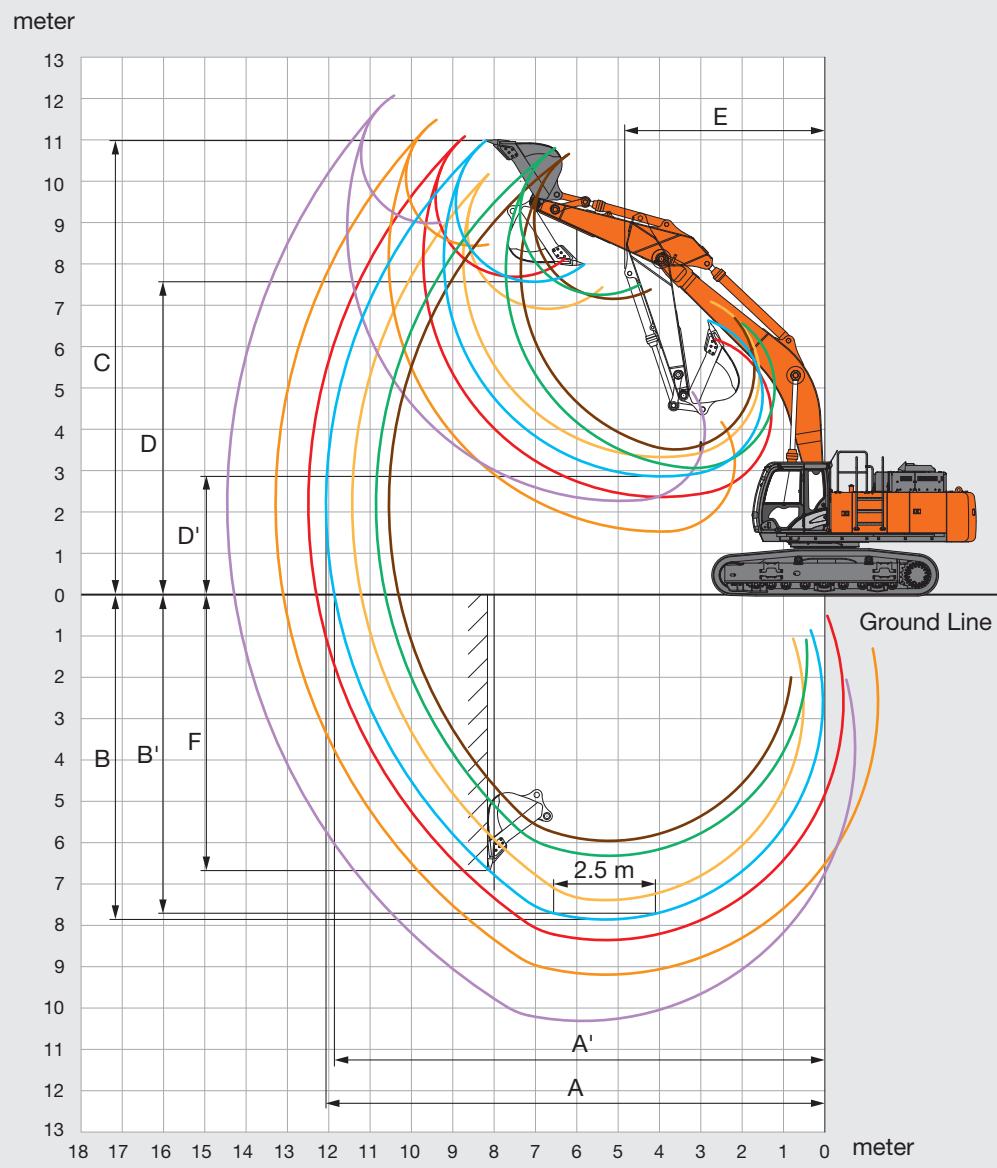
x Can't be installed

## Fixed Undercarriage: ZAXIS 470 / ZAXIS 470LC / ZAXIS 490H / ZAXIS 490LCH

## Variable Gauge Undercarriage: ZAXIS 490LCH

### WORKING RANGES

#### Fixed Undercarriage ZAXIS 470 / ZAXIS 470LC



	ZAXIS 470 / ZAXIS 470LC						ZAXIS 470LC
	BE-boom 6.3 m		H-boom 7.0 m				Boom 8.2 m
Arm length	BE-arm 2.5 m	BE-arm 2.9 m	BE-arm 2.9 m	H-arm 3.4 m	Arm 3.9 m	Arm 4.9 m	Arm 4.9 m
A Max. digging reach	10 570 / 10 540	10 860 / 10 860	11 400 / 11 430	12 070 / 12 070	12 250 / 12 490	13 290 / 13 290	14 460
A' Max. digging reach (on ground)	10 340 / 10 310	10 640 / 10 630	11 200 / 11 220	11 870 / 11 860	12 050 / 12 300	13 120 / 13 100	14 290
B Max. digging depth	6 020 / 5 950	6 360 / 6 320	7 400 / 7 390	7 900 / 7 860	8 190 / 8 360	9 230 / 9 190	10 310
B' Max. digging depth (for 2.5 m level)	5 840 / 5 770	6 190 / 6 150	7 200 / 7 180	7 750 / 7 710	8 050 / 8 220	9 110 / 9 070	10 190
C Max. cutting height	10 620 / 10 660	10 760 / 10 800	10 130 / 10 170	10 940 / 10 980	10 810 / 11 080	11 440 / 11 480	12 070
D Max. dumping height	7 090 / 7 150	7 210 / 7 250	6 900 / 6 910	7 530 / 7 570	7 900 / 7 690	8 400 / 8 440	8 980
D' Min. dumping height	3 450 / 3 510	3 020 / 3 060	3 320 / 3 330	2 820 / 2 860	2 570 / 2 360	1 480 / 1 530	2 270
E Min. swing radius	3 930 / 3 930	3 920 / 3 930	5 020 / 5 020	4 840 / 4 840	4 810 / 4 810	4 860 / 4 860	5 880
F Max. vertical wall	4 710 / 4 230	5 110 / 5 110	5 400 / 4 760	6 710 / 6 670	6 690 / 7 070	8 590 / 8 550	9 550

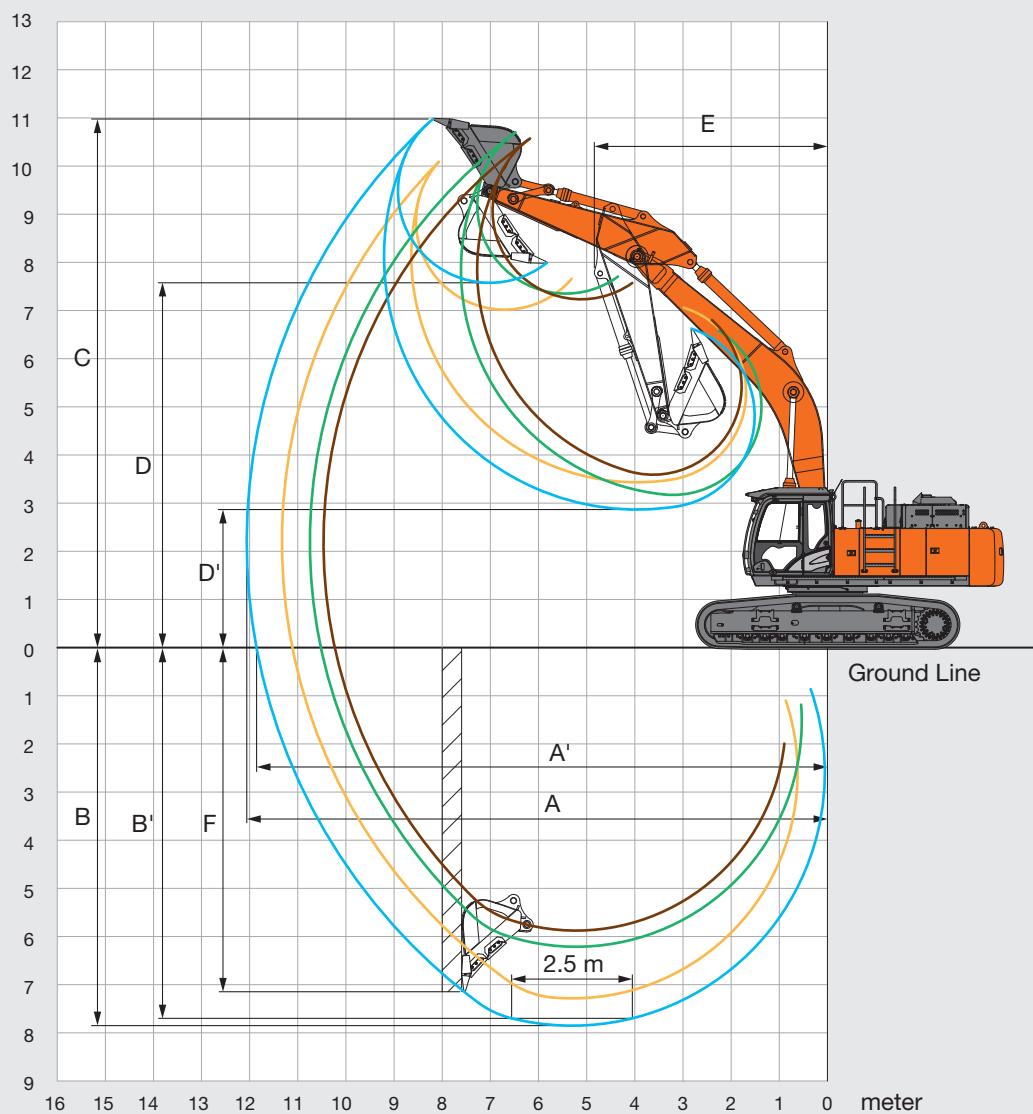
Excluding track shoe lug

# SPECIFICATIONS

## WORKING RANGES

### Fixed Undercarriage ZAXIS 490H / ZAXIS 490LCH

meter



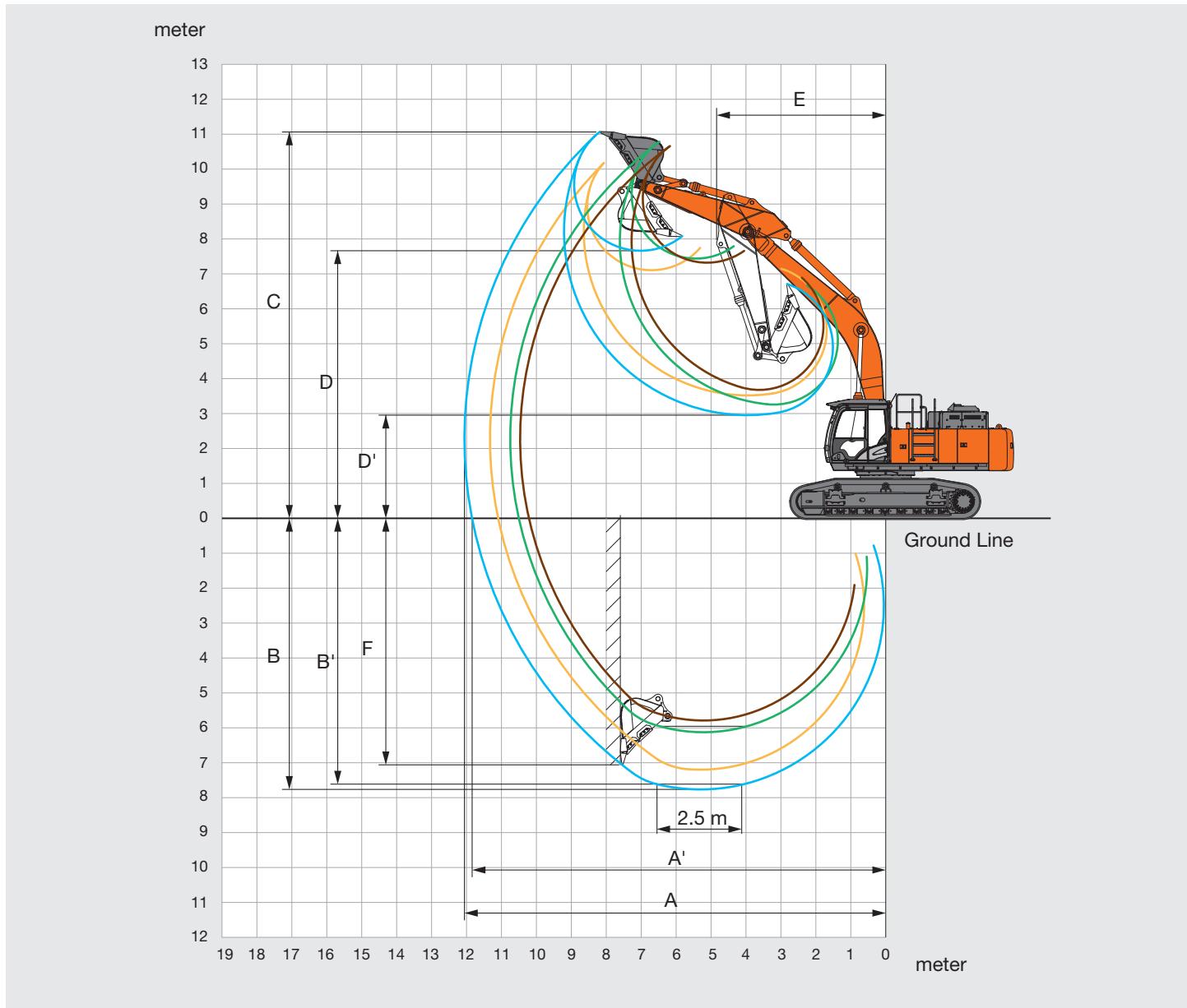
Unit: mm

Arm length	ZAXIS 490H		ZAXIS 490LCH			
	H-boom 7.0 m		BE-boom 6.3 m		H-boom 7.0 m	
	BE-arm 2.9 m	H-arm 3.4 m	BE-arm 2.5 m	BE-arm 2.9 m	BE-arm 2.9 m	H-arm 3.4 m
A Max. digging reach	11 330	12 060	10 460	10 750	11 330	12 060
A' Max. digging reach (on ground)	11 110	11 860	10 230	10 520	11 110	11 860
B Max. digging depth	7 320	7 890	5 880	6 210	7 280	7 850
B' Max. digging depth (for 2.5 m level)	7 110	7 740	5 690	6 040	7 070	7 700
C Max. cutting height	10 050	10 940	10 560	10 700	10 090	10 980
D Max. dumping height	6 980	7 540	7 230	7 350	7 020	7 580
D' Min. dumping height	3 390	2 830	3 590	3 170	3 430	2 870
E Min. swing radius	5 020	4 840	4 090	3 930	5 020	4 840
F Max. vertical wall	4 400	7 210	4 350	4 740	4 360	7 170

Excluding track shoe lug

## WORKING RANGES

### Variable Gauge Undercarriage ZAXIS 490LCH



Unit: mm

Arm length	ZAXIS 490LCH			
	BE-boom 6.3 m		H-boom 7.0 m	
	BE-arm 2.5 m	BE-arm 2.9 m	BE-arm 2.9 m	H-arm 3.4 m
A Max. digging reach	10 460	10 750	11 330	12 060
A' Max. digging reach (on ground)	10 210	10 500	11 090	11 840
B Max. digging depth	5 790	6 120	7 200	7 760
B' Max. digging depth (for 2.5 m level)	5 600	5 950	6 980	7 610
C Max. cutting height	10 650	10 790	10 170	11 080
D Max. dumping height	7 320	7 440	7 110	7 660
D' Min. dumping height	3 680	3 260	3 520	2 950
E Min. swing radius	4 090	3 930	5 020	4 840
F Max. vertical wall	4 260	4 650	4 280	7 080

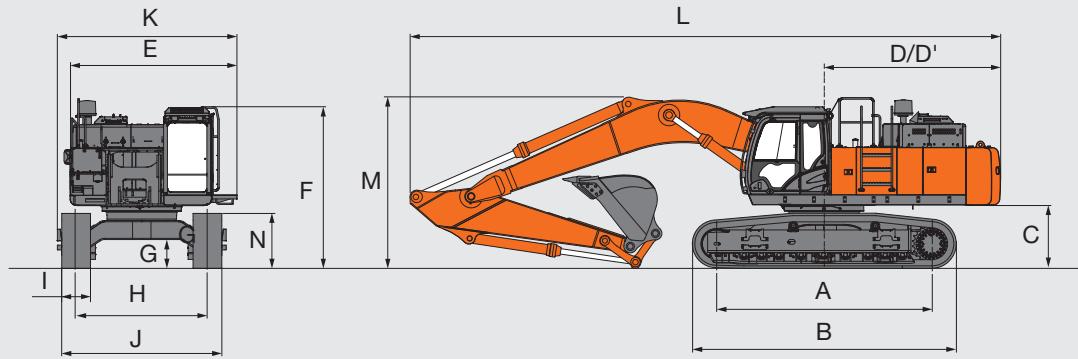
Excluding track shoe lug

# SPECIFICATIONS

**Fix Undercarriage: ZAXIS 470 / ZAXIS 470LC / ZAXIS 490H / ZAXIS 490LCH**

**Variable Gauge Undercarriage: ZAXIS 490LCH**

## DIMENSIONS



Unit: mm

	ZAXIS 470 [Fixed]	ZAXIS 470LC [Fixed]	ZAXIS 490H [Fixed]	ZAXIS 490LCH [Fixed]	ZAXIS 490LCH [Variable]
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	1 360
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	3 170	3 210	3 280	3 320	3 410
*1 G Min. ground clearance	495	535	495	535	572
H Track gauge	2 740	2 740	2 740	2 740	2 890 / 2 390
I Track shoe width	600 / 750	600 / 750	600	600	600
J Undercarriage width	with 600 mm shoe	3 340	3 340	3 340	3 490 / 2 990
	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	1 190

\*1 Excluding track shoe lug

## BUCKET AND ARM DIGGING FORCES

### ZAXIS 470 / ZAXIS 470LC

	ZAXIS 470 / ZAXIS 470LC						ZAXIS 470LC
	BE-boom 6.3 m		H-boom 7.0 m				Boom 8.2 m
	BE-arm 2.5 m	BE-arm 2.9 m	BE-arm 2.9 m	H-arm 3.4 m	Arm 3.9	Arm 4.9 m	Arm 4.9 m
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)	238 kN (24 290 kgf)	238 kN (24 290 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)	256 kN (26 140 kgf)	213 kN (21 720 kgf)	213 kN (21 720 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)	201 kN (20 480 kgf)	177 kN (18 110 kgf)	177 kN (18 110 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)	196 kN (19 970 kgf)	175 kN (17 800 kgf)	175 kN (17 800 kgf)

### ZAXIS 490H / ZAXIS 490LCH

	ZAXIS 490H		ZAXIS 490LCH					
	H-boom 7.0 m		BE-boom 6.3 m			H-boom 7.0 m		
	BE-arm 2.9 m	H-arm 3.4 m	BE-arm 2.5 m	BE-arm 2.9 m	BE-arm 2.9 m	BE-arm 2.9 m	H-arm 3.4 m	
Bucket digging force* ISO	295 kN (30 150 kgf)	296 kN (30 260 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)	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)	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)	256 kN (26 140 kgf)	215 kN (21 920 kgf)	

\* At power boost

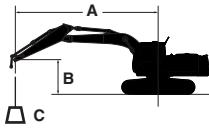
# LIFTING CAPACITIES (Without bucket)

## Fixed Undercarriage: ZAXIS 470 / ZAXIS 470LC / ZAXIS 490H / ZAXIS 490LCH

### Variable Gauge Undercarriage: ZAXIS 490LCH

- 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

#### [Fixed Undercarriage]

##### ZAXIS 470LC

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

Conditions	Load point height m	Load radius										At max. reach			
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m					
														meter	
Boom 7.0 m H Arm 3.4 m H Counterweight 9 080 kg Shoe 600 mm	7.5							*11 560	10 560			*8 640	8 250	8.64	
	6.0							*12 150	10 310	*11 360	7 620	*8 490	7 040	9.41	
	4.5			*20 460	*20 460	*15 630	13 860	*13 180	9 900	*11 770	7 440	*8 600	6 350	9.89	
	3.0			*25 010	19 500	*17 830	12 990	*14 360	9 440	12 170	7 200	*8 940	5 980	10.12	
	1.5			*17 050	*17 050	*19 500	12 290	*15 350	9 030	11 910	6 970	*9 550	5 850	10.13	
	0 (Ground)			*20 090	17 990	*20 200	11 880	*15 360	8 750	11 720	6 800	10 200	5 950	9.91	
	-1.5	*14 480	*14 480	*26 070	17 970	*19 900	11 720	15 200	8 610	11 650	6 740	10 890	6 330	9.45	
	-3.0	*23 770	*23 770	*23 730	18 150	*18 540	11 770	*14 650	8 640			*11 830	7 130	8.71	
	-4.5	*24 960	*24 960	*19 920	18 550	*15 730	12 020	*11 770	8 900			*11 480	8 770	7.59	
Boom 7.0 m H Arm 2.9 m BE Counterweight 9 080 kg Shoe 600 mm	6.0					*14 460	14 400	*12 780	10 150			*12 070	7 970	8.68	
	4.5					*22 080	20 730	*16 440	13 580	*13 720	9 750	*12 220	7 340	11 880	7 080
	3.0							*18 470	12 720	*14 780	9 310	12 080	7 130	11 190	6 600
	1.5							*19 840	12 090	15 570	8 930	11 860	6 920	11 000	6 440
	0 (Ground)					*21 460	17 870	*20 180	11 760	15 290	8 690	11 710	6 790	11 300	6 570
	-1.5	*17 230	*17 230	*24 940	17 960	*19 510	11 680	15 190	8 600			12 200	7 050	8.73	
	-3.0	*26 650	*26 650	*22 250	18 230	*17 750	11 810	*13 970	8 700			*12 920	8 120	7.92	
	-4.5					*17 910	*17 910	*14 270	12 170				*12 470	10 530	6.67
	7.5							*13 980	*13 980				*8 010	*8 010	7.13
Boom 6.3 m BE Arm 2.9 m BE Counterweight 9 080 kg Shoe 600 mm	6.0							*14 790	14 690	*13 540	10 230		*7 760	*7 760	8.05
	4.5					*20 920	*20 920	*16 490	14 020	*14 230	9 950		*7 840	*7 840	8.61
	3.0					*25 210	20 070	*18 480	13 240	*15 170	9 570		*8 200	7 410	8.88
	1.5					*27 650	18 900	*20 010	12 590	15 900	9 220		*8 900	7 230	8.89
	0 (Ground)					*27 690	18 470	*20 550	12 200	15 640	8 980		*10 090	7 420	8.64
	-1.5	*23 600	*23 600	*26 050	18 450	*19 860	12 080	*15 470	8 920			*12 190	8 080	8.10	
	-3.0	*29 020	*29 020	*22 730	18 710	*17 540	12 220						*13 650	9 570	7.21
	7.5							*14 650	*14 650				*13 740	12 030	6.77
	6.0							*15 320	14 440	*14 020	10 030		*13 260	9 520	7.73
Boom 6.3 m BE Arm 2.5 m BE Counterweight 9 080 kg Shoe 600 mm	4.5					*21 800	21 330	*16 930	13 750	*14 540	9 770		*13 390	8 280	8.31
	3.0							*18 780	12 970	*15 350	9 400		13 030	7 670	8.59
	1.5							*20 100	12 360	15 750	9 080		12 810	7 490	8.60
	0 (Ground)					*27 160	18 250	*20 380	12 030	15 520	8 870		13 300	7 710	8.34
	-1.5					*25 130	18 320	*19 370	11 970	*14 960	8 870		*14 100	8 470	7.78
	-3.0					*21 380	18 660	*16 560	12 190				*13 670	10 240	6.85

### ZAXIS 470

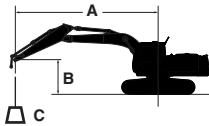
Rating over-front    Rating over-side or 360 degrees    Unit : kg

Conditions	Load point height m	Load radius										At max. reach			
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m					
														meter	
Boom 7.0 m H Arm 3.4 m H Counterweight 9 080 kg Shoe 600 mm	7.5							*11 550	10 480			*8 650	8 220	8.61	
	6.0							*12 120	10 230	11 050	7 560	*8 490	7 000	9.39	
	4.5					*20 330	*20 330	*15 570	13 780	*13 150	9 830	10 860	7 380	*8 590	6 310
	3.0					*24 910	19 380	*17 780	12 900	14 000	9 370	10 600	7 140	8 820	5 930
	1.5					*17 070	*17 070	18 980	12 200	13 550	8 960	10 350	6 910	8 670	5 790
	0 (Ground)					*19 930	17 830	18 500	11 780	13 230	8 670	10 160	6 740	8 850	5 890
	-1.5	*14 240	*14 240	*26 120	17 800	18 310	11 610	13 080	8 530	10 090	6 670	9 420	6 250	9.47	
	-3.0	*23 500	*23 500	*23 810	17 980	18 360	11 650	13 100	8 550			10 620	7 030	8.73	
	-4.5	*25 140	*25 140	*20 040	18 370	*15 830	11 900	*11 900	8 800			*11 500	8 620	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.



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

## [Fixed Undercarriage]

### ZAXIS 490LCH

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

Conditions	Load point height m	Load radius										At max. reach		
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				
														meter
Boom 7.0 m H Arm 3.4 m H Counterweight 9 080 kg Shoe 600 mm	7.5							*11 560	10 690			*8 640	8 360	8.64
	6.0							*12 150	10 440	*11 360	7 730	*8 490	7 140	9.41
	4.5			*20 460	*20 460	*15 630	14 040	*13 180	10 030	*11 770	7 550	*8 600	6 450	9.89
	3.0			*25 010	19 760	*17 830	13 170	*14 360	9 570	12 340	7 310	*8 940	6 070	10.12
	1.5			*17 050	*17 050	*19 500	12 470	*15 350	9 170	12 080	7 080	*9 550	5 940	10.13
	0 (Ground)			*20 090	18 250	*20 200	12 050	15 580	8 880	11 890	6 910	10 350	6 050	9.91
	-1.5	*14 480	*14 480	*26 070	18 230	*19 900	11 900	15 420	8 740	11 820	6 850	11 050	6 430	9.45
	-3.0	*23 770	*23 770	*23 730	18 420	*18 540	11 950	*14 650	8 770			*11 830	7 240	8.71
	-4.5	*24 960	*24 960	*19 920	18 810	*15 730	12 200	*11 770	9 030			*11 480	8 900	7.59
	6.0					*14 460	*14 460	*12 780	10 280			*12 070	8 080	8.68
Boom 7.0 m H Arm 2.9 m BE Counterweight 9 080 kg Shoe 600 mm	4.5			*22 080	20 990	*16 440	13 750	*13 720	9 880	*12 220	7 450	12 050	7 180	9.20
	3.0					*18 470	12 900	*14 780	9 440	12 250	7 230	11 350	6 700	9.46
	1.5					*19 830	12 260	*15 600	9 060	12 030	7 030	11 160	6 540	9.47
	0 (Ground)			*21 460	18 140	*20 180	11 940	15 510	8 820	11 880	6 900	11 460	6 670	9.23
	-1.5	*17 230	*17 230	*24 940	18 220	*19 510	11 860	15 410	8 740			12 380	7 160	8.73
	-3.0	*26 650	*26 650	*22 250	18 490	*17 750	11 980	*13 970	8 840			*12 920	8 250	7.92
	-4.5					*17 910	*17 910	*14 270	12 340			*12 470	10 690	6.67
	6.0					*13 980	*13 980					*8 970	*8 970	7.13
Boom 6.3 m BE Arm 2.9 m BE Counterweight 9 080 kg Shoe 600 mm	6.0					*14 790	*14 790	*13 560	10 360			*8 690	*8 690	8.05
	4.5			*20 920	*20 920	*16 490	14 190	*14 230	10 080			*8 780	8 070	8.61
	3.0			*25 200	20 320	*18 480	13 410	*15 170	9 700			*9 190	7 510	8.88
	1.5			*27 650	19 160	*20 010	12 760	*15 950	9 350			*9 970	7 340	8.89
	0 (Ground)			*27 690	18 730	*20 550	12 380	15 850	9 120			*11 290	7 540	8.64
	-1.5	*26 240	*26 240	*26 050	18 710	*19 860	12 260	*15 470	9 050			*13 630	8 200	8.10
	-3.0	*29 020	*29 020	*22 730	18 980	*17 540	12 400					*13 650	9 710	7.21
	7.5					*14 650	*14 650					*13 740	12 180	6.77
Boom 6.3 m BE Arm 2.5 m BE Counterweight 9 080 kg Shoe 600 mm	6.0					*15 320	14 620	*14 020	10 170			*13 270	9 650	7.73
	4.5			*21 800	21 590	*16 940	13 930	*14 540	9 910			*13 390	8 400	8.31
	3.0					*18 780	13 150	*15 350	9 540			13 210	7 780	8.59
	1.5					*20 100	12 540	15 970	9 210			12 990	7 600	8.60
	0 (Ground)			*27 160	18 510	*20 380	12 210	15 740	9 010			13 480	7 830	8.34
	-1.5			*25 130	18 590	*19 370	12 150	*14 960	9 000			*14 110	8 600	7.78
	-3.0			*21 380	18 920	*16 560	12 360					*13 670	10 380	6.85

### ZAXIS 490H

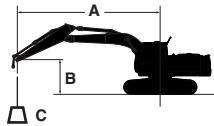
Rating over-front    Rating over-side or 360 degrees    Unit : kg

Conditions	Load point height m	Load radius										At max. reach		
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				
														meter
Boom 7.0 m H Arm 3.4 m H Counterweight 9 080 kg Shoe 600 mm	7.5							*11 550	10 480			*8 650	8 220	8.61
	6.0							*12 120	10 230	11 050	7 560	*8 490	7 000	9.39
	4.5			*20 330	*20 330	*15 570	13 780	*13 150	9 830	10 860	7 380	*8 590	6 310	9.88
	3.0			*24 910	19 380	*17 780	12 900	14 000	9 370	10 600	7 140	8 820	5 930	10.12
	1.5			*17 070	*17 070	18 980	12 200	13 550	8 960	10 350	6 910	8 670	5 790	10.14
	0 (Ground)			*19 930	17 830	18 500	11 780	13 230	8 670	10 160	6 740	8 850	5 890	9.92
	-1.5	*14 240	*14 240	*26 120	17 800	18 310	11 610	13 080	8 530	10 090	6 670	9 420	6 250	9.47
	-3.0	*23 500	*23 500	*23 810	17 980	18 360	11 650	13 100	8 550			10 620	7 030	8.73
	-4.5	*25 140	*25 140	*20 040	18 370	*15 830	11 900	*11 900	8 800			*11 500	8 620	7.63

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

### [Variable Gauge Undercarriage]

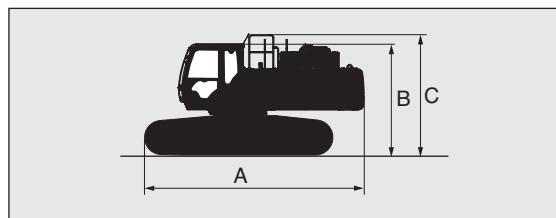
#### ZAXIS 490LCH

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

Conditions	Load point height m	Load radius										At max. reach		
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m				
														meter
Boom 7.0 m H Arm 3.4 m H Counterweight 9 080 kg Shoe 600 mm	7.5							*11 570	10 650			*8 630	8 250	8.69
	6.0							*12 190	10 390	*11 370	7 700	*8 490	7 070	9.44
	4.5			*20 720	*20 720	*15 750	13 950	*13 250	9 980	*11 800	7 510	*8 610	6 400	9.91
	3.0			*25 220	19 610	*17 940	13 080	*14 420	9 520	12 250	7 270	*8 970	6 040	10.13
	1.5			*17 030	*17 030	*19 560	12 400	*15 390	9 110	11 990	7 040	*9 590	5 920	10.13
	0 (Ground)			*20 410	18 180	*20 210	12 000	*15 460	8 840	11 810	6 880	10 300	6 040	9.89
	-1.5	*14 970	*14 970	*25 970	18 170	*19 850	11 850	15 320	8 710	11 750	6 820	11 030	6 440	9.42
	-3.0	*24 320	*24 320	*23 570	18 370	*18 430	11 910	*14 560	8 740			*11 820	7 270	8.66
	-4.5	*24 570	*24 570	*19 650	18 780	*15 510	12 180	*11 500	9 030			*11 440	9 000	7.52
Boom 7.0 m H Arm 2.9 m BE Counterweight 9 080 kg Shoe 600 mm	6.0					*14 560	14 500	*12 830	10 230			*12 070	7 990	8.72
	4.5			*22 350	20 810	*16 550	13 660	*13 780	9 830	*12 240	7 410	11 920	7 120	9.23
	3.0					*18 570	12 810	*14 830	9 380	12 160	7 200	11 250	6 660	9.47
	1.5					*19 880	12 200	*15 630	9 010	11 940	7 000	11 090	6 520	9.46
	0 (Ground)			*21 980	18 070	*20 170	11 890	15 400	8 780	11 800	6 870	11 420	6 660	9.21
	-1.5	*17 960	*17 960	*24 820	18 170	*19 450	11 820	15 310	8 710			12 380	7 180	8.70
	-3.0	*26 440	*26 440	*22 060	18 440	*17 620	11 950	*13 840	8 820			*12 920	8 300	7.86
	-4.5			*17 600	*17 600	*13 990	12 330					*12 410	10 860	6.59
	7.5					*13 990	*13 990					*8 940	*8 940	7.19
Boom 6.3 m BE Arm 2.9 m BE Counterweight 9 080 kg Shoe 600 mm	6.0					*14 860	14 790	*13 580	10 320			*8 690	*8 690	8.09
	4.5			*21 160	*21 160	*16 600	14 110	*14 280	10 030			*8 800	8 000	8.63
	3.0			*25 400	20 180	*18 580	13 330	*15 220	9 650			*9 220	7 470	8.89
	1.5			*27 700	19 060	*20 070	12 690	*15 980	9 300			*10 020	7 320	8.88
	0 (Ground)			*27 640	18 660	*20 540	12 320	15 750	9 080			*11 380	7 530	8.62
	-1.5	*26 930	*26 930	*25 920	18 660	*19 780	12 220	*15 390	9 020			*13 800	8 230	8.06
	-3.0	*28 660	*28 660	*22 480	18 940	*17 340	12 370					*13 620	9 800	7.15
	7.5					*14 650	*14 650					*13 690	11 950	6.83
	6.0					*15 390	14 550	*14 030	10 130			*13 260	9 530	7.77
Boom 6.3 m BE Arm 2.5 m BE Counterweight 9 080 kg Shoe 600 mm	4.5			*22 040	21 430	*17 040	13 840	*14 580	9 860			*13 410	8 320	8.33
	3.0					*18 880	13 070	*15 400	9 490			13100	7 730	8.60
	1.5					*20 150	12 470	*15 860	9 160			12 920	7 570	8.59
	0 (Ground)			*27 090	18 450	*20 360	12 150	*15 640	8 970			13 450	7 830	8.32
	-1.5			*24 970	18 530	*19 270	12 110	*14 850	8 980			*14 100	8 630	7.74
	-3.0			*21 110	18 890	*16 330	12 350					*13 620	10 500	6.79

# TRANSPORTATION

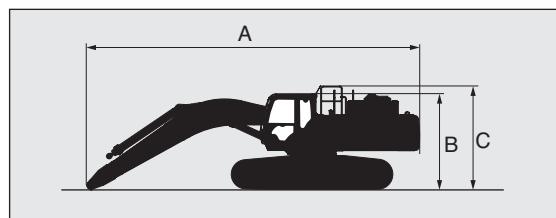
## BASIC MACHINE (WITHOUT COUNTERWEIGHT)



	Shoe width	Overall width	Weight	A	B	C
ZAXIS 470 [Fixed]	600 mm	3 340 mm	27 000 kg	5 460 mm	3 200 mm	3 540 mm
	750 mm	3 490 mm	27 800 kg			
ZAXIS 470LC [Fixed]	600 mm	3 340 mm	28 200 kg	5 680 mm	3 240 mm	3 580 mm
	750 mm	3 490 mm	29 000 kg			
ZAXIS 490H [Fixed]	600 mm	3 340 mm	27 600 kg	5 460 mm	3 320 mm	3 540 mm
	750 mm	3 490 mm	28 800 kg			
ZAXIS 490LCH [Variable]	600 mm	2 990* mm	29 900 kg	5 680 mm	3 450 mm	3 670 mm

\*Undercarriage retracted

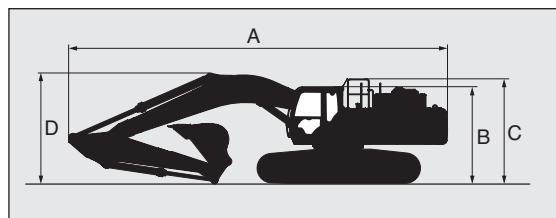
## BASIC MACHINE FITTED WITH BOOM AND NO SIDEWALK



	Boom length	Shoe width	Overall width	Weight	A	B	C
ZAXIS 470 [Fixed]	6.3 m BE	600 mm	3 340 mm	32 400 kg	9 170 mm	3 200 mm	3 540 mm
		750 mm	3 490 mm	33 100 kg			
	7.0 m H	600 mm	3 340 mm	32 400 kg	9 950 mm	3 240 mm	3 580 mm
		750 mm	3 490 mm	33 100 kg			
ZAXIS 470LC [Fixed]	6.3 m BE	600 mm	3 340 mm	33 600 kg	9 160 mm	3 240 mm	3 580 mm
		750 mm	3 490 mm	34 400 kg			
	7.0 m H	600 mm	3 340 mm	33 600 kg	9 940 mm	3 320 mm	3 540 mm
		750 mm	3 490 mm	34 400 kg			
ZAXIS 490H [Fixed]	8.2 m	600 mm	3 340 mm	34 100 kg	11 190 mm	3 360 mm	3 580 mm
		750 mm	3 490 mm	34 900 kg			
ZAXIS 490LCH [Fixed]	6.3 m BE	600 mm	3 340 mm	34 200 kg	9 160 mm	3 360 mm	3 580 mm
ZAXIS 490LCH [Variable]	7.0 H m	600 mm	3 340 mm	34 100 kg	9 940 mm		

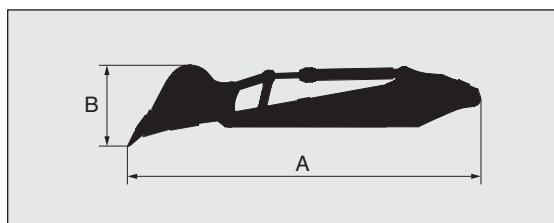
\*Undercarriage retracted

## BASIC MACHINE WITH FRONT AND SIDEWALK



	Boom length	6.3 m BE		7.0 m H				8.2 m	
		Arm length	2.5 m BE	2.9 m BE	2.9 m BE	3.4 m H	3.9 m		
ZAXIS 470 [Fixed]	A	11 490 mm	11 300 mm	12 060 mm	12 040 mm	12 040 mm	11 880 mm	4.9 m	
					3 200 mm				
					3 540 mm				
		4 020 mm	4 200 mm	3 860 mm	3 450 mm	3 480 mm	4 660 mm		
ZAXIS 470LC [Fixed]	A	11 490 mm	11 290 mm	12 050 mm	12 070 mm	12 030 mm	11 900 mm	13 160 mm	
					3 240 mm				
					3 580 mm				
		4 200 mm	4 120 mm	3 900 mm	3 720 mm	3 470 mm	4 660 mm		
ZAXIS 490H [Fixed]	A			12 100 mm	12 040 mm			4 530 mm	
					3 320 mm				
					3 540 mm				
				3 740 mm	3 450 mm				
ZAXIS 490LCH [Fixed]	A	11 490 mm	11 360 mm	12 100 mm	12 030 mm			4 530 mm	
				3 360 mm					
				3 580 mm					
		4 130 mm	3 880 mm	3 740 mm	3 450 mm				
ZAXIS 490LCH [Variable]	A	11 490 mm	11 350 mm	12 090 mm	12 020 mm			4 530 mm	
				3 450 mm					
				3 670 mm					
		4 170 mm	3 910 mm	3 780 mm	3 480 mm				

#### ARM AND BUCKET



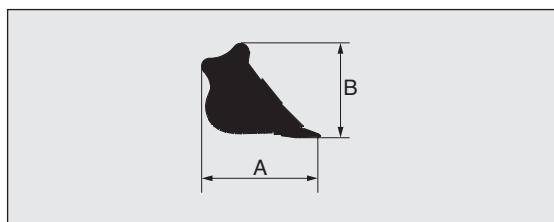
#### ZAXIS 470 / ZAXIS 470LC

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

#### ZAXIS 490H / ZAXIS 490LCH

Arm	Bucket Capacity ISO heaped	A	B	Overall width	Weight
BE 2.5 m	2.50 m <sup>3</sup>	5 650 mm	1 470 mm	1 820 mm	5 010 kg
BE 2.9 m	2.30 m <sup>3</sup>	5 950 mm	1 460 mm	1 700 mm	4 800 kg
H 3.4 m	1.90 m <sup>3</sup>	6 440 mm	1 300 mm	1 500 mm	4 630 kg

#### BUCKET



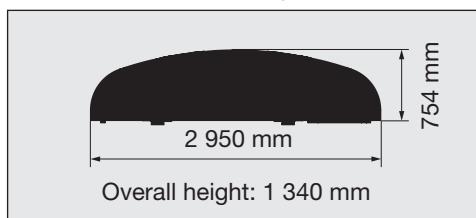
#### ZAXIS 470 / ZAXIS 470LC (Hoe bucket)

Bucket Capacity ISO heaped	A	B	Overall width	Weight
1.15 m <sup>3</sup>	1 800 mm	1 350 mm	1 210 mm	1 070 kg
1.40 m <sup>3</sup>	1 800 mm	1 350 mm	1 410 mm	1 170 kg
1.60 m <sup>3</sup>	1 960 mm	1 570 mm	1 360 mm	1 480 kg
1.90 m <sup>3</sup>	1 960 mm	1 570 mm	1 540 mm	1 590 kg
2.10 m <sup>3</sup>	1 960 mm	1 570 mm	1 630 mm	1 650 kg
2.30 m <sup>3</sup>	1 950 mm	1 660 mm	1 660 mm	1 800 kg
2.50 m <sup>3</sup>	1 950 mm	1 660 mm	1 770 mm	1 870 kg
2.65 m <sup>3</sup>	1 950 mm	1 660 mm	1 860 mm	1 930 kg

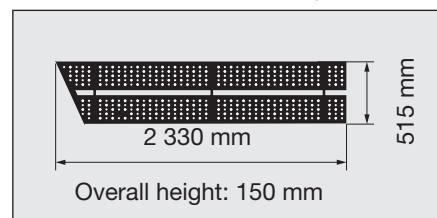
#### ZAXIS 490H / ZAXIS 490LCH (Rock bucket)

Bucket capacity ISO heaped	A	B	Overall width	Weight
1.90 m <sup>3</sup>	2 030 mm	1 480 mm	1 500 mm	2 070 kg
2.10 m <sup>3</sup>	1 950 mm	1 650 mm	1 580 mm	2 170 kg
2.30 m <sup>3</sup>	1 950 mm	1 650 mm	1 700 mm	2 260 kg
2.50 m <sup>3</sup>	1 950 mm	1 650 mm	1 820 mm	2 360 kg

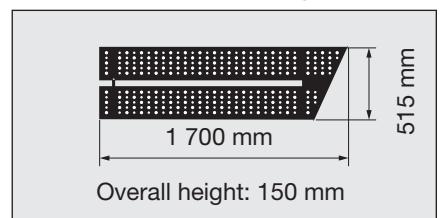
#### COUNTERWEIGHT 9 080 kg



#### LEFT FRONT SIDEWALK 48 kg



#### LEFT REAR SIDEWALK 34 kg



# EQUIPMENT

ENGINE	ZAXIS 470	ZAXIS 470LC	ZAXIS 490H	ZAXIS 490LCH
Alternator 50 A	●	●	●	●
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)	●	●	●	●
Expansion tank	●	●	●	●
Fan guard	●	●	●	●
Fuel pre-filter	●	●	●	●
Isolation-mounted engine	●	●	●	●
Power mood control [H/P (High Power) PWR(Power) ECO(Economy)]	●	●	●	●
Pre-cleaner	●	●	●	●
Radiator, oil cooler with dust protective net	●	●	●	●
Water separator	●	●	●	●

HYDRAULIC SYSTEM	ZAXIS 470	ZAXIS 470LC	ZAXIS 490H	ZAXIS 490LCH
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	ZAXIS 470	ZAXIS 470LC	ZAXIS 490H	ZAXIS 490LCH
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 (ISO10262) compliant cab	●	—	—	—
Round Tempered glass (green color) front window	●	—	—	—

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

	ZAXIS 470	ZAXIS 470LC	ZAXIS 490H	ZAXIS 490LCH
Front window on upper, lower and left side can be opened	●	●	—	—
Cab : H/R cab	—	—	●	●
OPG top guard fitted Level II (ISO10262)	—	—	●	●
OPG lower front guard fitted Level II (ISO10262)	—	—	○	●
ROPS (ISO12117-2) compliant cab	—	—	—	●
Laminated straight glass front window	—	—	●	●
Left side window can be opened	—	—	●	●
Cigarette lighter 24 V	●	●	●	●
Drink holder	●	●	●	●
Engine shut-off switch	●	●	●	●
Electric double horn	●	●	●	●
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	●	●	●	●
Power outlet 12 V	○	○	○	●
Rain guard for cab	○	○	—	—
Rear tray	●	●	●	●
Retractable seat belt	●	●	●	●
Rubber radio antenna	●	●	●	●
Seat : Adjustable reclining air suspension with heater	○	○	○	●
Seat : Adjustable reclining mechanical suspension	●	●	●	○
Seat : Adjustable reclining mechanical suspension with heater	○	○	○	○
Short wrist control levers	●	●	●	●
Storage box	●	●	●	●
Sun visor (front)	○	○	○	○
Sun visor (side)	○	○	○	○
Transparent roof with slide curtain	—	—	●	●
2 speaker	●	●	●	●
6 fluid-filled elastic mounts	●	●	●	●

MONITOR SYSTEM	ZAXIS 470	ZAXIS 470LC	ZAXIS 490H	ZAXIS 490LCH
Alarm buzzers: overheat, 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	●	●	●	●

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

LIGHTS	ZAXIS 470	ZAXIS 470LC	ZAXIS 490H	ZAXIS 490LCH
Additional working lights(boom right side)	○	○	○	○
2 working lights	●	●	●	●
2 cab lights	○	○	●	●
4 cab lights	○	○	○	○

UPPER STRUCTURE				
Auto-grease lubricator	○	○	○	○
Battery disconnect switch	●	●	●	●
Batteries 170 Ah	●	●	●	●
Counterweight 9 080 kg	●	●	●	●
Electric fuel refilling pump with auto stop	○	○	○	○
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	●	●	●	●
2.3 mm thickness undercover	●	●	—	—
4.5 mm thickness undercover	—	—	●	●

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

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

\*ZAXIS 490LCH :

Variable Gauge Undercarriage is common to Fixed Undercarriage.

FRONT ATTACHMENTS	ZAXIS 470	ZAXIS 470LC	ZAXIS 490H	ZAXIS 490LCH
Arm 3.9 m	○	○	—	—
Arm 4.9 m	○	○	—	—
Arm 2.5 m BE	○	○	○	○
Arm 2.9 m BE	○	○	○	○
Boom 7.0 m H and arm 3.4 m H	●	●	●	●
Boom 8.2 m	—	○	—	—
Boom 6.3 m BE	○	○	○	○
Centralized lubrication system	●	●	●	●
Damage prevention plate and square bars	●	●	●	●
Dirt seal on all bucket pins	●	●	●	●
Flanged pin	●	●	●	●
Monolithically cast bucket link A	●	●	●	●
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	●	●	●	●



**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

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.

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.