

ZAXIS-5 series

HITACHI

Reliable solutions

ZAXIS290



HYDRAULIC EXCAVATOR

Model Code ZX290LC-5B / ZX290LCN-5B

Engine Rated Power 140 kW (188 HP)

Operating Weight ZX290LC-5B: 29 000 kg / ZX290LCN-5B: 29 500 kg

Backhoe Bucket ISO Heaped : 1.00 - 1.62 m³



WALK AROUND

CONTENTS

4-5 Performance

Enhanced power, torque and speed ensure the optimum performance of every Hitachi machine.

6-7 Productivity

The new ZAXIS have a high impact on efficiency but a low impact on the environment.

8-9 Comfort

The cab of the new ZAXIS provides a safer and comfortable work space.

10-11 Durability

Hitachi is renowned for manufacturing high-quality machines that can meet the demands of the toughest job sites.

12-13 Maintenance

Easily accessible features for cleaning and routine maintenance maximise the availability of the ZAXIS 290.

14-15 Hitachi Support Chain

A wide range of after-sales services and support options is available to all our customers.

16-24 Specifications

Lower fuel costs

The TRIAS hydraulic system reaches higher yields with better fuel consumption than the previous ZAXIS model.

Larger swing power

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

Added durability

The strengthened brackets on the boom end and foot are equipped with bushings to withstand rugged environments.

Faster movement

The arm recirculation cancel and hydraulic boosting systems increase the arm speed during operation.

Enhanced versatility

Two additional spools in the control valve allow for the easy installation of attachments.



ZAXIS Empower your Vision.

The design of the new Hitachi ZAXIS 290 medium excavator is inspired by one aim – empower your vision. It delivers on five key levels: performance, productivity, comfort, durability and reliability. We recognise that fleet owners require high-quality, efficient machines that can work effectively, even in challenging conditions. We also realise that operators need a safer, user-friendly work space, and a machine that can respond to their skills with speed and precision. And to achieve a satisfying result, on time, on budget and to a high standard, we have aimed to maximise availability of the new ZAXIS 290 with easy maintenance features and the Hitachi Support Chain after-sales programme.

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 conditioning condensor can be easily opened for cleaning the condenser and radiator. Inspection parts are conveniently located.





PERFORMANCE

Hitachi assessed every component for the new range of medium excavators to achieve an even higher level of performance on the ZAXIS 290. We understand that every earthmoving job or loading cycle on a construction site demands the operator's skill to get the best out of the machine – and we make this easier by prioritising performance characteristics. The enhanced power, torque and speed, as well as the reduced running costs, ensure that you will be enthused by the benefits of the all-new ZAXIS 290.



Enhanced power and speed set a new standard on the job site



Lower fuel costs

Winning tenders and meeting production targets are highly competitive processes for you to develop your business. The choice of construction machinery is of paramount importance and your success relies on the productivity and efficiency of your equipment. This is where our new TRIAS hydraulic system comes into its own.

The latest advanced hydraulic and electronic technologies are central to our goal of delivering a significant saving on fuel costs with the new low-emission engine. We are delighted that TRIAS hydraulics allow you to achieve 9% less fuel consumption in PWR mode – than the previous ZAXIS P-mode – while maintaining a high level of productivity at the same time*.

Furthermore, a reduction of 18% in fuel consumption is also possible in ECO mode*. This still delivers a relatively high level of productivity using the same amount of fuel.

Higher level of performance

A smooth, fast and precise machine is every operator's dream – and that's exactly what the ZAXIS 290 offers. Our latest innovations have been developed specifically for the new generation of Hitachi medium excavators.

The hydraulic boosting system and other hydraulic systems enable the arm roll-in speed to increase when the load is relatively low. Our tried-and-tested power-boost feature has also increased by 10%* to deliver an enhanced level of excavating performance and lifting power.

The versatility of the ZAXIS 290 may be evidenced by the attachment support system, with 11 modes that can be registered on the monitor for the easy fitment of different attachments. These two auxiliary spools are useful for attachments that require multiple, large volumes of oil flow.

In addition, the swing torque for the ZAXIS 290 has increased by 9%*. The enhanced swing performance means that it is now easier to dig next to side walls and operate on slopes.

** Based upon typical work pattern collected via Global e-Service*

Key features

- 9% reduction in fuel consumption (PWR mode vs ZX-3 P-mode)*
- 18% reduction in fuel consumption (ECO mode vs ZX-3 P-mode)*
- New TRIAS hydraulic system higher productivity and less fuel consumption

- Attachment support system
- Power-boost
- Increased lifting capacity
- Larger swing power
- Two additional spools



PRODUCTIVITY

Every construction machinery manufacturer must comply with EU legislation, but Hitachi takes the implementation of the latest emission standards to another level. The development of the new ZAXIS medium excavator range has incorporated a host of environmentally friendly features with the emphasis placed firmly on productivity. In doing so, the ZAXIS 290 sets the benchmark for all-round efficiency on the job site, so that you can see an immediate return on your investment.



Striking a balance between powerful and sustainable efficiency



Sustainable efficiency

We are dedicated to the sustainable development of the Hitachi product range, particularly for use on urban job sites. Therefore, the new ZAXIS 290 is a sign of our commitment to minimising the impact of construction machinery on the environment in compliance with EU emission control Stage IIIB.

The ZAXIS 290 has been fitted with a muffler filter to capture air pollutants, which is automatically burnt thanks to an oxidation catalyst and exhaust temperature control. The variable geometry turbocharger and high volume-cooled EGR (Exhaust Gas Recirculation) also help to reduce nitrous oxide levels.

As well as reducing emissions, the ZAXIS 290's Auto Shut-down helps to prevent fuel wastage and lowers the level of noise in the cab.

In addition, all resin parts on the new ZAXIS medium excavator range are suitable for recycling and clearly marked for ease of use in this process.

Powerful efficiency

We are also focusing on finding the right balance between people, planet and profit. So, we have assessed the total cost of ownership for the new ZAXIS 290 to ensure that your new machine contributes to the profitability of your business.

The powerful new-generation Stage IIIB-compliant engine in the ZAXIS 290 delivers higher productivity, with greater fuel efficiency and is fitted with state-of-the-art controls throughout all of the components. The TRIAS hydraulic system has also been developed to reach higher yields with better fuel consumption than the previous ZAXIS model.

Hitachi medium excavators are renowned for their powerful and reliable performance, especially when there are daily targets and ultimate deadlines to meet on busy job sites. The latest range of ZAXIS models have been designed for increased productivity without burdening the environment through sustainable operations.

Key features

- | | |
|---|--|
| ■ Powerful and sustainable | ■ TRIAS hydraulic system – fuel efficiency and higher productivity |
| ■ Stage IIIB-compliant engine | ■ Environmentally friendly design |
| ■ Muffler filter that captures particulate matter | ■ Auto Shut-down – fuel saving for carbon dioxide reduction |
| ■ Variable geometry turbocharger | |
| ■ High volume-cooled EGR system | |



COMFORT

When it comes to designing the interior and functionality of the cab, Hitachi knows that the operator is king. We received direct feedback from our customers all over the world to ensure that the new ZAXIS 290 exceeds your expectations. The experience of working with the Hitachi medium excavator is second to none. The ZAXIS 290 offers a comfortable and safe working environment, enhanced visibility and a host of user-friendly features that set a new standard in the construction industry.



Inside and out, the new ZAXIS medium excavators lead the way



From the comfort of the cab

After a long shift on a road construction site or in the quarry, you need to feel ready to enjoy the rest of your day. Hitachi has taken the lead in operator comfort with the new ZAXIS 290, so that you can do just that.

The fully adjustable air-suspension seat features a new sliding mechanism with the capacity to be moved back further than ever before. The space underneath the monitor has also been expanded to allow for more leg room.

All-round visibility

Busy construction sites demand your full attention to avoid unnecessary damage or health and safety issues. The enhanced visibility – especially down the right-hand side of the new ZAXIS – will also save you time (and money), thanks to the latest innovations from Hitachi.

The repositioning of the monitor and door enhances your view, as well as making access to and from the cab much easier. The latest rear-view camera offers a closer view of the counterweight to minimise the blind spot.

User-friendly functionality

Hitachi has invested heavily in the advanced technology inherent within the new ZAXIS. The power remains firmly at your fingertips thanks to the functionality of the colour monitor and ergonomic controls.

The new multi-function LCD monitor has a large seven-inch screen that is easy to view. It provides a wide range of useful technical information, including a clear indication of the machine's status and settings with multi-lingual support in up to 32 languages. The monitor and ergonomically designed switches have been grouped together within easy reach of your right hand. The proportional switch in the new, optional, auxiliary function lever allows easy control of the front attachment.

Enjoy your work

Time flies when you're having fun, but we also realise that a happy operator is also a more productive one. That's why we have renewed our focus on providing a relaxed and enjoyable working environment within the cab.

The controls for the AM/FM stereo radio are now fully adjustable from the colour monitor. An auxiliary socket has also been added to the sound system, so that you can work efficiently and smoothly to your favourite music via devices such as MP3 players.

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



DURABILITY

Hitachi has been manufacturing mechanical and hydraulic excavators for more than 40 years. Hitachi uses IT as a strategic management tool to provide complete solutions in response to your requirements. This advanced technological approach helps us to grow as a strong global enterprise offering high-quality construction machinery. Our ZAXIS medium excavators are no exception and have established a market-leading reputation for reliability and durability.



Build to conquer tough working environments



Durable parts

The new ZAXIS 290 has been designed to operate in the most challenging of working conditions. Tough job sites require reliable machines, which deliver increased levels of availability and productivity. The bottom line is that you will enjoy a lower cost of ownership thanks to the durability of our medium excavators.

The strengthened boom end and foot on each new ZAXIS 290 are good examples. The brackets on the boom end and foot have been equipped with bushings to enhance their durable characteristics and withstand the rigours of long hours in rugged environments.

A filter-type high-performance water separator is provided standard. It captures moisture in fuel, even from fuel which contains a large amount of moisture.

Reinforced undercarriage

The front idler and adjuster cylinder have been reinforced on the ZAXIS 290 for added durability. In addition, mud no longer sticks to the adjuster cylinder.

Reliability has been further addressed with increase in the welded section parts that comprise the X-beam. The travel motor brackets' upper and lower plates have been extended, which has delivered a 40% reduction in stress.

ROPS-compliant cab

The pressurised and ROPS-compliant CRES V (Center pillar reinforced structure) cab prevents the penetration of dust and protects you from the potential risks of the job site. The Roll-over Protective Structure (ROPS) is designed to protect the operator in the unlikely event of the machine tipping or rolling over.

Key features

- Proven Hitachi quality
- More than 40 years of expertise
- Strengthened front attachment
- Reinforced undercarriage



MAINTENANCE

The quality and reliability of our excavators mean that they are used on tougher job sites around the world. The confidence that you have shown in Hitachi is shared by thousands of other operators and owners. That's why we have developed a host of easily accessible features for cleaning and maintaining the new ZAXIS 290, so that you can enjoy the availability that your Hitachi excavator fleet delivers – regardless of the location.



Keep working for longer thanks to user-friendly accessible features



Easy acces

We have made life easier for you by introducing a range of convenient features integrated within the new ZAXIS range of medium excavators. Our engineers have assessed your requirements and integrated a number of time-saving factors for routine maintenance.

Using the technology within the multi-function LCD monitor you can check engine oil volumes and see the warning light that appears when the hydraulic oil and fuel filters are due for replacement. In addition, you can set the routine service schedule to help prevent breakdowns each time the ignition switch is turned on.

On the exterior of the ZAXIS 290, the air conditioning condenser can be easily opened for cleaning the condenser and radiator. Severe blockages can also be cleared by blowing air through the convenient one-touch openable upper cover above the radiator.

From ground level, you can replace the fuel filters, engine oil filter and air cleaner, and other work is aided by non-slip steps for easy access to the upper structure of the machine.

Easy cleaning

We believe that easy routine maintenance enhances the levels of productivity and availability for your machine. That's why we have designed the ZAXIS 290 with a series of convenient and quick solutions, so that you can enjoy long, trouble-free days on the job site.

The interior anti-dust filter is a good example of these initiatives. It has been placed on the outside of the air conditioning condenser and fuel cooler, and away from the fan so that dust and particles can be caught evenly without them collecting in one place.

The cooling package has been placed in parallel and the slanted side frame also aids the cleaning process.

Key features

- Global e-Service monitors muffler filter
- Daily checks from ground level
- Oil volumes checked from the operator's seat
- Quick and easy service access



SUPPORT CHAIN

You can rely on Hitachi to offer consistently high levels of advanced technology, support and service via our European dealer network. We realise that the relationship between you and your local dealer is of paramount importance, and we support each one extensively, so they can provide you with a first-class after-sales service and help your machines to continually meet your expectations. The Hitachi Support Chain after-sales programme has been developed to protect your investment. The links in the chain allow endless support opportunities, and enable you to tailor-make your own "chain of service" from the following key areas.



A flexible after-sales programme created 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 combines 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 | ■ 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) | |

SPECIFICATIONS

ENGINE

Model	Isuzu AL-4HK1X
Type	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment	Muffler filter
No. of cylinders	4
Rated power	
ISO 9249, net	140 kW (188 HP) at 2 100 min ⁻¹ (rpm)
EEC 80/1269, net	140 kW (188 HP) at 2 100 min ⁻¹ (rpm)
SAE J1349, net	140 kW (188 HP) at 2 100 min ⁻¹ (rpm)
Maximum torque	652 Nm (66.5 kgfm) at 1 800 min ⁻¹ (rpm)
Piston displacement	5.193 L
Bore and stroke	115 mm x 125 mm
Batteries	2 x 12 V / 88 Ah

HYDRAULIC SYSTEM

Hydraulic pumps

Main pumps	3 variable displacement axial piston pumps
Maximum oil flow	2 x 236 L/min
	1 x 210 L/min
Pilot pump	1 gear pump
Maximum oil flow	37.3 L/min

Hydraulic Motors

Travel	2 variable displacement axial piston motors
Swing	1 axial piston motor

Relief Valve Settings

Implement circuit	34.3 MPa (350 kgf/cm ²)
Swing circuit	32.4 MPa (330 kgf/cm ²)
Travel circuit	34.3 MPa (350 kgf/cm ²)
Pilot circuit	3.9 MPa (40 kgf/cm ²)
Power boost	38.0 MPa (388 kgf/cm ²)

Hydraulic Cylinders

	Quantity	Bore	Rod diameter
Boom	2	135 mm	95 mm
Arm	1	150 mm	105 mm
Bucket	1	135 mm	90 mm
Positioning ^{*1}	1	150 mm	100 mm

*1 : For 2-piece boom

UPPERSTRUCTURE

Revolving Frame

D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed	10.3 min ⁻¹ (rpm)
Swing torque	90.5 kNm (9 230 kgfm)

Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO* Standards.

* International Organization for Standardization

UNDERCARRIAGE

Tracks

Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

Numbers of Rollers and Shoes on Each Side

Upper rollers	2
Lower rollers	8
Track shoes	48
Track guard	1

Travel Device

Each track driven by 2-speed axial piston motor. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low.

Travel speeds	High : 0 to 5.2 km/h
	Low : 0 to 3.1 km/h

Maximum traction force .. 246 kN (25 100 kgf)

Gradeability

70% (35 degree) continuous

SOUND LEVEL

Sound level in cab according to ISO 6396 LpA 70 dB(A)

External sound level according to ISO 6395 and

EU Directive 2000/14/EC LwA 103 dB(A)

SERVICE REFILL CAPACITIES

Fuel tank	510.0 L
Engine coolant	26.0 L
Engine oil	27.0 L
Swing device	11.7 L
Travel device (each side)	9.2 L
Hydraulic system	290.0 L
Hydraulic oil tank	156.0 L

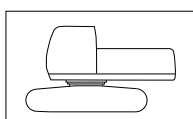
WEIGHTS AND GROUND PRESSURE

Operating weight and Ground pressure

			ZAXIS 290LC				ZAXIS 290LCN			
Boom type			Monoblock		2-Piece		Monoblock		2-Piece	
Shoe type	Shoe width	Arm length	kg	kPa(kgf/cm ²)	kg	kPa(kgf/cm ²)	kg	kPa(kgf/cm ²)	kg	kPa(kgf/cm ²)
Triple grouser	600 mm	2.42 m	29 100	55 (0.56)	29 700	56 (0.57)	28 900	54 (0.55)	29 600	56 (0.57)
		3.11 m	29 100	55 (0.56)	29 800	56 (0.57)	29 000	54 (0.55)	29 700	56 (0.57)
	700 mm	2.42 m	29 400	47 (0.48)	30 100	48 (0.49)	29 300	47 (0.48)	30 000	48 (0.49)
		3.11 m	29 500	47 (0.48)	30 200	48 (0.49)	29 400	47 (0.48)	30 000	48 (0.49)
	800 mm	2.42 m	29 800	42 (0.43)	30 500	43 (0.44)	29 700	42 (0.43)	30 400	43 (0.44)
		3.11 m	29 900	42 (0.43)	30 600	43 (0.44)	29 800	42 (0.43)	30 400	43 (0.44)
	900 mm	2.42 m	30 200	37 (0.38)	30 900	38 (0.39)	30 100	37 (0.38)	30 700	38 (0.39)
		3.11 m	30 300	38 (0.39)	31 000	38 (0.39)	30 200	37 (0.38)	30 800	38 (0.39)

Including 1.10 m³ (ISO heaped), bucket weight (900 kg) and counterweight (6 200 kg).

Basic Machine Weight and Overall width



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

ZAXIS 290LC

Shoe width	Weight	Overall width
600 mm	22 900 kg	3 190 mm
700 mm	23 300 kg	3 290 mm
800 mm	23 700 kg	3 390 mm
900 mm	24 100 kg	3 490 mm

ZAXIS 290LCN

Shoe width	Weight	Overall width
600 mm	22 700 kg	2 990 mm
700 mm	23 100 kg	3 090 mm
800 mm	23 500 kg	3 190 mm
900 mm	23 900 kg	3 290 mm

Components weight

	Weight
Counterweight	6 200 kg
Monoblock boom (with arm cylinder and boom cylinder)	3 130 kg
2-Piece boom (with arm cylinder and boom cylinder)	3 790 kg
2.42 m arm (with bucket cylinder)	1 350 kg
3.11 m arm (with bucket cylinder)	1 430 kg
1.10 m ³ bucket	900 kg

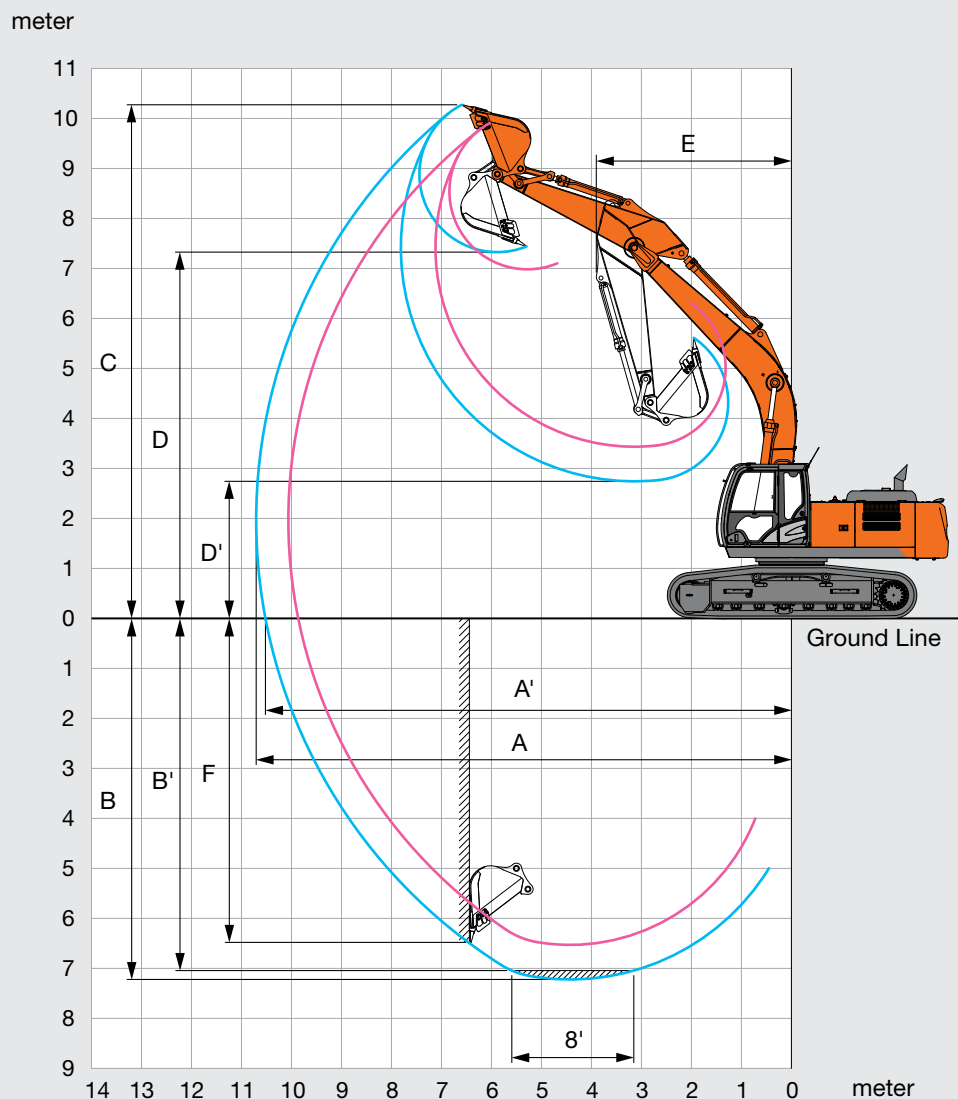
BUCKET AND ARM DIGGING FORCE

ZAXIS 290LC / ZAXIS 290LCN		
Arm length	2.42 m	3.11 m
Bucket digging force* ISO	202 kN (20 600 kgf)	
Bucket digging force* SAE : PCSA	175 kN (17 900 kgf)	
Arm crowd force* ISO	182 kN (18 500 kgf)	144 kN (14 700 kgf)
Arm crowd force* SAE : PCSA	174 kN (17 700 kgf)	138 kN (14 100 kgf)

* At power boost

SPECIFICATIONS

WORKING RANGES: MONOBLOCK BOOM

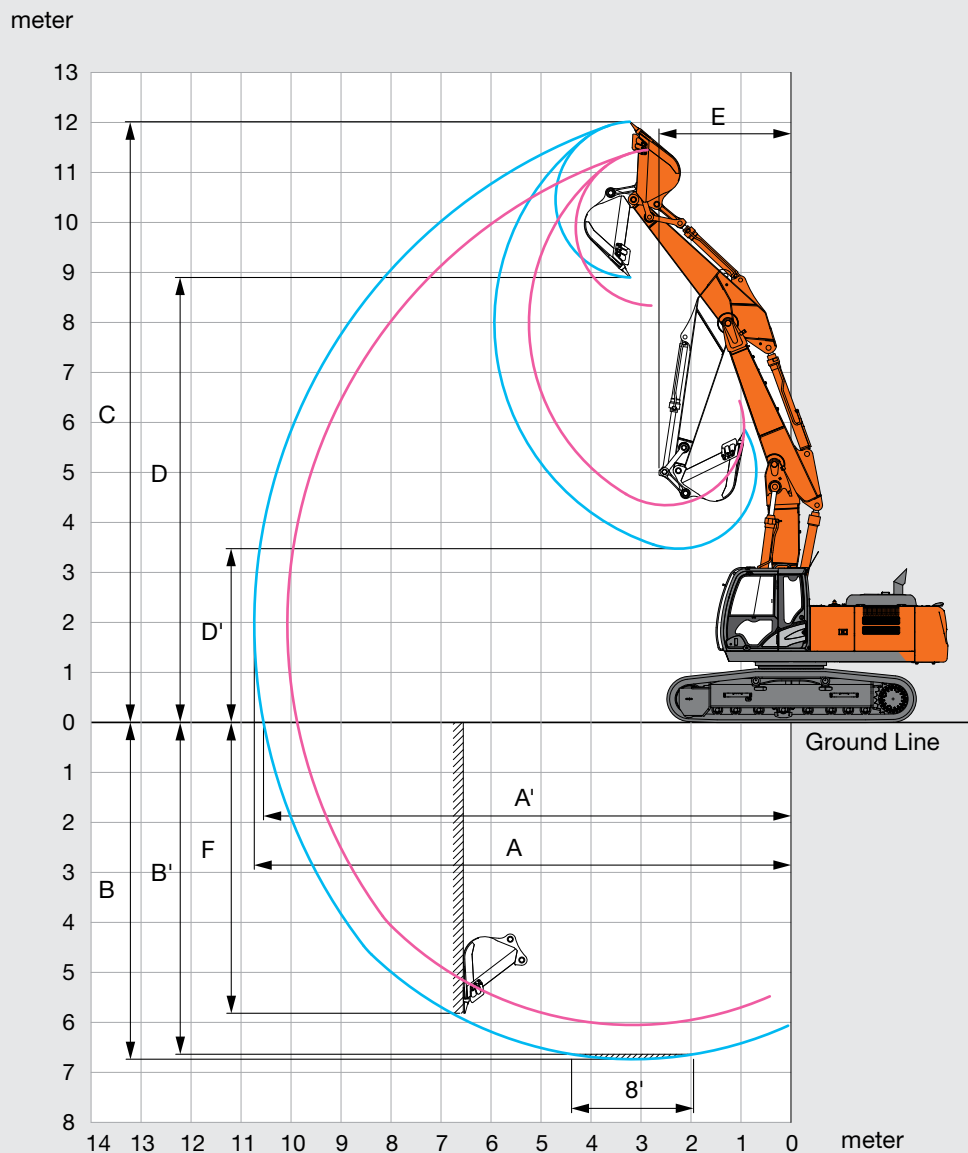


Unit: mm

	ZAXIS 290LC / ZAXIS 290LCN	
	6.20 m Monoblock boom	
Arm length	2.42 m	3.11 m
A Max. digging reach	10 600	10 710
A' Max. digging reach (on ground)	9 860	10 520
B Max. digging depth	6 530	7 220
B' Max. digging depth (8' level)	6 310	7 040
C Max. cutting height	9 910	10 270
D Max. dumping height	6 980	7 330
D' Min. dumping height	3 450	2 740
E Min. swing radius	4 060	3 900
F Max. vertical wall digging depth	5 650	6 480

Excluding track shoe lug

WORKING RANGES: 2-PIECE BOOM



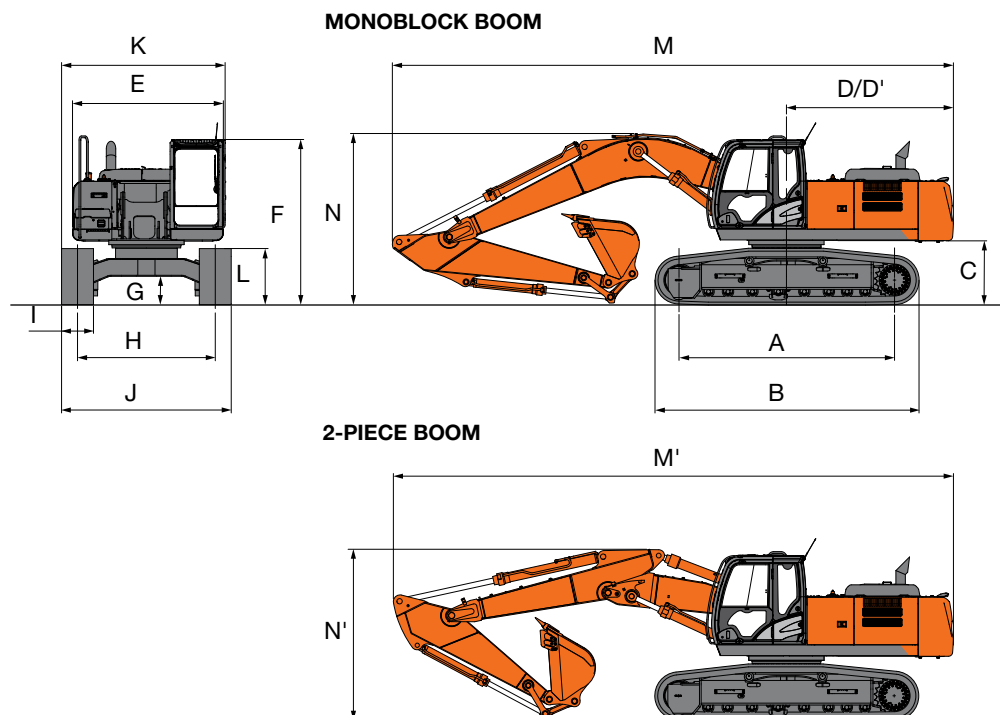
Unit: mm

	ZAXIS 290LC / ZAXIS 290LCN	
	6.12 m 2-Piece boom	
Arm length	2.42 m	3.11 m
A Max. digging reach	10 080	10 740
A' Max. digging reach (on ground)	9 880	10 530
B Max. digging depth	6 050	6 740
B' Max. digging depth (8' level)	5 950	6 640
C Max. cutting height	11 450	12 020
D Max. dumping height	8 330	8 900
D' Min. dumping height	4 340	3 470
E Min. swing radius	2 870	2 640
F Max. vertical wall digging depth	5 060	5 820

Excluding track shoe lug

SPECIFICATIONS

DIMENSIONS



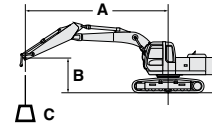
Unit: mm

	ZAXIS 290LC	ZAXIS 290LCN
A Distance between tumbler	4 050	4 050
B Undercarriage length	4 940	4 940
* C Counterweight clearance	1 170	1 170
D Rear-end swing radius	3 140	3 140
D' Rear-end length	3 140	3 140
E Overall width of upperstructure	2 870	2 870
F Overall height of cab	3 110	3 110
* G Min. ground clearance	510	510
H Track gauge	2 590	2 390
I Track shoe width	G 600	G 600
J Undercarriage width	3 190	2 990
K Overall width	3 190	2 990
* L Track height with triple grouser shoes	1 070	1 070
MONOBLOCK BOOM		
M Overall length		
With 2.42 m arm	10 640	10 640
With 3.11 m arm	10 550	10 550
N Overall height of boom		
With 2.42 m arm	3 450	3 450
With 3.11 m arm	3 200	3 200
2-PIECE BOOM		
M' Overall length		
With 2.42 m arm	10 530	10 530
With 3.11 m arm	10 510	10 510
N' Overall height of boom		
With 2.42 m arm	3 200	3 200
With 3.11 m arm	3 140	3 140

* Excluding track shoe lug G: Triple grouser shoe

LIFTING CAPACITIES

- 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.



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

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities.

ZAXIS 290LC MONOBLOCK BOOM



Rating over-front



Rating over-side or 360 degrees

Unit : kg

Conditions	Load point height m	Load radius												At max. reach		
		1.5		3.0		4.5		6.0		7.5		9.0				
																meter
Boom 6.20 m Arm 2.42 m Counterweight 6 200 kg Shoe 600 mm	9.0															
	7.5															
	6.0							*8 020	*8 020					*7 790	5 620	7.46
	4.5					*11 240	*11 240	*9 000	7 700	*8 010	5 480			*7 770	4 830	8.11
	3.0					*14 150	10 930	*10 290	7 290	*8 580	5 290			7 180	4 430	8.44
	1.5							*11 390	6 950	8 420	5 120			7 010	4 300	8.49
	0 (Ground)					*16 240	10 140	11 560	6 750	8 290	5 000			7 220	4 400	8.27
	-1.5			*10 350	*10 350	*15 700	10 160	11 500	6 700	8 270	4 990			7 910	4 790	7.75
	-3.0			*18 760	*18 760	*14 210	10 320	*10 810	6 800					*9 060	5 720	6.86
	-4.5			*14 540	*14 540	*11 090	10 690							*8 930	8 190	5.42
Boom 6.20 m Arm 3.11 m Counterweight 6 200 kg Shoe 600 mm	9.0															
	7.5															
	6.0							*7 120	*7 120	*6 930	5 860			*4 740	*4 740	8.19
	4.5					*9 810	*9 810	*8 170	8 060	*7 370	5 710			*4 730	4 420	8.78
	3.0					*12 760	11 610	*9 560	7 630	*8 060	5 500	*5 570	4 210	*4 890	4 100	9.09
	1.5					*15 140	10 830	*10 860	7 240	8 450	5 300	*6 400	4 120	*5 220	3 980	9.14
	0 (Ground)					*16 180	10 460	11 560	6 970	8 280	5 140			*5 800	4 050	8.93
	-1.5	*6 820	*6 820	*10 250	*10 250	*16 100	10 340	11 450	6 860	8 200	5 070			*6 800	4 340	8.45
	-3.0	*11 900	*11 900	*16 480	*16 480	*15 090	10 460	*11 370	6 880	8 250	5 120			8 040	5 000	7.65
	-4.5			*17 510	*17 510	*12 840	10 720	*9 480	7 080					*8 590	6 530	6.39

ZAXIS 290LCN MONOBLOCK BOOM



Rating over-front





Rating over-side or 360 degrees















Unit : kg

Conditions	Load point height m	Load radius m												At max. reach		
		1.5		3.0		4.5		6.0		7.5		9.0				
																meter
Boom 6.20 m Arm 2.42 m Counterweight 6 200 kg Shoe 600 mm	9.0															
	7.5															
	6.0							*8 020	7 570					*7 790	5 320	7.46
	4.5					*11 240	11 110	*9 000	7 250	*8 010	5 180			7 730	4 560	8.11
	3.0					*14 150	10 170	*10 290	6 860	8 580	5 000			7 150	4 190	8.44
	1.5							*11 390	6 520	8 380	4 830			6 980	4 060	8.49
	0 (Ground)					*16 240	9 420	11 510	6 330	8 250	4 710			7 190	4 150	8.27
	-1.5			*10 350	*10 350	*15 700	9 430	11 450	6 280	8 240	4 700			7 880	4 520	7.75
	-3.0			*18 760	*18 760	*14 210	9 590	*10 810	6 380					*9 060	5 380	6.86
	-4.5			*14 540	*14 540	*11 090	9 940							*8 930	7 670	5.42
Boom 6.20 m Arm 3.11 m Counterweight 6 200 kg Shoe 600 mm	9.0															
	7.5															
	6.0							*7 120	*7 120	*6 930	5 400			*4 740	4 640	8.19
	4.5					*9 810	*9 810	*8 170	7 410	*7 370	5 260			*4 730	4 060	8.78
	3.0					*12 760	10 540	*9 560	6 990	*8 060	5 050	*5 570	3 810	*4 890	3 750	9.09
	1.5					*15 140	9 790	*10 860	6 600	8 410	4 850	*6 400	3 720	*5 220	3 640	9.14
	0 (Ground)					*16 180	9 440	11 530	6 340	8 240	4 690			*5 800	3 700	8.93
	-1.5	*6 820	*6 820	*10 250	*10 250	*16 100	9 350	11 400	6 230	8 160	4 620			*6 800	3 960	8.45
	-3.0	*11 900	*11 900	*16 480	*16 480	*15 090	9 430	*11 370	6 260	8 220	4 670			8 010	4 570	7.65
	-4.5			*17 510	*17 510	*12 840	9 680	*9 480	6 450					*8 590	5 960	6.39


LIFTING CAPACITIES















ZAXIS 290LC 2-PIECE BOOM

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

Conditions	Load point height m	Load radius m												At max. reach		
		1.5		3.0		3.0		6.0		7.5		9.0				
																meter
2-Piece Boom 6.12 m Arm 2.42 m Counterweight 6 200 kg Shoe 600 mm	9.0													*7 590	*7 590	4.65
	7.5													*5 670	*5 670	6.41
	6.0			*10 260	*10 260									*4 920	*4 920	7.47
	4.5			*13 980	*13 980	*9 640	*9 640							*4 580	*4 580	8.12
	3.0			*18 430	*18 430	*13 660	*11 720	*7 830	7 660					*4 470	*4 470	8.45
	1.5			*22 790	*22 790	*16 340	12 020	*10 500	7 840	*6 080	5 260			*4 560	4 390	8.50
	0 (Ground)	*14 090	*14 090	*25 360	21 970	*16 390	11 370	*10 420	7 450	*6 880	5 200			*4 850	4 510	8.28
	-1.5	*21 270	*21 270	*25 660	21 640	*16 640	11 050	*11 430	7 170	*6 470	5 140			*5 450	4 930	7.76
	-3.0	*28 680	*28 680	*23 770	21 790	*15 240	10 910	*9 630	7 090					*5 560	*5 560	6.86
	-4.5															
2-Piece Boom 6.12 m Arm 3.11 m Counterweight 6 200 kg Shoe 600 mm	9.0					*6 970	*6 970							*5 800	*5 800	5.79
	7.5					*6 660	*6 660	*5 730	*5 730					*4 680	*4 680	7.27
	6.0					*7 210	*7 210	*5 830	*5 830	*4 980	*4 980			*4 160	*4 160	8.22
	4.5			*13 700	*13 700	*8 450	*8 450	*6 310	*6 310	*5 120	*5 120			*3 910	*3 910	8.81
	3.0	*12 430	*12 430	*19 650	*19 650	*11 380	*11 380	*7 860	*7 860	*5 470	*5 470	*4 220	4 130	*3 840	*3 840	9.12
	1.5			*21 750	*21 750	*16 290	*11 910	*9 530	8 010	*5 970	5 490	*4 490	4 050	*3 900	*3 900	9.16
	0 (Ground)	*12 260	*12 260	*24 230	22 430	*16 290	11 580	*11 090	7 600	*6 530	5 340			*4 120	4 010	8.96
	-1.5	*16 950	*16 950	*25 620	21 740	*16 420	11 110	*10 960	7 290	*7 050	5 160			*4 560	4 320	8.48
	-3.0	*21 690	*21 690	*25 070	21 620	*16 400	10 960	*11 320	7 060	*6 450	5 140			*5 390	5 000	7.68
	-4.5	*24 450	*24 450	*20 100	*20 100	*12 260	10 890							*6 630	*6 630	5.92

ZAXIS 290LCN 2-PIECE BOOM

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

Conditions	Load point height m	Load radius m												At max. reach		
		1.5		3.0		4.5		6.0		7.5		9.0				
																meter
2-Piece Boom 6.12 m Arm 2.42 m Counterweight 6 200 kg Shoe 600 mm	9.0													*7 590	*7 590	4.65
	7.5													*5 670	*5 670	6.41
	6.0			*10 260	*10 260									*4 920	*4 920	7.47
	4.5			*13 980	*13 980	*9 640	*9 640							*4 580	4 490	8.12
	3.0			*18 430	*18 430	*13 660	10 790	*7 830	7 140					*4 470	4 130	8.45
	1.5			*22 790	20 350	*16 340	10 930	*10 500	7 190	*6 080	4 810			*4 560	4 010	8.50
	0 (Ground)	*14 090	*14 090	*25 360	19 340	*16 390	10 300	*10 420	6 840	*6 880	4 740			*4 850	4 120	8.28
	-1.5	*21 270	*21 270	*25 660	19 030	*16 640	9 990	*11 430	6 540	*6 470	4 690			*5 450	4 500	7.76
	-3.0	*28 680	*28 680	*23 770	19 170	*15 240	9 860	*9 630	6 450					*5 560	5 410	6.86
	-4.5															
2-Piece Boom 6.12 m Arm 3.11 m Counterweight 6 200 kg Shoe 600 mm	9.0					*6 970	*6 970							*5 800	*5 800	5.79
	7.5					*6 660	*6 660	*5 730	*5 730					*4 680	*4 680	7.27
	6.0					*7 210	*7 210	*5 830	*5 830	*4 980	*4 980			*4 160	*4 160	8.22
	4.5			*13 700	*13 700	*8 450	*8 450	*6 310	*6 310	*5 120	*5 120			*3 910	*3 910	8.81
	3.0	*12 430	*12 430	*19 650	*19 650	*11 380	*10 830	*7 860	7 780	*5 470	5 210	*4 220	3 780	*3 840	3 690	9.12
	1.5			*21 750	20 510	*16 290	11 270	*9 530	7 350	*5 970	5 100	*4 490	3 700	*3 900	3 590	9.16
	0 (Ground)	*12 260	*12 260	*24 230	19 770	*16 290	10 500	*11 090	6 950	*6 530	4 890			*4 120	3 660	8.96
	-1.5	*16 950	*16 950	*25 620	19 120	*16 420	10 050	*10 960	6 650	*7 050	4 710			*4 560	3 940	8.48
	-3.0	*21 690	*21 690	*25 070	19 010	*16 400	9 900	*11 320	6 420	*6 450	4 690			*5 390	4 560	7.68
	-4.5	*24 450	*24 450	*20 100	19 270	*12 260	9 840							*6 630	6 630	5.92

● Standard equipment ○ Optional equipment

ENGINE

Air cleaner double filters	●
Auto idle system	●
Auto shut-down control	●
Cartridge-type engine oil filter	●
Fuel pre-filter	●
Fuel main filter	●
Dust-proof indoor net	●
Dry-type air filter with evacuator valve (with air filter restriction indicator)	●
Electrical fuel feed pump	●
ECO/PWR mode control	●
Engine oil drain coupler	●
Fan guard	●
Fuel cooler	●
Fuel recirculation filter	○
High performance water separator	●
Isolation-mounted engine	●
Muffler filter	●
Radiator, oil cooler and intercooler	●
Radiator reserve tank	●
50 A alternator	●

HYDRAULIC SYSTEM

Auto power lift	●
Control valve with main relief valve	●
Full-flow filter	●
High mesh full flow filter with restriction indicator	○
Hose rupture valve	○
Pilot filter	●
Power boost	●
Suction filter	●
Swing dampener valve	●
Two extra port for control valve	●
Variable reliefvalve for two extra port	●
Work mode selector	●

CAB

Auxiliary function lever (Breaker assist)	○
All-weather sound suppressed steel cab	●
AM-FM radio	●
Ashtray	●
Auto control air conditioner	●
AUX. terminal and storage	●
CRES V (Center pillar reinforced structure) cab	●
Drink holder with hot & cool function	●
Electric double horn	●
Engine shut-off switch	●
Equipped with reinforced, tinted (green color) glass windows	●
Evacuation hammer	●
Fire extinguisher bracket	○
Floor mat	●
Footrest	●
Front window washer	●
Windows on front, upper, lower and left side can be opened	●
Glove compartment	●
Hot & cool box	●
Intermittent windshield wipers	●
Key cylinder light	●
Laminated round glass window	○
LED room light with door courtesy	●
OPG front guard Level II (ISO10262) compliant cab	○
OPG top guard fitted Level II (ISO10262) compliant cab	○
Pilot control shut-off lever	●
Rain guard	○
Rear tray	●
Retractable seat belt	●
ROPS (ISO12117-2) compliant cab	●
Rubber radio antenna	●
Seat : air suspension seat with heater	●
Seat adjustment part : backrest, armrest, height and angle, slide forward / back	●
Short wrist control levers	●
Sun visor (front window/side window)	○
Transparent roof with slide curtain	●
2 speakers	●
4 fluid-filled elastic mounts	●
12 V power outlet	○
24 V cigarette lighter	●

MONITOR SYSTEM

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

LIGHTS

Additional cab roof front lights	○
Additional cab roof rear lights	○
Additional boom light with cover	○
Rotating lamp	○
2 working lights	●

UPPER STRUCTURE

Electric fuel refilling pump with auto stop and filter	●
Fuel level float	●
Hydraulic oil level gauge	●
Rear view camera	●
Rear view mirror (right & left side)	●
Swing parking brake	●
Tool box	●
Undercover	●
Utility space	●
6 200 kg counterweight	●
2 x 88 Ah batteries	●

UNDERCARRIAGE

Bolt-on sprocket	●
Reinforced track links with pin seals	●
Travel motor covers	●
Travel parking brake	●
Track undercover	○
Upper and lower rollers	●
1 track guard (each side) and hydraulic track adjuster	●
4 tie down hooks	●
3 track guards	○
600 mm triple grouser shoes	●

FRONT ATTACHMENTS

Casted bucket link A	●
Centralized lubrication system	●
Dirt seal on all bucket pins	●
Flanged pin	●
HN bushing	●
Reinforced resin thrust plate	●
WC (tungsten-carbide) thermal spraying	●

ATTACHMENTS

Attachment basic piping	●
Additional pump (50 L/min)	○
Breaker and crusher piping	●
HSB Parts for breaker and crusher	●
Pilot accumulator	○
Welded bucket link A with welded hook	○
Accessories for 2 speed selector	○
Assist piping	○

MISCELLANEOUS

Lockable fuel refilling cap	●
Lockable machine covers	●
Onboard information controller	●
Skid-resistant tapes, plates and handrails	●
Standard tool kit	●
Travel direction mark on track frame	●



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 2025

The Hitachi Group released the Environmental Vision 2025 to curb annual carbon dioxide emissions. The Group is committed to global production while reducing environmental impact in life cycles of all products, and realizing a sustainable society by tackling three goals — prevention of global warming, recycling of resources, and enhancement of ecosystem.

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.



KS-EN175EU