### HITACHI

**Reliable solutions** 

## **ZAXIS135**US





#### HYDRAULIC EXCAVATOR

Model Code: ZX135US-5B Engine Rated Power: 73.4 kW (98 HP) Operating Weight: 13 400 - 14 900 kg Backhoe Bucket ISO Heaped: 0.19 - 0.66 m<sup>3</sup>

## WALK AROUND

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#### **Higher productivity**

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

#### Added durability

The strengthened brackets on the boom foot are equipped with bushes to withstand rugged environments.

#### Faster movement

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

#### Enhanced lifting performance

Power boost and auto power boost allow the machine to perform powerful digging and lifting The design of the new Hitachi ZAXIS 135US 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 135US with easy maintenance features and the Hitachi Support Chain after-sales programme.

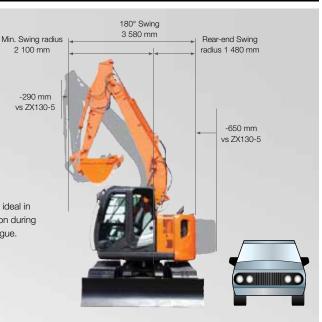
#### **Expanded leg room**

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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 ergonomicaly re-designed.

#### **Ultimate comfort**

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



#### Short-tail swing radius

This allows the new ZAXIS to work in confined spaces, particularly in urban areas, for road construction, forestry and demolition - anywhere with limited work space.

#### 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

With the new easy-to-use locking mechanism the Dust-Proof indoor filter can be attached and detached quickly.





## PERFORMANCE

Like all new ZAXIS models, the ZAXIS 135US has been designed to deliver an outstanding performance on the job site, with increased productivity, enhanced manoeuvrability and reduced fuel consumption. It is extremely versatile and ideal for working on a wide variety of projects, especially where space is limited. The short-tail swing radius makes it suitable for urban and road construction sites, as well as forestry and demolition applications.



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



#### Higher level of performance

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.

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 HIOS III hydraulics allow you to achieve 11% 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 22% in fuel consumption is also possible in ECO mode\*. This still delivers a relatively high level of productivity using the same amount of fuel.

#### A wider range of applications

More compact than conventional models, the ZAXIS 135US is suitable for working on a wide variety of job sites, especially where space is limited, namely on urban and road construction projects, and in forestry and demolition. It delivers increased operating efficiency in confined areas thanks to minimal protrusions at both the front and rear of the machine. A truck can be positioned closer to the tracks, for example, which boosts loading efficiency.

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

#### Key features

- 11% reduction in fuel consumption (PWR mode vs ZX-3 P-mode)\*
- 22% reduction in fuel consumption (ECO mode vs ZX-3 P-mode)\*
- HIOS III hydraulic system high productivity and lower fuel consumption

#### Lower fuel with high productivity

The success of your business is influenced by the productivity and efficiency of your equipment. Ultimately, your investment in Hitachi construction machinery can help you to meet production targets and compete successfully to win tenders within your market.

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 5% to deliver an enhanced level of excavating performance and lifting power.

The versatility of the ZAXIS 135US 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.

- Attachment support system
- Power-boost
- Increased lifting capacity
- Short-tail swing radius

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## PRODUCTIVITY

Although the ZAXIS 135US has been created to help increase productivity levels on the job site, it has also been designed to have a reduced impact on the environment. The new excavator has been equipped with powerful and innovative features, allowing it to operate efficiently and in a sustainable way. In this way, it contributes to a safer and more pleasant working environment, and to the profitability of your business.



### 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 135US 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 135US 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 135US'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 135US to ensure that your new machine contributes to the profitability of your business.

The powerful new-generation Stage IIIB-compliant engine in the ZAXIS 135US delivers higher productivity, with greater fuel efficiency and is fitted with state-of-the-art controls throughout all of the components.

Hitachi 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
- Stage IIIB-compliant engine

Muffler filter that captures particulate matter

- Variable geometry turbocharger
- High volume-cooled EGR system

Environmentally friendly design

Auto Shut-down – fuel saving for carbon dioxide reduction

ZX135US-5



## COMFORT

When we consulted operators and owners about the most important factors to be considered during the design of the new ZAXIS excavators, a comfortable working environment ranked high on the list. The cab of the ZAXIS 135US benefits from user-friendly features, excellent all-round visibility and expanded leg room. The overall aim was to make working long shifts on the job site easier and more enjoyable for our customers.



# Inside and out, the new ZAXIS 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 135US, 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. The pressurized cab keeps dust and particles from entering.

#### 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 terminal 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 and the inclusion of storage for an MP3 player.

#### 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
  - Auxiliary terminal and storage for an MP3 player



## DURABILITY

Hitachi is renowned for developing machines that are built to cope with the most rigorous working conditions. This is due to the several decades of experience gained in manufacturing high-quality construction equipment that is relied upon by our customers around the world. The new ZAXIS 135US is the result of continuous development by Hitachi and incorporates the latest advancements in technology, ensuring its reliability and durability on the toughest job sites.



# Build to conquer tough working environments



#### **Durable parts**

The new ZAXIS 135US 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 excavators.

The strengthened boom foot on each new ZAXIS 135US is a good example. The bracket on the boom foot has 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 main frame**

The front idler and adjuster cylinder have been reinforced on the ZAXIS 135US 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. The D-section frame skirt has been enlarged for higher durability.

#### **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 main frame





## MAINTENANCE

To ensure the optimum performance of your new Hitachi ZAXIS excavator, it's now easier than ever to carry out routine maintenance, cleaning and service checks. The new ZAXIS 135US has been designed with several features that are quickly and conveniently accessible from ground level, and others have been repositioned so they are easier to reach. This means that you can spend less time on maintenance and more time on the work you enjoy.



# Keep working for longer thanks to user-friendly accessible features



#### Easy access

We have made life easier for you by introducing a range of convenient features integrated within the new ZAXIS range of 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 135US, 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 135US 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.

#### 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

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 European network, so that they can ensure your ZAXIS 135US 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 the following key-areas, "links" in the chain of service available from Hitachi via your local dealer.







### A flexible after-sales programme created to protect your investment

#### **Global e-Service**

The new ZAXIS excavator is equipped with a GPRS communication system<sup>\*</sup>. 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

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 AM-4JJ1X
Туре	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	73.4 kW (98 HP) at 2 000 min <sup>-1</sup> (rpm)
EEC 80/1269, net	73.4 kW (98 HP) at 2 000 min <sup>-1</sup> (rpm)
SAE J1349, net	73.4 kW (98 HP) at 2 000 min <sup>-1</sup> (rpm)
Maximum torque	374 Nm (38.1 kgfm) at 1 600 min <sup>-1</sup> (rpm)
Piston displacement	2.999 L
Bore and stroke	95.4 mm x 104.9 mm
Batteries	2 x 12 V / 58 Ah

#### HYDRAULIC SYSTEM

#### **Hydraulic Pumps**

Main pumps	2 variable displacement axial piston pumps
Maximum oil flow	2 x 117 L/min
Pilot pump	1 gear pump
Maximum oil flow	33.6 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 <sup>2</sup> )
Swing circuit	32.3 MPa (330 kgf/cm²)
Travel circuit	34.3 MPa (350 kgf/cm²)
Pilot circuit	4.0 MPa (40.8 kgf/cm²)
Power boost	36.3 MPa (370 kgf/cm <sup>2</sup> )

#### **Hydraulic Cylinders**

	Quantity	Bore	Rod diameter
Boom	2	105 mm	70 mm
Arm	1	115 mm	80 mm
Bucket	1	100 mm	70 mm
Positioning *1	1	140 mm	95 mm

<sup>\*1</sup> : 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 ty					
	Swing speed	13.7 min <sup>-1</sup> (rpm)			
	Swing torque	33 kNm (3 370 kgfm)			

#### **Operator's Cab**

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

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	1
Lower rollers	7
Track shoes	44

#### **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 5.5 km/h

Low : 0 to 3.3 km/h

Maximum traction force ..... 117 kN (11 900 kgf)

Gradeability ..... 70% (35 degree) continuous

#### **SOUND LEVEL**

Sound level in cab according to ISO 6396	LpA 69 dB(A)
External sound level according to ISO 6395 and	
EU Directive 2000/14/EC	LwA 99 dB(A)

#### **SERVICE REFILL CAPACITIES**

Fuel tank	
Engine coolant	
Engine oil	
Swing device	
Travel device (each side)	
Hydraulic system	
Hydraulic oil tank	

#### WEIGHTS AND GROUND PRESSURE

#### **Operating Weight and Ground Pressure**

			ZAXIS 135US			ZAXIS 135US with blade (optional)				
	Boom type		Monoblock		2-Piece		Monoblock		2-Piece	
Shoe type	Shoe width	Arm length	kg	kPa(kgf/cm²)	kg	kPa(kgf/cm²)	kg	kPa(kgf/cm²)	kg	kPa(kgf/cm²)
		2.10 m	13 400	42 (0.43)	-	-	14 400	45 (0.46)	-	-
	500 mm	2.52 m	13 400	42 (0.43)	14 000	44 (0.45)	14 400	45 (0.46)	15 000	47 (0.48)
		3.01 m	13 500	42 (0.43)	-	-	14 500	45 (0.46)	-	-
<b>T</b> : 1		2.10 m	13 700	36 (0.37)	-	-	14 700	38 (0.39)	-	-
Triple grouser	600 mm	2.52 m	13 700	36 (0.37)	14 300	37 (0.38)	14 700	38 (0.39)	15 300	40 (0.41)
grouser		3.01 m	13 800	36 (0.37)	-	-	14 800	39 (0.40)	-	-
		2.10 m	13 900	31 (0.32)	-	-	14 900	33 (0.34)	-	-
	700 mm	2.52 m	13 900	31 (0.32)	14 500	32 (0.33)	14 900	33 (0.34)	15 500	34 (0.35)
		3.01 m	14 000	31 (0.32)	-	-	15 000	33 (0.34)	-	-
		2.10 m	13 500	42 (0.43)	-	-	14 500	45 (0.46)	-	-
Pad	500 mm	2.52 m	13 500	42 (0.43)	14 100	44 (0.45)	14 500	45 (0.46)	15 100	47 (0.48)
		3.01 m	13 600	42 (0.43)	-	-	14 600	45 (0.46)	-	-

Incliding 0.50 m<sup>3</sup> (ISO heaped), bucket weight (410 kg) and counterweight (3 600 kg).

#### **Basic Machine Weight and Overall Width**



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

			135US	ZAXIS 135US with blade (optional)		
Shoe type	Shoe width	Weight	Overall width	Weight	Overall width	
	500 mm	10 800 kg	2 490 mm	11 800 kg	2 490 mm	
Triple grouser	600 mm	11 100 kg	2 590 mm	12 100 kg	2 590 mm	
grouser	700 mm	11 300 kg	2 690 mm	12 300 kg	2 690 mm	
Pad	500 mm	10 900 kg	2 490 mm	11 900 kg	2 490 mm	

#### **Components Weight**

	Weight
Counterweight	3 640 kg
Monoblock boom (with arm cylinder and boom cylinder)	1 300 kg
2-Piece boom (with arm cylinder and boom cylinder)	1 820 kg
2.10 m arm (with bucket cylinder)	490 kg
2.52 m arm (with bucket cylinder)	540 kg
3.01 m arm (with bucket cylinder)	610 kg
0.50 m³ bucket	410 kg

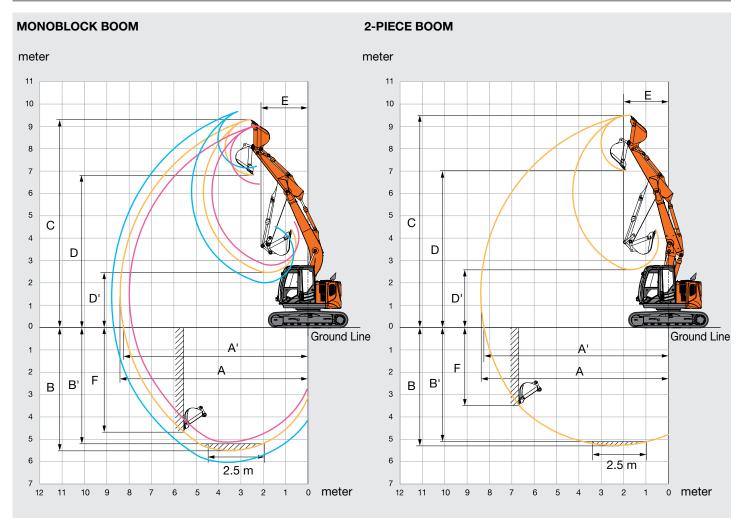
#### BUCKET AND ARM DIGGING FORCE

	ZAXIS 135US						
Arm length	2.10 m	2.52 m	3.01 m				
Bucket digging force* ISO		104 kN (10 600 kgf)					
Bucket digging force* SAE : PCSA		91 kN (9 300 kgf)					
Arm crowd force* ISO	77 kN (7 900 kgf)	69 kN (7 000 kgf)	61 kN (6 200 kgf)				
Arm crowd force* SAE : PCSA	74 kN (7 600 kgf)	67 kN (6 800 kgf)	60 kN (6 100 kgf)				

\* At power boost

### **SPECIFICATIONS**

#### WORKING RANGES

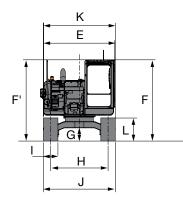


Unit: mm

	ZAXIS 135US								
		Monoblock boom		2-Piece boom					
Arm length	2.10 m	2.52 m	3.01 m	2.52 m					
A Max. digging reach	8 020	8 390	8 860	8 380					
A' Max. digging reach (on ground)	7 870	8 240	8 720	8 240					
B Max. digging depth	5 070	5 490	5 980	5 250					
B' Max. digging depth (2.5 m level)	4 820	5 270	5 790	5 120					
C Max. cutting height	9 020	9 290	9 690	9 480					
D Max. dumping height	6 550	6 830	7 220	7 020					
D' Min. dumping height	2 870	2 470	2 080	2 600					
E Min. swing radius	2 000	2 110	2 450	1 920					
F Max. vertical wall digging depth	4 430	4 730	5 190	3 530					

Excluding track shoe lug

#### DIMENSIONS

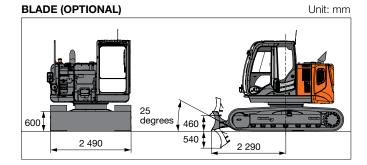


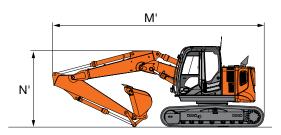
MONOBLOCK BOOM

В

Unit: mm

2-PIECE BOOM





	ZAXIS 135US
A Distance between tumblers	2 880
B Undercarriage length	3 580
* C Counterweight clearance	840
D Rear-end swing radius	1 490
D' Rear-end length	1 490
E Overall width of upperstructure	2 480
F Overall height of cab	2 790
F' Over height of upperstructure	2 790
* G Min. ground clearance	410
H Track gauge	1 990
I Track shoe width	G 500
J Undercarriage width	2 490
K Overall width	2 490
L Track height with triple grouser shoes	790
MONOBLOCK BOOM	
M Overall length	
With 2.10 m arm	7 360
With 2.52 m arm	7 370
With 3.01 m arm	7 390
* N Overall height of boom	
With 2.10 m arm	2 790
With 2.52 m arm	2 790
With 3.01 m arm	2 780
2-PIECE BOOM	
M' Overall length	
With 2.10 m arm	-
With 2.52 m arm	7 310
With 3.01 m arm	-
* N' Overall height of boom	
With 2.10 m arm	-
With 2.52 m arm	2 640
With 3.01 m arm	-

\* Excluding track shoe lug G: Triple grouser shoe

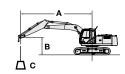
### LIFTING CAPACITIES

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.

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.



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

Unit : kg

ZAXIS 135US M	AXIS 135US MONOBLOCK BOOM										Rating over	-side or 360	Unit : kg	
	Load					Load ra	dius m							
Conditions	point	1.5		3.	3.0		4.5		6.0		.5	А	ר	
	height m	ů	Ţ,	Ů	œ	ů	œ	ů	<b>O</b>	ů	Ċ	Ů	œ	meter
Boom 4.60 m	6.0					*4 150	3 490					*2 980	2 900	5.01
Arm 2.10 m	4.5			*5 030	*5 030	*4 310	3 430	*3 130	2 150			*2 710	2 110	6.07
Counterweight	3.0			*7 500	6 010	4 920	3 250	3 140	2 110			*2 680	1 800	6.62
Ũ	1.5					4 680	3 030	3 050	2 020			2 540	1 690	6.79
3 640 kg	0 (Ground)			*5 300	5 240	4 530	2 900	2 980	1 960			2 600	1 720	6.61
Shoe 500 mm	-1.5	*5 000	*5 000	*8 660	5 260	4 500	2 870	2 980	1 960			2 950	1 940	6.05
	-3.0			*6 700	5 400	4 590	2 950					*3 830	2 590	4.98
Boom 4.60 m	6.0					*3 670	3 550					*2 430	*2 430	5.50
Arm 2.52 m	4.5			*3 930	*3 930	*3 920	3 480	3 220	2 180			*2 260	1 910	6.48
Counterweight	3.0			*6 620	6 180	*4 730	3 290	3 150	2 110			*2 250	1 650	6.99
Ũ	1.5			*6 790	5 470	4 710	3 050	3 050	2 020			2 340	1 550	7.15
3 640 kg	0 (Ground)			*6 130	5 200	4 520	2 880	2 960	1 940			2 390	1 570	6.98
Shoe 500 mm	-1.5	*4 720	*4 720	8 940	5 180	4 460	2 820	2 930	1 910			2 660	1 740	6.46
	-3.0	*8 600	*8 600	*7 440	5 290	4 500	2 870					3 400	2 220	5.47
Boom 4.60 m	6.0					*3 140	*3 140	*2 360	2 210			*2 080	*2 080	6.10
Arm 3.01 m	4.5					*3 440	*3 440	3 260	2 210			*1 950	1 680	6.99
Counterweight	3.0			*5 270	*5 270	*4 280	3 340	3 170	2 130			*1 940	1 470	7.47
Ũ	1.5			*8 410	5 610	4 740	3 080	3 050	2 010	2 160	1 420	*2 040	1 390	7.62
3 640 kg	0 (Ground)	** * * * *	** * * *	*6 630	5 190	5 410	2 870	2 940	1 920			2 140	1 400	7.46
Shoe 500 mm	-1.5	*4 140	*4 140	*8 620	5 090	4 410	2 780	2 880	1 860			2 340	1 530	6.97
	-3.0	*7 200	*7 200	*8 140	5 150	4 420	2 790	2 920	1 890			2 870	1 870	6.07
	-4.5			*5 390	5 380	*3 260	2 950					*3 250	2 940	4.51

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Rating over-front

#### ZAXIS 135US BLADE (ABOVE GROUND) MONOBLOCK BOOM

Load radius m I oad At max. reach point 3.0 4.5 6.0 1.5 Conditions height Ð Ŭ Ð 0 0 Ŭ Ð Ū. ٢ Ū. Ū meter Ü. m 6.0 3 740 \*2 980 \*2 710 2 670 2 980 5.01 4 150 Boom 4.60 m \*5 030 \*7 500 \*4 310 3 690 2 280 4.5 \*5 030 \*3 130 2 330 6.07 Arm 2.10 m 3.0 6 4 6 0 4 9 1 0 3 500 3 130 2 280 1 960 6.62 Counterweight 3 0 4 0 2 200 2 5 3 0 6.79 1.5 4 670 3 2 9 0 1 840 3 640 kg 0 (Ground) \*5 300 \*5 300 4 520 3 150 2 970 2 1 4 0 2 590 1 880 6.61 \*5 000 \*5 000 Shoe 500 mm -1.5 \*8 660 5720 4 4 8 0 3 1 2 0 2 970 2 1 4 0 2 940 2 1 2 0 6.05 -3.0 3 200 \*3 670 \*3 830 \*2 430 2 810 4.98 5.50 \*6 700 5 8 5 0 4 570 6.0 \*3 670 Boom 4 60 m \*3 930 \*3 930 3 7 4 0 3 2 1 0 2 360 \*2 260 2 0 7 0 6.48 4.5 \*3 920 Arm 2.52 m 3.0 \*6 620 \*6 620 4 730 3 540 3 140 2 290 2 250 6.99 1 790 Counterweight 1.5 \*6 790 \*6 130 5 930 5 650 4 690 3 300 3 140 3 030 2 950 2 190 2 120 2 330 2 380 1 690 7.15 3 640 kg 0 (Ground) 4 500 1 7 2 0 6.98 -1.5 -3.0 \*4 720 \*4 720 8 910 5 630 4 4 4 0 3 080 2 920 2 090 2 640 1 900 6.46 Shoe 500 mm \*8 600 \*8 600 \*7 440 5 740 4 4 9 0 3 1 2 0 3 390 2 4 2 0 5 47 6.0 \*3 140 \*3 140 \*2 360 \*2 360 \*2 080 \*2 080 6.10 Boom 4.60 m 4.5 \*3 440 \*3 440 3 250 2 390 \*1 950 1 830 6.99 Arm 3.01 m 3.0 1.5 \*5 270 \*5 270 \*4 280 3 590 3 160 2 300 \*1 940 1 610 7 47 Counterweight 7.62 7.46 \*8 410 6 070 4 720 3 330 3 030 2 190 2 150 1 560 \*2 040 1 520 3 640 kg \*6 630 \*8 620 0 (Ground) 5 6 4 0 4 4 9 0 3 1 2 0 2 930 2 0 9 0 2 1 3 0 1.530 4 390 3 030 2 870 2 040 2 330 6.97 \*4 140 \*4 140 5 5 4 0 1 670 Shoe 500 mm -1.5 -3.0 \*7 200 \*7 200 \*8 140 5 610 4 400 3 040 2 910 2 070 2 860 2 0 4 0 6.07 -45 \*5 390 \*5 390 \*3 260 3 200 \*3 250 3 1 9 0 4.51

#### ZAXIS 135US BLADE (ON GROUND) MONOBLOCK BOOM

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

Rating over-side or 360 degrees

	Load				At many march									
Conditions	point	1.	5	3.	0	4.	4.5		.0	7.5		P P	t max. react	1
Contaillonio	height m	Ů	Ð	ů	Ð	Ů	œ	ů	<b>O</b>	Ů	Ð	ů	<b>O</b>	meter
Boom 4.60 m	6.0					*4 150	3 740					*2 980	*2 980	5.01
Arm 2.10 m	4.5			*5 030	*5 030	*4 310	3 690	*3 130	2 330			*2 710	2 280	6.07
	3.0			*7 500	6 460	*5 090	3 500	*4 210	2 280			*2 680	1 960	6.62
Counterweight	1.5					*5 950	3 290	*4 510	2 200			*2 820	1 840	6.79
3 640 kg	0 (Ground)			*5 300	*5 300	*6 320	3 150	*4 620	2 140			*3 170	1 880	6.61
Shoe 500 mm	-1.5	*5 000	*5 000	*8 660	5 720	*5 980	3 120	*4 150	2 140			*3 910	2 120	6.05
	-3.0			*6 700	5 850	*4 600	3 200					*3 830	2 810	4.98
Boom 4.60 m	6.0					*3 670	*3 670					*2 430	*2 430	5.50
Arm 2.52 m	4.5			*3 930	*3 930	*3 920	3 740	*3 540	2 360			*2 260	2 070	6.48
Counterweight	3.0			*6 620	*6 620	*4 730	3 540	*3 980	2 290			*2 250	1 790	6.99
•	1.5			*6 790	5 930	*5 690	3 300	*4 360	2 190			*2 370	1 690	7.15
3 640 kg	0 (Ground)			*6 130	5 650	*6 230	3 140	*4 580	2 120			*2 650	1 720	6.98
Shoe 500 mm	-1.5	*4 720	*4 720	*9 100	5 630	*6 110	3 080	*4 370	2 090			*3 230	1 900	6.46
	-3.0	*8 600	*8 600	*7 440	5 740	*5 110	3 120					*3 800	2 420	5.47
Boom 4.60 m	6.0					*3 140	*3 140	*2 360	*2 360			*2 080	*2 080	6.10
Arm 3.01 m	4.5					*3 440	*3 440	*3 350	2 390			*1 950	1 830	6.99
Counterweight	3.0			*5 270	*5 270	*4 280	3 590	*3 690	2 300			*1 940	1 610	7.47
•	1.5			*8 410	6 070	*5 330	3 330	*4 140	2 190	*2 530	1 560	*2 040	1 520	7.62
3 640 kg	0 (Ground)			*6 630	5 640	*6 060	3 120	*4 470	2 090			*2 250	1 530	7.46
Shoe 500 mm	-1.5	*4 140	*4 140	*8 620	5 540	*6 170	3 030	*4 460	2 040			*2 660	1 670	6.97
	-3.0	*7 200	*4 200	*8 140	5 610	*5 500	3 040	*3 700	2 070			*3 580	2 040	6.07
	-4.5			*5 390	*5 390	*3 260	3 200					*3 250	3 190	4.51

#### ZAXIS 135US 2-PIECE BOOM

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

	Load			At max. reach									
Conditions	point height m	1.5		3.0		4.5		6.0		At max. reach			
Contaitione		ů	œ	ů	œ	ů	œ	ů	œ	ů	œ	meter	
2-Piece Boom Arm 2.52 m	7.5			*4 290	*4 290					*3 260	*3 260	3.68	
	6.0					*3 910	3 630			*2 540	2 510	5.49	
Counterweight	4.5			*3 920	*3 920	*4 130	3 660	3 260	2 200	*2 330	1 880	6.47	
•	3.0			*7 420	6 500	*4 650	3 550	3 250	2 190	*2 300	1 610	6.98	
3 640 kg	1.5	*11 700	*11 700	*9 370	6 180	4 920	3 460	3 170	2 100	2 330	1 510	7.14	
Shoe 500 mm	0 (Ground)	*8 900	*8 900	9 400	5 900	4 930	3 190	3 040	1 980	2 370	1 530	6.97	
	-1.5	*11 880	*11 880	9 470	5 520	4 670	2 970	2 940	1 890	2 650	1 700	6.45	
	-3.0	*14 850	*14 850	*9 060	5 380	4 550	2 850			*2 760	2 230	5.36	

#### ZAXIS 135US BLADE (ABOVE GROUND) 2-PIECE BOOM

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

Т

	Load										At max. reach			
Conditions	point height m	1.5		3.0		4.5		6.0		At max. reden				
Containtonio		ů	÷	ů	đ	ů	<b>D</b>	ů	đ	ů	<b>D</b>	meter		
2-Piece Boom	7.5									*4 420	*4 420	2.86		
Arm 2.52 m	6.0			*4 790	*4 790	*4 290	3 800			*3 120	*3 120	4.99		
Counterweight	4.5			*5 160	*5 160	*4 390	3 870	*3 150	2 310	*2 800	2 270	6.05		
0	3.0	*11 010	*11 010	*8 590	6 860	*4 960	*3 760	3 190	2 320	2 670	1 930	6.60		
3 640 kg	1.5	*7 190	*7 190	*9 390	6 570	4 910	3 670	3 1 1 0	2 240	2 520	1 810	6.77		
Shoe 500 mm	0 (Ground)	*8 840	*8 840	*9 460	6 280	4 870	3 430	3 010	2 140	2 590	1 850	6.59		
	-1.5	*13 350	*13 350	9 420	5 990	4 630	3 210	2 960	2 100	2 940	2 090	6.03		
	-3.0	*16 940	*16 940	*8 020	5 890	*3 740	3 170			*3 360	3 060	4.63		

#### ZAXIS 135US BLADE (ON GROUND) 2-PIECE BOOM

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

	Load			At max, reach									
Conditions	point	1.5		3.0		4.5		6.0		At max. reach			
Conditions	height m	ů	Ð	ů	÷	ů	œ	ů	÷	ů	<b>D</b>	meter	
2-Piece Boom	7.5			*4 290	*4 290					*3 260	*3 260	3.68	
Arm 2.52 m	6.0					*3 910	3 860			*2 540	*2 540	5.49	
Counterweight	4.5			*3 920	*3 920	*4 130	3 900	*3 340	2 390	*2 330	2 050	6.47	
3 640 kg	3.0			*7 420	6 890	*4 650	3 780	*3 520	*2 380	*2 300	1 770	6.98	
	1.5	*1 1700	*11 700	*9 370	6 600	*5 650	3 730	*3 830	2 290	*2 400	1 660	7.14	
Shoe 500 mm	0 (Ground)	*8 900	*8 900	*9 700	6 380	*6 200	3 460	*4 240	2 160	*2 660	1 680	6.97	
	-1.5	*11 880	*11 880	*9 810	5 990	*6 260	3 240	*4 100	2 070	*3 120	1 870	6.45	
	-3.0	*14 850	*14 850	*9 060	5 860	*4 990	3 120			*2 760	2 450	5.36	

### **EQUIPMENT**

#### ENGINE

Air cleaner double filters	٠
Auto idle system	٠
Auto shut-down control	٠
Cartridge-type engine oil filter	•
Cartridge-type fuel pre-filter	•
Cartridge-type fuel main filter	•
Cold fuel resistance valve	0
Dust-proof indoor net	•
Dry-type air filter with evacuator valve (with air filter restriction indicator)	•
Electrical fuel feed pump	•
ECO/PWR mode control	٠
Engine oil drain coupler	٠
Engine warm-up device	•
Fan guard	•
Fuel cooler	٠
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	٠
Control valve with main relief valve	٠
Full-flow filter	٠
High mesh full flow filter with restriction indicator	0
Hose rupture valve for boom	٠
Hose rupture valve for arm	0
Pilot filter	٠
Power boost	٠
Suction filter	٠
Extra port for control valve	٠
Variable reliefvalve for breaker&crusher	•
Work mode selector	٠

CAB	
Auxiliary function lever (Breaker ssist)	(
All-weather sound suppressed steel	•
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	•
Floor mat	•
Footrest	•
Front window washer	•
Windows on front, upper, lower and left side can be openend	•
Glove compartment	•
Hot & cool box	•
Intermittent windshield wipers	•
Key cylinder light	•
Laminated round glass window	(
Room light with door courtesy	•
OPG front guard Level II (ISO10262) compliant cab	C
OPG top guard fitted Level II (ISO10262) compliant cab	(
Pilot control shut-off lever	•
Rain guard	0
Retractable seat belt	•
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)	0
Transparent roof with slide curtain	•
2 speaker	(
4 fluid-filled elastic mounts	•
12 V power outlet	0
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	0
Additional cab roof rear lights	0
Additional boom light with cover	0
Rotating lamp	0
2 working lights	•

#### **UPPER STRUCTURE**

Electric fuel refilling pump with auto stop and filter	٠
Fuel level float	٠
Hydraulic oil level gauge	٠
Rear view camera	٠
Rear view mirror (right & left side)	٠
Swing parking brake	٠
Tool box	٠
Undercover	٠
3 640 kg counterweight	٠
2 x 58 Ah batteries	٠

#### ..... Standard equipment O

•

..... Optional equipment

UNDERCARRIAGE	
Bolt-on sprocket	٠
Reinforced track links with pin seals	٠
Travel motor covers	•
Travel parking brake	•
Track undercover	0
Upper and lower rollers	•
1 track guards (each side) and hydraulic track adjuster	•
2 tracks guards (each side) and hydraulic track adjuster	0
4 tie down hooks	•
500 mm triple grouser shoes	•

FRONT ATTACHMEN	rs
Casted bucket link A	٠
Centralized lubrication system	٠
Dirt seal on all bucket pins	٠
Flanged pin	٠
HN bushing	٠
Reinforced resin thrust plate	٠
WC (tungsten-carbide) thermal spraying	•
Welded bucket link A with welded hook	0

ATTACHMENTS	
Accessories for 2 speed selector	0
Additional pump (30 L/min)	0
Assist piping	0
Attachment basic piping	٠
Breaker and crusher piping	٠
HSB Parts for breaker and crusher	٠
Pilot accumulator	0

MISCEL	LAN	EOUS
MICOLL		

Global e-service	٠
Lockable fuel refilling cap	٠
Lockable machine covers	٠
Onboard information controller	٠
Skid-resistant, plates and handrails	٠
Standard tool kit	٠
Theft prevention system*	0
Travel direction mark on track frame	٠

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

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

MEMO		



#### - 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, customer installed and modified parts, optional parts and all standard equipment with some differences in color and features. Before use, read and understand the Operator's Manual for proper operation.

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