

HYDRAULIC EXCAVATOR

The Power to Perform

The ZAXIS-3 series is a new generation of excavators designed to provide more efficient power, productivity and improved operator comfort. By listening carefully to the wishes of the end-user, HITACHI not only understands your business, but also provides the reliable solutions you've been looking for.

NEW AND IMPROVED

- Performance:
 - 1.48 m rear-end swing radius
 - 3 % higher production
 - 5 % more stability than New ZAXIS 120 (ZX120-3)
- Comfort:

Excellent visibility Enhanced controllability Lower noise level

New equipment: Rear view camera (Optional) Theft deterrent system

Reduced running costs: Lower fuel consumption per m³



Productivity

Short-tail-swing

New E-mode

HIOS II hydraulic system

New electronic controlled diesel engine

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Operator comfort

Short stroke levers Comfort designed seat

comfort

High visibility inside cab

Improved controlability and operator

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Notes: The images in this catalog show excavators with a 3.01 m arm, a 700 mm triple grouser shoe and an optional blade attachment were taken for demonstration purposes only and the actions shown are not recommended under normal operating conditions.

Boosted Productivity

Short-tail-swing makes possible efficient operations in various confined worksites.

HIOS II hydraulic system and new DOHC 4-valve diesel engine were developed for ZAXIS-3.

These advanced technologies are at work to yield bigger output with higher fuel efficiency.



More production, less fuel consumption

Increased Production

A combination of the hydraulic system (HIOS*II) and new DOHC 4-valve engine allows the efficient use of hydraulic pressure to increase speeds of actuators and boost production with higher fuel efficiency. The productivity is increased 3 % in comparison to previous model ZAXIS-1.

*Human & Intelligent Operation System

New E-mode

The new E mode, H/P mode and P mode can be selected to suit job needs. The new E mode can save fuel consumption by up to 9 % compared to the previous model's P mode, while yielding similar production.

Increased Travel Speed

Flow operation has been improved. Travel speed has been increased from 5.0 km/h (ZAXIS-1) to 5.5 km/h, allowing for smoother movement during on-site operation.

Efficient hydraulic control - HIOS II

HIOS II Hydraulic System

The HIOS II hydraulic system elicits more user satisfaction than other models on the market due to its greater operator comfort and ease of operability.

Our ZAXIS-3 model not only adopts this technology but also improves it, adding several enhancements over previous models. It offers a balance between the operability of the front attachment arm and its manoeuvring speed, resulting in an improved capacity to handle combined operations with maximum stability during excavation.

Development concept of new engine

DOHC* 4-Valve Engine

The new DOHC 4-valve diesel engine is developed and built to comply with the rigorous Emission Regulations enforced in 2008 in U.S and EU. This new engine contributes to environmental preservation. At the same time it realizes high durability and low fuel consumption by adapting the latest advanced engine technology.

*Double Overhead camshaft

Common Rail Type Fuel Injection System

Electronic control common rail type fuel injection system drives an integrated fuel pump at an ultrahigh pressure to distribute fuel to each injector per cylinder through a common rail.

This enables optimum combustion to generate big horsepower, and reduce PM* (diesel plume) and fuel consumption.

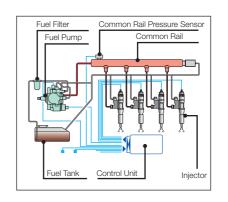
*Particulate Matter

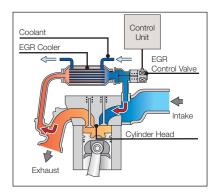
Cooled EGR* System

The cooled EGR system lets part of exhaust gasses mix with intake air for re-combustion to reduce oxygen concentration in the air in the combustion chamber. This design lowers combustion temperature in the cylinder, reducing fuel consumption and NOx while yielding more horsepower.

*Exhaust Gas Recirculation







The photo shows an excavator with a 2.52 m arm and 700 mm wide grouser shoe installed.

*In figure, machines are expressed by model codes for presentation.



The ZAXIS-3 series cab has been redesigned to meet demands of customers. From the operator's seat the operator has an excellent view of the jobsite. On the widescreen color LCD monitor the operator can see machine conditions and with the rear view camera (optional), what is behind the machine. Ample legroom, short stroke levers and a comfortable seat ensure optimum working conditions. The seat features horizontal, vertical adjustments and has a backrest contoured for comfort, with a HITACHI logo.







Wide adjustable armrests and a retractable seat belt are included. Short stroke levers allow for continuous operation with less fatigue. Three switches on the lever (optional) can be set to operate attachments other than buckets. The cab is pressurized to keep out dust. Noise and vibrations are kept to a minimum due to the elastic mounts, filled with silicone oil, the cab rests on.

Visibility is improved especially for the right downward view. Sliding windows on the front and side enable direct communication between operator and other workers. A flat floor allows for easy cleaning. Ergonomic controls and switches, fully automatic air conditioner and a radio complete the package.

Embedded Information Technology

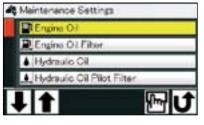
The ZAXIS-3 series is equipped with a widescreen color LCD monitor with adjustable contrast for day and night shifts. With the monitor the operator can check maintenance intervals, select work modes, monitor fuel consumption, and connect to the rear view camera (optional). A theft deterrent system and multi-language selection is also available.

Multi function monitor



The color LCD monitor, located in the cab, indicates coolant temperature, fuel level, and maintenance data. It also allows one-touch adjustment of the attachment. The display can also be adjusted to day or night shift.

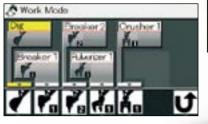
Maintenance support





Replacement timing of hydraulic oil and fuel filters is alerted to the operator through the LCD monitor according to the schedule preset by the user each time when turning the key switch. The scheduled maintenance can prevent the failure of the machine.

Attachment support system (work mode selector)



When replacing the attachment, oil flow adjustment can automatically be done by one touch on the work mode selection display on the LCD monitor. Minor adjustments of oil flow is possible if necessary.



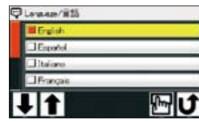
Rear view camera (Optional)

Password Input



The widescreen color LCD, in tandem with the rear view camera on the counterweight, provides a convenient view of the area behind the unit. The rear view camera automatically works when travelling backward, and can also be manually turned on with a select switch on the monitor.

Multi-language selection



The menu allows selection from 12 languages.

Fuel consumption monitoring



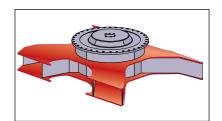
Fuel consumption per operating hour is computed, and the result is displayed on the LCD monitor. This information suggests refuelling timing, and guides energy-saving operation and efficient job management.

*The indicated values are examples and could differ from those in actual operation.



Strengthened X beam and side frames

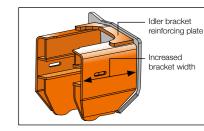
The X-beam is strengthened by the improved construction and enlarged box sections. Top and bottom plates of the X-beam use monolithic plates, instead of conventional welded four plates. This eliminates welding to strengthen the X-beam.



Strengthened idler brackets

The idler bracket is widened.

Reinforcing plate is also attached to prevent the opening of the idler bracket.



Strengthened front attachment

At arm-bucket joint, the arm top is hardened with WC thermal spraying (Tungsten-Carbide) for greater wear resistance at its contact surface with bucket, reducing jerking. Reinforced resin thrust plates designed to reduce noise and resist wear.

The new HN bushings, containing "solid molybdenum-based lubricant", are utilized at the boom-arm joint and arm cylinder mounting area for better lubrication and higher durability. (At other joints, conventional HN bushings are also utilized.)



New HN bushing







11

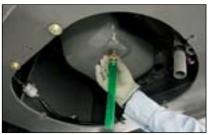
Simplified Maintenance

The ZAXIS-3 series meet customer demands for simplified maintenance. Regular maintenance is the key for keeping equipment in top condition, which can help to prevent costly downtime. In addition, a regular serviced machine has higher residual value. There are many service features to be found on the ZAXIS-3 series.



Conveniently located inspection points







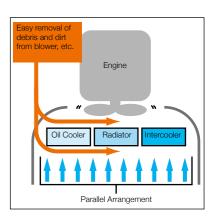
Wide doors give access, from ground level, to the fuel filter, water separator and engine oil filter. A large handrail, steps and anti-skid plates lead to the engine cover. The engine oil pan is fitted with a drain coupler. When draining, an associated drain hose is connected to the drain coupler. The drain coupler is reliable, avoiding oil leakage and vandalism.

The large handrail, steps and anti-skid plates lead to the engine cover.

Parallel arrangement of the cooling pack



The oil cooler, radiator and intercooler are laid out in a parallel arrangement, instead of the conventional in-line arrangement. This parallel arrangement is significantly easier to clean around the radiator.



Extended oil and filter change intervals

Front Pin Lubricating Intervals and Consumables Replacement		
New ZAXIS 135US		
Lubricant Bucket	500 h	
Boom Foot	500 h	
Front	500 h	
Consumables Engine Oil	500 h	
Engine Oil Filter	500 h	
Hydraulic Oil	5 000 h	
Hydraulic Oil Filter	1 000 h	
Fuel Filter	500 h	

The oil and filter change intervals have been extended considerably, reducing maintenance time and expenses. Engine oil consumption is lower. Hydraulic oil can be used up to 5 000 hours.



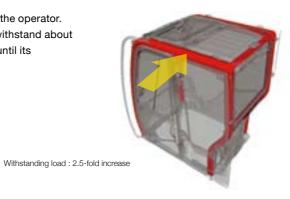
Ensuring the safety of the operator and other workers on the jobsite is an important concern for HITACHI.

That is why the ZAXIS-3 series has a number of safety features including a new reinforced cab and shut-off mechanisms for engine and pilot controls.



CRES II cab

The CRES II cab is designed to help with "just in case" protection for the operator. Safety in case of tipping is improved. The cab top, for instance, can withstand about 2.5 times conventional load when side load is applied to the cab top until its deformation reaches 200 mm.



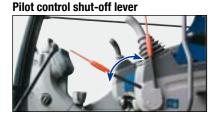
Additional features

Cab right protection bars



OPG Top Guard, Level II

Evacuation hammer



glass.

(optional)

Other features include a retractable seatbelt, evacuation hammer and emergency engine shut-off switch. A shut-off lever for pilot control helps to prevent unintentional movements. In addition an Operator Protective Guard (OPG top guard, Level II) is optionally available. For the cab windows there is a choice of laminated or tempered

Engine shut-off switch





Environmental Features

HITACHI acts responsibly when it comes to the environment.
Our production facilities have ISO 14001 certification.
The HITACHI machine is lead free and has a low-noise design, therefore HITACHI customers get one of the most environmentally considerate hydraulic excavators available today.



A cleaner machine

The ZAXIS-3 series is equipped with a clean but powerful engine to comply with Tier 3, and Stage III A. An engine emission regulations effective in the U.S. EPA and European Union from 2008. Exhaust gas is partly re-combusted to reduce particulate matter (PM) output and lower nitrogen oxide (NOx) levels.



A quieter machine

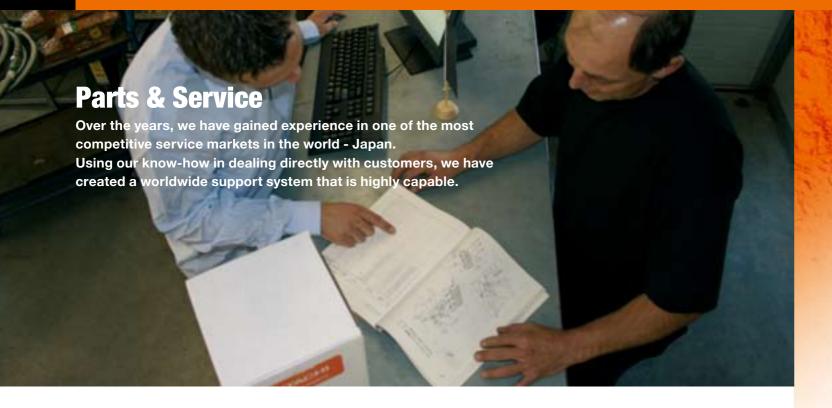
A number of features make this machine quieter. First, isochronous control of the engine speed means a restriction of engine speed during no-load and light-duty operation to suppress sound. A fan with curved blades reduces air resistance and air flow noise. Third, a time-tested muffler suppresses engine noise significantly.



A recyclable machine

All resin parts are marked to facilitate recycling. The machine is completely lead-free. The radiator and oil cooler are made from aluminium and all wires are lead-less. In addition, biodegradable hydraulic oil is available for jobsites where special environmental care is required.





Parts

HITACHI only offers genuine high quality parts. We guarantee that these parts have high performance and long life. We manage around 1 000 000 types of parts all around the world. They are designed and built to be the best match for your HITACHI equipment. HITACHI has a global parts distribution network that makes sure you get what you need as quickly as possible. We have more than 150 dealers worldwide who provide the closest support for your needs.

In most cases, your dealer will have the replacement part that you require. If a dealer does not have a certain part, he can order it from four fully stocked parts depots located across the world. These distribution centres are all connected by an on-line system that gives them access to shared information on stocks, such as the number and type

of available parts. The depots, which in turn are stocked by a parts center in Japan, minimize delivery time and enable you to get your parts as efficiently and quickly as possible.

Service

Our goal is to "keep customer equipment at a maximum performance level". To fulfil this goal, we have set more than 150 dealers all over the world. They have highly trained technicians, and provide a number of support programs.

HITACHI provides a unique extended warranty program called HITACHI Extended Life Program, or HELP. To minimize downtime during troubleshooting, we developed a PDA based diagnostic system called "Dr.ZX". To keep our customers' equipment in top running shape, good service is indispensable. We believe personnel training is the key to providing the best service.

If you would like more information regarding parts and/or service, please ask your nearest HITACHI dealer. Not all programs and/or services are available in every market or region.

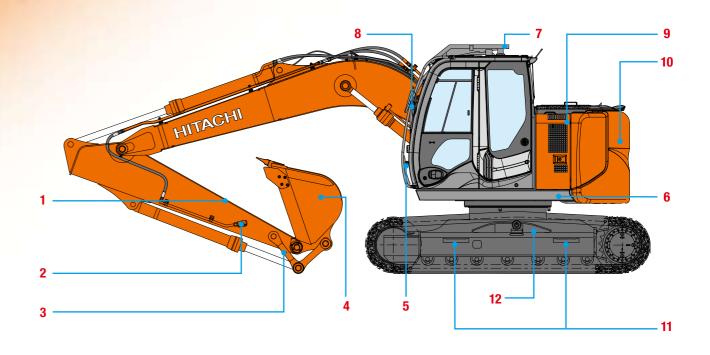
Base Machine for Doing a Wide Range of Jobs

Can be used with a wide range of hydraulic attachments.

Options include large-capacity additional pump along with piping and components for the attachments.

Demolition Version K-Series

ZAXIS 135USK



- 1 Attachment basic piping.
- 2 2.52 m Reinforced K-arm with damage prevention plate.
- 3 Reinforced link B for demolition.
- 4 0.50 m Reinforced K-bucket.
- 5 Front glass lower guard.
- 6 6.0 mm undercover.

7 K-cab. (CRES II cab with overhead window & guard)



- 8 Twin wiper.
- **9** High-performance full-flow filter. (with restriction indicator)

- 10 4 510 kg counterweight. (850 kg added heavier)
- 11 Reinforced side step. (bolt mounted)
- 12 Track undercover.

OPTION

- Accessories for breaker
- Accessories for breaker & crusher
- Accessories for 2 speed selector
- Front glass upper guard
- Small radius swing bracket
- Pilot accumulator

SPECIFICATIONS

ENGINE

Model Isuzu AJ-4JJ1X

Type 4-cycle water-cooled, direct injection

Aspiration Turbocharged, intercooled

No. of cylinders 4

Rated power

ISO 9249, net 69.0 kW (93.0 HP) at 1 800 min⁻¹ (rpm) EEC 80/1269, net .. 69.0 kW (93.0 HP) at 1 800 min⁻¹ (rpm) SAE J1349, net 69.0 kW (93.0 HP) at 1 800 min⁻¹ (rpm) Maximum torque 372 Nm (38 kgf m) at 1 600 min⁻¹ (rpm)

Piston displacement .. 2.999 L

Bore and stroke 95.4 mm x 104.9 mm Batteries 2 x 12 V / 55 Ah

HYDRAULIC SYSTEM

• Work mode selector

Digging mode / Attachment mode

• Engine speed sensing system

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/cm²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Dimensions

	Quantity	Bore	Rod diameter
Boom	2	105 mm	70 mm
Arm	1	115 mm	80 mm
Bucket	1	100 mm	70 mm

Hvdraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

CONTROLS

Pilot controls. Hitachi's original shockless valve.

Implement levers 2 Travel levers with pedals

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. 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, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed 13.7 min⁻¹ (rpm) Swing torque 34.0 kNm (3 470 kgf m)

Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) can be opened. Reclining seat with armrests; adjustable with or without control levers.

* International Standardization Organization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame. Lubricated track rollers, idlers, and sprockets with floating seals.

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

Upper rollers	1
Lower rollers	7
Track shoes	4

Travel Device

Each track driven by 2-speed axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are

Parking brake is spring-set/hydraulic-released disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel. 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 (11 940 kgf)

WEIGHTS AND GROUND PRESSURE

ZX135US-3:

Equipped with 4.60 m boom, 2.52 m arm and 0.50 m³ (SAE, PCSA heaped) bucket.

Shoe type	Shoe width		Ground pressure
	500 mm	13 400 kg	42 kPa (0.43 kgf/cm²)
Triple grouser	600 mm	13 700 kg	35 kPa (0.36 kgf/cm²)
	700 mm	13 900 kg	31 kPa (0.32 kgf/cm²)
pad	500 mm	13 500 kg	42 kPa (0.43 kgf/cm²)

ZX135US-3 with Blade (Optional):

Equipped with 4.60 m boom, 2.52 m arm and 0.50 m³ (SAE, PCSA heaped) bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	500 mm	14 300 kg	45 kPa (0.46 kgf/cm²)

Weights of the basic machines [including 3 680 kg or 4 510 kg K-type counterweight and triple grouser shoes, excluding front-end attachment, fuel, hydraulic oil, engine oil and coolant etc.] are:

ZX135US-3	10 800 kg with 500 mm shoes
ZX135USK-3	11 800 kg with 500 mm shoes

with Blade

ZX135US-3 11 700 kg with 500 mm shoes

ZX135USK-3:

Equipped with 4.60 m boom, 2.52 m K-arm and 0.50 m³ (SAE, PCSA heaped) K-bucket.

Shoe type Shoe width		Operating weight	Ground pressure
Triple grouser	500 mm	14 500 kg	46 kPa (0.47 kgf/cm²)

SERVICE REFILL CAPACITIES	
Fuel tank	220.0 L
Engine coolant	16.0 L
Engine oil	17.0 L
Swing device	3.2 L
Travel device (each side)	4.0 L
Hydraulic system	120.0 L
Hydraulic oil tank	62.0 L

BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design. 4.60 m boom and 2.10 m, 2.52 m and 3.01 m arms are available.

Buckets

Capacity		itv Wi					Recomm	endation	
Сарас	illy	VVI	uin	No. of	Weight	ZX135US-3			ZX135USK-3
SAE, PCSA heaped	CECE heaped	Without side cutters	With side cutters	teeth	g	1.96 m arm	2.52 m arm	2.81 m arm	2.52 m K-arm
0.19 m ³	0.17 m ³	450 mm	550 mm	3	260 kg	0	0	0	0
0.30 m ³	0.25 m ³	580 mm	700 mm	3	290 kg	0	0	0	0
0.40 m ³	0.33 m ³	680 mm	800 mm	4	340 kg	0	0	0	0
0.45 m ³	0.40 m ³	850 mm	970 mm	5	400 kg	0	0	0	0
0.50 m ³	0.45 m ³	890 mm	1 010 mm	5	410 kg	0	0	O*¹	0
0.59 m ³	0.50 m ³	950 mm	1 070 mm	5	430 kg	0	0	_	0
0.66 m ³	0.55 m ³	1 030 mm	_	5	430 kg	0	0	_	_
*2 0.45 m ³	0.45 m ³	890 mm	1 010 mm	5	470 kg	0	0	O*1	0
*3 0.50 m ³	0.45 m ³	890 mm	1 010 mm	5	500 kg	0	0	0	0
*4 0.59 m ³	0.45 m ³	890 mm	1 010 mm	5	480 kg	0	0	_	0
V-type bucket: 0.35 n	n ³ (CECE heaped)			3	370 kg	0	0	0	_
One-point ripper			1	320 kg	•	•	_	•	
Center-pull type clamshell bucket: 0.30 m³ (CECE heaped), Width 560 mm		6	690 kg	0	0	_	0		
Shell-push type clams	shell bucket: 0.30	m ³ (CECE heaped), Width 685 mm	6	590 kg	0	0	_	0

¹ With 700 mm shoes only

^{*2} Reinforced bucket

³ Level-pin-type reinforced bucket

^{*4} H-bucket

Suitable for materials with density of 2 000 kg/m³ or less

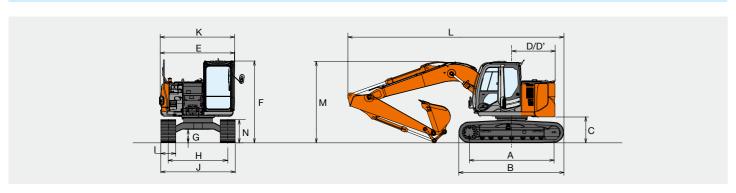
O Suitable for materials with density of 1 600 kg/m³ or less Suitable for materials with density of 1 100 kg/m³ or less

Heavy-duty service

Not applicable

SPECIFICATIONS

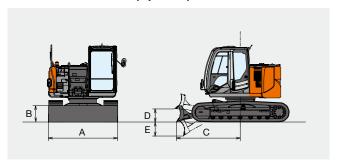
DIMENSIONS



		Unit: mm
	ZX135US-₃	ZX135USK-₃
A Distance between tumblers	2 880	2 880
B Undercarriage length	3 580	3 580
* C Counterweight clearance	860	860
D Rear-end swing radius	1 480	1 480
D' Rear-end length	1 450	1 450
E Overall width of upperstructure	2 480	2 480
F Overall height of cab	2 740	2 870
* G Min. ground clearance	440	440
H Track gauge	1 990	1 990
I Track shoe width	G 500	G 500
J Undercarriage width	2 490	2 490
K Overall width	2 500	2 500
L Overall length		
With 2.10 m arm	7 360	7 360
With 2.52 m arm	7 370	7 370
With 3.01 m arm	7 380	7 380
M Overall height of boom		
With 2.10 m arm	2 780	2 780
With 2.52 m arm	2 780	2 780
With 3.01 m arm	2 780	2 780
N Track height with triple grouser shoes	800	800

^{*} Excluding track shoe lug G: Triple grouser shoe

ZX135US-3 with Blade (Optional)



Α	Overall width of blade	490 mm
В	Overall height of blade	610 mm
С	Blade distance	330 mm
D	Max. rasing height above ground	480 mm
Ε	Max. lowering depth from ground	520 mm

WORKING RANGES

TV405U0 TV405U0				
	ZX135US-3			ZX135USK-3
Arm length	2.10 m	2.52 m	3.01 m	2.52 m K-arm
A Max. digging reach	8 020	8 380	8 850	8 380
A' Max. digging reach (on ground)	7 880	8 250	8 720	8 250
B Max. digging depth	5 120	5 530	6 020	5 530
B' Max. digging depth (8' level)	4 880	5 320	5 840	5 320
C Max. cutting height	8 960	9 240	9 630	9 240
D Max. dumping height	6 510	6 780	7 180	6 780
E Min. swing radius	1 990	2 100	2 450	2 100
F Max. vertical wall	4 620	5 010	5 490	5 010
Bucket digging force ISO		99 kN (10 100 kgf)		99 kN (10 100 kgf)
Bucket digging force SAE: PCSA	86 kN (8 800 kgf)			86 kN (8 800 kgf)
Arm crowd force ISO	73 kN (7 500 kgf)	65 kN (6 600 kgf)	58 kN (5 900 kgf)	65 kN (6 600 kgf)
Arm crowd force SAE : PCSA	71 kN (7 200 kgf)	63 kN (6 400 kgf)	57 kN (5 800 kgf)	63 kN (6 400 kgf)

Excluding track shoe lug

LIFTING CAPACITIES

Notes: 1. Ratings are based on SAE J1097.

- 2. Lifting capacity of the ZAXIS Series does not exceed 75 % of tipping load with the machine on firm, level ground or 87 % full hydraulic capacity.
- 3. The load point is a hook (not standard equipment) located on the back of the bucket.
- 4. *Indicates load limited by hydraulic capacity.

5.0 m = Ground.



ZX135US-3													Rating over-side or 360 degrees							000 kg
	Load								Load I								Alexander			
Conditions	Point	1 40		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m		7.0 m		8.0 m		At max. reach		
	Height	©	ů	@	Ů		Ů	©	ů	©	Ů	@	Ů	©	Ů		ů	@	ů	meter
Arm 2.10 m	7.0 m							*2.22	*2.22									*1.83	*1.83	5.24
Bucket	6.0 m							*3.16	*3.16	*2.64	*2.64							*1.65	*1.65	6.25
SAE,PCSA: 0.50 m ³	5.0 m							*3.20	*3.20	2.73	*3.18							1.51	*1.57	6.92
Counterweight	4.0 m					*3.53	*3.53	*3.63	*3.63	2.68	*3.36	1.92	2.94					1.31	*1.54	7.36
3 680 kg	3.0 m					*5.86	*5.86	3.72	*4.43	2.57	*3.75	1.88	2.89					1.20	*1.56	7.61
Shoe 500 mm	2.0 m							3.47	*5.41	2.45	3.81	1.81	2.82	1.37	2.17			1.15	*1.60	7.71
	1.0 m							3.26	5.27	2.33	3.68	1.74	2.75	1.34	2.13			1.14	*1.69	7.65
	0 (Ground)							3.15	5.14	2.25	3.58	1.69	2.69	1.31	2.10			1.19	*1.83	7.44
	-1.0 m					5.01	*5.44	3.11	5.09	2.20	3.54	1.66	2.66					1.30	*2.05	7.04
	-2.0 m			*5.53	*5.53	5.05	*7.28	3.12	5.10	2.20	3.53	1.66	2.66					1.53	*2.40	6.44
	-3 0 m			*6.85	*6.85	5 13	*6 18	3 17	*5.05	2 22	3 57							2.00	*2.50	5.53

Conditions	Load Point Height	Load Radius															At			
		1.0 m		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m		7.0 m		8.0 m		At max. reach		
			ů	@	ů	-	ů	•	ů	@	Ů	@	ů	@	ů	@	Ů	©	ů	meter
Arm 2.52 m Bucket SAE,PCSA: 0.50 m³ Counterweight	7.0 m							*2.45	*2.45									*1.52	*1.52	5.80
	6.0 m							*2.72	*2.72	*2.75	*2.75							*1.40	*1.40	6.71
	5.0 m							*2.75	*2.75	2.78	*2.82	1.97	*2.52					*1.34	*1.34	7.33
	4.0 m							*3.17	*3.17	2.72	*3.04	1.95	*2.94					1.19	*1.32	7.74
3 680 kg	3.0 m					*4.34	*4.34	3.81	*3.96	2.61	*3.45	1.90	2.91	1.41	2.21			1.09	*1.34	7.98
Shoe 500 mm	2.0 m							3.55	*4.96	2.48	3.84	1.82	2.83	1.37	2.17			1.04	*1.38	8.07
	1.0 m							3.31	5.33	2.35	3.70	1.75	2.75	1.33	2.13			1.03	*1.47	8.02
	0 (Ground)							3.16	5.15	2.25	3.59	1.68	2.68	1.29	2.09			1.07	*1.59	7.81
	-1.0 m					4.94	*5.83	3.09	5.07	2.19	3.52	1.64	2.64	1.27	2.07			1.16	*1.78	7.45
	-2.0 m			*5.36	*5.36	4.96	*7.86	3.07	5.06	2.16	3.50	1.63	2.62					1.34	*2.08	6.88
	-3.0 m			*7.57	*7.57	5.03	*6.87	3.11	5.09	2.18	3.52	1.65	2.65					1.68	*2.59	6.06
	-4.0 m					5.15	*5.38	3.19	*4.31	2.25	*3.25									

*4 46 | *4 46 | 3 27 | *3 63

Conditions	Load Point Height		Load Radius															٨.		. 1.
		1.0 m		2.0 m		3.0 m		4.0 m		5.0 m		6.0 m		7.0 m		8.0 m		At max. reach		
		-	ů	-	ů	•	ů	•	ů	©	ů	©	ů	-	ů	-	ů	•	Ů	meter
Arm 3.01 m	7.0 m									*2.17	*2.17							*1.32	*1.32	6.47
Bucket	6.0 m									*2.41	*2.41	*1.96	*1.96					*1.22	*1.22	7.28
SAE,PCSA: 0.50 m ³ Counterweight	5.0 m									*2.40	*2.40	2.00	*2.50					1.17	*1.17	7.85
	4.0 m							*2.44	*2.44	*2.63	*2.63	1.94	*2.61	1.44	2.23			1.03	*1.15	8.23
3 680 kg	3.0 m					*2.52	*2.52	*2.95	*2.95	2.65	*3.06	1.91	*2.85	1.41	2.22			0.95	*1.17	8.46
Shoe 500 mm	2.0 m							3.64	*4.38	2.51	*3.61	1.83	2.85	1.37	2.17			0.91	*1.21	8.54
	1.0 m							3.36	*5.39	2.36	3.72	1.74	2.75	1.32	2.12	1.00	*1.62	0.90	*1.28	8.49
	0 (Ground)							3.16	5.17	2.24	3.58	1.66	2.67	1.27	2.07			0.92	*1.38	8.30
	-1.0 m					4.86	*5.72	3.05	5.04	2.12	3.49	1.61	2.61	1.24	2.03			0.99	*1.54	7.96
	-2.0 m	*3.42	*3.42	*4.70	*4.70	4.86	*7.94	3.01	4.99	2.11	3.45	1.58	2.58	1.22	2.02			1.13	*1.78	7.44
	-3.0 m	*5.64	*5.64	*7.15	*7.15	4.90	*7.51	3.02	5.00	2.11	3.45	1.58	2.58					1.37	*2.17	6.70
	-4.0 m			*8.26	*8.26	5.00	*6.26	3.08	*4.89	2.16	3.49	1.64	2.64					1.89	*2.22	5.63
	-5.0 m					*4.30	*// 3/)	3 20	*3 3/1											

ZX135USK	ZX135USK-3														Rating over-side or 360 degrees Rating over-						
	Load								Load I								At				
Conditions	Point			2.0 m		3.0 m		4.0 m		5.0 m		6.0 m		7.0 m		8.0 m		At max. reach			
	Height	©	ů	-	Ů	•	Ů	©	ů	@	ů	@	ů	•	Ů	@	ů	©	Ů	meter	
Arm 2.52 m	7.0 m							*2.64	*2.64									*1.46	*1.46	5.80	
Bucket	6.0 m							*2.65	*2.65	*2.70	*2.70							*1.33	*1.33	6.71	
SAE,PCSA: 0.50 m ³	5.0 m							*2.68	*2.68	*2.75	*2.75	2.20	*2.45					*1.27	*1.27	7.33	
Counterweight	4.0 m							*3.10	*3.10	*2.96	*2.96	2.18	*2.86					*1.26	*1.26	7.74	
4 510 kg	3.0 m					*4.28	*4.28	*3.88	*3.88	2.92	*3.37	2.12	*3.06	1.58	2.45			1.23	*1.27	7.98	
Shoe 500 mm	2.0 m							3.98	*4.88	2.78	*3.89	2.05	3.14	1.55	2.41			1.18	*1.32	8.07	
	1.0 m							3.73	*5.75	2.64	4.10	1.97	3.05	1.50	2.36			1.17	*1.40	8.02	
	(Ground)							3.57	5.73	2.54	3.99	1.90	2.98	1.46	2.32			1.21	*1.53	7.81	
	-1.0 m					5.59	*5.73	3.50	5.65	2.47	3.92	1.86	2.93	1.44	2.30			1.32	*1.72	7.45	
	-2.0 m			*5.29	*5.29	5.62	*7.75	3.48	5.63	2.45	3.89	1.84	2.92					1.51	*2.03	6.88	
	-3.0 m			*7.67	*7.67	5.69	*6.76	3.51	*5.32	2.47	3.91	1.87	2.94					1.90	*2.50	6.06	
	-4.0 m					*5.26	*5.26	3.60	*4.20	2.54	*3.15										

STANDARD EQUIPMENT

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

ENGINE

- H/P mode control
- E mode control
- 50 A alternator
- Dry-type air filter with evacuator valve (with air filter restriction indicator)
- Cartridge-type engine oil filter
- Cartridge-type fuel double filters
- Air cleaner double filters
- Radiator, oil cooler and intercooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto idle system
- Fuel cooler
- Electrical fuel feed pump
- Engine oil drain coupler

HYDRAULIC SYSTEM

- Work mode selector
- Control valve with main relief valve
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter

CAB

- OPG top guard fitted Level I

- Front window washer
- Electric double horn
- AM-FM radio with digital clock

- Cigarette lighter
- Ashtray

- Short wrist control levers
- Pilot control shut-off lever
- Engine shut-off switch - Auto control air conditioner

- structure) cab
- cab
- (green color) glass windows
- 4 fluid-filled elastic mounts
- Front windows on upper, lower and
- Intermittent windshield wipers
- Adjustable reclining seat
- Footrest

- Storage box
- Glove compartment

- CRES II (Center pillar reinforced
- (ISO10262) compliant cab
- All-weather sound suppressed steel
- Equipped with reinforced, tinted
- left side can be opened

- with adjustable armrests

- Seat belt
- Drink holder

- Fire extinguisher bracket
- Floor mat

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

LIGHTS

- 2 working lights

UPPER STRUCTURE

- Undercover
- 3 680 kg counterweight
- Fuel level float
- Hydraulic oil level gauge
- Tool box
- Rear view mirror (right & left side)
- Swing parking brake

UNDERCARRIAGE

- Travel parking brake
- Travel motor covers
- Hydraulic track adjuster
- Bolt-on sprocket - Upper and lower rollers
- Reinforced track links with pin seals
- 4 tie down hooks
- 500 mm Triple grouser shoes

FRONT ATTACHMENTS

- HN bushing
- WC (tungsten-carbide) thermal spraying
- Reinforced resin thrust plate
- Flanged pin
- Casted bucket link A
- Bucket clearance adjust mechanism
- Centralized lubrication system
- Dirt seal on all bucket pins
- 2.52 m arm
- 0.50 m³ (SAE, PCSA heaped) bucket

MISCELLANEOUS

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

- 2.52 m Reinforced K-arm with
- 0.50 m³ (SAE, PCSA heaped)
- Reinforced link B for demolition
- Front glass lower guard
- Attachment basic piping
- Track undercover
- 4 510 kg counterweight - High-performance full-flow filter
- condenser - Reinforced side step (bolt mounted)

ZX135USK-3 (Demolition version)

- K-cab (CRESII cab with overhead window and guard)
- damage prevention plate.
- Reinforced K-bucket
- Twin wiper
- 6.0 mm thickness undercover
- (with restriction indicator) - Front screen of fuel cooler and air

OPTIONAL EQUIPMENT

Optional equipment may vary by country, so please consult your Hitachi dealer for details.

CAB

- Suspension seat
- Transparent roof
- Front glass lower guard
- Front glass upper guard
- OPG top guard, Level II
- Suspension seat
- Rain guard
- Sun visor
- 12 V power source
- Three switches lever

LIGHTS

- Additional work light (boom right side)
- Additional light (on the top of the cab)
- Additional light (Rear light)

UNDERCARRIAGE

- Track undercover

UPPER STRUCTURE

- Rear view camera
- Tropical cover
- Travel motion alarm device
- Electric fuel refilling pump with auto stop
- Swing motion alarm device with lamps

ATTACHMENTS

- Attachment basic piping
- Accessories for breaker
- Accessories for breaker & crusher
- Accessories for 2 speed selector
- Additional pump
- Assist piping
- Pilot accumulator
- Hose rupture valve

OTHERS

- Pre-cleaner
- Biodegradable oil
- Front screen of fuel cooler and air condenser

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.

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