

ZAXIS-3 series

HITACHI

ZAXIS  
70



## HYDRAULIC EXCAVATOR

- **Model Code** : ZX70-3 / ZX70LC-3 / ZX80LCK-3
- **Engine Rated Power** : 39.4 kW (52.8 HP) ISO 9249, net
- **Operating Weight** : ZX70-3 : 6 500 - 7 900 kg  
ZX70LC-3 : 6 600 - 8 000 kg  
ZX80LCK-3 : 7 400 - 8 200 kg
- **Backhoe Bucket** : SAE, PCSA Heaped : 0.13 - 0.33 m<sup>3</sup>  
CECE Heaped : 0.12 - 0.29 m<sup>3</sup>

# 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:**  
5 % higher production
- **Comfort:**  
Excellent visibility  
Enhanced controllability  
Lower noise level
- **New equipment:**  
Theft deterrent system  
Rear view camera (Optional)
- **Reduced running costs:**  
Lower fuel consumption per m<sup>3</sup>  
Improved durability and reliability



### Productivity

- E-mode
  - Speed sensing control
  - Improved swing ability
  - Improved mobility
  - Improved blade crowding performance
- Page 4-5**

### Operator comfort

- High visibility inside cab
  - Short stroke levers
  - Wide foot space
  - Comfort designed seat
  - Improved controllability and operator comfort
- Page 6-7**

### Multi function monitor

- Maintenance support
  - Theft deterrent system
  - Rear view camera (Optional)
- Page 8-9**

### Durability and reliability

- Strengthened upperstructure
  - Strengthened undercarriage
  - Strengthened front attachment
- Page 10-11**

### Maintenance

- Conveniently located inspection points
  - Wide opened engine cover
  - Parallel arrangement of the cooling pack
- Page 12-13**

### Safety measures

- CRES II cab
  - Cab right protection bars
  - Pilot control shut-off lever
  - Engine stop knob
- Page 14**

### Environment measures

- Array of low noise mechanisms
  - Ecological design
- Page 15**

### Parts & service

**Page 16**

### Various versions

- Demolition version K-series
- Page 17**

### Specifications

**Page 18-24**

- **The new engine complies with the Emission Regulations U.S EPA Tier 3, and EU Stage III A**
- **The advanced low noise design complies with the coming EU noise regulation 2000 / 14 / EC, STAGE II**

Notes : The pictures in this catalog show excavators with an optional 2.12 m arm installed. Some of the pictures in this catalog show an unmanned machine with attachments in an operating position. These were taken for demonstration purposes only and the actions shown are not recommended under normal operating conditions.



\*The photo shows an excavator with an optional blade installed.

## Boosted Productivity

Efficient hydraulic system and new intercooled turbocharger 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 intercooled turbocharger engine allows the efficient use of hydraulic pressure to increase speeds of actuators and boost production with higher fuel efficiency. The productivity is increased 5 % in comparison to previous model ZAXIS-1.

*\*Human & Intelligent Operation System*

### E-mode

The E mode and P mode can be selected to suit job needs. The E mode can save fuel consumption by up to 12 % compared to the previous model's P mode, while yielding similar production.

### Increase in Swing Torque, Traction Force and Travel Speed

Swing torque and traction force are increased significantly.

- Swing torque 11 % UP
- Traction force 4 % UP
- Travel speed 6 % UP

Sophisticated Travel Control; At climbing or steering, when the machine needs more traction force, the engine speed automatically increases which makes the machine faster.

## Efficient hydraulic control

### Hydraulic System

The Hydraulic System elicits more user satisfaction than other models due to its greater operator comfort and ease of operability. During arm roll-in operations, the hydraulics of 3 pumps are merged, allowing for quick leveling operations. Depending on the operations, usage of the 3 pumps are automatically switched, offering excellent operability. It supports stability and combined operability, such as speed balance and land clearing.

### Speed Sensing Control

A speed sensing system is used for hydraulic horsepower control. The hydraulic pump delivery flow, which varies with changes in engine RPM according to the load, is controlled. This means efficient use of engine horsepower, and also contributes to a reduction in fuel consumption.

## Development concept of new engine

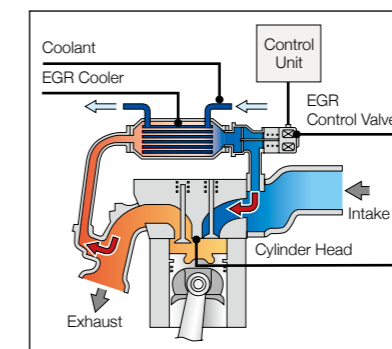
### Intercooled Turbocharger Engine

The new intercooled turbocharger 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.

### Cooled EGR\* System

Exhaust gas is partially mixed with intake air to lower combustion temperature for reducing NOx and fuel consumption. What's more, the EGR cooler cools down exhaust gas to increase air concentration for complete combustion, reducing PM\*\* (diesel plume).

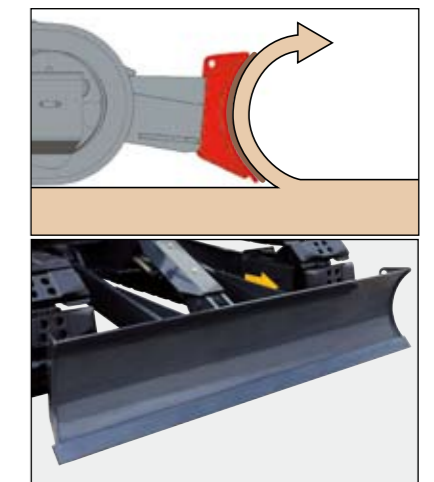
*\*Exhaust Gas Recirculation*  
*\*\*Particulate Matter*



## Improved crowding performance

### Reshaped Blade (Optional)

The blade is reshaped for crowding without loss.



## A New Standard in Operator Comfort

The operator's seat of the ZAXIS-3 series gives the operator an excellent view of the jobsite.

Ample legroom, short stroke levers and a large seat ensure optimum working conditions for the operator during long hours.



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. Visibility is increased with the blade (optional). The blade is shaped so that the operator can visually confirm that the blade is in contact with the ground. A flat floor allows for easy cleaning. Ergonomic controls and switches, fully automatic air conditioner and a radio complete the package.

# Embedded Information Technology

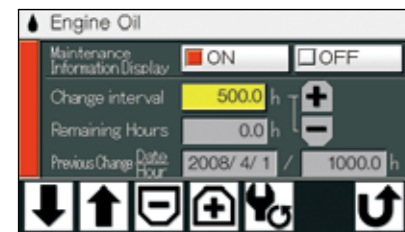
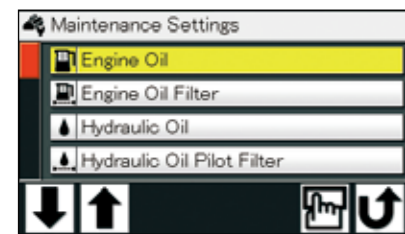
The ZAXIS-3 series is equipped with a widescreen color LCD monitor with adjustable contrast for day and night shifts. With the monitor the operator can check maintenance intervals and connect to the rear view camera (optional). A theft deterrent system and multi-language selection is also available.

## 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.

## Multi-language selection



The menu allows selection from 12 languages.



## Theft deterrent system



The electronic immobiliser requires the entry of a password to the multifunctional monitor each time when starting the engine to prevent theft and vandalism.

## Rear view camera (Optional)



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.



## A Solid Base for a Long Life

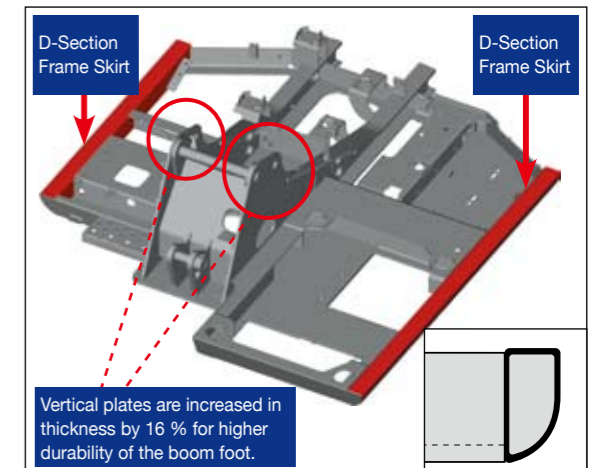
HITACHI's technology is built on a wealth of experience and know-how from a variety of demanding conditions around the world. The undercarriage of the ZAXIS 70 has become much stronger.



The photo shows an excavator with an optional blade and pad shoe installed.

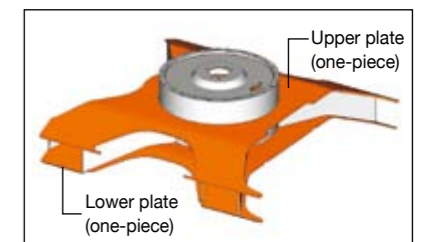
### Strengthened Upperstructure Frame

The new ZAXIS excavator now has a D-section frame skirt, which was highly acclaimed in previous models. As a result of this D-section frame skirt, rigidity and durability in the upper machinery are greatly improved. Strengthened boom foot mounting bracket, vertical plates are increased in thickness by 16 % for higher durability of the boom foot.



### Strengthened X beam

One-piece upper and lower plates are utilized instead of conventional 4-piece plates, eliminating welds. This increases strength of the track frame.



### 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.



WC Thermal spraying

# Simplified Maintenance

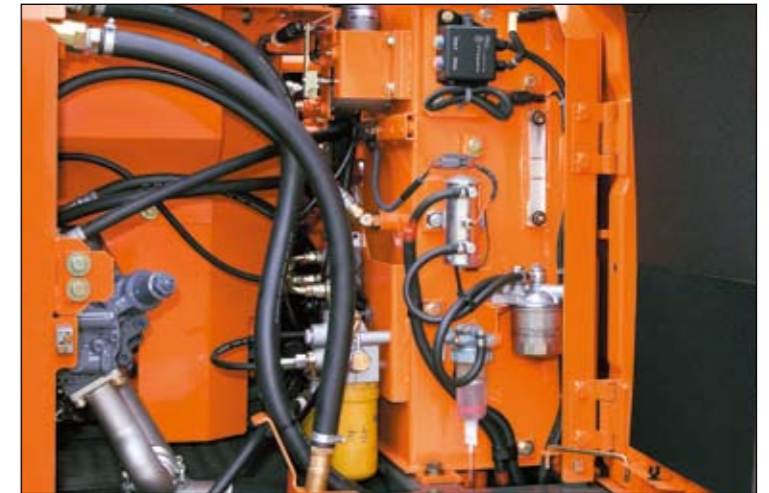
The ZAXIS-3 series meet customer demands for simplified maintenance. Regular maintenance is the key for keeping equipment in top condition, which can help to prevent costly downtime. In addition, a regular serviced machine has higher residual value. There are many service features to be found on the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



The photo shows an excavator with an optional pad shoe installed.

## Conveniently located inspection points

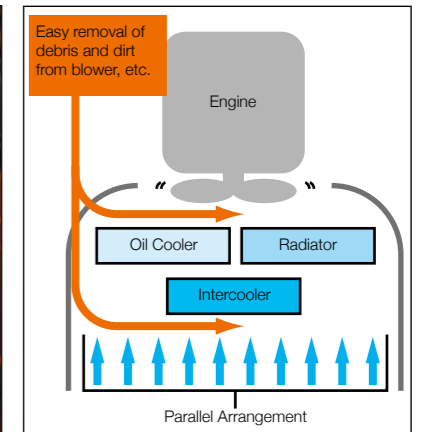
Wide doors give access, from ground level, to the fuel filter, water separator and engine oil filter.



The photo shows an excavator with an optional electric fuel refilling pump installed.

## Parallel arrangement of the cooling pack

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



## Extended oil and filter change intervals

Front Pin Lubricating Intervals and Consumables Replacement		
		New ZAXIS 70
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

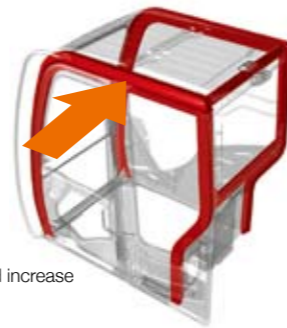
The oil and filter change intervals have been extended considerably, reducing maintenance time and expenses. Engine oil consumption is lower. Hydraulic oil can be used up to 5 000 hours.

## Safety Features

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 1.4 times conventional load when side load is applied to the cab top until its deformation reaches 200 mm.



withstanding load : 1.4-fold increase

### Additional features

#### Cab right protection bars



#### Evacuation hammer



#### Engine stop knob



#### Pilot control shut-off lever



#### OPG top guard, level II



(optional)

#### Retractable seat belt



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

## 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

Many features contribute to noise reduction in the new ZAXIS. Firstly, the fan with linear clutch responds to the engine temperature: the rotational speed of the fan increases smoothly as the temperature of the engine increases. This control reduces noise in light-load operations, as the fan rotational speed does not increase beyond what is necessary. This also means that no load is placed on the engine, reducing fuel consumption.

The cylinder block and ladder frame in the new engine are strengthened, reducing engine noise. Due to intercooled turbo charging and the optimization of fuel injection timing, exhaust noise is reduced by 10 dB (compared to previous models).



### 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 & Service

Over the years, we have gained experience in one of the most competitive service markets in the world - Japan. Using our know-how in dealing directly with customers, we have created a worldwide support system that is highly capable.

### 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.

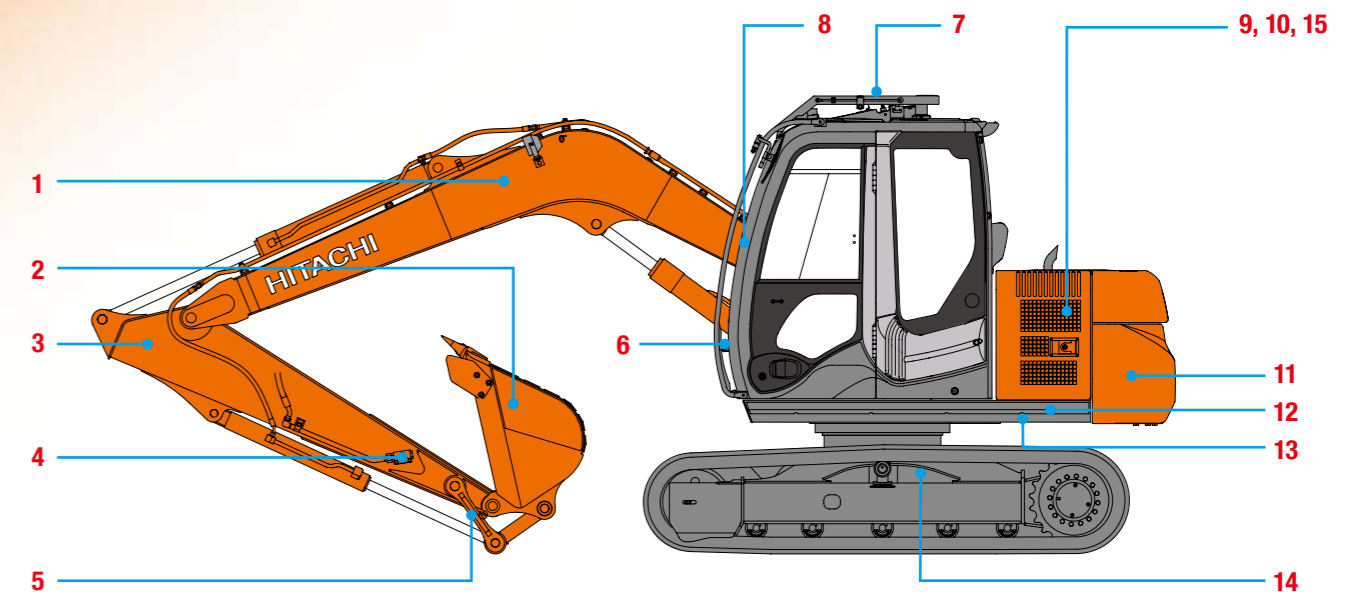
If you would like more information regarding parts and/or service, please ask your nearest HITACHI dealer. Not all programs and/or services are available in every market or region.

## 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 80LCK



1 4.0 m K-boom.

2 0.28 m<sup>3</sup> reinforced K-bucket.

3 2.12 m reinforced K-arm with damage prevention plate.

4 Attachment basic piping.

5 Reinforced link B for demolition.

6 Front glass lower guard.

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



8 Twin wiper.

9 High-performance full-flow filter. (with restriction indicator)

10 Air cleaner double filters.

11 1 100 kg counterweight. (350 kg added heavier)

12 Deck guard and reinforced upperstructure main fram.

13 4.5 mm undercover.

14 6.0 mm track undercover.

15 Front screen of air condenser.

#### OPTION

- Accessories for breaker
- Accessories for breaker & crusher
- Accessories for 2 speed selector
- Front glass upper guard

# SPECIFICATIONS

## ENGINE

Model .....	Isuzu AU-4LE2X
Type .....	4-cycle water-cooled, direct injection
Aspiration .....	Turbocharged, intercooled
No. of cylinders .....	4
Rated power	
EEC 80/1269 (without Fan)	40.5 kW (54.3 HP) at 2 000 min <sup>-1</sup> (rpm)
SAE J1349 (without Fan) ...	40.5 kW (54.3 HP) at 2 000 min <sup>-1</sup> (rpm)
ISO 9249, net .....	39.4 kW (52.8 HP) at 2 000 min <sup>-1</sup> (rpm)
EEC 80/1269, net.....	39.4 kW (52.8 HP) at 2 000 min <sup>-1</sup> (rpm)
SAE J1349, net .....	39.4 kW (52.8 HP) at 2 000 min <sup>-1</sup> (rpm)
Maximum torque .....	215 N m (21.9 kgf m) at 1 500 min <sup>-1</sup> (rpm)
Piston displacement .....	2.179 L
Bore and stroke .....	85 mm x 96 mm
Batteries .....	2 x 12 V / 52 Ah

## HYDRAULIC SYSTEM

- Swing-independent 3-pump hydraulic system
- OHS (Optimum Hydraulic System) assures fully independent and combined operations
- Automatic 2-speed motor increases traction force and travel speed
- Engin speed sensing system

Main pumps .....	3 variable displacement axial piston pumps
Maximum oil flow ..	2 x 72.6 L/min
	1 x 61.6 L/min
Pilot pump .....	1 gear pump
Maximum oil flow ..	22.0 L/min

## Hydraulic Motors

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

## Relief Valve Settings

Implement circuit .....	26.0 MPa (265 kgf/cm <sup>2</sup> )
Swing circuit .....	23.0 MPa (235 kgf/cm <sup>2</sup> )
Travel circuit .....	31.4 MPa (320 kgf/cm <sup>2</sup> )
Pilot circuit .....	3.9 MPa (40 kgf/cm <sup>2</sup> )

## 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	1	115 mm	65 mm
Arm	1	95 mm	60 mm
Bucket	1	85 mm	55 mm

## Hydraulic 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 .....	2

## 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 .....	10.5 min <sup>-1</sup> (rpm)
Swing torque .....	14.3 kN m (1 460 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 .....	5
Track shoes .....	38: ZX70-3 40: ZX70LC-3 / ZX80LCK-3

### Travel Device

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

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 5.3 km/h Low : 0 to 3.4 km/h
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Maximum traction force .. 58.9 kN (6 010 kgf)

Gradeability .....

## SERVICE REFILL CAPACITIES

Fuel tank .....	135 L
Engine coolant .....	10.3 L
Engine oil .....	12.1 L
Travel device .....	1.2 L (each side)
Hydraulic system .....	100 L
Hydraulic oil tank .....	60 L

## WEIGHTS AND GROUND PRESSURE

### ZX70-3 :

Equipped with 3.72 m boom, 1.62 m arm and 0.28 m<sup>3</sup> (SAE, PCSA heaped) bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	450 mm	6 500 kg	30 kPa (0.31 kgf/cm <sup>2</sup> )
	600 mm	6 600 kg	23 kPa (0.23 kgf/cm <sup>2</sup> )
Pad	450 mm	6 500 kg	29 kPa (0.30 kgf/cm <sup>2</sup> )
Rubber	450 mm	6 500 kg	30 kPa (0.31 kgf/cm <sup>2</sup> )

### ZX70-3 with Blade (Optional) :

Equipped with 3.72 m boom, 1.62 m arm and 0.28 m<sup>3</sup> (SAE, PCSA heaped) bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	450 mm	7 000 kg	32 kPa (0.33 kgf/cm <sup>2</sup> )

### ZX70LC-3 :

Equipped with 3.72 m boom, 1.62 m arm, 0.33 m<sup>3</sup> (SAE, PCSA heaped) bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	450 mm	6 600 kg	28 kPa (0.29 kgf/cm <sup>2</sup> )
	600 mm	6 700 kg	22 kPa (0.22 kgf/cm <sup>2</sup> )
Pad	450 mm	6 600 kg	28 kPa (0.29 kgf/cm <sup>2</sup> )
Rubber	450 mm	6 600 kg	28 kPa (0.29 kgf/cm <sup>2</sup> )

### ZX70LC-3 with Blade (Optional) :

Equipped with 3.72 m boom, 1.62 m arm, 0.33 m<sup>3</sup> (SAE, PCSA heaped) bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	450 mm	7 100 kg	30 kPa (0.31 kgf/cm <sup>2</sup> )

## BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design. 3.72 m boom, 1.62 m and 2.12 m arms are available.

## Buckets

Capacity		Width		No. of teeth	Weight	Recommendation			
						ZX70-3 / ZX70LC-3		ZX70-3 / ZX70LC-3 with off-set front	ZX80LCK-3
SAE, PCSA heaped	CECE heaped	Without side cutters	With side cutters			3.72 m boom		off-set boom	4.0 m K-boom
						1.62 m arm	2.12 m arm	1.61 m arm	2.12 m K-arm
0.13 m <sup>3</sup>	0.12 m <sup>3</sup>	360 mm	450 mm	3	141 kg	⊙ / ⊙	⊙ / ⊙	⊙ / ⊙	⊙
0.17 m <sup>3</sup>	0.15 m <sup>3</sup>	450 mm	540 mm	3	168 kg	⊙ / ⊙	⊙ / ⊙	⊙ / ⊙	⊙
0.19 m <sup>3</sup>	0.17 m <sup>3</sup>	490 mm	590 mm	3	175 kg	⊙ / ⊙	⊙ / ⊙	⊙ / ⊙	⊙
0.23 m <sup>3</sup>	0.20 m <sup>3</sup>	560 mm	650 mm	3	186 kg	⊙ / ⊙	⊙ / ⊙	⊙ / ⊙	⊙
0.28 m <sup>3</sup>	0.24 m <sup>3</sup>	660 mm	750 mm	4	211 kg	⊙ / ⊙	⊙ <sup>3</sup> / ⊙	⊙ / ⊙	⊙
0.33 m <sup>3</sup>	0.29 m <sup>3</sup>	770 mm	860 mm	5	230 kg	○ / ⊙	—	—	—
<sup>1</sup> 0.23 m <sup>3</sup>	0.20 m <sup>3</sup>	560 mm	650 mm	3	191 kg	⊙ / ⊙	⊙ / ⊙	⊙ / ⊙	⊙
<sup>1</sup> 0.28 m <sup>3</sup>	0.24 m <sup>3</sup>	660 mm	750 mm	4	214 kg	⊙ / ⊙	⊙ <sup>3</sup> / ⊙	⊙ / ⊙	⊙
<sup>1</sup> 0.33 m <sup>3</sup>	0.29 m <sup>3</sup>	770 mm	860 mm	5	239 kg	○ / ○	—	—	—
<sup>2</sup> 0.23 m <sup>3</sup>	0.20 m <sup>3</sup>	560 mm	650 mm	3	225 kg	⊙ / ⊙	⊙ / ⊙	⊙ / ⊙	⊙
<sup>2</sup> 0.28 m <sup>3</sup>	0.24 m <sup>3</sup>	660 mm	750 mm	4	254 kg	⊙ / ⊙	○ <sup>3</sup> / ○	⊙ / ⊙	⊙
<sup>2</sup> 0.33 m <sup>3</sup>	0.29 m <sup>3</sup>	770 mm	860 mm	5	277 kg	○ / ○	—	—	—
Slope-finishing blade; With 750 mm, Length 1 500 mm					250 kg	◇ / ◇	◇ / ◇	◇ / ◇	—

<sup>1</sup> Reinforced tooth

<sup>2</sup> Reinforced bucket

<sup>3</sup> With 600 mm / 700 mm shoes only

⊙ Suitable for materials with density of 2 000 kg/m<sup>3</sup> or less

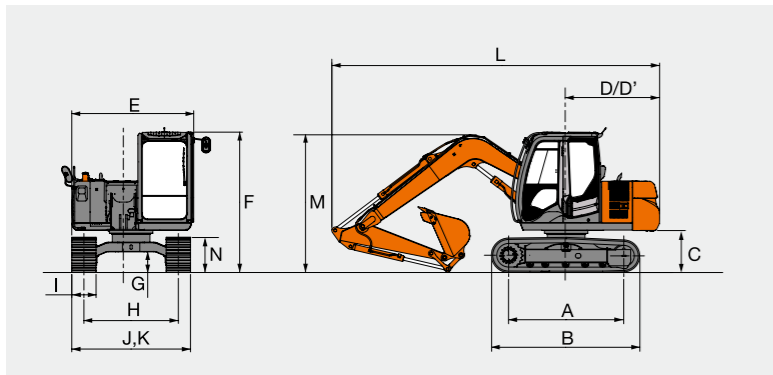
○ Suitable for materials with density of 1 600 kg/m<sup>3</sup> or less

◇ Slope-finishing service

— Not applicable

# SPECIFICATIONS

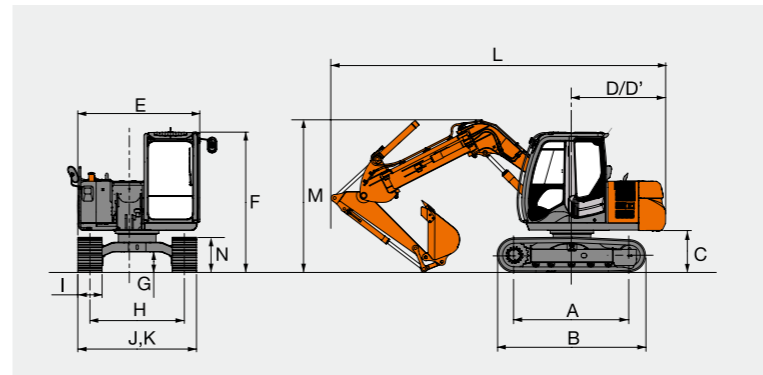
## DIMENSIONS



	ZX70-3	ZX70LC-3	ZX80LCK-3
A Distance between tumbler	2 140	2 290	
B Undercarriage length	2 765	2 920	
* C Counterweight clearance		*760	
D Rear-end swing radius		1 750	
D' Rear-end length		1 750	
E Overall width of upperstructure		2 260	
F Overall height of cab	2 600		2 730
* G Min. ground clearance		*360	
H Track gauge	1 750	1 870	
I Track shoe width		G 450	
J Undercarriage width	2 200	2 320	
K Overall width	2 260	2 320	
L Overall length			
With 1.62 m arm	6 080		—
With 2.12 m arm	6 120		6 470
M Overall height of boom			
With 1.62 m arm	2 550		—
With 2.12 m arm	2 880 (2 700 without Bucket)		2 600
* N Track height with triple grouser shoes		655	

\* Excluding track shoe lug G: Triple grouser shoe

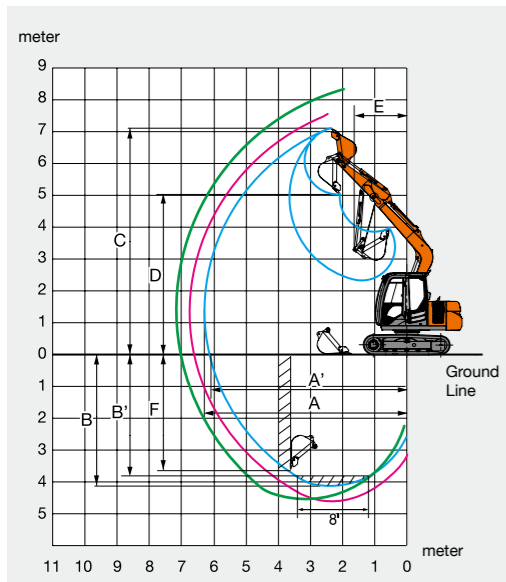
## DIMENSIONS : Off-set front



	ZX70-3	ZX70LC-3
A Distance between tumbler	2 140	2 290
B Undercarriage length	2 765	2 920
* C Counterweight clearance		*760
D Rear-end swing radius		1 750
D' Rear-end length		1 750
E Overall width of upperstructure		2 260
F Overall height of cab	2 600	
* G Min. ground clearance		*360
H Track gauge	1 750	1 870
I Track shoe width		G 450
J Undercarriage width	2 200	2 320
K Overall width	2 260	2 320
L Overall length		
With 1.62 m arm		6 210
M Overall height of boom		
With 1.62 m arm		2 870
* N Track height with triple grouser shoes		655

\* Excluding track shoe lug G: Triple grouser shoe

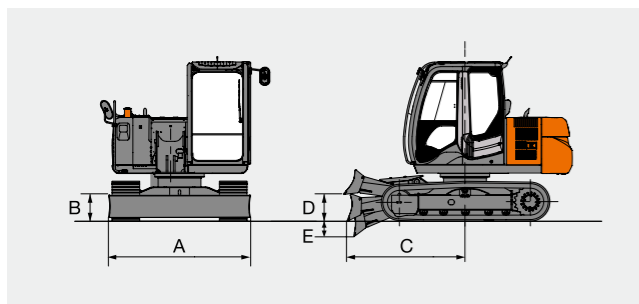
## WORKING RANGES



	ZX70-3 / ZX70LC-3	ZX80LCK-3	
Boom length	3.72 m	4.0 m K-boom	
Arm length	1.62 m	2.12 m K-arm	
A Max. digging reach	6 320	7 130	
A' Max. digging reach (on ground)	6 170	7 000	
B Max. digging depth	4 170	4 460	
B' Max. digging depth (8' level)	3 820	4 220	
C Max. cutting height	7 150	8 210	
D Max. dumping height	5 060	6 090	
E Min. swing radius	1 720	1 670	
F Max. vertical wall	3 730	4 100	
Bucket digging force	ISO	55 kN (5 600 kgf)	
	SAE : PCSA	47 kN (4 800 kgf)	
Arm crowd force	ISO	38 kN (3 900 kgf)	32 kN (3 300 kgf)
	SAE : PCSA	36 kN (3 700 kgf)	31 kN (3 200 kgf)

Excluding track shoe lug

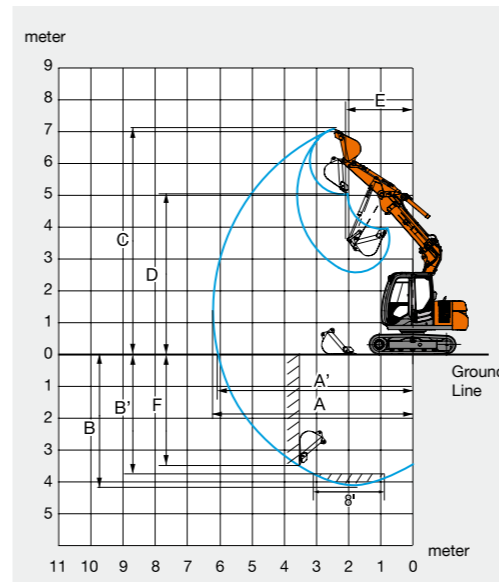
## ZX70-3 / ZX70LC-3 / ZX80LCK-3 with Blade (Optional)



A Overall width of blade	ZX70-3 : 2 200 mm ZX70LC-3 / ZX80LCK-3 : 2 320 mm
B Overall height of blade	460 mm
C Blade distance	1 880 mm
*D Max. raising height above ground	360 mm
*E Max. lowering depth from ground	300 mm

\* Excluding track shoe lug

## WORKING RANGES : Off-set front



	ZX70-3 / ZX70LC-3 with Off-set front	
Arm length	1.62 m	
Off-set distance	0 m / Max.	
A Max. digging reach	6 320 / 5 880	
A' Max. digging reach (on ground)	6 170 / 5 710	
B Max. digging depth	4 160 / 3 710	
B' Max. digging depth (8' level)	3 790 / 3 330	
C Max. cutting height	7 130 / 6 780	
D Max. dumping height	5 050 / 4 700	
E Min. swing radius	2 150 / 2 160 / 2 310	
F Max. vertical wall	3 550 / 3 090	
G Left side off-set distance	— / 1 150	
H Right side off-set distance	— / 1 150	
Bucket digging force	ISO	55 kN (5 600 kgf)
	SAE : PCSA	47 kN (4 800 kgf)
Arm crowd force	ISO	38 kN (3 900 kgf)
	SAE : PCSA	36 kN (3 700 kgf)

Excluding track shoe lug



## STANDARD EQUIPMENT

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

### ENGINE

- 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 filter
- Radiator, oil cooler and intercooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system

### HYDRAULIC SYSTEM

- Control valve with main relief valve
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter
- Swing drain filter

### CAB

- CRES II (Center pillar reinforced structure) cab
- OPG top guard fitted Level I (ISO10262) compliant cab
- All-weather sound suppressed steel cab
- Equipped with reinforced, tinted (green color) glass windows
- 4 fluid-filled elastic mounts
- Front windows on upper, lower and left side can be opened

- Intermittent windshield wipers
- Front window washer
- Adjustable reclining seat with adjustable armrests
- Footrest
- Electric horn
- AM-FM radio with digital clock
- Seat belt
- Drink holder
- Cigarette lighter
- Ashtray
- Storage box
- Glove compartment
- Fire extinguisher bracket
- Floor mat
- Short wrist control levers
- Pilot control shut-off lever
- Engine stop knob
- Auto control air conditioner
- Transparent roof with slide curtain

### MONITOR SYSTEM

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

### LIGHTS

- 2 working lights

### UPPERSTRUCTURE

- Undercover
- 750 kg counterweight
- 850 kg counterweight: with off-set front
- Fuel level float
- Hydraulic oil level gauge
- 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
- 2 tie down hooks
- 450 mm triple grouser shoes

### FRONT ATTACHMENTS

- HN bushing
- WC (tungsten-carbide) thermal spraying
- Flanged pin
- Dirt seal on all bucket pins
- 1.62 m arm
- 1.61 m arm: with off-set front
- 0.28 m<sup>3</sup> (SAE, PCSA heaped) bucket

### MISCELLANEOUS

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

### ZX80LCK-3 (Demolition version)

- K-cab (CRES II cab with overhead window and guard)
- 4.0 m K-boom
- 2.12 m Reinforced K-arm with damage prevention plate
- 0.28 m<sup>3</sup> (SAE, PCSA heaped) reinforced K-bucket
- Reinforced link B for demolition
- Front glass lower guard
- Twin wiper
- Attachment basic piping
- 4.5 mm undercover
- 1 100 kg counterweight
- High-performance full-flow filter (with restriction indicator)
- Front screen of air condenser
- Air cleaner double filters
- Deck guard and reinforced upperstructure main frame
- Blade attachment bracket
- Centerjoint for blade

## OPTIONAL EQUIPMENT

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

### CAB

- Suspension seat
- 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
- Blade

### UPPER STRUCTURE

- Rear view camera
- 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
- Hose rupture valve
- Off-set front

### OTHERS

- Pre-cleaner
- Biodegradable oil
- Front screen of air condenser
- Air cleaner double filters

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.