

ZAXIS-7G series

HITACHI

Reliable Solutions

# ZAXIS890



## HYDRAULIC EXCAVATOR

Model code	: ZX890-7G / ZX890LC-7G	ZX890H-7G / ZX890LCH-7G	ZX890LCR-7G
Engine rated power	: 377 kW (506HP)	377 kW (506HP)	377 kW (506HP)
Operating weight	: 81 700 - 85 300 kg	81 900 - 84 300 kg	84 800 - 85 300 kg
Bucket capacity	: 2.9 - 4.5 m <sup>3</sup>	3.5 - 4.3 m <sup>3</sup>	3.5 - 4.3 m <sup>3</sup>



# GET MORE FROM YOUR MACHINE

You're at the heart of Hitachi Construction Machinery's design for its latest range of excavators. To continuously improve on previous generation machines, we've focused on enhancing your profit in business.

We have made cost reduction for our customers our top priority and, in doing so, have achieved reduced fuel consumption. The cab has been redesigned to improve the operator's working environment and controllability, with production also expected to improve. An engine that already has a proven track record of high reliability has been adopted, and we have placed further work in it to make it even more robust. Remote failure diagnosis, monitoring, and OTA (Over The Air - controller rewriting) are also supported to reduce downtime.

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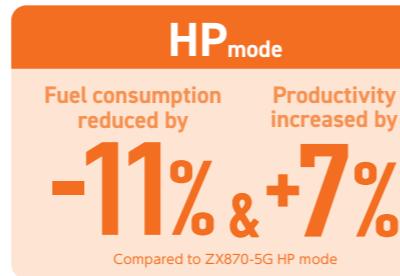
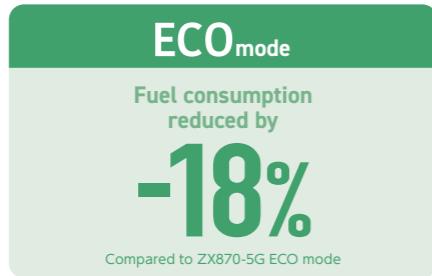
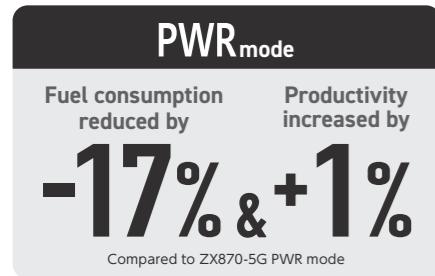
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# MORE PRODUCTION LOWER FUEL CONSUMPTION

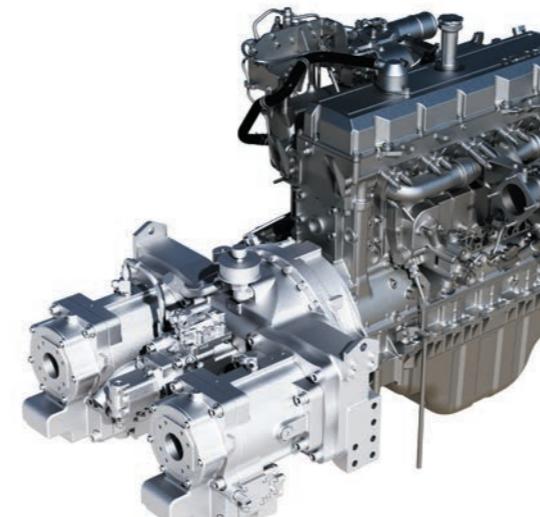
The HIOS-V new Hydraulic system has achieved both increased productivity and reduced fuel consumption in each mode. The ZAXIS performance contributes to increase the returns to the customer.



## HIOS-V Hydraulic system

The hydraulic system developed was based on the concept of a hydraulic system that fits in-line with a sense of human operation.

- ✓ Efficient hydraulic control achieves smoother and more speedy movement of front attachments.
- ✓ Fine-tuned hydraulic pump control according to work load reduces fuel consumption and supports cost reductions.



## Reduced oil pressure loss

A new valve has been adopted to reduce hydraulic loss and further improve hydraulic efficiency.

- ✓ Contributing to low fuel consumption operation

## High power engine

Rated power has been increased from the conventional ZX870-5G engine contributing to greater work volume.

- ✓ Increased workload

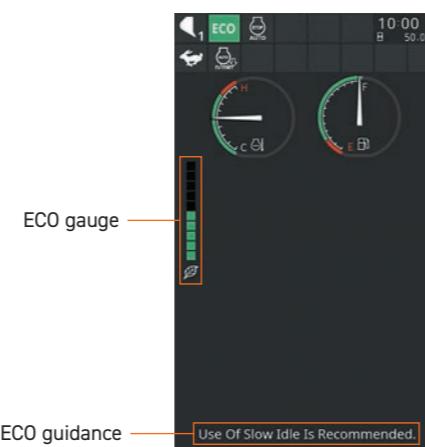
	ZX870-5G	ZX890-7G
Rated output (ISO 14396:2002)	<b>360kW</b>	<b>377kW</b>

## High efficiency operation support system

### ECO gauge

The current fuel consumption is indicated by segment display, prompting the operator to better fuel economy. The lower the fuel consumption, the higher the segment.

Easy to be removed and cleaned



### ECO guidance

Prompts the operator to better fuel economy.

Messages are also shown while the ECO gauge is displayed.

- ✓ Prompts operator for better economy



# BETTER OPERABILITY

In the cab of the Zaxis-7G, enhanced comfort and safety features are at your fingertips, offering the power to perform greater productivity with ease as well as reduced fatigue.



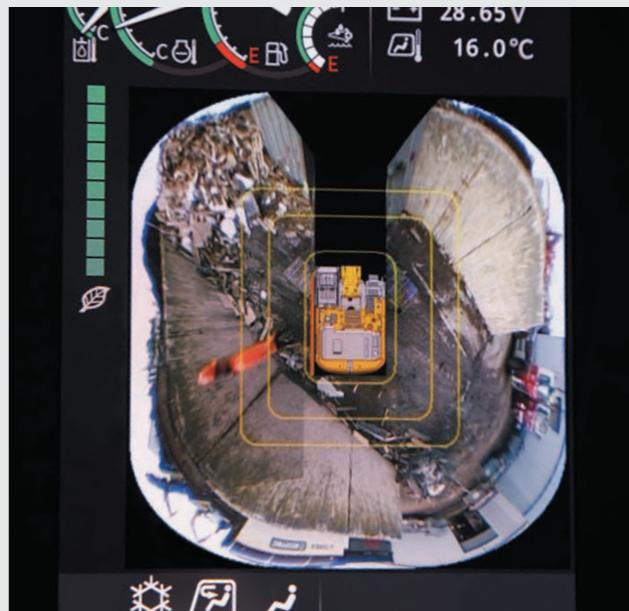
Operation is easy with ergonomically designed controls and switches.



Low-reflective color 8" touch panel monitor, 42 % larger display compared to ZX-5G series. Easier to view and navigate. USB power supply and Bluetooth® available.



New designed pilot shut-off lever  
The newly designed pilot shut-off lever allows easier locking and unlocking with wrist operation.



AERIAL ANGLE (Optional)  
270-degree bird's eye-view camera system is available as an option.



# HIGH DURABILITY AND RELIABILITY

Completing a project on time and on budget depends on the ability of your construction equipment to perform all day, every day. That's why Hitachi construction machinery owners have profited from generations of reliable and durable machinery. Hitachi Construction Machinery is always conscious of improving long-term reliability in its machine development. High long-term reliability is good in not only performance all day, every day but also for resale value.

## H Boom

Complete joint penetration has been applied to areas where the load is focused, and durability and reliability have been further improved.



## H Arm

A forged boss is used in the arm rod. Complete joint penetration has been applied to areas where the load is focused, and durability and reliability have been further improved.



## Rock bucket (ZX890H-7G, ZX890LCH-7G only)

A rock bucket has been adopted in consideration for sites requiring heavier excavator work. Equipped with horizontal wear plates and two-piece side shrouds for increased durability.



## Undercarriage (ZX890H-7G, ZX890LCH-7G only)

### Full track guard

Protects the lower roller and link from boulders and extending the unit's operating life.



## Equipped with an Expansion tank

✓ Improving the reliability of the engine cooling performance



## An engine with improved reliability

The engine is a highly reliable model that has already been adopted previously. In adopting it for the ZX-7G, we have put in our efforts to further increase durability and to BOOST your uptime. EGR (Exhaust Gas Recirculation) is removed from the engine, increasing its durability for using low-quality fuel.



## H/R Cab (ZX890H-7G, ZX890LCH-7G only)



A reinforced cab for H&R specification machines with a reinforced windshield and a FOPS\* guard that protects the cab from falling objects. The front has a laminated straight glass front window that shuts out dust. The cab front guard (optional), also complies with the ISO standard OPG\*\*.

\*FOPS: Falling-Object Protective Structure  
\*\*OPG: Operator Protective Guards

## Reinforced undercover (ZX890H-7G, ZX890LCH-7G only)



# GREATER DURABILITY IN QUARRY SITES R-series

Realizing higher quality and stronger durability

"Abrasion-resistant steel has been adopted, and strength has been further increased by changing the structure."

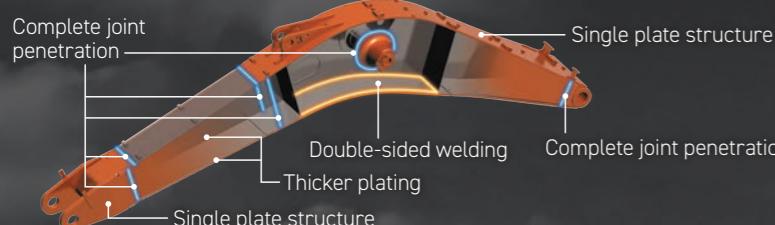
"Durable front structure and joints"

"Reinforced undercarriage that can withstand severe ground conditions"

Achieved stronger durability that meets customer needs.

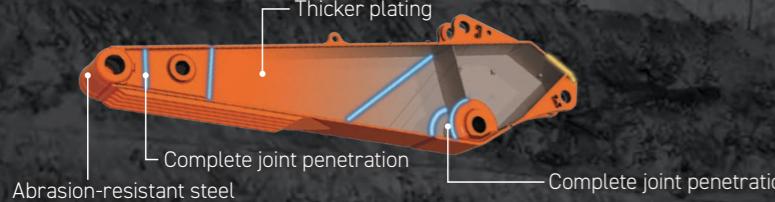
## R Boom

Double-sided welding and complete joint penetration are applied to improve the rigidity and durability of the boom. Durability is also improved by the boom end side plate's single plate structure, thicker boom end bush and other various components.



## R Arm

Thicker arm side frames are installed, improving durability. Arm dent prevention plates and five square bars prevent the deformation of the arm during digging and loading of limestone and crushed stone.



## R Bucket

**R bucket for crushed stones:** High durability by adopting abrasion-resistant steel, two-piece side shrouds, cutting edge shrouds, and large bucket claws for rock excavation. The side wear plate is made of 1 470 N/mm<sup>2</sup> (150 kgf/mm<sup>2</sup>) class abrasion-resistant steel that has high wear resistance and is easy to repair by welding. Repair work such as replacements can also be done relatively easily.

**R Bucket for limestone:** Limestone has slightly sticky properties and can be tough to work with, and places a large load on the front structure during excavation. For this reason, the R bucket designed for limestone has a structure that emphasizes crack prevention. The arm mounting bracket has been strengthened with added ribs. Impact resistance is improved by increasing the length of welded part. In addition, 1 470 N/mm<sup>2</sup> (150 kgf/mm<sup>2</sup>) grade abrasion-resistant steel is used to improve wear resistance.



## Undercarriage

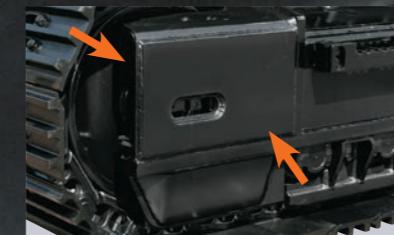
### Reinforced travel motor guard

Protects the travel motor from rocks and prevents the damage to travel motor.



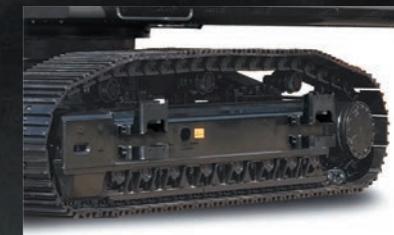
### Reinforced idler bracket

The idler bracket is strengthened to cope with frequent impacts.



### Full track guard

Protects the lower roller link from rocks and extending the unit's operating life.



## H/R Cab



A reinforced cab for H&R specification machines with a reinforced windshield and a FOPS\* guard that protects the cab from falling objects. The front has a laminated straight glass front window that shuts out dust. The cab front guard (optional), also complies with the ISO standard OPG\*\*.

\*FOPS: Falling-Object Protective Structure

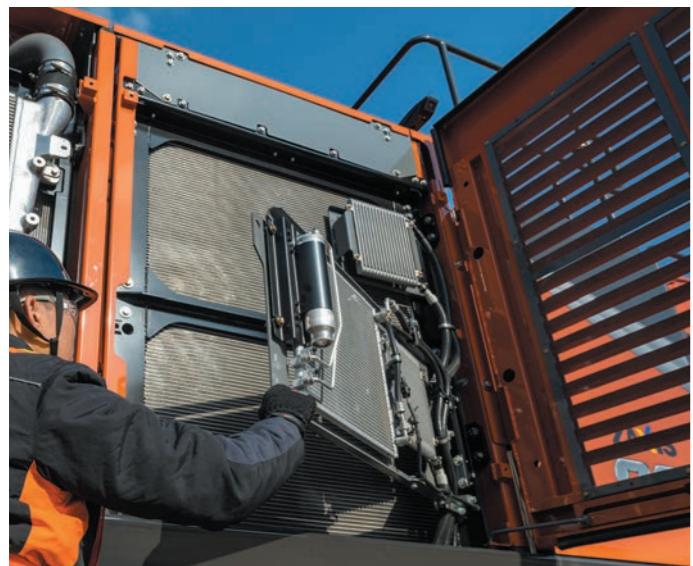
\*\*OPG: Operator Protective Guards



# SMOOTH MAINTENANCE

Regular maintenance is essential for the machine to achieve high performance.

Hitachi's excavator is designed for ease of regular maintenance. Simple and easy maintenance keeps the machine in good condition and keeps its high performance.



**Easy-access air conditioner condenser**

- ✓ The cover can be opened without the need for any tools
- ✓ Easy to clean Radiator/Oil Cooler/Inter cooler core with simple air blowing



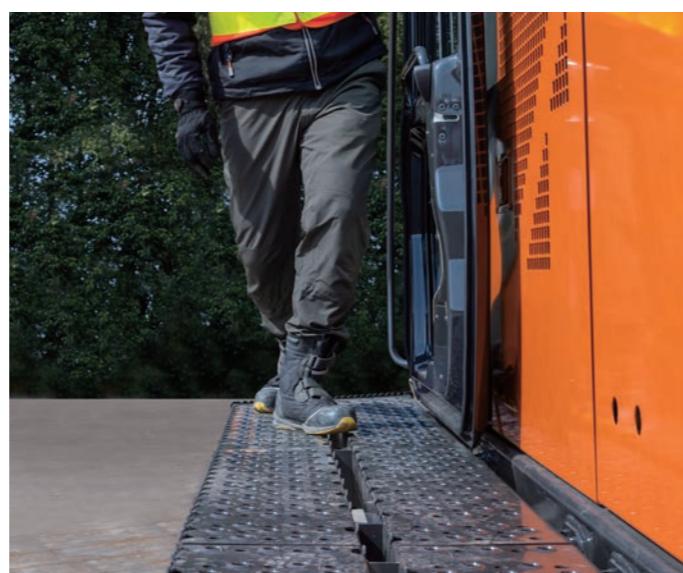
**Dust-proof net on right side cover**

- ✓ Provided on the cover, in front of radiator core
- ✓ Easy cleaning with compressed air



**Simplified engine oil drainage**

- ✓ Drain work can be done more easily by attaching a dedicated nozzle hose.



**Side walk**

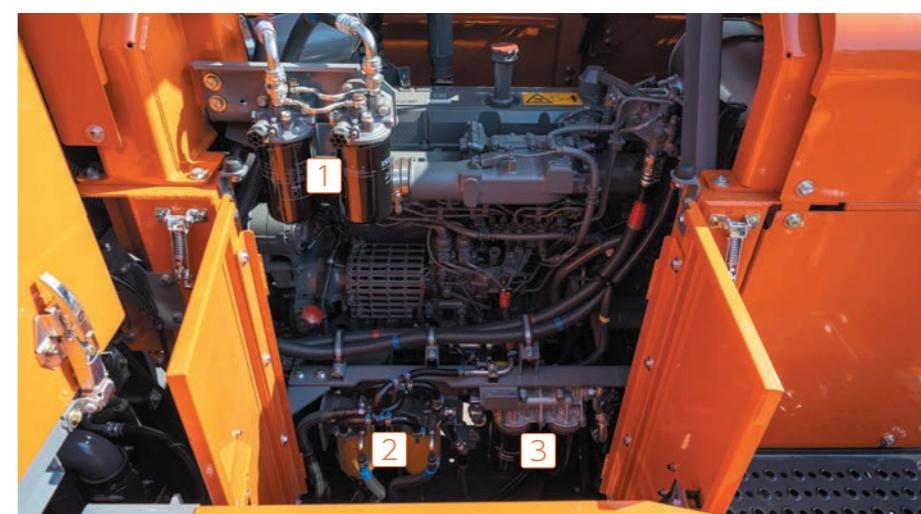
- ✓ Easy to move from cab to pump room or platform



**Easy access to filters**

Filter locations are concentrated in the pump room

- 1 Fuel main filter
- 2 Fuel pre-filter with water separator
- 3 Engine oil filter



# MACHINE MANAGEMENT

Hitachi Construction Machinery offers a wide range of after-sales services to help you feel in total control of your fleet and workload. These initiatives give you access to vital data and tools to manage your machine.



## Data report

Regular reports inform you of the machine's operation status. Emergency reports inform you of alarm information.

The stable operation of the machine is further supported with two types of reports visualizing the machine's daily operation status.

## Monthly report

Regular reports on the operating status of each machine.

## Alarm report

If an emergency alarm is generated from a sensor mounted on the machine, its alarm content is reported by e-mail in a timely manner. You can receive it on your computer, mobile phone, or smartphone (communication format is via e-mail).

A wide range of data on Global e-Service enhances efficiency.



## ConSite Air

This is a service solution to diagnose machine status and update software from a remote location using OTA (Over The Air).

- Machine status, including error code display and sensor data, can be checked quickly, reducing downtime due to machine trouble.
- Software updates can be performed remotely, reducing the amount of machine downtime required.



Remote Diagnosis



Remote Software update

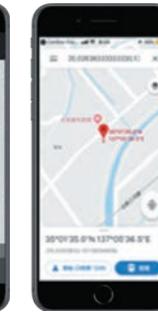
movie for further info.



## ConSite Pocket

ConSite Pocket sends you real-time alerts for issues arising with your machine. You'll receive recommendations on what to do and step-by-step help guides. The app also enables you to see the location of your fleet.

- Use your smartphone to check monthly reports, alarm reports, as well as machine operating positions.
- If an alarm report is generated, the system will notify you immediately using a push notification.



Monthly report

Machine finder

Location information

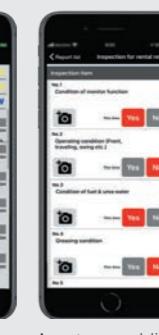
movie for further info.



## ConSite Shot

This is a smartphone application that allows you to easily perform daily inspections of your machines and rental warehousing / delivery management.

- You can easily create high-quality inspection reports and share information within your company or with agents etc.
- Customers who have rental machines can also use it during rental warehousing / delivery inspections.



Load condition

Acceptance or delivery

Inspection report with condition photo

movie for further info.



## ConSite OIL

This system detects if the oil quality has deteriorated, due to contamination or low viscosity. If this happens, you and your authorized dealer will receive an alert.

movie for further info.



# SPECIFICATIONS

ENGINE	
Model	Isuzu 6WG1
Type	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled
No. of cylinders	6
Rated power	
ISO 14396 : 2002 gross	377 kW (506 HP) at 1 800 min <sup>-1</sup> (rpm)
ISO 9249 : 2007 net	375 kW (503 HP) at 1 800 min <sup>-1</sup> (rpm)
Maximum torque	2 138 Nm (218 kgfm) at 1 500 min <sup>-1</sup> (rpm)
Piston displacement	15.681 L
Bore and stroke	147 mm x 154 mm
Batteries	2 x 12 V

HYDRAULIC SYSTEM	
<b>Hydraulic Pumps</b>	
Main pumps	2 variable displacement axial piston pumps
Maximum oil flow	2 x 512 L/min
Pilot pump	1 gear pump
Maximum oil flow	50 L/min
<b>Hydraulic Motors</b>	
Travel	2 axial piston motors with parking brake
Swing	2 axial piston motor
<b>Relief Valve Settings</b>	
Implement circuit	31.9 MPa (325 kgf/cm <sup>2</sup> )
Swing circuit	28.4 MPa (290 kgf/cm <sup>2</sup> )
Travel circuit	34.3 MPa (350 kgf/cm <sup>2</sup> )
Pilot circuit	3.9 MPa (40 kgf/cm <sup>2</sup> )
Power boost	34.3 MPa (350 kgf/cm <sup>2</sup> )
<b>Hydraulic Cylinders</b>	
	Quantity
Boom	2
Arm	1
Bucket	1
Bucket (BE)	1
	Bore
Boom	215 mm
Arm	225 mm
Bucket	200 mm
Bucket (BE)	215 mm
	Rod diameter
Boom	150 mm
Arm	160 mm
Bucket	140 mm
Bucket (BE)	150 mm

UPPERSTRUCTURE	
<b>Revolving Frame</b>	
D-section frame for resistance to deformation.	
<b>Swing Device</b>	
Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulicreleased disc type.	
Swing speed	7.4 min <sup>-1</sup> (rpm)
Swing torque	194 kNm (19 800 kgfm)

UNDERCARRIAGE	
<b>Tracks</b>	
Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.	
<b>Numbers of Rollers and Shoes on Each Side</b>	
Upper rollers	3
Lower rollers	8 : ZX890-7G / ZX890H-7G 9 : ZX890LC-7G / ZX890LCH-7G / ZX890LCR-7G
Track shoes	47 : ZX890-7G / ZX890H-7G 51 : ZX890LC-7G / ZX890LCH-7G / ZX890LCR-7G
Track guards	2 : ZX890-7G / ZX890LC-7G Full track guard : ZX890H-7G / ZX890LCH-7G / ZX890LCR-7G

Travel Device	
Each track driven by axial piston motor through reduction gear for counterrotation of the tracks.	
Parking brake is spring-set/hydraulic-released disc type.	
Automatic transmission system: High-Low.	
Travel speeds	
Travel speeds	High : 0 to 4.6 km/h
	Low : 0 to 3.1 km/h
Maximum traction force	
560 kN (57 100 kgf)	
Gradeability	
70 % (35 degree) continuous	

SERVICE REFILL CAPACITIES	
Fuel tank	1 110.0 L
Engine coolant	133.0 L
Engine oil	54.0 L
Pump drive	6.2 L
Swing device (each)	15.7 L
Travel device (each side)	19.0 L
Hydraulic system	1 042.0 L
Hydraulic oil tank	500.0 L

## WEIGHTS AND GROUND PRESSURE

### Operating Weight and Ground Pressure

ZX890-7G

Shoe grouser type	Shoe width mm	Arm type	Boom type	Bucket Capacity (ISO7451 : 2007 heaped)	Operating weight		
					kg	kPa	kgf/cm <sup>2</sup>
Double	650	2.95 m BE	7.1 m BE	4.5 m <sup>3</sup> Bucket	81 700	123	1.25
		3.7 m H	8.4 m H	3.5 m <sup>3</sup> Bucket	81 900	123	1.25
	750	2.95 m BE	7.1 m BE	4.5 m <sup>3</sup> Bucket	82 300	107	1.09
		3.7 m H	8.4 m H	3.5 m <sup>3</sup> Bucket	82 500	107	1.09

ZX890LC-7G

Shoe grouser type	Shoe width mm	Arm type	Boom type	Bucket Capacity (ISO7451 : 2007 heaped)	Operating weight		
					kg	kPa	kgf/cm <sup>2</sup>
Double	650	2.95 m BE	7.1 m BE	4.5 m <sup>3</sup> Bucket	83 500	125	1.27
		3.7 m H	8.4 m H	3.5 m <sup>3</sup> Bucket	83 600	125	1.27
	750	2.95 m BE	7.1 m BE	4.5 m <sup>3</sup> Bucket	84 200	109	1.11
		3.7 m H	8.4 m H	3.5 m <sup>3</sup> Bucket	84 300	110	1.12
	900	2.95 m BE	7.1 m BE	4.5 m <sup>3</sup> Bucket	85 100	92	0.94
		3.7 m H	8.4 m H	3.5 m <sup>3</sup> Bucket	85 300	92	0.94

ZX890H-7G

Shoe grouser type	Shoe width mm	Arm type	Boom type	Bucket Capacity (ISO7451 : 2007 heaped)	Operating weight		
					kg	kPa	kgf/cm <sup>2</sup>
Double	650	2.95 m BE	7.1 m BE	4.3 m <sup>3</sup> Rock Bucket	82 500	124	1.26
		3.7 m H	7.1 m BE	3.7 m <sup>3</sup> Rock Bucket	81 900	123	1.25
		3.7 m H	8.4 m H	3.5 m <sup>3</sup> Rock Bucket	82 400	124	1.26

ZX890LCH-7G

Shoe grouser type	Shoe width mm	Arm type	Boom type	Bucket Capacity (ISO7451 : 2007 heaped)	Operating weight		
					kg	kPa	kgf/cm <sup>2</sup>
Double	650	2.95 m BE	7.1 m BE	4.3 m <sup>3</sup> Rock Bucket	84 300	126	1.28
		3.7 m H	7.1 m BE	3.7 m <sup>3</sup> Rock Bucket	83 800	126	1.28
		3.7 m H	8.4 m H	3.5 m <sup>3</sup> Rock Bucket	84 200	126	1.28

# SPECIFICATIONS

## BUCKET AND ARM DIGGING FORCE

ZX890-7G / ZX890LC-7G

Boom length	7.1 m BE		8.4 m H	
Arm length	2.95 m BE		3.7 m H	
	kN	kgf	kN	kgf
Bucket digging force* ISO 6015 : 2006	472	48 100	399	40 700
Arm crowd force* ISO 6015 : 2006	394	40 200	323	32 900

\* At power boost

ZX890H-7G / ZX890LCH-7G

Boom length	7.1 m BE			8.4 m H		
Arm length	2.95 m BE		3.7 m H		3.7 m H	
	kN	kgf	kN	kgf	kN	kgf
Bucket digging force* ISO 6015 : 2006	472	48 100	402	41 000	402	41 000
Arm crowd force* ISO 6015 : 2006	394	40 200	324	33 000	324	33 000

\* At power boost

ZX890LCR-7G

Boom length	7.1 m BER			8.4 m R		
Arm length	2.95 m BER		3.7 m R		3.7 m R	
	kN	kgf	kN	kgf	kN	kgf
Bucket digging force* ISO 6015 : 2006	472	48 100	402	41 000	402	41 000
Arm crowd force* ISO 6015 : 2006	394	40 200	324	33 000	324	33 000

\* At power boost

## BACKHOE ATTACHMENTS

ZX890-7G

Bucket	Capacity (m³)	Width (mm)		No. of teeth	Weight (kg)	Boom 7.1 m BE	Boom 8.4 m H
	ISO7451: 2007 heaped	Without side cutters	With side cutters			Arm 2.95 m BE	Arm 3.7 m H
Backhoe bucket	2.9	1 590	1 780	5	2 700	x	○
	3.5	1 850	2 040	5	2 950	x	○
	4.5	2 120	2 190	5	3 970	○	x
Applicable shoe type						650 mm double grouser	
						750 mm double grouser	
						900 mm double grouser	

ZX890LC-7G

Bucket	Capacity (m³)	Width (mm)		No. of teeth	Weight (kg)	Boom 7.1 m BE	Boom 8.4 m H
	ISO7451: 2007 heaped	Without side cutters	With side cutters			Arm 2.95 m BE	Arm 3.7 m H
Backhoe bucket	2.9	1 590	1 780	5	2 700	x	○
	3.5	1 850	2 040	5	2 950	x	○
	4.5	2 120	2 190	5	3 970	○	x
Applicable shoe type						650 mm double grouser	
						750 mm double grouser	
						900 mm double grouser	

ZX890H-7G

Bucket	Capacity (m³)	Width (mm)		No. of teeth	Weight (kg)	Boom 7.1 m BE	Boom 8.4 m H
	ISO7451: 2007 heaped	Without side cutters	With side cutters			Arm 2.95 m BE	Arm 3.7 m H
Rock bucket	3.5	1 870	1 890	5	3 790	x	●
	3.7	1 950	1 970	5	3 900	x	●
	4.3	2 090	2 110	5	4 270	●	x
	5.0	2 240	2 260	5	5 000	○	x
Ripper bucket	1.9	–	1 490	3	4 200	x	●
	2.2	–	1 580	3	4 400	●	x
One-point ripper						1	2 680
						●	●
Applicable shoe type						650 mm double grouser	

ZX890LCH-7G

Bucket	Capacity (m³)	Width (mm)		No. of teeth	Weight (kg)	Boom 7.1 m BE	Boom 8.4 m H
	ISO7451: 2007 heaped	Without side cutters	With side cutters			Arm 2.95 m BE	Arm 3.7 m H
Rock bucket	3.5	1 870	1 890	5	3 790	x	●
	3.7	1 950	1 970	5	3 900	●	x
	4.3	2 090	2 110	5	4 270	●	x
	5.0	2 240	2 260	5	5 000	○	x
Ripper bucket	1.9	–	1 490	3	4 200	x	●
	2.2	–	1 580	3	4 400	●	x
One-point ripper						1	2 680
						●	●
Applicable shoe type						650 mm double grouser	

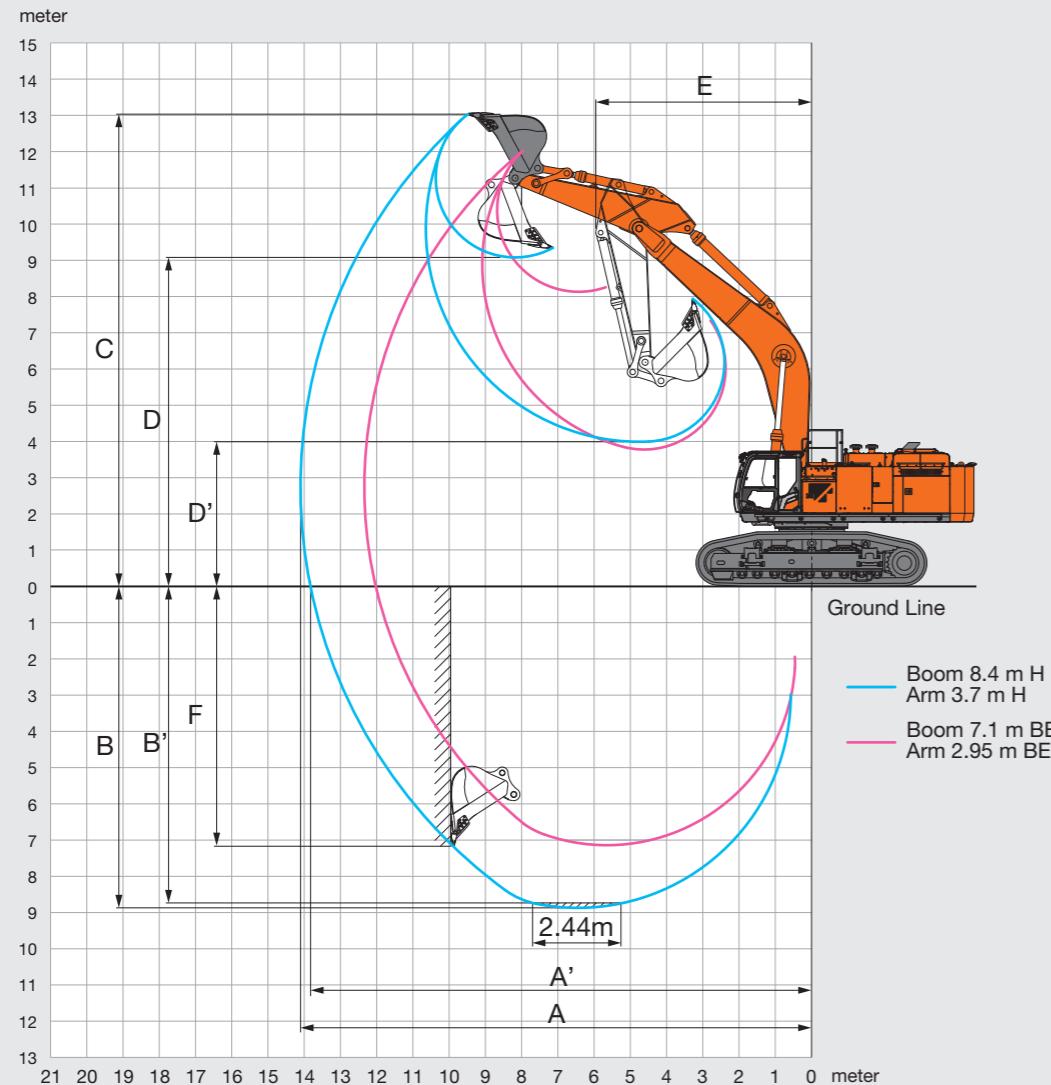
ZX890LCR-7G

Bucket	Capacity (m³)	Width (mm)		No. of teeth	Weight (kg)	Boom 7.1 m BER	Boom 8.4 m R
	ISO7451: 2007 heaped	Without side cutters	With side cutters			Arm 2.95 m BER	Arm 3.7 m R

# SPECIFICATIONS

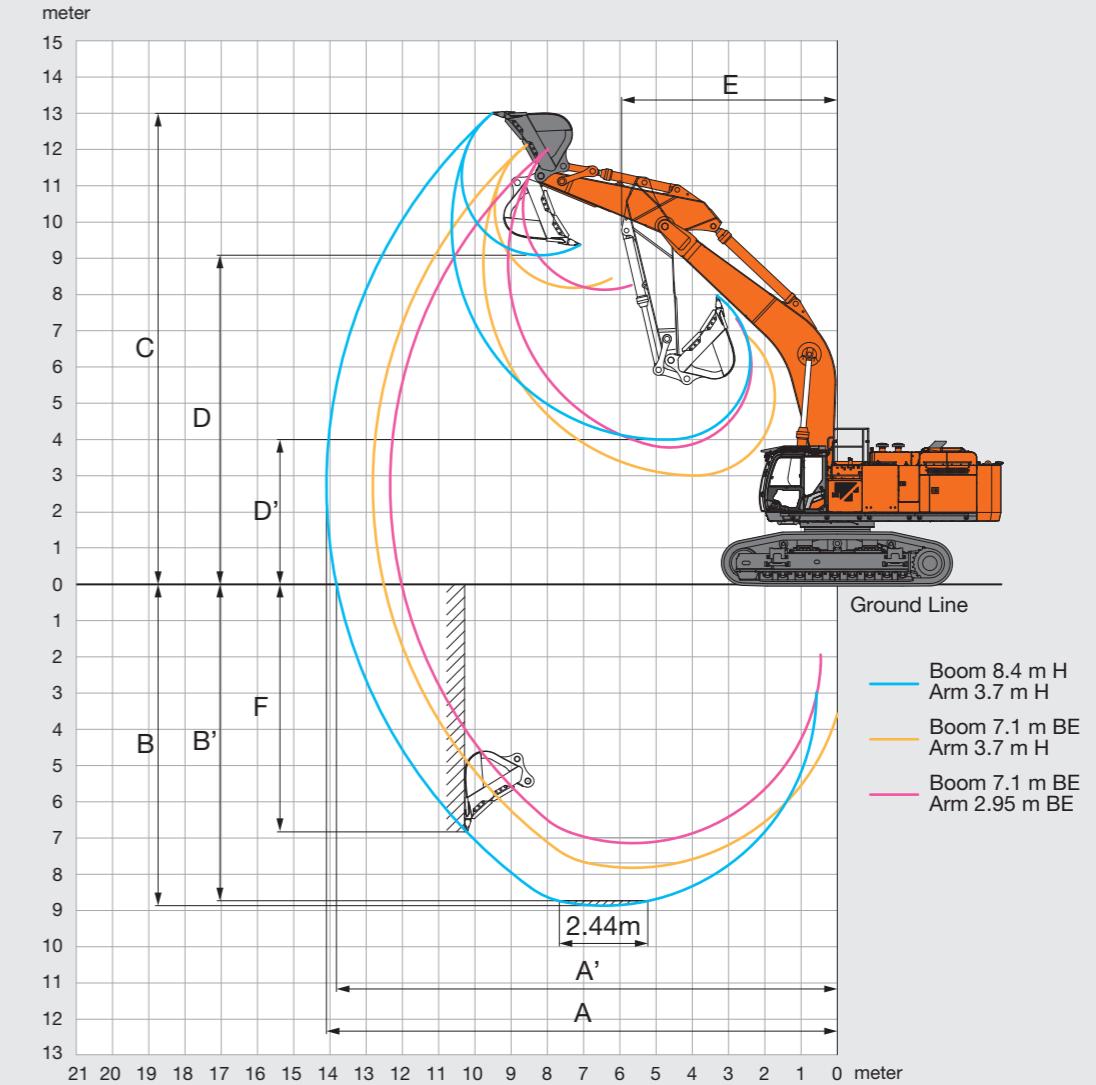
ZX890-7G / ZX890LC-7G

## WORKING RANGES



ZX890H-7G / ZX890LCH-7G

## WORKING RANGES



	ZX890-7G / ZX890LC-7G		Unit: mm
Boom	7.1 m BE	8.4 m H	
Arm length	2.95 m BE	3.7 m H	
A Max. digging reach	12 340	14 100	
A' Max. digging reach (on ground)	12 020	13 820	
B Max. digging depth	7 140	8 870	
B' Max. digging depth for 2.44 m level	7 000	8 740	
C Max. cutting height	12 010	13 030	
D Max. dumping height	8 130	9 080	
D' Min. dumping height	3 770	3 990	
E Min. swing radius	5 210	5 950	
F Max. vertical wall digging depth	4 100	7 170	

Excluding track shoe lug

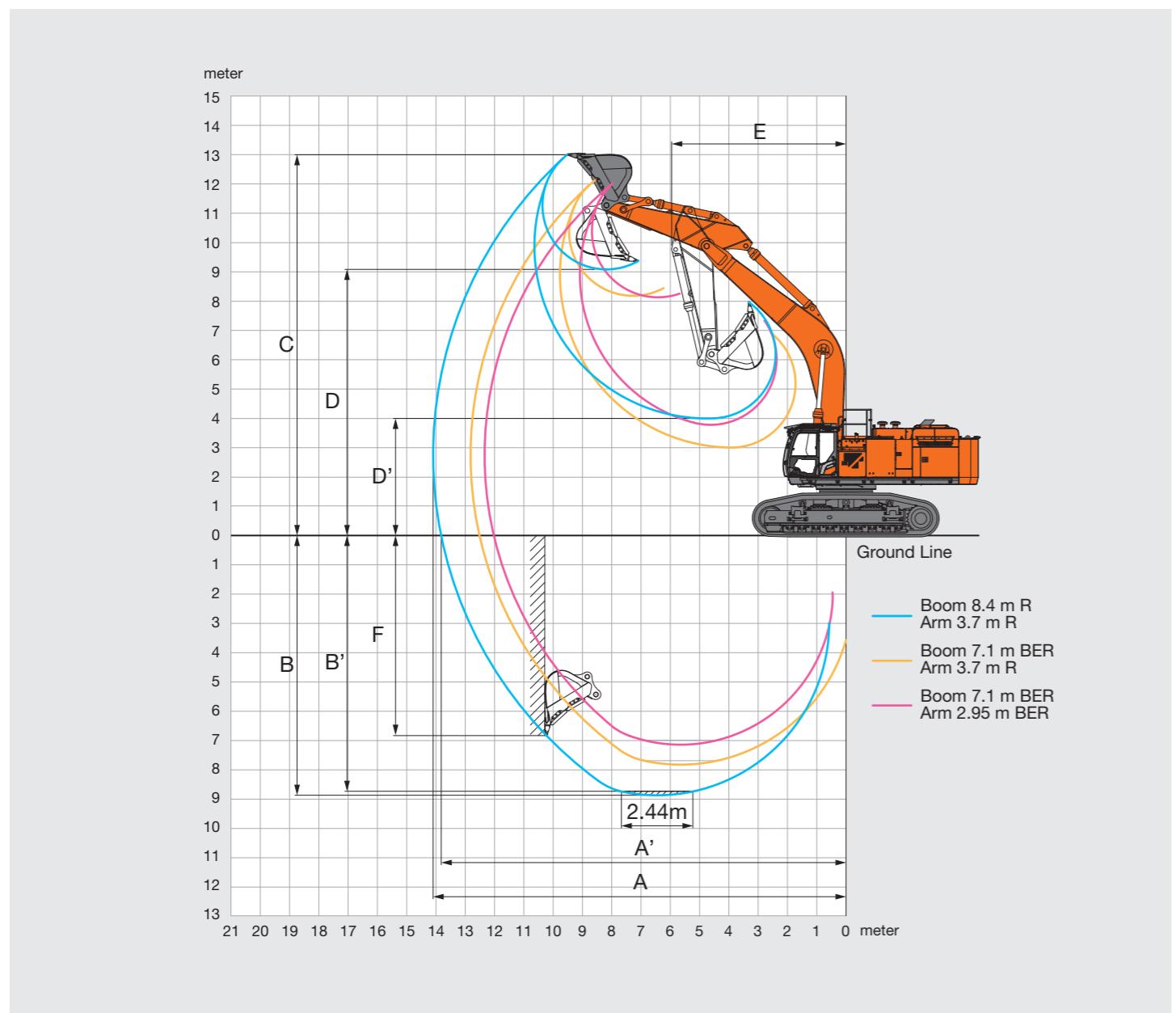
	ZX890H-7G / ZX890LCH-7G		
Boom	7.1 m BE	8.4 m H	3.7 m H
Arm length	2.95 m BE	3.7 m H	3.7 m H
A Max. digging reach	12 340	12 810	14 100
A' Max. digging reach (on ground)	12 020	12 510	13 820
B Max. digging depth	7 140	7 820	8 870
B' Max. digging depth for 2.44 m level	7 000	7 690	8 740
C Max. cutting height	12 010	12 130	13 000
D Max. dumping height	8 130	8 180	9 080
D' Min. dumping height	3 770	3 000	3 990
E Min. swing radius	5 210	5 090	5 950
F Max. vertical wall digging depth	4 100	6 090	6 840

Excluding track shoe lug

# SPECIFICATIONS

ZX890LCR-7G

## WORKING RANGES

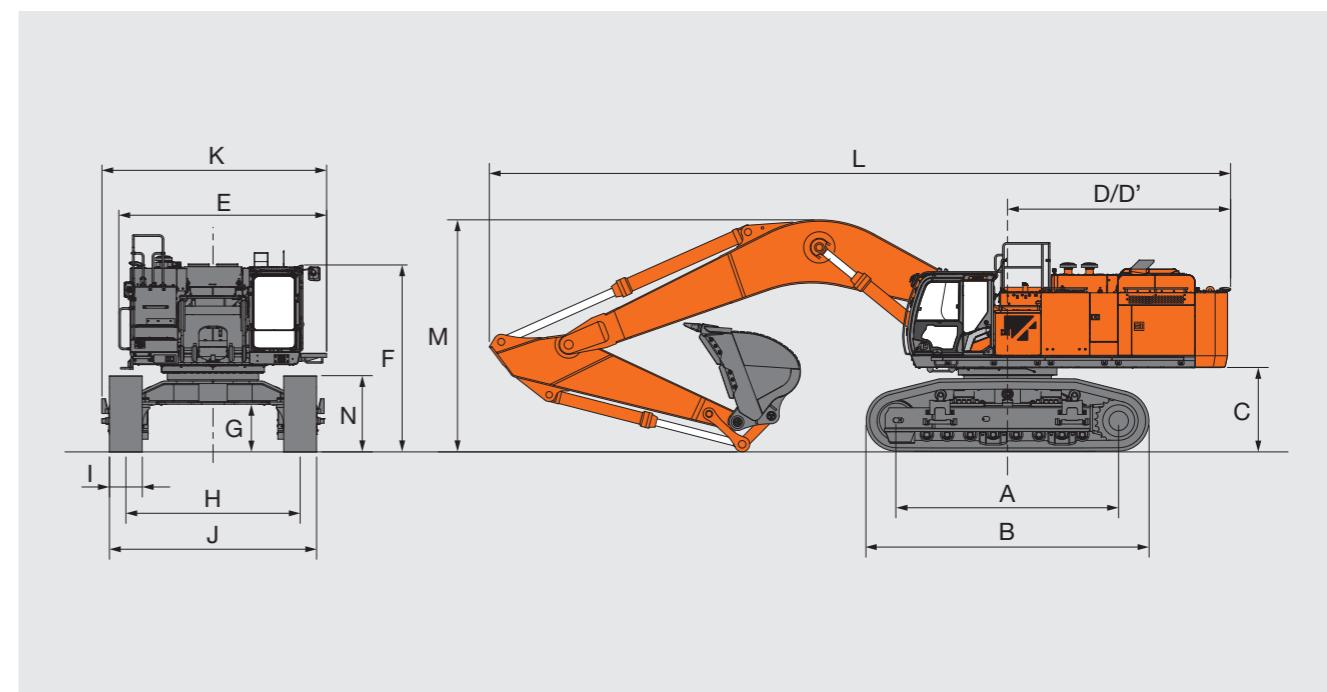


	ZX890LCR-7G		
Boom	7.1 m BER		8.4 m R
Arm length	2.95 m BER	3.7 m R	3.7 m R
A Max. digging reach	12 340	12 810	14 100
A' Max. digging reach (on ground)	12 020	12 510	13 820
B Max. digging depth	7 140	7 820	8 870
B' Max. digging depth for 2.44 m level	7 000	7 690	8 740
C Max. cutting height	12 010	12 130	13 000
D Max. dumping height	8 130	8 180	9 080
D' Min. dumping height	3 770	3 000	3 990
E Min. swing radius	5 210	5 090	5 950
F Max. vertical wall digging depth	4 100	6 090	6 840

Excluding track shoe lug

ZX890-7G / ZX890LC-7G / ZX890H-7G / ZX890LCH-7G / ZX890LCR-7G

## DIMENSIONS



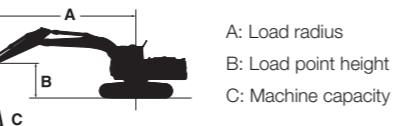
	ZX890-7G	ZX890LC-7G	ZX890H-7G	ZX890LCH-7G	ZX890LCR-7G
A Distance between tumblers	4 590	5 110	4 590	5 110	5 110
B Undercarriage length	5 840	6 360	5 840	6 360	6 360
*C Counterweight clearance	1 680	1 680	1 680	1 680	1 680
D Rear-end swing radius	4 600	4 600	4 600	4 600	4 600
D' Rear-end length	4 520	4 520	4 520	4 520	4 520
E Overall width of upperstructure	4 120	4 120	4 120	4 120	4 120
F Overall height of cab	3 690	3 690	3 800	3 800	3 800
*G Min. ground clearance	890	890	890	890	890
H Track gauge : Extended / Retracted	3 450 / 2 830	3 450 / 2 830	3 450 / 2 830	3 450 / 2 830	3 450 / 2 830
I Track shoe width	650 / 750	650 / 750 / 900	650	650	650
J Undercarriage width : Extended / Retracted					
with 650 mm shoe	4 100 / 3 480	4 100 / 3 480	4 100 / 3 480	4 100 / 3 480	4 100 / 3 480
with 750 mm shoe	4 200 / 3 580	4 200 / 3 580	-	-	-
with 900 mm shoe	-	4 350 / 3 730	-	-	-
K Overall width	4 450	4 450	4 450	4 450	4 450
**L Overall length	14 800	14 800	14 800	14 800	14 800
**M Overall height of boom	4 770	4 770	4 770	4 770	4 770
**N Track height	1 500	1 500	1 500	1 500	1 500

\* Excluding track shoe lug

\*\* with Boom 8.4 m and Arm 3.7 m

# MACHINE CAPACITIES

- Notes:
1. Ratings are based on ISO 10567 : 2007.
  2. Machine capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
  3. The load point is the center-line of the bucket pivot mounting pin on the arm.
  4. \*Indicates load limited by hydraulic capacity.
  5. 0 m = Ground.



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

For machine capacities, subtract installed attachment and quick hitch weight from machine capacities.

To determine lifting capacities, apply "Rating over-side or 360 degrees" machine capacities from the table and deduct weight of installed attachment and quick hitch.

Optional feature may affect machine performance.

**ZX890-7G**

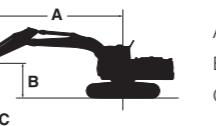
Conditions	Load point height m	Load radius												At max. reach				Unit : kg
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		At max. reach				
		Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	
Boom 8.4 m H Arm 3.7 m H Counterweight 13 300 kg Shoe 650 mm	9.0									*16 350	*16 350			*12 240	*12 240	10.1		
	7.5									*17 010	*17 010	*15 370	13 970	*12 080	*12 080	10.9		
	6.0					*25 050	*25 050	*20 700	*20 700	*18 220	17 500	*16 730	13 700	*12 200	*11 830	11.4		
	4.5					*29 780	*29 780	*23 250	21 980	*19 690	16 810	17 190	13 310	*12 570	11 070	11.8		
	3.0					*33 680	28 460	*25 600	20 880	21 080	16 150	16 770	12 910	*13 230	10 660	11.9		
	1.5								26 730	20 060	20 490	15 600	16 400	12 560	*13 770	10 560	11.8	
	0 (Ground)								26 200	19 570	20 090	15 220	16 140	12 320	*14 080	10 770	11.6	
	-1.5					*34 910	26 890	25 980	19 360	19 900	15 030	16 040	12 210	*14 870	11 350	11.1		
	-3.0					*32 930	27 060	26 020	19 400	19 920	15 050			16 380	12 490	10.4		
	-4.5					*29 640	27 480	*24 160	19 690	*19 410	15 340			*18 180	14 590	9.4		
	-6.0					*29 450	*29 450	*24 260	*24 260	*19 260	*19 260			*17 670	*17 670	7.9		

**ZX890LC-7G**

Conditions	Load point height m	Load radius												At max. reach				Unit : kg
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		At max. reach				
		Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	
Boom 7.1 m BE Arm 2.95 m BE Counterweight 13 300 kg Shoe 650 mm	9.0																	
	7.5									*21 750	*21 750							
	6.0					*26 890	*26 890	*23 170	*23 170	*21 180	18 030			*16 660	*16 660	8.9		
	4.5					*31 010	*31 010	*25 220	23 180	*22 040	17 550			*16 390	16 320	9.5		
	3.0					*34 730	30 670	*27 250	22 190	*23 040	17 010			*16 610	14 970	9.9		
	1.5					*36 770	29 420	*28 650	21 390	*23 730	16 530			*18 530	14 190	10.0		
	0 (Ground)					*36 890	28 790	*29 000	20 870	*23 670	16 210			*20 570	14 650	9.7		
	-1.5					*42 330	*42 330	*35 250	28 600	*27 960	20 670	*22 120	16 150		*21 580	15 880	9.1	
	-3.0	*41 880	*41 880	*36 690	*36 690	*31 580	27 780	*24 790	20 820					*21 270	18 440	8.2		
	-4.5			*30 900	*30 900	*24 390	*24 390							*19 710	*19 710	6.9		
	-6.0																	
Boom 8.4 m H Arm 3.7 m H Counterweight 13 300 kg Shoe 650 mm	9.0									*16 350	*16 350							
	7.5									*17 010	*17 010	*15 370	14 260	*12 080	*12 080	10.9		
	6.0					*25 050	*25 050	*20 700	*20 700	*18 220	17 840	*16 730	13 980	*12 200	12 090	11.4		
	4.5					*29 780	*29 780	*23 250	22 410	*19 690	17 160	*17 530	13 600	*12 570	11 310	11.8		
	3.0					*33 680	29 060	*25 600	21 310	*21 140	16 490	*18 380	13 190	*13 230	10 900	11.9		
	1.5								*27 270	20 490	*22 280	15 940	*19 060	12 840	*14 230	10 800	11.8	
	0 (Ground)								*28 030	20 000	*22 900	15 560	18 940	12 600	*15 730	11 020	11.6	
	-1.5					*34 910	27 480	*27 840	19 800	*22 840	15 380	18 380	12 500	17 440	11 620	11.1		
	-3.0					*32 930	27 660	*26 660	19 830	*21 880	15 400			*18 060	12 780	10.4		
	-4.5					*29 640	28 080	*24 160	20 120	*19 410	15 680			*18 180	14 910	9.4		
	-6.0					*29 450	*29 450	*24 260	*24 260	*19 260	*19 260			*17 670	*17 670	7.9		

# MACHINE CAPACITIES

- Notes:
1. Ratings are based on ISO 10567 : 2007.
  2. Machine capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
  3. The load point is the center-line of the bucket pivot mounting pin on the arm.
  4. \*Indicates load limited by hydraulic capacity.
  5. 0 m = Ground.



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

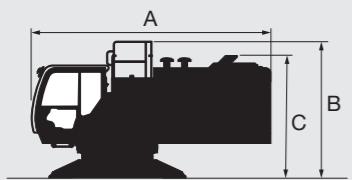
# MEMO

## ZX890LCR-7G

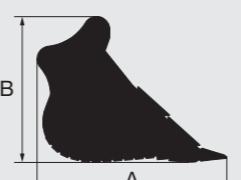
Conditions	Load point height m	Load radius												At max. reach	
		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m			
		Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees	Rating over-front	Rating over-side or 360 degrees		
Boom 7.1 m BER Arm 2.95 m BER Counterweight 13 300 kg Shoe 650 mm	9.0														
	7.5							*21 750	*21 750					*16 660	
	6.0					*26 890	*26 890	*23 170	*23 170	*21 180	18 200			*16 390	
	4.5					*31 010	*31 010	*25 220	23 410	*22 040	17 730			*16 610	
	3.0					*34 730	30 970	*27 250	22 420	*23 040	17 180			*17 290	
	1.5					*36 770	29 730	*28 650	21 610	*23 730	16 710			*18 530	
	0 (Ground)					*36 890	29 090	*29 000	21 100	*23 670	16 390			*20 570	
	-1.5					*42 330	*42 330	*35 250	28 900	*27 960	20 890	*22 120	16 320	*21 580	
	-3.0	*41 880	*41 880	*39 690	*39 690	*31 580	29 080	*24 790	21 040					*21 270	
	-4.5			*30 900	*30 900	*24 390	*24 390							*19 710	
	-6.0														
Boom 7.1 m BER Arm 3.7 m R Counterweight 13 300 kg Shoe 650 mm	9.0														
	7.5							*19 490	*19 490	*14 860	*14 860			*10 790	
	6.0							*21 670	*21 670	*19 100	18 730			*10 780	
	4.5			*39 260	*39 260	*28 980	*28 980	*23 970	*23 970	*21 110	18 200			*11 060	
	3.0					*33 260	32 070	*26 360	23 060	*22 410	17 610	*13 710	*13 710	*11 650	
	1.5					*36 220	30 580	*28 240	22 160	*23 470	17 060	*13 680	13 610	*12 620	
	0 (Ground)					*37 340	29 670	*29 180	21 510	*23 940	16 640			*14 140	
	-1.5					*36 660	29 250	*28 880	21 150	*23 400	16 420			*16 630	
	-3.0					*44 080	*44 080	*34 090	29 230	*26 930	21 090			*21 140	
	-4.5					*36 910	*36 910	*28 910	*21 930	21 440				*21 120	
	-6.0														
Boom 8.4 m R Arm 3.7 m R Counterweight 13 300 kg Shoe 650 mm	9.0							*16 240	*16 240					*12 190	
	7.5									*16 890	*16 890	*15 320	14 310	*12 030	
	6.0					*24 900	*24 900	*20 570	*20 570	*18 090	17 910	*16 610	14 020	*12 150	
	4.5					*29 600	*29 600	*23 100	22 500	*19 550	17 220	*17 400	13 630	*12 520	
	3.0					*33 480	29 170	*25 430	21 390	*20 990	16 540	*18 240	13 230	*13 180	
	1.5							*27 090	20 560	*22 120	15 980	*18 920	12 870	*14 180	
	0 (Ground)							*27 850	20 060	*22 740	15 600	18 820	12 620	*15 670	
	-1.5					*34 700	27 580	*27 660	19 860	*22 680	15 420	18 710	12 520	*17 320	
	-3.0					*32 720	27 770	*26 480	19 900	*21 730	15 440			*17 920	
	-4.5					*29 440	28 200	*23 990	20 190	*19 270	15 730			*18 040	
	-6.0					*29 240	*29 240	*24 070	*24 070	*19 110	*19 110			*17 520	
														7.9	

# TRANSPORTATION

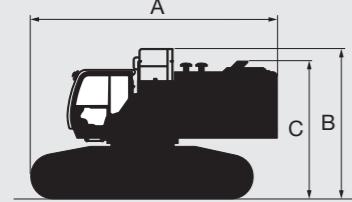
## UPPERSTRUCTURE



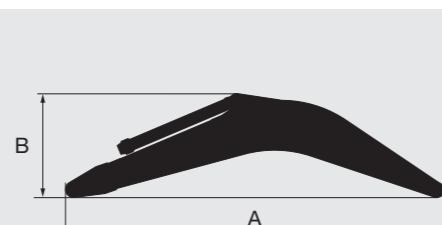
## BUCKET



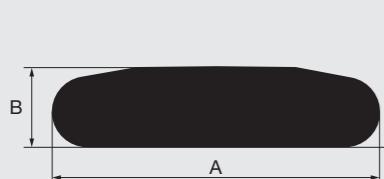
## BASIC MACHINE (WITHOUT COUNTERWEIGHT)



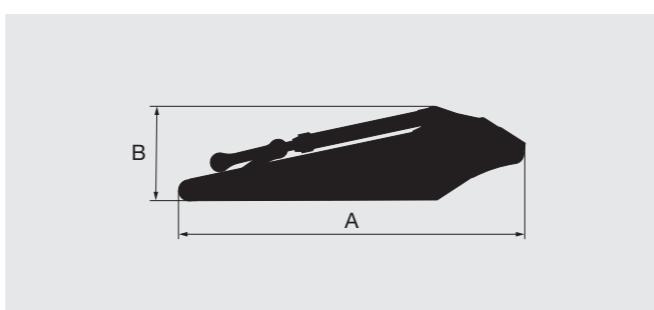
## BOOM



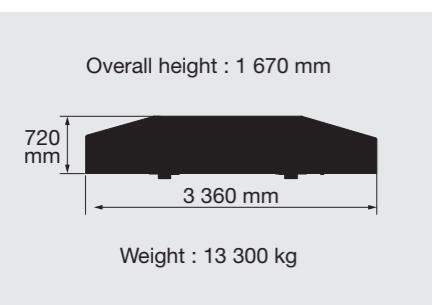
## SIDE FRAME



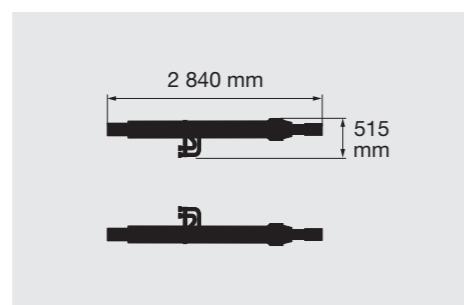
## ARM



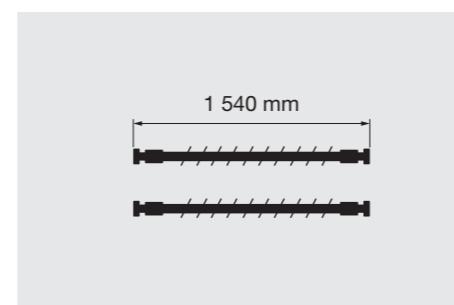
## COUNTERWEIGHT



BOOM CYLINDERS 550 kg X 2  
Overall height: 410 mm



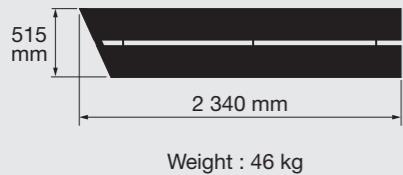
HOSE OF BOOM CYLINDERS  
9 kg X 2 / 13 kg X 2



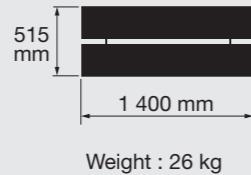
## LEFT SIDEWALK

Overall height: 150 mm

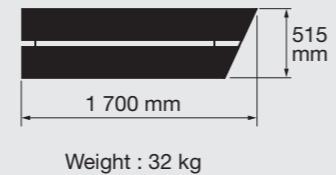
### FRONT



### CENTER



### REAR



## UPPERSTRUCTURE

Fixed gauge	A (mm)	B (mm)	C (mm)	Overall width (mm)	Weight (kg)
ZX890-7G	6 040	3 370	2 955	3 420	27 500
ZX890LC-7G	6 040	3 370	2 955	3 420	27 500
ZX890H-7G	6 040	3 370	2 955	3 420	27 700
ZX890LCH-7G	6 040	3 370	2 955	3 420	27 700
ZX890LCR-7G	6 040	3 370	2 955	3 420	27 700

## BASIC MACHINE (WITHOUT COUNTERWEIGHT)

Fixed gauge	Shoe width (mm)	A (mm)	B (mm)	C (mm)	Overall width (mm)	Weight (kg)
ZX890-7G	650	6 770	4 300	3 890	3 480	50 100
	750	6 770	4 300	3 890	3 580	50 800
ZX890LC-7G	650	7 080	4 300	3 890	3 480	51 900
	750	7 080	4 300	3 890	3 580	52 600
ZX890H-7G	900	7 080	4 300	3 890	3 730	53 500
ZX890LCH-7G	650	6 770	4 300	3 890	3 480	50 800
ZX890LCR-7G	650	7 080	4 300	3 890	3 480	52 700
ZX890LCR-7G	650	7 080	4 300	3 890	3 480	52 970

Notes : Undercarriage retracted.

## SIDE FRAME

Fixed gauge	Shoe width (mm)	A (mm)	B (mm)	Overall width (mm)	Weight (kg)
ZX890-7G	650	5 840	1 500	1 330	11 200
	750	5 840	1 500	1 330	11 500
ZX890LC-7G	650	6 360	1 500	1 330	12 100
	750	6 360	1 500	1 330	12 400
ZX890H-7G	900	6 360	1 500	1 425	12 900
ZX890LCH-7G	650	5 840	1 500	1 330	11 400
ZX890LCR-7G	650	6 360	1 500	1 330	12 400
ZX890LCR-7G	650	6 360	1 500	1 330	12 700

## BUCKET

Bucket	Bucket Capacity ISO heaped (m³)	A (mm)	B (mm)	Overall width (mm)	Weight (kg)
Backhoe bucket	2.9	2 210	1 910	1 780	2 700
	3.5	2 210	1 910	2 040	2 950
	4.5	2 320	2 000	2 190	3 970
Rock bucket	3.5	2 240	1 920	1 890	3 790
	3.7	2 240	1 920	1 970	3 900
	4.3	2 310	2 000	2 110	4 270
R bucket	5.0	2 510	2 020	2 260	5 000
	3.5	2 240	1 920	1 890	4 870
	3.7	2 240	1 920	1 970	4 970
R bucket	4.3	2 310	2 000	2 110	5 690

## BOOM

Boom	A (mm)	B (mm)	Overall width (mm)	Weight (kg)
7.1 m BE	7 490	2 700	1 450	7 670
8.4 m H	8 780	2 500	1 450	8 200
7.1 m BER	7 490	2 700	1 450	7 680
8.4 m R	8 780	2 500	1 450	8 270

## ARM

Arm	A (mm)	B (mm)	Overall width (mm)	Weight (kg)
2.95 m BE	4 460	1 660	850	4 650
3.7 m H	5 290	1 420	820	4 510
2.95 m BER	4 460	1 660	850	4 760
3.7 m R	5 290	1 420	820	4 610

# EQUIPMENT

ENGINE	ZX890-7G	ZX890 LC-7G	ZX890 H-7G	ZX890 LCH-7G	ZX890 LCR-7G
Alternator 60 A	●	●	●	●	●
Auto idle system	●	●	●	●	●
Auto shut-down control	●	●	●	●	●
Cartridge-type engine oil filter	●	●	●	●	●
Cartridge-type fuel main filter	●	●	●	●	●
Cartridge-type fuel pre-filter with water separator	●	●	●	●	●
ConSite OIL (sensor)*	●	●	●	●	●
Dry-type air filter with evacuator valve (with air filter restriction indicator)	●	●	●	●	●
Dust-proof net	●	●	●	●	●
ECO/PWR/HP mode control	●	●	●	●	●
Electrical fuel feed pump	●	●	●	●	●
Engine oil drain coupler	●	●	●	●	●
Expansion tank	●	●	●	●	●
Fan guard	●	●	●	●	●
Isolation-mounted engine	●	●	●	●	●
Pre-cleaner	○	○	○	○	○
Radiator, oil cooler and intercooler	●	●	●	●	●
Reversible fan	○	○	○	○	○

HYDRAULIC SYSTEM	ZX890-7G	ZX890 LC-7G	ZX890 H-7G	ZX890 LCH-7G	ZX890 LCR-7G
Auto power lift	●	●	●	●	●
Boom mode selector system	●	●	●	●	●
ConSite OIL (sensor)*	●	●	●	●	●
Control valve with main relief valve	●	●	●	●	●
Drain filter	●	●	●	●	●
Engine speed sensing system	●	●	●	●	●
Extra port for control valve	●	●	●	●	●
High mesh full flow filter	●	●	●	●	●
Pilot filter	●	●	●	●	●
Power boost	●	●	●	●	●
Shockless valve in pilot circuit	●	●	●	●	●
Suction filter	●	●	●	●	●
Two extra port for control valve	●	●	●	●	●
Work mode selector	●	●	●	●	●

CAB	ZX890-7G	ZX890 LC-7G	ZX890 H-7G	ZX890 LCH-7G	ZX890 LCR-7G
All-weather sound suppressed steel cab	●	●	●	●	●
Auto control air conditioner	●	●	●	●	●
Bluetooth® radio	●	●	●	●	●
Console height adjustment	●	●	●	●	●
CRES VII (center pillar reinforced structure) cab	●	●	●	●	●
Drink holder with hot and cool function	●	●	●	●	●
Electric double horn	●	●	●	●	●
Engine shut-off switch	●	●	●	●	●
Evacuation hammer	●	●	●	●	●
Fire extinguisher bracket	○	○	○	○	○
Floor mat	●	●	●	●	●
Footrest	●	●	●	●	●
Front window washer (1 points)	●	●	●	●	●
Glove compartment	●	●	●	●	●
Hands-free calling device	○	○	○	○	○
Hot and cool box	●	●	●	●	●
Intermittent windshield wipers	●	●	●	●	●
Key cylinder light	●	●	●	●	●
Laminated straight glass front window	○	○	○	○	○
LED room light	●	●	●	●	●
Magazine rack	●	●	●	●	●
OPG front guard Level II (ISO 10262 : 1998) compliant	○	○	○	○	○
OPG top guard Level II (ISO 10262 : 1998) compliant	○	○	○	○	○
Pilot shut-off lever	●	●	●	●	●
Power outlet 12V	○	○	○	○	○
Power outlet 24V	●	●	●	●	●
Rain guard (without OPG front guard)	○	○	○	○	○
Rear tray	●	●	●	●	●
Retractable seat belt	●	●	●	●	●
Rubber radio antenna	●	●	●	●	●
Seat : air suspension seat with heater	○	○	○	○	○
Seat : mechanical suspension seat	●	●	●	●	●
Seat adjustment part : backrest, armrest, height and angle, slide forward / back	●	●	●	●	●
Seat belt reminder	●	●	●	●	●
Short wrist control levers	●	●	●	●	●
Smartphone holder	●	●	●	●	●
Sunscreen roller type (multi-use front or side and rear window)	○	○	○	○	○
Transparent roof with slide curtain	●	●	●	●	●
USB power supply	●	●	●	●	●
Windows on leftside can be opened	●	●	●	●	●
2 speakers	●	●	●	●	●
6 fluid-filled elastic mounts	●	●	●	●	●
8 inch monitor	●	●	●	●	●

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

MONITOR SYSTEM	ZX890-7G	ZX890 LC-7G	ZX890 H-7G	ZX890 LCH-7G	ZX890 LCR-7G
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,etc	●	●	●	●	●
Display of meters : water temperature, hour, fuel rate, clock, etc	●	●	●	●	●
Other displays : work mode, auto-idle, glow, rear view monitor, side view monitor, operating conditions, etc	●	●	●	●	●
35 languages selection	●	●	●	●	●

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

UNDERCARRIAGE	ZX890-7G	ZX890 LC-7G	ZX890 H-7G	ZX890 LCH-7G	ZX890 LCR-7G
Bolt-on sprocket	●	●	●	●	●
Full track guard	-	-	●	●	●
Hydraulic track adjuster	●	●	●	●	●
Idler track guard	●	●	●	●	●
Reinforced track links with pin seals	●	●	●	●	●
Shoe : 650 mm double grouser	●	●	●	●	●
Shoe : 750 mm double grouser	○	○	-	-	-
Shoe : 900 mm double grouser	-	○	-	-	-
Track undercover	○	○	○	○	○
Travel direction mark on track frame	●	●	●	●	●
Travel motor covers	●	●	●	●	●
Travel parking brake	●	●	●	●	●
Upper and lower rollers	●	●	●	●	●
2 track guards (each side)	●	●	-	-	-

LIGHTS	ZX890-7G	ZX890 LC-7G	ZX890 H-7G	ZX890 LCH-7G	ZX890 LCR-7G
Additional boom LED light with cover	○	○	○	○	○
Additional cab roof front 2 LED lights	○	○	○	○	○
Additional cab roof front 4 LED lights	○	○	○	○	○
Additional cab roof rear 1 LED light	○	○	○	○	○
LED lights for camera (side and rear view camera)	○	○	○	○	○
Rotating lamp	○	○	○	○	○
2 working LED lights	●	●	●	●	●

UPPER STRUCTURE	ZX890-7G	ZX890 LC-7G	ZX890 H-7G	ZX890 LCH-7G	ZX890 LCR-7G
AERIAL ANGLE (side and rear view camera)	○	○	○	○	○
Auto-grease lubricator (without bucket and link pins)	○	○	○	○	○
Batteries	●	●	●	●	●
Body top handrail	●	●	●	●	●
Counterweight 13 300 kg	●	●	●	●	●
Electric fuel refilling pump with auto stop and filter	○	○	○	○	○
Electrical grease pump with hose-reel	○	○	○	○	○
Fuel level float	●	●	●	●	●
Hydraulic oil level gauge	●	●</			

Before using a machine with a satellite or tele-communication system, please make sure that the satellite or tele-communication system complies with local regulations, safety standards and legal requirements. If not so, please make modifications accordingly.

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 using, please read and understand the Operator's Manual for proper operation.