HITACHI

Reliable solutions





HYDRAULIC EXCAVATOR

Model code: Backhoe: ZX890LCH-6/ZX890LCR-6

Loading shovel: ZX890H-6

Engine rated power: 382 kW (ISO14396)

Operating weight: 84 400 – 87 300 kg / loading shovel: 82 800 – 84 000 kg

Bucket ISO heaped: 1.9 - 5.0 m³ / loading shovel: 3.6 - 4.4 m³

ZX890-6. NO COMPROMISE

The ZX890-6 has been created to offer the highest level of performance, but without compromising on the increasing demand for operational efficiency. Incorporating innovative and unique Hitachi technology, it delivers lower emissions and reduced running costs in response to demand from European contractors.

The large Zaxis-6 excavators reinforce Hitachi's reputation for the quality of its engineering and the durability of its products. The ZX890-6 is the epitome of reliability, with incredibly versatile features that highlight its suitability for a variety of challenging working environments.





6. DESIGNED FOR RELIABILITY



8. ULTIMATE DURABILITY













Optimum performance

Remote monitoring with Global e-Service online application.



coolant levels can be checked from the cab.



Safe workspace A non-slip plate

ensures long-term safety on deck.



Low emissions SCR system reduces NOx from

exhaust gas.



Reduced fuel costs

4% fuel saving in ECO mode (3% in HP mode).



Easy maintenance

Reversible fan reduces debris build-up.



Excellent efficiency

HIOS IIIB hydraulic system reduces fuel consumption and increases productivity.



Engine protection

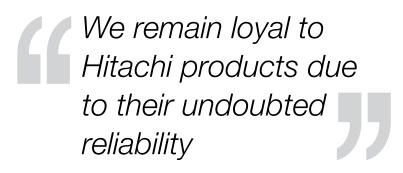
Several engine parts have been changed to enhance reliability.



Smaller environmental impact

95% of resin parts can be recycled.





Freddy Talarmin, President, Sotravi Group

DESIGNED FOR RELIABILITY

Hitachi has a market-leading reputation for building exceptionally reliable excavators. Designed to meet the demands of quarries and large-scale construction projects, the ZX890-6 can be relied on to provide high levels of productivity, safe and easy maintenance, and optimum levels of availability.

Enhanced engine protection

A strengthened new injector increases the reliability of the engine. The sliding portion is coated with DLC (diamond-like carbon) and it has a strengthened inlet filter. A stronger blow-by hose also enhances reliability.

Improved fuel efficiency

A high-volume cooled EGR system recirculates some of the exhaust gas, reducing NOx and other pollutant emissions while maintaining a high engine output. This enables an efficient and reliable performance.

Efficient cooling

The expansion tank is mounted on top of the engine's cooling circuit, allowing the air inside the coolant to be completely removed. This helps to prevent engine parts from partially heating up.

Reduced fuel contamination

The main fuel filter screws into place on the ZX890-6. This ensures that dust is prevented from entering the fuel circuit during routine maintenance procedures. It is also easily replaced.

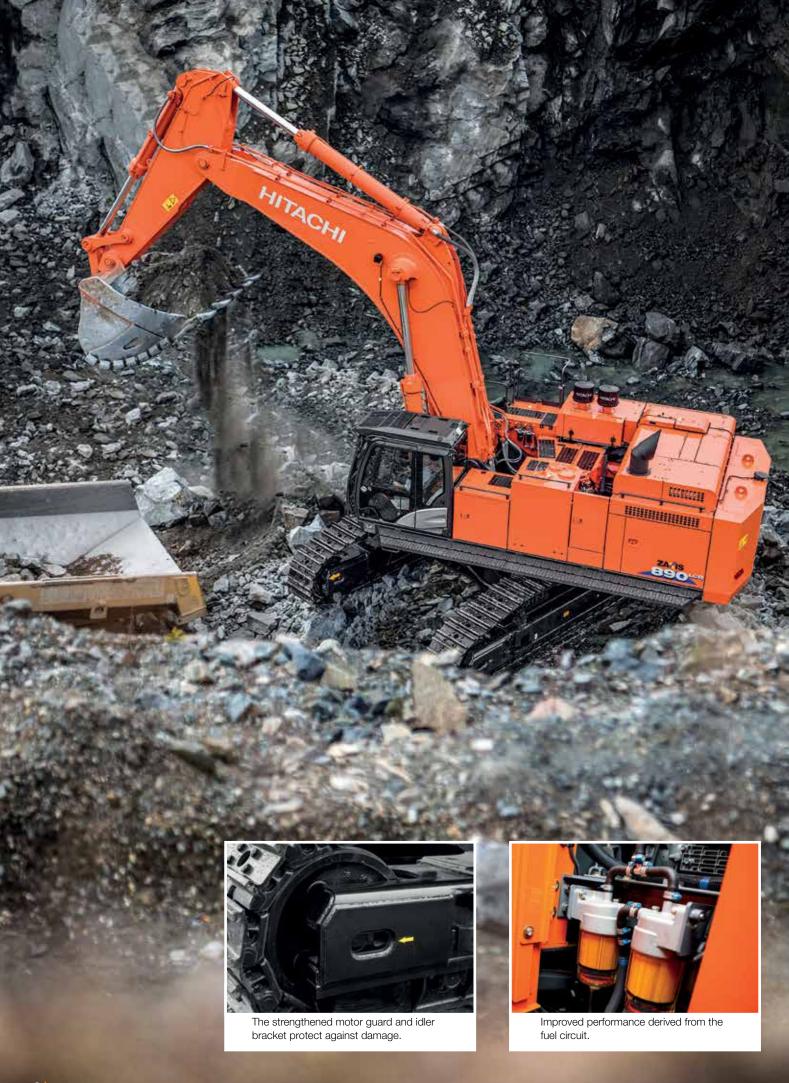
Easy maintenance

To avoid electrical accidents during maintenance and to retain battery energy during long-term storage, a battery disconnect switch is now included as standard. Safe and easy maintenance has an impact on the overall reliability of the ZX890-6.



Easy access for maintenance.







Hitachi's stringent testing procedures for durability include an excavating and operating assessment – from 1,000 to more than 10,000 hours – and a 24-hour swing test with a remote-controlled machine.



ULTIMATE DURABILITY

Hitachi large excavators are designed and engineered to handle hard and abrasive materials, all day and every day, in challenging working environments. With several decades of experience in manufacturing excavators, Hitachi developed the ZX890-6 to be its most durable machine yet.





Less filter cleaning is required thanks to the optional pre-cleaner.

Enhanced fuel circuit

A high-performance water separator is integrated into the pre-filter of the ZX890-6 for added protection against moisture.

Minimal maintenance

An optional pre-cleaner ensures that dust is discharged automatically, reducing the frequency of filter cleaning. The diesel oxidation catalyst (DOC) also requires little maintenance.

Reinforced arm

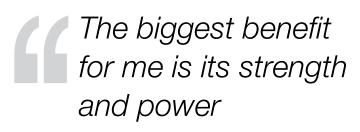
The arm of the ZX890LCR-6 has thicker side frames and plates, as well as other

robust components, to protect against damage during digging and loading of limestone and crushed stone. This helps to enhance the machine's durability for demanding sites.

Greater protection

The travel motor guard and idler bracket of the ZX890LCR-6 have been strengthened to prevent damage from rocks and frequent impacts on busy and challenging sites. Strengthening these load-bearing areas extends the lifetime of the machine and lowers ownership costs.







Christophe Seghin, operator, Lachat

UNRIVALLED VERSATILITY

The ZX890-6 is powerful to deliver high levels of productivity, stable in tough working environments, and precise for selecting materials. It can be used with a variety of attachments and in different work modes to maximise its capabilities. Wherever it is working, it offers exceptional visibility and outstanding performance.

Better visibility

The front guard of the cab has smaller and fewer bars in order to minimise blind spots. A larger reflector on the back of the ZX890-6 improves the machine's visibility in low light or at night, so it can work safely for longer periods of time.

Easier to transport

Thanks to its flexibility, the ZX890-6 is suitable for working on various sites and can be transported securely due to the new tie-down hooks incorporated into its design.

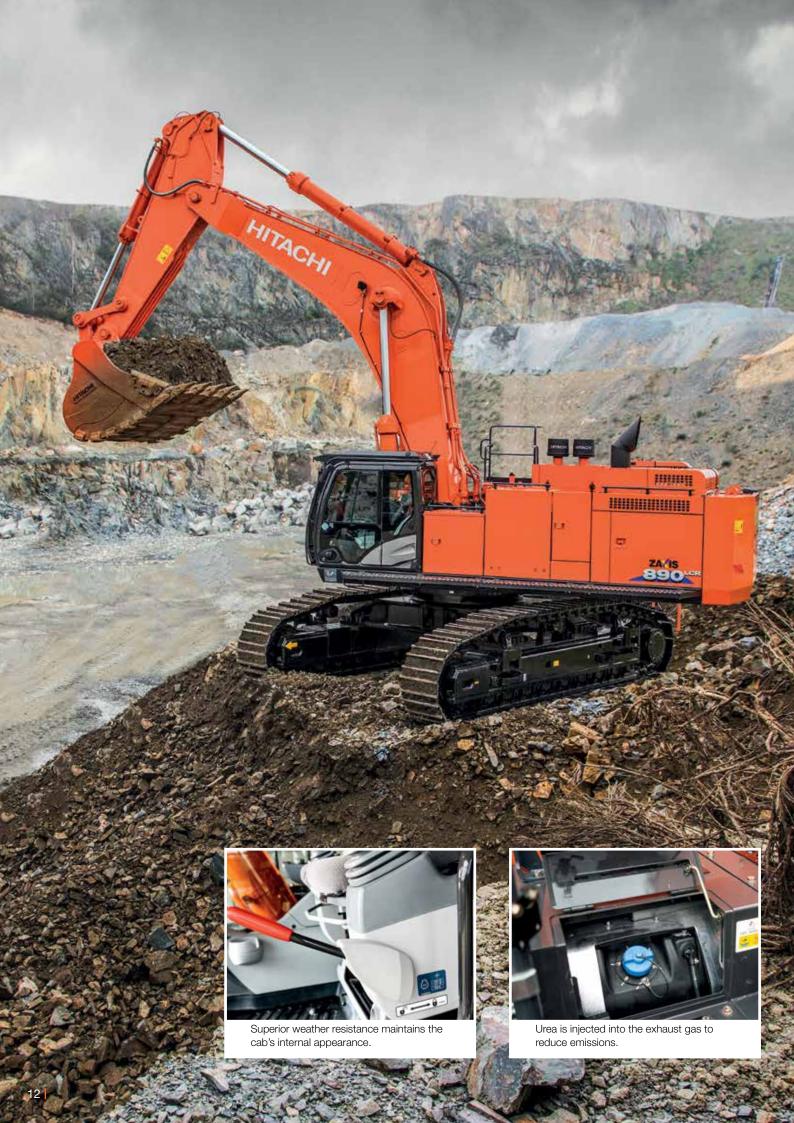
Greater flexibility

The attachment replacement support system allows for the easy fitment of attachments, which increase the number of tasks that can be carried out by the ZX890-6. A pressure adjustment feature controlled electronically also protects the attachments during installation.



More versatility with the easy fitment of attachments.





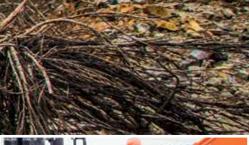


Hitachi obtained ISO 9001 certification in 1995, which verifies its commitment to quality assurance policies, including the implementation of the uniform 'Made by Hitachi' global quality standard at its production bases worldwide.



FOCUSED ON QUALITY

Hitachi large excavators are continuously evolving to meet increasing demands for performance, efficiency, comfort and safety. The inherent quality of the Zaxis-6 range enables Hitachi to set new industry standards and exceed expectations.





Safe and easy access to the platform.



Reduced emissions

A selective catalytic reduction (SCR) system developed by Hitachi injects urea into exhaust gas to reduce NOx from emissions. This invaluable innovation not only helps the environment, but also complies with EU Stage IV emission regulations.

Superior cooling

New high-quality sealant around the cooling package and acoustic materials on the upper structure prevent deterioration caused by heat. This ensures the long-term cooling and low-noise performance of the ZX890-6.

Safety at work

The H/R compliant cab is designed to protect the operator from falling objects. It is pressurised to suppress the penetration of air and dust from the job site. The

platform can now be accessed from the side of the machine and has a wider step area.

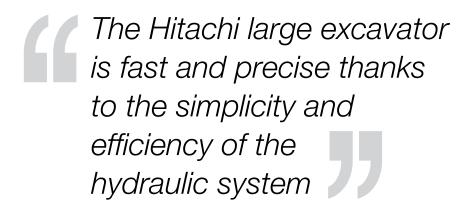
Comfort

The interior of the spacious cab has been designed with comfort in mind. Features include a fully adjustable seat, ergonomic controls and a drinks holder that maintains the temperature of drinks using warm or cooled air from the air conditioning system.

Excellent weather resistance

The console in the cab has been made of durable AES-grade resin, which is resistant to colour changes caused by ultraviolet rays. This maintains the pristine appearance of the cab's interior for a longer period of time.





Boleslaw Gazda, operator, DSS Group

EXPERTS IN TECHNOLOGY

The unique advanced technology incorporated in Hitachi large excavators enables them to excel in challenging working environments, such as quarries and complex construction sites. The Zaxis-6 range benefits from the latest developments by Hitachi engineers, and as a result, the ZX890-6 leads the field in its class throughout the European market.

Saving fuel and costs

The HIOS IIIB hydraulic technology developed by Hitachi uses two pumps and control valves to reduce fuel consumption and cut costs. The ZX890-6 can save up to 4% fuel in ECO mode (3% in HP), with the same productivity as the Zaxis-5 model.

Fast operation

HIOS IIIB has a positive impact on productivity due to the efficient swing, boom lowering, arm and bucket roll-out of the ZX890-6. The front speed during a

single operation benefits from increased pump flow and reduced pressure loss of the hydraulic circuit.

Remote monitoring

Global e-Service allows owners to monitor their ZX890-6 remotely via Owner's Site (24/7 online access) and ConSite (an automatic monthly report). These help to maximise efficiency, minimise downtime and improve overall performance.

Fewer emissions

The after-treatment device helps to reduce emissions and noise levels. This advanced technology consists of a diesel oxidation catalyst (DOC), urea mixing pipe, SCR system and silencer.

Convenient updates

Operators can check the machine's status and settings – including engine oil and coolant levels – conveniently on the seven-inch multi-function LCD monitor. Multi-lingual support in 32 languages is available.





The LCD monitor shows the machine's status and settings.



Reduced fuel consumption due to HIOS IIIB hydraulic technology.



The SCR system reduces emissions and noise levels.





We use all aspects of Hitachi Support Chain, which are incredibly strong and integrate well



Edan Cohen, Site Manager, AD Edan Hadash Earthmoving Contractors

REDUCING THE TOTAL COST OF OWNERSHIP



Hitachi has created the Support Chain after-sales programme to ensure optimum efficiency, as well as minimal downtime, reduced running costs and high resale values.

Global e-Service

Hitachi has developed two remote monitoring systems as part of its Global e-Service online application. Owner's Site and ConSite are an integral part of the excavator, which sends operational data daily via GPRS or satellite to www. globaleservice.com. This allows immediate access to the Owner's Site, and the vital information that is required for support on job sites.

Comparing the ratio of operating and non-operating hours helps to enhance efficiency. Effective management of maintenance programmes helps to maximise availability. Running costs can also be managed by analysing the fuel consumption. The location and movements of each machine are clearly displayed for essential planning.

An automatic service report – ConSite – sends a monthly email summarising the information from Global e-Service for each machine. This includes: daily working hours and fuel consumption data; statistics on the operating mode ratio, plus a comparison for fuel consumption/efficiency, and CO₂ emissions.

Technical support

Each Hitachi service technician receives full technical training from HCME in Amsterdam. These sessions provide access to the same technical knowledge available within the Hitachi quality assurance departments and design centres. Technicians combine this global expertise with the local language and culture of the customer to provide the highest level of after-sales support.

Extended warranty and service contracts

Every new Hitachi Zaxis-6 model is covered by a full manufacturer's warranty. For extra protection – due to severe



working conditions or to minimise equipment repair costs – Hitachi dealers offer a unique extended warranty called HELP (Hitachi Extended Life Program) and comprehensive service contracts. These can help to optimise the performance of each machine, reduce downtime and ensure higher resale values.

Parts

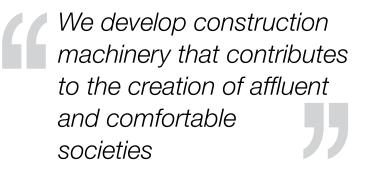
Hitachi offers a wide range and a high availability of parts dispatched from the 53,000 m² HCME European Parts Depot in The Netherlands.

- Hitachi Genuine Parts: allow machines to work for longer, with lower running and maintenance costs.
- Hitachi Select Parts and 2Genuine Parts: especially for older machines, they cost less, are of proven quality and come with the manufacturer's warranty.
- Performance Parts: to cope with highly demanding conditions, they have been engineered for greater durability, better performance or longer life.
- Remanufactured components: offering an economically viable solution, they are the best option when preventative replacements are required.

Whatever the choice, the renowned quality of Hitachi construction machinery is assured.







Yuichi Tsujimoto, HCM President

BUILDING A BETTER FUTURE

Established in 1910, Hitachi, Ltd. was built upon a founding philosophy of making a positive contribution to society through technology. This is still the inspiration behind the Hitachi group's reliable solutions that answer today's challenges and help to create a better world.

Hitachi, Ltd. is now one of the world's largest corporations, with a vast range of innovative products and services. These have been created to challenge convention, improve social infrastructure and contribute to a sustainable society.



Mini excavators

Hitachi Construction Machinery Co., Ltd. (HCM) was founded in 1970 as a subsidiary of Hitachi, Ltd. and has become one of the world's largest construction equipment suppliers. A pioneer in producing hydraulic excavators, HCM also manufactures wheel loaders, rigid dump trucks, crawler cranes and special application machines at state-of-the-art facilities across the globe.

Incorporating advanced technology, Hitachi construction machinery has a reputation for the highest quality standards. Suitable for a wide range of industries, it is always

hard at work around the world – helping to create infrastructure for a safe and comfortable way of living, developing natural resources and supporting disaster relief efforts.

Hitachi Zaxis excavators are renowned for being reliable, durable and versatile – capable of delivering the highest levels of productivity under the most challenging of conditions. They are designed to provide owners with a reduced total cost of ownership, and operators with the ultimate level of comfort and safety.

ENGINE

Model Isuzu AQ-6WG1XASA-01

Type 4-cycle water-cooled, common rail direct injection Aspiration Variable geometry turbocharged, intercooled,

cooled EGR

Aftertreatment DOC and SCR system

No. of cylinders 6

Rated power

ISO 14396 382 kW at 1 800 min-1 Maximum torque 2 200 Nm at 1 450 min-1

Piston displacement 15.681 L

Bore and stroke 147 mm x 154 mm Batteries 2 x 12 V / 170 Ah

HYDRAULIC SYSTEM

Hydraulic Pumps

Main pumps 2 variable displacement axial piston pumps

Maximum oil flow 2 x 556 L/min Pilot pump 1 gear pump Maximum oil flow 50 L/min

Hydraulic Motors

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

Relief Valve Settings

Implement circuit	31.9 MPa
Implement circuit (*)	29.4 MPa
Swing circuit	28.4 MPa
Travel circuit	34.3 MPa
Pilot circuit	3.9 MPa
Power boost	34.3 MPa
* ZX890H	

Hydraulic Cylinders ZAXIS 890LC(R)(H)

	<u></u>	` ', ',		
	Quantity	Bore	Rod diameter	
Boom	2	215 mm	150 mm	
Arm	1	225 mm	160 mm	
Bucket	1	200 mm	140 mm	
Bucket (BE)	1	215 mm	150 mm	

Hydraulic Cylinders ZAXIS 890H

	Quantity	Bore	Rod diameter
Boom	2	200 mm	140 mm
Arm	1	200 mm	140 mm
Bucket	2	180 mm	130 mm
Level	1	200 mm	140 mm
Dump	2	130 mm	80 mm

UPPERSTRUCTURE

Revolving Frame

D-section frame for resistance to deformation.

Swing Device

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

Swing speed 7.8 min-1 Swing torque 267 kNm

Operator's Cab

Independent spacious (H/R cab), 1 025 mm wide by 1 817 mm high, conforming to ISO* Standards.

UNDERCARRIAGE

Tracks

Track shoes with double 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	3
Lower rollers	9
Lower rollers (*)	8
Track shoes	51
Track shoes (*)	47
Track guard	1
Track guard (*)	2
* 7X890H	

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 High: 0 to 4.7 km/h

Low: 0 to 3.2 km/h

Maximum traction

force 560 kN

SOUND LEVEL

Sound level in cab according to ISO 6396LpA 75 dB(A)
External sound level according to ISO 6395 and
EU Directive 2000/14/ECLwA 108 dB(A)

SERVICE REFILL CAPACITIES

Fuel tank	1 110.0 L
Engine coolant	124.0 L
Engine oil	57.0 L
Pump drive	6.2 L
Swing device (each side)	15.7 L
Travel device (each side)	19.0 L
Hydraulic system	1 042.0 L
Hydraulic oil tank	500.0 L
DEF/AdBlue® tank	95.0 L

^{*} International Organization for Standardization

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

ZAXIS 890LCH

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
8.4 m H 3.7 m H	Double	650 mm	84 800 kg	115 kPa	
		750 mm	85 500 kg	101 kPa	
			900 mm	86 400 kg	85 kPa

Including 3.5 m³ Rock bucket (ISO heaped)

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
		650 mm	85 600 kg	116 kPa	
7.1 m BE	7.1 m BE 2.95 m BE	m BE Double	750 mm	86 300 kg	102 kPa
			900 mm	87 300 kg	86 kPa

Including 5.0 m³ Rock bucket (ISO heaped)

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
7.1 m BE 3.7 m H			650 mm	84 400 kg	115 kPa
	Double	750 mm	85 100 kg	100 kPa	
			900 mm	86 000 kg	84 kPa

Including 3.7 m³ Rock bucket (ISO heaped)

ZAXIS 890LCR

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
7.1 m BER	2.95 m BER	Double	650 mm	86 800 kg	118 kPa

Including 4.3 m³ R-bucket (ISO heaped)

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
7.1 m BER	3.7 m R	Double	650 mm	85 900 kg	117 kPa

Including 3.7 m³ R-bucket (ISO heaped)

Boom type	Arm type	Arm type Shoe grouser type Shoe width		Operating weight	Ground pressure	
8.4 m R	3.7 m R	Double	650 mm	86 300 kg	117 kPa	

Including 3.5 m³ R-bucket (ISO heaped)

BUCKET AND ARM DIGGING FORCE

		ZAXIS 890LCH / ZAXIS 890LCR								
Boom length	Boom 7.1 m / E	Boom 7.1 m / Boom 7.1 m BER								
Arm length	Arm 2.95 m BE / Arm 2.95 m BER	Arm 3.7 m H / Arm 3.7 m R	Arm 3.7 m H / Arm 3.7 m R							
Bucket digging force* ISO	472 kN	402 kN	402 kN							
Bucket digging force* SAE	411 kN	359 kN	359 kN							
Arm crowd force* ISO	394 kN	324 kN	324 kN							
Arm crowd force* SAE	378 kN	316 kN	316 kN							

^{*} At power boost

WEIGHTS AND GROUND PRESSURE

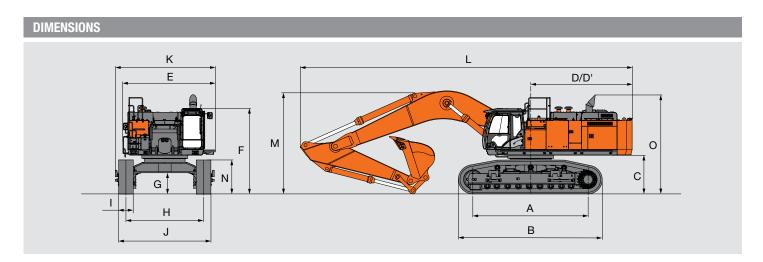
ZAXIS 890H

Equipped with 3.6 m³ bottom dump bucket (ISO heaped).

Shoe type	Shoe width	Operating weight	Ground pressure
Double grouser	650 mm	84 000 kg	126 kPa (1.29 kgf/cm²)

Equipped with 4.0 m³ tilt dump bucket (ISO heaped).

Shoe type	Shoe width	Operating weight	Ground pressure		
Double grouser	650 mm	82 800 kg	124 kPa (1.27 kgf/cm²)		



Unit: mm

		ZAXIS 890LCH *2		ZAXIS 890LCR *3				
A Distance between tumblers		5 110		5 110				
B Undercarriage length		6 360		6 360				
*1C Counterweight clearance		1 680		1 680				
D Rear-end swing radius		4 600						
D' Rear-end length		4 540						
E Overall width of upperstructure		4 120						
F Overall height of cab		3 800						
*1G Min. ground clearance		890		890				
H Track gauge: Extended / Retracted		3 450 / 2 830		3 450 / 2 830				
I Track shoe width	G 650	G 750	G 900	G 650				
J Undercarriage width: Extended / Retracted	4 100 / 3 480	4 200 / 3 580	4 350 / 3 730	4 100 / 3 480				
K Overall width		4 450		4 450				
L Overall length		14 800		14 800				
M Overall height of boom		4 770						
*1N Track height		1 500						
O Overall height of base machine		4 410		4 410				

^{*1} Excluding track shoe lug *2 Equipped with Boom 8.4 m H and Arm 3.7 m H *3 Equipped with Boom 8.4 m R and Arm 3.7 m R

Backhoe Buckets

0	14		/: -I±I-				Recommendation							
Сар	acity	V	/idth			Z	AXIS 890LC	Н	ZAXIS 890LCR					
		Without	With	No. of teeth	Weight	Boom 7	Boom 7.1 m BE		Boom 7.1 m BER		Boom 8.4 m R			
ISO heaped	CECE heaped	' side cutters side cutters	2.	Arm 2.95 m BE	Arm 3.7 m H	Arm 3.7 m H	Arm 2.95 m BER	Arm 3.7 m R	Arm 3.7 m R					
2.9 m ³	2.6 m ³	1 590 mm	1 780 mm	5	2 700 kg	-	0	0	-	-	-			
3.5 m ³	3.1 m³	1 850 mm	2 040 mm	5	2 950 kg	-	©	0	-	_	-			
4.5 m ³	3.9 m³	2 120 mm	2 190 mm	5	3 970 kg	0	-	-	_	_	_			
*1 3.5 m ³	3.1 m³	1 870 mm	1 890 mm	5	3 790 kg	-	•	•	-	-	-			
*1 3.7 m ³	3.2 m³	1 950 mm	1 970 mm	5	3 900 kg	-	•	-	_	_	_			
*1 4.3 m ³	3.8 m³	2 090 mm	2 110 mm	5	4 270 kg	•	-	-	-	-	-			
*1 5.0 m ³	4.4 m³	2 240 mm	2 260 mm	5	5 000 kg	•	-	-	•	_	_			
*2 3.5 m ³	3.1 m³	1 870 mm	1 890 mm	5	4 870 kg	-	-	-	-	•	•			
*2 3.7 m ³	3.2 m³	1 950 mm	1 970 mm	5	4 970 kg	-	-	-	_	•	_			
*2 4.3 m ³	3.8 m ³	2 090 mm	2 110 mm	5	5 690 kg	-	-	-	•	-	-			
*3 1.9 m ³	1.7 m³	-	1 490 mm	3	4 200 kg	_	•	•	_	_	_			
*3 2.2 m ³	2.0 m ³	-	1 580 mm	3	4 400 kg	•	-	-	-	-	_			
One-point ripp	er			1	2 680 kg	•	•	•	•	•	•			

^{*1} Rock bucket

• Heavy-duty service

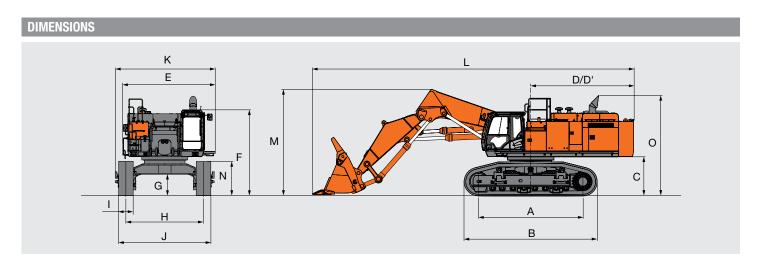
G: Double grouser shoe

Shoe for use 650 mm; Quarry ground, Dry riverbed, Soil ground 750 mm; Mid-Solid ground, Soft ground 900 mm; Soft ground

^{*2} R-bucket

⁻ Not applicable *3 Ripper bucket

[©] Suitable for materials with density of 1 800 kg/m³ or less.



Unit: mm

	Offic. Ithiri
	ZAXIS 890H
A Distance between tumblers	4 590
B Undercarriage length	5 840
*1C Counterweight clearance	1 680
D Rear-end swing radius	4 600
D' Rear-end length	4 540
E Overall width of upperstructure	4 120
F Overall height of cab	3 800
*1G Min. ground clearance	890
H Track gauge: Extended / Retracted	3 450 / 2 830
I Track shoe width	G 650
J Undercarriage width: Extended / Retracted	4 100 / 3 480
K Overall width	4 450
L Overall length	14 130
M Overall height of boom	4 900
*1N Track height	1 500
O Overall height of base machine	4 410

^{*1} Excluding track shoe lug

LOADING SHOVEL ATTACHMENTS

Boom and arm are of all-welded, box-section design. Efficient, automatic level crowding achieved by one-lever control because the parallel link mechanism keeps the bucket digging angle constant, and level cylinder circuit maintains the bucket height constant. (Auto-Leveling Crowd Mechanism)

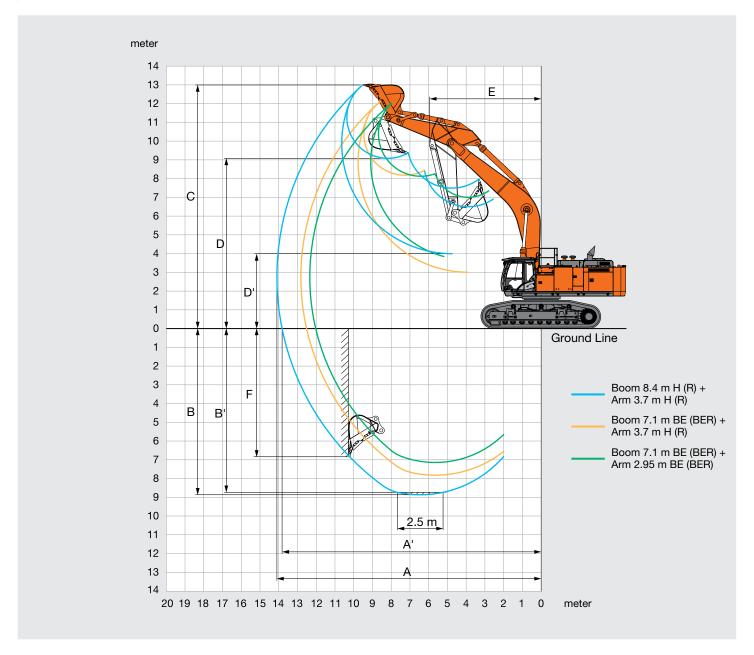
Loading Shovel Bucket (ISO heaped)

ZAXIS 890H

Туре	Capacity	Width	No. of teeth	Weight	Remarks
Pottom dumo	3.60 m ³	2 300 mm	6	6 080 kg	Rock bucket
Bottom dump	4.00 m ³	2 460 mm	6	5 620 kg	General purpose bucket
Tilt duman	4.00 m ³	2 360 mm	6	4 930 kg	Rock bucket
Tilt dump	4.40 m³	2 520 mm	6	4 630 kg	General purpose bucket

G: Double grouser shoe

WORKING RANGES



Unit: mm

	Z	'AXIS 890LCH / ZAXIS 890LC	R
	Boom 7.1 m BE /	Boom 8.4 m H / Boom 8.4 m R	
Arm length	Arm 2.95 m BE / Arm 2.95 m BER	Arm 3.7 m H / Arm 3.7 m R	Arm 3.7 m H / Arm 3.7 m R
A Max. digging reach	12 340	12 820	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 (2.5 mm 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	4 100	6 090	6 840

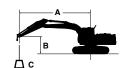
Excluding track shoe lug

LIFTING CAPACITIES

- Notes: 1. Ratings are based on ISO 10567.
 - 1. naurrys are based on ISO 10507.
 2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
 3. The load point is the center-line of the bucket pivot mounting pin on the arm.
 4. *Indicates load limited by hydraulic capacity.
 5. 0 m = Ground.

 - 5. 0 m = Ground.

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



A: Load radius B: Load point height

C: Lifting capacity

ZAXIS 890LCI	1								[] Ra	ating over-	front 📮	⊢ Rating	over-side	or 360 d	egrees	Unit : kg
	Load point	3.0) m	1.5		6.0	Load m	radius 7.5	m	9.0) m	10.5		At	max. reac	:h
Conditions	height	<u></u>		Ö		Ö		ď		Ö		ů .	=	ů	₽	meter
Boom 7.1 m BE	7.5	U	-J-0	U	-J-0	U		*21 750	*21 750	U	-J-0	U	<u></u>	*16 660	*16 660	8.9
Arm 2.95 m BE	6.0					*26 890	*26 890	*23 170	*23 170	*21 180	18 540			*16 390	*16 390	9.5
Counterweight	4.5					*31 010	*31 010	*25 220	23 830	*22 040	18 060			*16 610	15 420	9.9
13 300 kg	3.0					*34 730	31 550	*27 250	22 840	*23 040	17 520			*17 290	14 740	10.1
Shoe 650 mm	1.5					*36 770	30 300	*28 650	22 040	*23 730	17 040			*18 530	14 630	10.0
	0 (Ground)					*36 890	29 670	*29 000	21 520	*23 670	16 720			*20 570	15 110	9.7
	-1.5			*42 330	*42 330	*35 250	29 480	*27 960	21 320	*22 120	16 660			*21 580	16 380	9.1
	-3.0	*41 880	*41 880	*39 690	*39 690	*31 580	29 660	*24 790	21 460	22 120	10 000			*21 270	19 010	8.2
	-4.5	11 000	11 000	*30 900	*30 900	*24 390	*24 390	21700	21 100					*19 710	*19 710	6.9
Boom 7.1 m BE	7.5			00 000	00 000	2.000	2.000	*19 490	*19 490	*14 860	*14 860			*10 790	*10 790	9.5
Arm 3.7 m H	6.0							*21 670	*21 670	*19 100	19 060			*10 780	*10 780	10.1
Counterweight	4.5			*39 260	*39 260	*28 980	*28 980	*23 970	*23 970	*21 100	18 540			*11 060	*11 060	10.5
13 300 kg Shoe 650 mm	3.0					*33 260	32 650	*26 360	23 480	*22 410	17 950	*13 710	*13 710	*11 650	*11 650	10.6
Chico coo min	1.5					*36 220	31 160	*28 240	22 580	*23 470	17 400	*13 680	*13 680	*12 620	*12 620	10.6
	0 (Ground)					*37 340	30 250	*29 180	21 930	*23 940	16 980			*14 140	14 130	10.3
	-1.5					*36 660	29 830	*28 880	21 570	*23 400	16 750			*16 630	15 110	9.7
	-3.0			*44 080	*44 080	*34 090	29 800	*26 930	21 510					*21 140	17 100	8.9
	-4.5			*36 910	*36 910	*28 910	*28 910	*21 930	21 860					*21 120	*21 120	7.7
Boom 8.4 m H	7.5									*16 240	*16 240			*12 190	*12 190	10.1
Arm 3.7 m H	6.0									*16 890	*16 890	*15 320	14 580	*12 030	*12 030	10.9
Counterweight 13 300 kg	4.5					*24 900	*24 900	*20 570	*20 570	*18 090	*18 090	*16 610	14 300	*12 150	*12 150	11.4
Shoe 650 mm	3.0					*29 600	*29 600	*23 100	22 930	*19 550	17 550	*17 400	13 910	*12 520	11 580	11.8
	1.5					*33 480	29 750	*25 430	21 810	*20 990	16 880	*18 240	13 500	*13 180	11 160	11.9
	0 (Ground)							*27 090	20 980	*22 120	16 320	*18 920	13 150	*14 180	11 060	11.8
	-1.5							*27 850	20 490	*22 740	15 940	*19 250	12 900	*15 670	11 280	11.6
	-3.0					*34 700	28 160	*27 660	20 280	*22 680	15 750	*18 980	12 800	*17 600	11 900	11.1
	-4.5					*32 720	28 340	*26 480	20 330	*21 730	15 780			*17 920	13 090	10.4
	-6.0					*29 440	28 780	*23 990	20 620	*19 270	16 070			*18 040	15 280	9.4
	-7.5			*29 240	*29 240	*24 070	*24 070	*19 110	*19 110					*17 520	*17 520	7.9
Boom 8.4 m H	7.5									*16 240	*16 240			*12 190	*12 190	10.1
Arm 3.7 m H	6.0									*16 890	*16 890	*15 320	14 850	*12 030	*12 030	10.9
Counterweight 13 300 kg	4.5					*24 900	*24 900	*20 570	*20 570	*18 090	*18 090	*16 610	14 570	*12 150	*12 150	11.4
Shoe 900 mm	3.0					*29 600	*29 600	*23 100	*23 100	*19 550	17 870	*17 400	14 180	*12 520	11 810	11.8
	1.5					*33 480	30 300	*25 430	22 220	*20 990	17 200	*18 240	13 770	*13 180	11 390	11.9
	0 (Ground)							*27 090	21 390	*22 120	16 640	*18 920	13 410	*14 180	11 290	11.8
	-1.5							*27 850	20 890	*22 740	16 260	*19 250	13 170	*15 670	11 520	11.6
	-3.0					*34 700	28 710	*27 660	20 690	*22 680	16 070	*18 980	13 060	*17 600	12 150	11.1
	-4.5					*32 720	28 900	*26 480	20 730	*21 730	16 090			*17 920	13 360	10.4
	-6.0					*29 440	29 330	*23 990	21 020	*19 270	16 390			*18 040	15 580	9.4
	-7.5			*29 240	*29 240	*24 070	*24 070	*19 110	*19 110					*17 520	*17 520	7.9

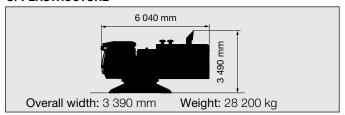
LIFTING CAPACITIES

ZAXIS 890LCR

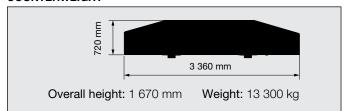
	Load						Load	radius						۸.	t max. reac	h
Conditions	point	3.0) m	4.5	5 m	6.0) m	7.5	5 m	9.0	m	10.	5 m		i max. reac	11
	height m	ů	₽	ů	₽	ů	₽	ů	₽	ů	₽	ů	₽	ů	₽	meter
Boom 7.1 m BER	7.5							*21 680	*21 680					*16 640	*16 640	8.9
Arm 2.95 m BER	6.0					*26 800	*26 800	*23 090	*23 090	*21 100	18 540			*16 360	*16 360	9.5
Counterweight 13 300 kg	4.5					*30 910	*30 910	*25 130	23 840	*21 960	18 060			*16 580	15 410	9.9
Shoe 650 mm	3.0					*34 610	31 550	*27 150	22 840	*22 950	17 510			*17 260	14 730	10.1
	1.5					*36 640	30 300	*28 540	22 030	*23 640	17 030			*18 500	14 620	10.0
	0 (Ground)					*36 760	29 660	*28 890	21 510	*23 580	16 710			*20 540	15 100	9.7
	-1.5			*42 310	*42 310	*35 120	29 470	*27 850	21 300	*22 030	16 650			*21 490	16 370	9.1
	-3.0	*41 860	*41 860	*39 540	*39 540	*31 460	29 660	*24 690	21 460					*21 180	19 010	8.2
	-4.5			*30 760	*30 760	*24 280	*24 280							*19 610	*19 610	6.9
Boom 7.1 m BER	7.5							*19 460	*19 460	*14 830	*14 830			*10 770	*10 770	9.5
Arm 3.7 m R	6.0							*21 600	*21 600	*19 070	*19 070			*10 750	*10 750	10.1
Counterweight 13 300 kg	4.5			*39 160	*39 160	*28 890	*28 890	*23 900	*23 900	*21 030	18 540			*11 030	*11 030	10.5
Shoe 650 mm	3.0					*33 170	32 670	*26 270	23 490	*22 330	17 940	*13 680	*13 680	*11 620	*11 620	10.6
	1.5					*36 110	31 160	*28 140	22 580	*23 390	17 390	*13 650	*13 650	*12 590	*12 590	10.6
	0 (Ground)					*37 230	30 250	*29 080	21 930	*23 860	16 970			*14 110	*14 110	10.3
	-1.5					*36 540	29 830	*28 790	21 570	*23 310	16 740			*16 600	15 100	9.7
	-3.0			*43 940	*43 940	*33 980	29 810	*26 840	21 510					*21 110	17 100	8.9
	-4.5			*36 780	*36 780	*28 800	*28 800	*21 840	*21 840					*21 040	*21 040	7.7
Boom 8.4 m R	7.5									*16 160	*16 160			*12 170	*12 170	10.1
Arm 3.7 m R Counterweight	6.0									*16 810	*16 810	*15 300	14 580	*12 000	*12 000	10.9
13 300 kg	4.5					*24 800	*24 800	*20 480	*20 480	*18 010	*18 010	*16 520	14 290	*12 120	*12 120	11.4
Shoe 650 mm	3.0					*29 480	*29 480	*22 990	22 930	*19 460	17 540	*17 310	13 890	*12 500	11 560	11.8
	1.5					*33 330	29 730	*25 320	21 800	*20 890	16 860	*18 150	13 480	*13 150	11 130	11.9
	0 (Ground)							*26 960	20 960	*22 010	16 290	*18 820	13 120	*14 150	11 030	11.8
	-1.5							*27 710	20 450	*22 630	15 910	*19 140	12 870	*15 640	11 250	11.6
	-3.0					*34 540	28 120	*27 530	20 250	*22 570	15 720	*18 880	12 770	*17 510	11 870	11.1
	-4.5					*32 570	28 310	*26 350	20 290	*21 610	15 740			*17 820	13 060	10.4
	-6.0					*29 290	28 750	*23 860	20 590	*19 160	16 040			*17 940	15 250	9.4
	-7.5			*29 060	*29 060	*23 930	*23 930	*18 990	*18 990					*17 410	*17 410	7.9

TRANSPORTATION

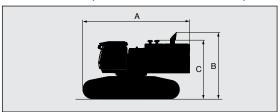
UPPERSTRUCTURE



COUNTERWEIGHT



BASIC MACHINE (WITHOUT COUNTERWEIGHT)



Shoe w	idth	А	В	C*1	Overall width*2	Weight
	650mm	7 080 mm	4 410 mm	3 885 mm	3 480 mm	53 200 kg
ZAXIS 890LCH	750 mm	7 080 mm	4 410 mm	3 885 mm	3 580 mm	53 900 kg
	900 mm	7 080 mm	4 410 mm	3 885 mm	3 730 mm	54 800 kg
ZAXIS 890LCR	650mm	7 080 mm	4 410 mm	3 885 mm	3 480 mm	53 500 kg

^{*1} Without exhaust funnel

^{*2} Undercarriage retracted



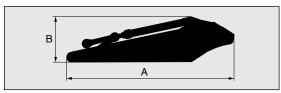
Shoe width		А	В	Overall width	Weight
	650 mm	6 360 mm	1 500 mm	1 330 mm	12 400 kg
ZAXIS 890LCH	750 mm	6 360 mm	1 500 mm	1 330 mm	12 700 kg
	900 mm	6 360 mm	1 500 mm	1 425 mm	13 200 kg
ZAXIS 890LCR	650 mm	6 360 mm	1 500 mm	1 330 mm	12 700 kg

воом



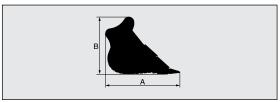
Boom	А	В	Overall width	Weight
7.1 m BE	7 490 mm	2 700 mm	1 450 mm	7 670 kg
8.4 m H	8 780 mm	2 500 mm	1 450 mm	8 200 kg
7.1 m BER	7 490 mm	2 700 mm	1 450 mm	7 680 kg
8.4 m R	8 780 mm	2 500 mm	1 450 mm	8 270 kg

ARM



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

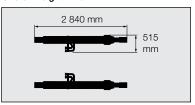
BUCKET



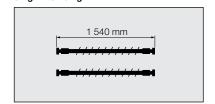
Bucket		Α	В	Overall	Weight
ISO heaped	CECE heaped	^	В	width	vveignt
2.9 m ³	2.6 m ³	2 210 mm	1 910 mm	1 780 mm	2 700 kg
3.5 m ³	3.1 m ³	2 210 mm	1 910 mm	2 040 mm	2 950 kg
4.5m^3	3.9 m³	2 320 mm	2 000 mm	2 190 mm	3 970 kg
*1,*2 3.5 m ³	3.1 m ³	2 240 mm	1 920 mm	1 890 mm	*1 3 790 kg (*2 4 870 kg)
*1,*2 3.7 m ³	3.2 m ³	2 240 mm	1 920 mm	1 970 mm	*1 3 900 kg (*2 4 970 kg)
*1,*2 4.3 m ³	3.8 m ³	2 310 mm	2 000 mm	2 110 mm	*1 4 270 kg (*2 5 690 kg)
*1 5.0 m ³	4.4 m³	2 510 mm	2 020 mm	2 260 mm	5 000 kg

^{*1} Rock bucket

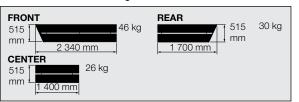
BOOM CYLINDERS 850 kg X 2 Overall height: 410 mm



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

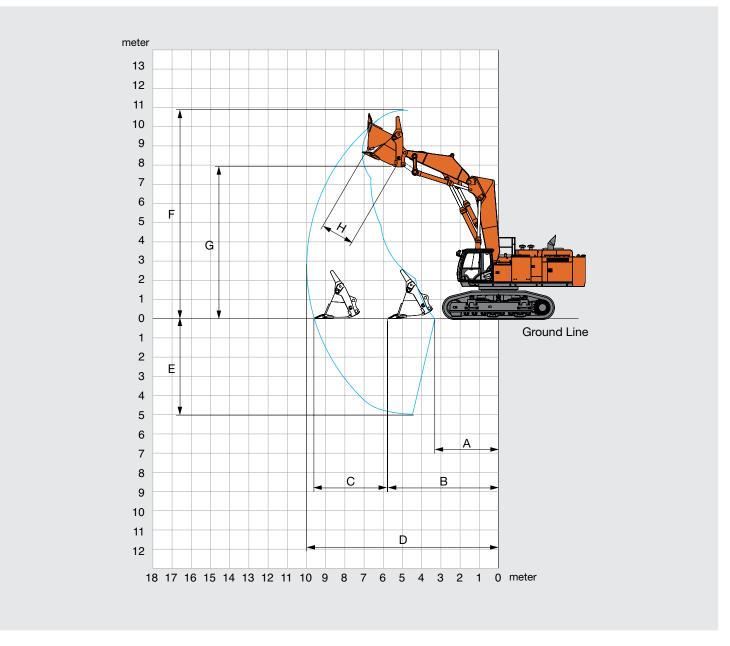


LEFT SIDEWALK Overall height: 150 mm



^{*2} R-bucket

WORKING RANGES

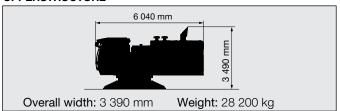


Unit: mm

	ZAXIS 890H Loading Shovel
	Tilt dump type
A Min. digging distance	3 110
B Min. level crowding distance	5 730
C Level crowding distance	3 860
D Max. digging reach	10 000
E Max. digging depth	4 970
F Max. cutting height	10 860
G Max. dumping height	4 970
H Max. bucket opening width	-
Digging force kN (kgf)	441 (45 000)

TRANSPORTATION

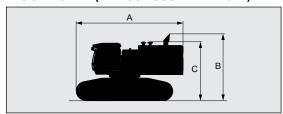
UPPERSTRUCTURE



COUNTERWEIGHT



BASIC MACHINE (WITHOUT COUNTERWEIGHT)



Shoe w	idth	А	В	C*1	Overall width*2	Weight
ZAXIS 890H	650mm	6 820 mm	4 410 mm	3 885 mm	3 480 mm	51 300 kg

^{*1} Without exhaust funnel

SIDE FRAME



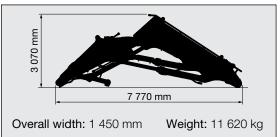
Shoe w	idth	А	В	Overall width	Weight
ZAXIS 890H	650 mm	6 360 mm	1 500 mm	1 330 mm	11 500 kg

LOADING SHOVEL FRONT ATTACHMENT

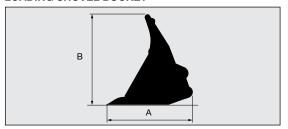


Bucket capacity (ISO heaped)	А	В	Overall width	Weight
3.60 m ³	9 800 mm	3 200 mm	2 400 mm	17 670 kg
4.00 m ³	9 800 mm	3 200 mm	2 560 mm	17 170 kg

LOADING SHOVEL FRONT ATTACHMENT (WITHOUT BUCKET)

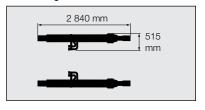


LOADING SHOVEL BUCKET

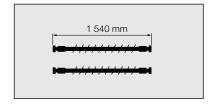


Bucket capacity	А	В	Weight	Туре
3.60 m ³	2 280 mm	2 570 mm	6 080 kg	Bottom dump type rock bucket
4.00 m ³	2 300 mm	2 570 mm	5 620 kg	Bottom dump type general purpose bucket
4.00 m ³	2 290 mm	2 560 mm	4 930 kg	Tilt dump type rock bucket
4.40 m ³	2 290 mm	2 560 mm	4 630 kg	Tilt dump type general purpose bucket

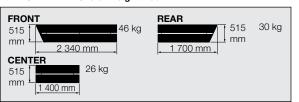
BOOM CYLINDERS 700 kg X 2 Overall height: 410 mm



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



LEFT SIDEWALK Overall height: 150 mm



^{*2} Undercarriage retracted

EQUIPMENT

ENGINE	ZAXIS 890LCH	ZAXIS 890LCR	ZAXIS 890H**
Aftertreatment device	•	•	•
Air cleaner double filters	•	•	•
Alternator 50 A	•	•	•
Auto idle system	•	•	•
Auto shut-down control	•	•	•
Cartridge-type engine oil filter	•	•	•
Cartridge-type fuel main filter	•	•	•
DEF/AdBlue® tank inlet strainer and extension filler	•	•	•
DEF/AdBlue® tank with ISO magnet adapter	•	•	•
Dry-type air filter with evacuator valve (with air filter restriction indicator)	•	•	•
Dust-proof net	•	•	•
Electrical fuel feed pump	•	•	•
Engine oil drain coupler	•	•	•
Expansion tank	•	•	•
Fan guard	•	•	•
Fuel cooler	•	•	•
Fuel pre-filter	•	•	•
Isolation-mounted engine	•	•	•
Maintenance free pre-cleaner	0	0	0
Power mode control [H/P (High Power) PWR (Power) ECO (Economy)]	•	•	•
Radiator, oil cooler and intercooler	•	•	•
Water separator	•	•	•

HYDRAULIC SYTEM			
Auto power lift	•	•	•
Boom mode selector system	•	•	•
Control valve with main relief valve	•	•	•
Drain filter	•	•	•
Engine speed sensing system	•	•	•
Extra port for control valve	•	•	•
Full-flow filter	•	•	•
Hose rupture valve for arm	0	0	0
Hose rupture valve for boom	0	0	0
Pilot filter	•	•	•
Power boost	•	•	•
Quick warm-up system for pilot circuit	•	•	•
Shockless valve in pilot circuit	•	•	•
Suction filter	•	•	•
Work mode selector	•	•	•

•	: Standard equipment	0	: Optional equipment	- : Not applicable
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CAB	ZAXIS 890LCH	ZAXIS 890LCR	ZAXIS 890H**
All-weather sound suppressed steel	•	•	•
cab	•	•	
AM-FM radio		•	•
Ashtray	•		
Auto control air conditioner	•	•	•
AUX terminal and storage	•	•	•
Cigarette lighter 24 V	•	•	•
Drink holder with hot & cool function	•	•	•
Electric double horn	•	•	•
Engine shut-off switch	•	•	•
Evacuation hammer	•	•	•
Fire extinguisher bracket	0	0	0
Floor mat	•	•	•
Footrest	•	•	•
Front window washer	•	•	•
Glove compartment	•	•	•
Hot & cool box	•	•	•
Intermittent windshield wipers	•	•	•
Key cylinder light	•	•	•
Laminated straight glass front			
window			
LED room light with door courtesy	•	•	•
OPG front guard Level II (ISO10262) compliant cab	•	•	•
OPG top guard Level II (ISO10262) compliant cab	•	•	•
Pilot control shut-off lever	•	•	•
Power outlet 12 V	0	0	0
Rear tray	•	•	•
Retractable seat belt	•	•	•
Rubber radio antenna	•	•	•
Seat : air suspension seat with heater	•	•	•
Seat adjustment part : backrest, armrest, height and angle, slide forward / back	•	•	•
Short wrist control levers	•	•	•
Sun visor (front window/side window)	0	0	0
Transparent roof with slide curtain	•	•	•
2 speakers	•	•	•
6 fluid-filled elastic mounts	•	•	•
			1

EQUIPMENT

MONITOR SYSTEM	ZAXIS 890LCH	ZAXIS 890LCR	ZAXIS 890H**
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, SCR system trouble, etc	•	•	•
Alarm buzzers: overheat, engine oil pressure, overload, SCR system trouble	•	•	•
Display of meters: water temperature, hour, fuel rate, clock, DEF/AdBlue® rate	•	•	•
Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions, etc	•	•	•
32 languages selection	•	•	•

LIGHTS			
2 cab lights	•	•	•
4 cab lights	0	0	0
4 working lights	•	•	•

UPPER STRUCTURE			
Auto-grease lubricator (without bucket and link pins)	•	•	•
Batteries 2 x 170 Ah	•	•	•
Battery disconnect switch	•	•	•
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	•	•	•
Ladder	•	•	•
Lockable fuel refilling cap	•	•	•
Lockable machine covers	•	•	•
Lockable tool box	•	•	•
Platform handrail	•	•	•
Rear view camera	•	•	•
Rear view mirror (right & left side)	•	•	•
Sidewalk (cab side)	•	•	•
Skid-resistant plates and handrails	•	•	•
Swing parking brake	•	•	•
Undercover 4.5 mm	•	•	•
Utility space	•	•	•

UNDERCARRIAGE	ZAXIS 890LCH	ZAXIS 890LCR	ZAXIS 890H**
Bolt-on sprocket	•	•	•
Full track guard	•	•	•
Reinforced track links with pin seals	•	•	•
Shoe: 650 mm double grouser	•	•	•
Shoe: 750 mm double grouser	0	_	0
Shoe: 900 mm double grouser	0	_	0
Track undercover	•	•	•
Travel direction mark on track frame	•	•	•
Travel motor covers	•	•	•
Travel parking brake	•	•	•
Upper and lower rollers	•	•	•
4 tie down hooks	•	•	•

FRONT ATTACHMENTS			
Arm 2.95 m BE	0	_	0
Arm 3.7 m R	_	•	_
Boom 7.1 m BE	0	_	0
Boom 2.95 m BER	_	0	_
Boom 7.1 m BER	_	0	_
Boom 8.4 m H and arm 3.7 m H	•	_	•
Boom 8.4 m R and arm 3.7 m R	_	•	_
Bucket 3.5 m ³ R (ISO heaped) (with dual type side shrouds)	_	•	_
Bucket 3.5 m³ Rock (ISO heaped) (with dual type side shrouds)	•	_	•
Centralized lubrication system	•	•	•
Cylinder hose protectors arm	•	•	•
Cylinder hose protectors boom	•	•	•
Cylinder hose protectors bucket	•	•	•
Damage prevention plate and square bars	•	•	•
Dirt seal on all bucket pins	•	•	•
Flanged pin	•	•	•
Reinforced link A	_	•	_
Reinforced link B	_	•	_
Bottom dump type Bucket 4.0 m³ (ISO heaped) For general excavation	_	_	0
Bottom dump type Bucket 3.6 m³ (ISO heaped) For loading large crushed rocks			•
Tilt dump type Bucket 4.4 m³ (ISO heaped) For general excavation			0
Tilt dump type Bucket 4.0 m³ (ISO heaped) For loading large crushed rocks			0

ATTACHMENTS			
Accessories for breaker	0	0	_
Accessories for breaker & crusher	0	0	_
Accessories for 2 speed selector	0	0	_
Attachment basic piping	0	0	-

MISCELLANEOUS			
Global e-Service	•	•	•
Onboard information controller	•	•	•
Standard tool kit	•	•	•
Theft prevention system*	0	0	0

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

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

in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory	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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