## **HITACHI**

Reliable solutions

## ZAXIS190\\\/



## WHEEL EXCAVATOR

Model Code: ZX190W-5B

Engine Rated Power: 122 kW (164 HP)
Operating Weight: 18 400 - 20 500 kg
Backhoe Bucket ISO Heaped: 0.51 - 1.20 m³



## WALK AROUND

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A wide range of tasks can be completed by Hitachi wheeled excavators.

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Hitachi wheeled excavators have a high impact on efficiency but a low impact on the environment.

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The cab of the new Hitachi wheeled excavators provides a safer and comfortable work space.

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A wide range of after-sales services and support options is available to all our customers.

## 16-25 Specifications

#### **Enhanced visibility**

Visibility of the front of the machine, especially on the right-hand side, has been improved for safer operation.

#### Added durability

The reinforced chassis and strengthened brackets on the boom foot are capable of withstanding rugged environments.

#### **Higher productivity**

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

#### Faster movement

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

## New power boost

The newly provided power boost helps to increase digging power and lifting power.



The design of the new Hitachi ZAXIS 190W medium excavator is inspired by one aim – empower your vision.

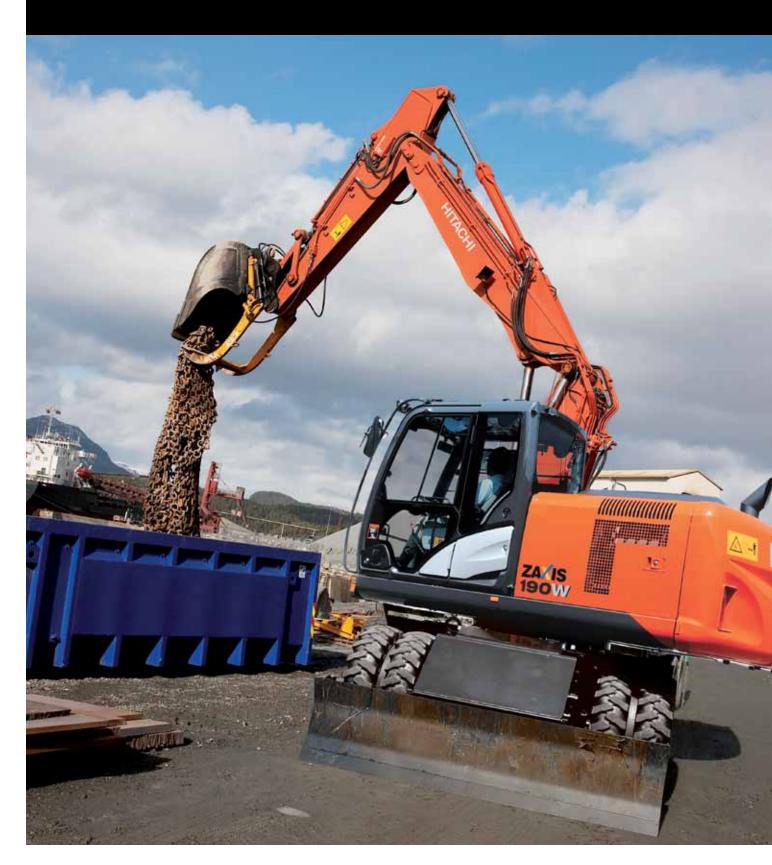
It delivers on five key levels: performance, productivity, comfort, durability and reliability. We recognise that fleet owners require high-quality, efficient machines that can work effectively, even in challenging conditions. We also realise that operators need a safer, user-friendly work space, and a machine that can respond to their skills with speed and precision. And to achieve a satisfying result, on time, on budget and to a high standard, we have aimed to maximise availability of the new ZAXIS 190W with easy maintenance features and the Hitachi Support Chain after-sales programme.





## VERSATILITY

The new ZAXIS 190W wheeled excavator stands apart from the competition due to its enhanced power and speed, and reduced running costs. Versatile and easy to operate, it can be used on a wide range of construction projects to complete a variety of tasks using different attachments. Another benefit of the new Zaxis-5 model is that it is easy to manoeuvre, so you can move it from one part of the job site to another quickly and effortlessly.



# Versatile, powerful and easy to operate







## Versatile performance

Powerful, fast and easy to use, the new ZAXIS wheeled excavators are capable of impressive performance levels and are extremely versatile for a variety of applications.

The lifting capacity has been increased by 7%, extending the machine's capability for moving heavy loads. This is further enhanced by the auto power boost function, when greater force is required. Similarly, a new power boost function increases the digging force by 6% for up to eight seconds, when needed.

The front speed of the new models has been enhanced by the HIOS III boom recirculation system – pressurised oil is circulated in the boom cylinder when lowering the boom, allowing pressurised oil from the pump to be used efficiently to increase the speed of the arm.

These are easily fitted using the attachment support system, with 11 modes that can be registered on the monitor. A new pressure adjustment feature offers protection of individual attachments by setting the required pressure.

### Lower fuel costs

Winning tenders and meeting production targets are highly competitive processes for you to develop your business. The choice of construction machinery is of paramount importance and your success relies on the productivity and efficiency of your equipment. This is where our new HIOS III hydraulic system comes into its own.

The latest advanced hydraulic and electronic technologies are central to our goal of delivering a significant saving on fuel costs with the new low-emission engine. We are delighted that HIOS III hydraulics allow you to achieve 6% less fuel consumption in PWR mode – than the previous ZAXIS P-mode – while maintaining a high level of productivity at the same time\*.

Furthermore, a reduction of 14% in fuel consumption is also possible in ECO mode\*. This still delivers a relatively high level of productivity using the same amount of fuel.

- 6% reduction in fuel consumption (PWR mode vs previous P-mode)
- 14% reduction in fuel consumption (ECO mode vs previous P-mode)
- New HIOS III hydraulic system higher productivity and less fuel consumption

- Attachment support system
- Power-boost
- Increased lifting capacity

<sup>\*</sup> Based upon typical work pattern collected via Global e-Service



## PRODUCTIVITY

Hitachi engineers have equipped the new ZAXIS 190W with a powerful new engine and advanced hydraulics to give you high levels of productivity on the job site. You can therefore expect to gain a quick return on your investment and, ultimately, greater profitability. The new Hitachi wheeled excavator range also has several sustainable features, designed to reduce their impact on the environment and to conform to the latest EU regulations on emission standards.



# Greater efficiency and a smaller environmental impact







## Sustainable efficiency

Minimising the environmental impact of our construction equipment was an important consideration during the design of the new ZAXIS wheeled excavators. We are committed to developing machines that are both sustainable and productive in order to meet the needs of our customers, as well as satisfy the requirements of the EU regulations on emission controls.

The ZAXIS 190W is equipped with a muffler filter that captures and burns air pollutants, with an oxidation catalyst and exhaust temperature control. Levels of nitrous oxide are also reduced by the excavator's variable geometry turbocharger, which encourages optimum combustion.

Another feature designed to reduce emissions is the Auto Shut-down, which also helps to prevent fuel wastage and lowers the noise level in the cab. Combining this with the Auto-Idle function can also prevent further fuel wastage.

## **Powerful efficiency**

Despite the reduced environmental impact of the new ZAXIS wheeled excavators, they are guaranteed to have a maximum efficiency impact at any job site. We have strived to balance our obligations to comply with the latest environmental regulations with your needs for high productivity and profitability.

Hitachi wheeled excavators are renowned for their reliability and high productivity, which is vital for meeting deadlines on busy job sites. The latest range of ZAXIS models builds upon this reputation, offering increased efficiency and sustainable operations.

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

- Powerful and sustainable
- Stage IIIB-compliant engine
- Muffler filter that captures particulate matter
- Variable geometry turbocharger optimal combustion
- High volume-cooled EGR system

- HIOS III hydraulic system fuel efficiency and higher productivity
- Environmentally friendly design
- Auto shut-down fuel saving for carbon dioxide reduction



## COMFORT

Operator comfort was one of the most important factors in the design of the new ZAXIS wheeled excavators. After consulting customers and operators around the world, Hitachi engineers knew that the cab should be spacious, offer excellent visibility of the job site and be equipped with easy-to-use controls. The result of their efforts will exceed your previous expectations, so that you can enjoy going to work in the ZAXIS 190W, and get the job done comfortably and safely.



# A superior level of operator comfort







## **Comfort guaranteed**

Long shifts on construction sites used to take their toll on operators, but the comfortable cab of the new ZAXIS wheeled excavators has been designed to ensure that once you leave work, you feel ready to enjoy the rest of your day. The ZAXIS 190W now offers a more spacious working environment – with a fully adjustable suspension seat that slides further back than previous models and extended leg room by 45 mm.

### **Enhanced visibility**

The new ZAXIS 190W incorporates several developments from Hitachi that will help to enhance visibility from the operator's seat, which is essential for working safely on busy construction sites. The right side of the machine has been redesigned, including a reshaped front cover, to allow for better visibility from the cab. The new model also has a redesigned monitor that fits neatly in line with the right-hand pillar, again to enhance visibility through the front window.

A new rear-view camera provides a broader range of visibility, so you can see immediately below the counterweight. The new monitor shows both operation status icons and the rear view simultaneously, so there is no need to switch displays.

## **User-friendly functionality**

Hitachi has invested heavily in the advanced technology inherent within the new ZAXIS. The power remains firmly at your fingertips thanks to the functionality of the colour monitor and ergonomic controls.

The new multi-function LCD monitor has a large seven-inch screen that is easy to view. It provides a wide range of useful technical information, including a clear indication of the machine's status and settings with multi-lingual support in up to 32 languages. The monitor and ergonomically designed switches have been grouped together within easy reach of your right hand. The proportional switches in the new, auxiliary function lever allow easy control of the front attachment. An auxiliary terminal has also been added to the sound system, so that you can work efficiently and smoothly to your favourite music via devices such as MP3 players and the inclusion of storage for an MP3 player.

- High-spec ROPS cab
- Enhanced visibility
- New colour LCD monitor
- Easily accessible real-time information

- Expansive leg room
- Ergonomically designed control panel
- Auxiliary terminal and storage for an MP3 player



## DURABILITY

The new range of ZAXIS wheeled excavators can be relied upon to operate in tough working environments and on challenging projects. This is due to the fact that they are the latest in a long line of excavators to be manufactured by Hitachi over several decades. Therefore, they benefit from years of expertise and an advanced technological approach. Like all Hitachi excavators, the ZAXIS 190W is guaranteed to be a high-quality, reliable and durable machine.



# Designed to work in challenging environments







## **Durable parts**

The new ZAXIS 190W has been designed to operate in the most challenging of working conditions. Tough job sites require reliable machines, which deliver increased levels of availability and productivity. The bottom line is that you will enjoy a lower cost of ownership thanks to the durability of our wheeled excavators.

The strengthened front attachment on the new ZAXIS 190W is a good example. The brackets on the boom foot and end have been equipped with a bushing to enhance its durable characteristics and withstand the rigours of long hours in rugged environments.

A filter-type high-performance water separator is provided standard. It captures moisture in fuel, even from fuel that contains a large amount of moisture.

### **Additional reinforcements**

The chassis of the new ZAXIS wheeled excavators has been reinforced for added durability. The cover to protect the blade cylinder is larger and further protection is provided by a structure that conforms to the top and bottom of the blade.

The transmission unit is installed above the axle to prevent it hitting unexpected obstacles. It also features a reinforced outrigger cover.

- Proven Hitachi quality
- More then 40 years of expertise
- Strengthened front attachment
- Reinforced undercarriage



## MAINTENANCE

Hitachi realises that the productivity and availability of your machine have a direct impact on the success of your business. That is why the new range of ZAXIS wheeled excavators have been designed with several easy maintenance solutions, allowing them to be inspected, cleaned and serviced quickly and conveniently. So you can quickly continue with the task at hand, knowing that the ZAXIS 190W is performing at its optimum level.



# Quick and convenient solutions to optimise availability







## Easy access

A range of convenient features integrated within the new ZAXIS medium excavators are designed to make life easier. Our engineers have assessed your requirements and integrated a number of time-saving factors for routine maintenance.

Using the technology within the multi-function LCD monitor you can check engine oil volumes and see the warning light that appears when the hydraulic oil and fuel filters are due for replacement. In addition, you can set the routine service schedule to help prevent breakdowns each time the ignition switch is turned on.

The fresh air filter for the air conditioner is located to the side of the cab door from behind the operator's seat. This allows for easy cleaning and replacement of the filter. An electric fuel-refilling unit with fuel filter is also provided as standard.

From ground level, you can access the double fuel filter, engine oil filter and water separator via wide doors. Hydraulic oil can be used for up to 5,000 hours.

## Minimal downtime

In order to ensure the smooth running of your machine and to minimise downtime, regular maintenance is essential. Fortunately it's easy and simple to carry out such tasks on the new ZAXIS wheeled excavators, so you can focus on getting the work done.

For example, the engine oil pan is fitted with a drain coupler, so when draining, an associated drain hose is connected to the drain coupler. The reliable drain coupler helps to prevent oil leakages and vandalism, which could both cause unnecessary downtime to any project.

- Global e-Service monitors muffler filter
- Daily checks from ground level
- Oil volumes checked from the operator's seat
- Quick and easy service access



# SUPPORT CHAIN

As soon as you become a Hitachi customer, you can rely on first-class after-sales service from your authorised dealer. Hitachi provides extensive support to each of the dealers within the European network, so that they can ensure your ZAXIS 190W continues to meet your requirements and exceed expectations. To further protect your investment in Hitachi construction machinery, we have introduced the Hitachi Support Chain after-sales programme. This gives you the flexibility to create a tailor-made service plan from the the following key-areas, "links" in the chain of service available from Hitachi via your local dealer.







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

#### Global e-Service

The new ZAXIS excavator is equipped with a GPRS communication system\*. This sends a wide range of machine data to the Hitachi main server. Via the Global e-Service database, you will have remote access to all of this data. All you need is an internet connection and your Global e-Service log-in details.

Global e-Service enables you and your dealer to download and share this data, helping you to remotely manage your fleet. The online facility also helps your dealer to proactively advise you on preventive maintenance and related special offers.

The latest information on the ZAXIS excavator is available 24/7 and includes operational data, such as the number of working hours, fuel consumption figures, working modes and location. This helps you to reduce running costs, plan jobs efficiently and keep up to date with machine maintenance – to ensure optimum performance and minimal downtime.

## **Technical support**

The professional and highly trained Hitachi service team combines the global expertise and knowledge of Hitachi Construction Machinery with your local language and culture. We take a proactive approach towards customer service by continuously training our dealer personnel, so that the available global knowledge is passed on to each individual technician in our dealer network.

## **Extended warranty and service contracts**

Every new Hitachi model is covered by a full manufacturer's warranty. However, your ZAXIS excavator may require extra protection due to severe working conditions or to minimise equipment repair costs. To meet these demands, our dealers offer the option of a unique extended warranty programme (HELP – Hitachi Extended Life Program) and comprehensive service contracts – the most effective way to optimise the performance of your new ZAXIS excavator.

## Parts and Remanufactured Components

Hitachi offers different lines of parts and components to suit your specific needs. In addition to our range of genuine parts, there are other options available:

- If your machines have been working for several years, Hitachi can offer a second line of genuine parts as an attractively priced solution.
- For that highly demanding application or climate, Hitachi provides a line of parts with extra performance.
- When you are looking for an economical solution for preventive replacements, remanufactured components are the best option.

Whatever choice you make, you can be assured of the renowned Hitachi quality and warranty to give you added peace of mind.

Your Hitachi dealer can supply you with more details on each of the above parts lines.



\* The GPRS communication system is standard equipment for new ZAXIS excavators, however, the availability of the communication system depends on licensing regulations in your country. Please contact your Hitachi dealer for more information or to apply for a Global e-Service account.

- Check each of your machines from your office 24/7
- Have a remote insight into fuel consumption
- Check the current and previous locations and movements of your machine(s)
- See maintenance status and items due for renewal on each of your machines
- Receive e-mail notifications for any machine alerts, unexpected movements and so on

## **SPECIFICATIONS**

ENGINE	
Model	Isuzu AM-4HK1X
Туре	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment	Muffler filter
No. of cylinders	4
Rated power	
ISO 9249, net	122 kW (164 HP) at 2 000 min-1 (rpm)
EEC 80/1269, net	122 kW (164 HP) at 2 000 min-1 (rpm)
SAE J1349, net	122 kW (164 HP) at 2 000 min-1 (rpm)
Maximum torque	655 Nm (66.8 kgfm) at 1 500 min <sup>-1</sup> (rpm)
Piston displacement	5.193 L
Bore and stroke	115 mm x 125 mm
Batteries	2 x 12 V / 93 Ah

## HYDRAULIC SYSTEM

nvu	launc	pumps	3
,			

Main pumps	2 variable displacement axial piston pumps
Maximum oil flow	2 x 169 L/min
Pilot pump	1 gear pump
Maximum oil flow	30 L/min
Steering pump	1 gear pump
Maximum oil flow	28.6 L/min

#### **Hydraulic Motors**

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

## **Relief Valve Settings**

Implement circuit	34.3 MPa (350 kgf/cm²)
Swing circuit	33.4 MPa (341 kgf/cm²)
Travel circuit	34.8 MPa (355 kgf/cm²)
Pilot circuit	3.9 MPa (40 kgf/cm²)
Power boost	36.3 MPa (370 kgf/cm²)

#### **Hydraulic Cylinders**

	Quantity	Bore	Rod diameter
Boom	2	120 mm	85 mm
Arm	1	125 mm	90 mm
Bucket	1	105 mm	75 mm
Positioning *1	1	170 mm	105 mm

<sup>\*1 :</sup> For 2-piece boom

### UPPERSTRUCTURE

#### **Revolving Frame**

D-section frame for resistance to deformation.

## **Swing Device**

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

 Swing speed ......
 12.2 min<sup>-1</sup> (rpm)

 Swing torque ......
 53.3 kNm (5 440 kgfm)

#### Operator's Cab

 $\mbox{\sc lnd}$  ependent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO\* Standards.

### UNDERCARRIAGE

Wheeled type undercarriage. The frame is of welded, stress-relieved structure.

Drive system: 2 speed power shift transmission and variable displacement axial piston type travel motor.

Travel speed (forward and reverse)

Creeper speed range	0 to 2.6 km/h
Low speed range	0 to 8.6 km/h
High speed range	0 to 35 km/h
Maximum traction force	102 kN (10 350 kgf)
Gradeability	70% (35 degree)
Min. turning radius	6 800 mm
Aylo:	

Axle:

All-wheel drive.

The front axle can be locked hydraulically in any position. Oscillating front axle......  $\pm$  7°

#### Brakes system:

Maintenance free wet-disc brakes on axle are standard. Fully hydraulic service brake system

## **SOUND LEVEL**

Sound level in cab according to ISO 6396	LpA 73 dB(A)
External sound level according to ISO 6395 and	
EU Directive 2000/14/ECL	wA 103 dB(A)

### **SERVICE REFILL CAPACITIES**

Fuel tank	290.0 L
Engine coolant	25.0 L
Engine oil	23.0 L
Swing device	6.2 L
Transmission	2.5 L
Front differential gear	9.5 L
Rear differential gear	14.0 L
Hub reduction gear	
Front axle	2 x 2.5 L
Rear axle	2 x 2.5 L
Hydraulic system	180.0 L
Hvdraulic tank	100.0 L

<sup>\*</sup> International Organization for Standardization

## WEIGHTS

## Operating weight

		Monoblock Boom	2-Piece Boom
A I = = +41=	Ot-1-11:	Standard gauge/Wide gauge	Standard gauge/Wide gauge
Arm length	Stabilization	Standard chassis	Standard chassis
		kg	kg
	Rear Blade	18 400	19 000
0.06	Rear Outrigger	18 800	19 300
2.26 m Outrigger and Blade Front and Rear Outrigger	Outrigger and Blade	19 600	20 100
	19 800	20 400	
2.40 m  Rear Blade Rear Outrigger Outrigger and Blade Front and Rear Outrigger	-	19 000	
	-	19 400	
	-	20 200	
	Front and Rear Outrigger	-	20 400
	Rear Blade	18 500	19 100
	Rear Outrigger	18 800	19 400
2.71 m	Outrigger and Blade	19 600	20 200
	Front and Rear Outrigger	19 900	20 500

Including 0.70 m³ (ISO heaped), bucket weight (600 kg) and counterweight (4 000 kg).

## BUCKET AND ARM DIGGING FORCE

	ZAXIS 190W with monoblock boom		
Arm length	2.26 m 2.71 m		
Bucket digging force* ISO	123 kN (12 500 kgf)		
Bucket digging force* SAE : PCSA	107 kN (10 900 kgf)		
Arm crowd force* ISO	105 kN (10 700 kgf)	91 kN (9 300 kgf)	
Arm crowd force* SAE : PCSA	100 kN (10 200 kgf)	87 kN (8 900 kgf)	

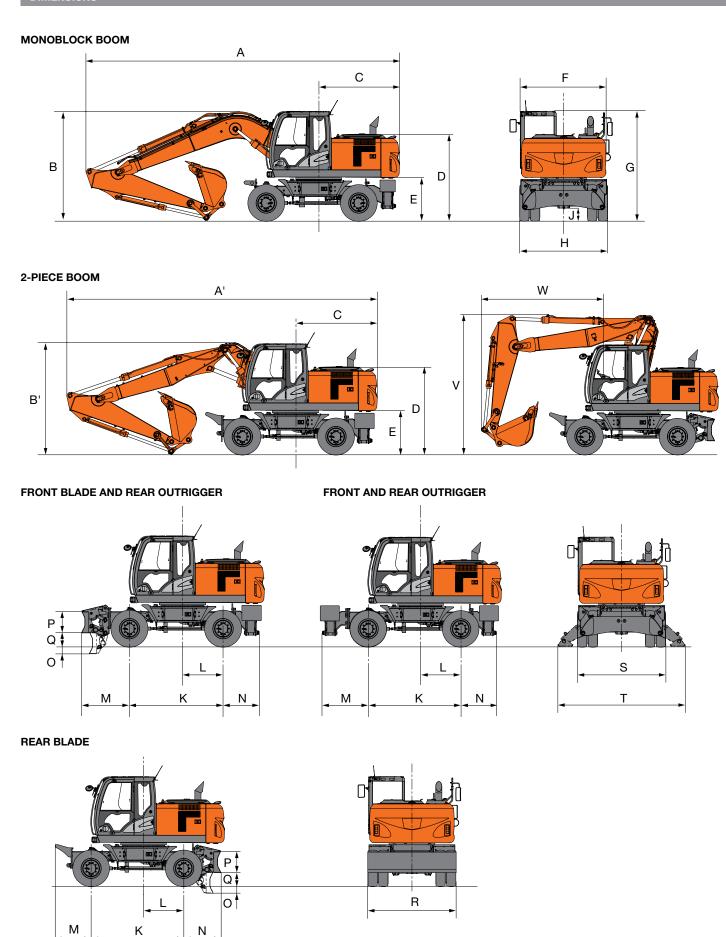
<sup>\*</sup> At power boost

	ZAXIS 190W with 2-piece boom			
Arm length	2.26 m 2.40 m 2.71 m			
Bucket digging force* ISO	123 kN (12 500 kgf)			
Bucket digging force* SAE : PCSA	107 kN (10 900 kgf)			
Arm crowd force* ISO	105 kN (10 700 kgf)	97 kN (9 900 kgf)	91 kN (9 300 kgf)	
Arm crowd force* SAE : PCSA	100 kN (10 200 kgf)	93 kN (9 500 kgf)	87 kN (8 900 kgf)	

<sup>\*</sup> At power boost

## **SPECIFICATIONS**

## **DIMENSIONS**



## DIMENSIONS

						Unit: mn
	_			Standard Gauge/Wide Ga	auge	
				Standard Chassis		
		Rear BL	Rear O/R	Front BL Rear O/R	Front O/R Rear BL	Front and Rear O/R
Α	Overall length (with monoblock boom)					
	2.26 m arm			9 000		
	2.71 m arm			8 980		
	Overall length					
,,	(with 2-piece boom)			8 810		
	2.26 m arm 2.40 m arm			8 790		
	2.40 m ami			8 800		
	Overall height			0 000		
В	(with monoblock boom)					
	2.26 m arm			3150		
	2.71 m arm			3 130* (3 120: Boom heig	yht)	
B'	Overall height (with 2-piece boom)					
	2.26 m arm			3 190		
	2.40 m arm			3 150		
	2.71 m arm			3 210		
С	Rear-end swing radius			2 320		
_D	Engine cover height			2 475		
_E	Counterweight clearance			1 235		
F	Overall width of upper structure			2 450		
G	Overall height of cabin			3 130		
Н	Overall width tires			2 550/2 730		
J	Min. ground clearance			350		
K	Wheel base			2 650		
L	Swing-centre to rear axle			1 150		
М	Front overhang	1 (	020	1 360	1.3	380
_ N	Rear overhang	1 065	1	085	1 065	1 085
0	Max. blade lower	220	-		220	-
P	Height of blade	590	-		590	-
_Q	Max. blade raise	370	-		370	-
	Overall width of blade	2 530/2 730	-		30/2 730	_
	Over width of O/R retract	-			2 450	
	Overall width O/R extend	_			3 440	
V	Over height of boom (travelling)					
	2.26 m arm			3 995		
	2.40 m arm			3 995		
	2.71 m arm			3 995		
W	Front overhang (travelling)					
	2.26 m arm			3 395		
	2.40 m arm			3 465		
	2.71 m arm			3 325		

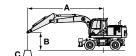
Transportation dimensions are A (A') , B (B') , H (without blade) or A (A') , B (B') , R (with blade). \*Cabin Height.

## LIFTING CAPACITIES

- Notes:
   1. Ratings are based on ISO 10567.
   2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
   3. The load point is the center-line of the bucket pivot mounting pin on the arm.
   4. \*Indicates load limited by hydraulic capacity.
   5. Each value with Rear blade up over the Front-axle side and each value with Rear blade down over the Rear-axle side respectively, and value in optimal position with positioning cylindar. position with positioning cylinder.

  6. 0 m = Ground.

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



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

#### ZAXIS 190W MONOBLOCK BOOM, 2.71 M ARM, STANDARD CHASSIS, STANDARD GAUGE, 4 000 KG COUNTERWEIGHT

TANDARD GAUGE, 4 000 KG COUNTERWEIGHT		thating over front or rear ⊕ Rating over-side 360 degrees Unit: 1											
			Load radius At ma										
	Stabilization	3.0	) m	4.5	5 m	6.0	) m	7.5	i m	7 ti maxi re		4011	
		ů		ď		ď		ů		ů		Mete	
	Rear blade up (over front)					*4.94	3.12			*3.40	2.45		
	Rear blade down (over rear)					*4.94	3.49			*3.40	2.75		
0.0	Rear outrigger down (over rear)					*4.94	4.18			*3.40	3.31		
6.0 m	Front outrigger and rear blade down (over rear)					*4.94	*4.94			*3.40	*3.40	6.8	
	Front blade and rear outrigger down (over rear)					*4.94	*4.94			*3.40	*3.40		
	4 outrigger down (over rear)					*4.94	*4.94			*3.40	*3.40		
	Rear blade up (over front)			*6.96	4.68	4.97	3.00	3.46	2.07	3.37	2.01		
	Rear blade down (over rear)			*6.96	5.27	*5.84	3.37	*3.85	2.34	*3.37	2.27		
	Rear outrigger down (over rear)			*6.96	6.38	*5.84	4.06	*3.85	2.83	*3.37	2.75	١.	
4.5 m	Front outrigger and rear blade down (over rear)			*6.96	*6.96	*5.84	4.96	*3.85	3.47	*3.37	*3.37	7.6	
	Front blade and rear outrigger down (over rear)			*6.96	*6.96	*5.84	5.18	*3.85	3.62	*3.37	*3.37		
	4 outrigger down (over rear)			*6.96	*6.96	*5.84	*5.84	*3.85	*3.85	*3.37	*3.37		
	Rear blade up (over front)			7.43	4.25	4.77	2.82	3.39	2.00	3.05	1.79		
	Rear blade down (over rear)			*8.43	4.83	*6.45	3.19	*5.39	2.26	*3.50	2.03		
	Rear outrigger down (over rear)			*8.43	5.91	*6.45	3.87	4.68	2.76	*3.50	2.48		
3.0 m	Front outrigger and rear blade down (over rear)			*8.43	7.36	*6.45	4.76	*5.39	3.39	*3.50	3.06	8.01	
	Front blade and rear outrigger down (over rear)			*8.43	7.73	*6.45	4.97	5.18	3.54	*3.50	3.19		
	4 outrigger down (over rear)			*8.43	*8.43	*6.45	5.73	5.38	4.07	*3.50	*3.50		
	Rear blade up (over front)			6.97	3.86	4.56	2.63	3.29	1.91	2.94	1.70	8.10	
	Rear blade down (over rear)			*9.58	4.43	*7.00	2.99	5.44	2.18	*3.79	1.94		
	Rear outrigger down (over rear)			*9.58	5.49	6.47	3.67	4.58	2.66	*3.79	2.38		
1.5 m	Front outrigger and rear blade down (over rear)			*9.58	6.91	*7.00	4.55	*5.61	3.30	*3.79	2.94		
	Front blade and rear outrigger down (over rear)			*9.58	7.27	*7.00	4.76	5.07	3.45	*3.79	3.08		
	4 outrigger down (over rear)			*9.58	8.55	*7.00	5.51	5.28	3.97	*3.79	3.54		
	Rear blade up (over front)			6.73	3.66	4.41	2.50	3.22	1.84	3.00	1.72		
	Rear blade down (over rear)			*9.82	4.21	*7.19	2.86	5.36	2.11	*4.32	1.96		
	Rear outrigger down (over rear)			*9.82	5.26	6.30	3.53	4.50	2.60	4.17	2.42		
0 m	Front outrigger and rear blade down (over rear)			*9.82	6.68	*7.19	4.41	*5.58	3.23	*4.32	3.01	7.9	
	Front blade and rear outrigger down (over rear)			*9.82	7.03	6.98	4.62	5.00	3.38	*4.32	3.14		
	4 outrigger down (over rear)			*9.82	8.30	*7.19	5.36	5.20	3.90	*4.32	3.62		
	Rear blade up (over front)	*8.44	6.57	6.67	3.60	4.35	2.45			3.28	1.87		
	Rear blade down (over rear)	*8.44	7.74	*9.17	4.16	*6.83	2.81			*5.15	2.14		
	Rear outrigger down (over rear)	*8.44	*8.44	*9.17	5.21	6.24	3.47			4.59	2.64		
1.5 m	Front outrigger and rear blade down (over rear)	*8.44	*8.44	*9.17	6.62	*6.83	4.35			*5.15	3.28	7.38	
	Front blade and rear outrigger down (over rear)	*8.44	*8.44	*9.17	6.97	*6.83	4.56			5.10	3.44		
	4 outrigger down (over rear)	*8.44	*8.44	*9.17	8.23	*6.83	5.30			*5.15	3.97		
	Rear blade up (over front)	*10.08	6.72	6.74	3.66	4.40	2.49			3.98	2.27		
	Rear blade down (over rear)	*10.08	7.90	*7.67	4.22	*5.62	2.85			*4.93	2.59		
	Rear outrigger down (over rear)	*10.08	*10.08	*7.67	5.27	*5.62	3.52			*4.93	3.19		
3.0 m	Front outrigger and rear blade down (over rear)	*10.08	*10.08	*7.67	6.68	*5.62	4.39			*4.93	3.97	6.4	
	Front blade and rear outrigger down (over rear)	*10.08	*10.08	*7.67	7.04	*5.62	4.60			*4.93	4.16		
	4 outrigger down (over rear)	*10.08	*10.08	*7.67	*7.67	*5.62	5.35			*4.93	4.82		

## ZAXIS 190W MONOBLOCK BOOM, 2.71 M ARM, STANDARD CHASSIS, WIDE GAUGE, 4 000 KG COUNTERWEIGHT

		Load radius								A.	-1-	
	Stabilization	3.	3.0 m 4.5 m				) m	7.5	i m	At	ich	
		ů	<b>P</b>	ů	<b>-</b>	ů	<b>•</b>	ů	<b>-</b>	ů		Meter
	Rear blade up (over front)					*4.94	3.36			*3.40	2.64	
	Rear blade down (over rear)					*4.94	3.81			*3.40	3.01	
0.0	Rear outrigger down (over rear)					*4.94	4.36			*3.40	*3.40	0.00
6.0 m	Front outrigger and rear blade down (over rear)					*4.94	*4.94			*3.40	*3.40	6.88
	Front blade and rear outrigger down (over rear)					*4.94	*4.94			*3.40	*3.40	
	4 outrigger down (over rear)					*4.94	*4.94			*3.40	*3.40	
	Rear blade up (over front)			*6.96	5.06	5.02	3.24	3.50	2.24	*3.37	2.18	
	Rear blade down (over rear)			*6.96	5.77	*5.84	3.69	*3.85	2.56	*3.37	2.49	
4 E m	Rear outrigger down (over rear)			*6.96	6.68	*5.84	4.24	*3.85	2.96	*3.37	2.88	7.60
4.5 m	Front outrigger and rear blade down (over rear)			*6.96	*6.96	*5.84	5.19	*3.85	3.63	*3.37	*3.37	7.62
	Front blade and rear outrigger down (over rear)			*6.96	*6.96	*5.84	5.35	*3.85	3.74	*3.37	*3.37	
	4 outrigger down (over rear)			*6.96	*6.96	*5.84	*5.84	*3.85	*3.85	*3.37	*3.37	
	Rear blade up (over front)			7.50	4.62	4.81	3.05	3.42	2.17	3.08	1.94	
	Rear blade down (over rear)			*8.43	5.32	*6.45	3.49	*5.39	2.49	*3.50	2.23	
3.0 m	Rear outrigger down (over rear)			*8.43	6.20	*6.45	4.05	4.68	2.88	*3.50	2.59	8.01
	Front outrigger and rear blade down (over rear)			*8.43	7.74	*6.45	4.98	*5.39	3.55	*3.50	3.20	
	Front blade and rear outrigger down (over rear)			*8.43	8.02	*6.45	5.14	5.23	3.66	*3.50	3.30	
	4 outrigger down (over rear)			*8.43	*8.43	*6.45	5.73	5.38	4.07	*3.50	*3.50	
	Rear blade up (over front)			7.04	4.22	4.60	2.86	3.33	2.08	2.97	1.85	
	Rear blade down (over rear)			*9.58	4.91	*7.00	3.30	5.39	2.40	*3.79	2.13	
1.5 m	Rear outrigger down (over rear)			*9.58	5.77	6.47	3.84	4.58	2.79	*3.79	2.49	8.10
1.5111	Front outrigger and rear blade down (over rear)			*9.58	7.29	*7.00	4.77	*5.61	3.45	*3.79	3.08	
	Front blade and rear outrigger down (over rear)			*9.58	7.55	*7.00	4.93	5.13	3.56	*3.79	3.18	
	4 outrigger down (over rear)			*9.58	8.55	*7.00	5.51	5.28	3.97	*3.79	3.54	
	Rear blade up (over front)			6.80	4.01	4.46	2.73	3.25	2.01	3.03	1.88	
	Rear blade down (over rear)			*9.82	4.69	*7.19	3.16	5.31	2.33	*4.32	2.17	
0 m	Rear outrigger down (over rear)			*9.82	5.55	6.30	3.70	4.50	2.72	4.18	2.53	7.90
0111	Front outrigger and rear blade down (over rear)			*9.82	7.05	*7.19	4.63	*5.58	3.38	*4.32	3.15	7.90
	Front blade and rear outrigger down (over rear)			*9.82	7.31	7.05	4.78	5.05	3.49	*4.32	3.25	
	4 outrigger down (over rear)			*9.82	8.30	*7.19	5.36	5.20	3.90	*4.32	3.62	
	Rear blade up (over front)	*8.44	7.32	6.74	3.96	4.40	2.68			3.31	2.05	
	Rear blade down (over rear)	*8.44	*8.44	*9.17	4.63	*6.83	3.11			*5.15	2.37	
-1.5 m	Rear outrigger down (over rear)	*8.44	*8.44	*9.17	5.49	6.24	3.65			4.59	2.77	7.38
1.0111	Front outrigger and rear blade down (over rear)	*8.44	*8.44	*9.17	6.98	*6.83	4.57			*5.15	3.44	7.00
	Front blade and rear outrigger down (over rear)	*8.44	*8.44	*9.17	7.25	*6.83	4.72			5.15	3.55	
	4 outrigger down (over rear)	*8.44	*8.44	*9.17	8.23	*6.83	5.30			*5.15	3.97	
	Rear blade up (over front)	*10.08	7.47	6.80	4.02	4.44	2.72			4.02	2.48	
	Rear blade down (over rear)	*10.08	8.94	*7.67	4.70	*5.62	3.15			*4.93	2.86	
-3.0 m	Rear outrigger down (over rear)	*10.08	*10.08	*7.67	5.55	*5.62	3.69			*4.93	3.35	6.47
-0.0 111	Front outrigger and rear blade down (over rear)	*10.08	*10.08	*7.67	7.05	*5.62	4.61			*4.93	4.17	
	Front blade and rear outrigger down (over rear)	*10.08	*10.08	*7.67	7.32	*5.62	4.77			*4.93	4.31	
	4 outrigger down (over rear)	*10.08	*10.08	*7.67	*7.67	*5.62	5.35			*4.93	4.82	

## **LIFTING CAPACITIES**

## ZAXIS 190W 2-PIECE BOOM, 2.40 M ARM, STANDARD CHASSIS, STANDARD GAUGE, 4 000 KG COUNTERWEIGHT

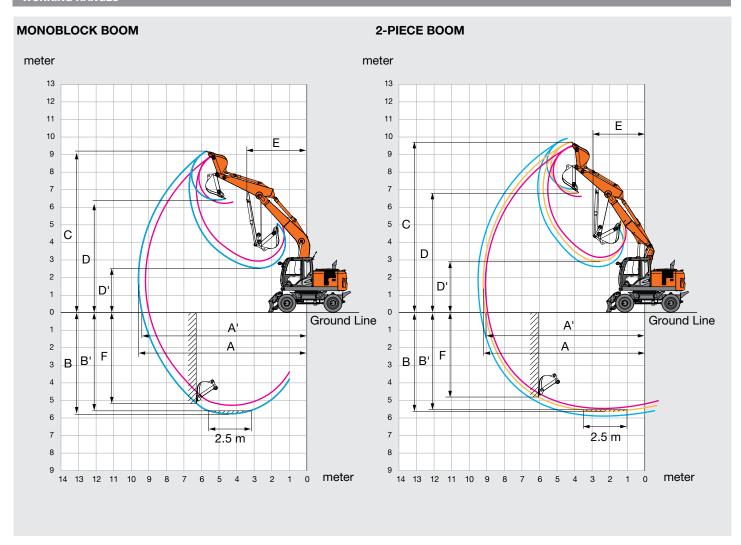
						Load radius							At max. reach		
	Stabilization	1.5	1.5 m 3.0 m				4.5 m 6.0 m 7.5 m					Ati	acn		
				ů	<b>©</b>	ů		ů	<b>@</b>	ů		ů		Meter	
	Rear blade up (over front)					*4.85	*4.85					*4.17	4.02		
	Rear blade down (over rear)					*4.85	*4.85					*4.17	*4.17		
7.5 m	Rear outrigger down (over rear)					*4.85	*4.85					*4.17	*4.17	5.14	
7.5111	Front outrigger and rear blade down (over rear)					*4.85	*4.85					*4.17	*4.17	0.14	
	Front blade and rear outrigger down (over rear)					*4.85	*4.85					*4.17	*4.17		
	4 outrigger down (over rear)					*4.85	*4.85					*4.17	*4.17		
	Rear blade up (over front)					*4.81	*4.81	*4.84	3.17			*3.70	2.72		
	Rear blade down (over rear)					*4.81	*4.81	*4.84	3.56			*3.70	3.06		
6.0 m	Rear outrigger down (over rear)					*4.81	*4.81	*4.84	4.26			*3.70	3.69	6.48	
0.0111	Front outrigger and rear blade down (over rear)					*4.81	*4.81	*4.84	*4.84			*3.70	*3.70	0.40	
	Front blade and rear outrigger down (over rear)					*4.81	*4.81	*4.84	*4.84			*3.70	*3.70		
	4 outrigger down (over rear)					*4.81	*4.81	*4.84	*4.84			*3.70	*3.70		
	Rear blade up (over front)			*7.48	*7.48	*5.80	4.87	5.08	3.24			*3.57	2.19		
	Rear blade down (over rear)			*7.48	*7.48	*5.80	5.42	*5.13	3.62			*3.57	2.48		
4.5	Rear outrigger down (over rear)			*7.48	*7.48	*5.80	*5.80	*5.13	4.25			*3.57	3.01	7.07	
4.5 m	Front outrigger and rear blade down (over rear)			*7.48	*7.48	*5.80	*5.80	*5.13	5.06			*3.57	*3.57	7.27	
	Front blade and rear outrigger down (over rear)			*7.48	*7.48	*5.80	*5.80	*5.13	*5.13			*3.57	*3.57		
	4 outrigger down (over rear)			*7.48	*7.48	*5.80	*5.80	*5.13	*5.13			*3.57	*3.57		
	Rear blade up (over front)			*9.13	8.28	*7.42	4.73	5.01	3.22	3.46	2.03	3.31	1.93		
	Rear blade down (over rear)			*9.13	*9.13	*7.42	5.26	*5.81	3.59	*4.74	2.31	*3.63	2.20		
	Rear outrigger down (over rear)			*9.13	*9.13	*7.42	6.23	*5.81	4.21	*4.74	2.81	*3.63	2.69		
3.0 m	Front outrigger and rear blade down (over rear)			*9.13	*9.13	*7.42	*7.42	*5.81	4.99	*4.74	3.46	*3.63	3.32	7.68	
	Front blade and rear outrigger down (over rear)			*9.13	*9.13	*7.42	*7.42	*5.81	5.18	*4.74	3.62	*3.63	3.46		
	4 outrigger down (over rear)			*9.13	*9.13	*7.42	*7.42	*5.81	*5.81	*4.74	4.15	*3.63	*3.63		
	Rear blade up (over front)			*11.21	8.17	7.46	*4.68	5.01	3.11	3.40	1.97	3.18	1.83		
	Rear blade down (over rear)			*11.21	9.26	*8.93	5.20	*6.54	3.49	*5.44	2.25	*3.86	2.09		
	Rear outrigger down (over rear)			*11.21	*11.21	*8.93	6.16	*6.54	4.19	4.71	2.75	*3.86	2.57	7.77	
1.5 m	Front outrigger and rear blade down (over rear)			*11.21	*11.21	*8.93	7.40	*6.54	*4.99	*5.44	3.40	*3.86	3.19		
	Front blade and rear outrigger down (over rear)			*11.21	*11.21	*8.93	7.71	*6.54	5.18	5.19	3.55	*3.86	3.33		
	4 outrigger down (over rear)			*11.21	*11.21	*8.93	8.75	*6.54	5.81	5.39	4.08	*3.86	3.84		
	Rear blade up (over front)	*9.01	*9.01	*13.62	8.13	7.55	4.57	4.91	2.90	3.30	1.89	3.26	1.86		
	Rear blade down (over rear)	*9.01		*13.62	9.41	*9.67	5.17	*7.03	3.28	*4.91	2.16	*4.32	2.13		
	Rear outrigger down (over rear)	*9.01	*9.01	*13.62	11.49	*9.67	6.25	6.65	3.98	4.62	2.66	*4.32	2.62		
0 m	Front outrigger and rear blade down (over rear)	*9.01	*9.01	*13.62	*13.62	*9.67	7.48	*7.03	4.89	*4.91	3.30	*4.32	3.26	7.56	
	Front blade and rear outrigger down (over rear)	*9.01	*9.01	*13.62	*13.62	*9.67	7.79	*7.03	5.11	*4.91	3.46	*4.32	3.41		
	4 outrigger down (over rear)	*9.01	*9.01	*13.62	*13.62	*9.67	8.81	*7.03	5.87	*4.91	3.99	*4.32	3.94		
	Rear blade up (over front)	*15.54	*15.54	*14.93	7.79	7.65	4.38	4.68	2.69			3.61	2.05		
	Rear blade down (over rear)	*15.54	*15.54	*15.56	9.05	*9.84	4.97	*7.24	3.07			*5.23	2.35		
	Rear outrigger down (over rear)	*15.54	*15.54	*15.56	11.53	*9.84	6.08	6.64	3.76			5.08	2.89		
-1.5 m	Front outrigger and rear blade down (over rear)	*15.54	*15.54	*15.56	14.63	*9.84	7.57	*7.24	4.66			*5.23	3.60	7.01	
	Front blade and rear outrigger down (over rear)	*15.54	*15.54	*15.56	15.28	*9.84	7.94	*7.24	4.88			*5.23	3.77		
	4 outrigger down (over rear)	*15.54	*15.54		*15.56	*9.84	9.09	*7.24	5.65			*5.23	4.36		
	Rear blade up (over front)	*27.33	*27.33		7.73	7.26	4.05		0.00			4.61	2.61		
	Rear blade down (over rear)	*27.33	*27.33	*16.12	8.99	*10.07	4.63					*6.34	2.99		
	Rear outrigger down (over rear)	*27.33	*27.33	*16.12	11.46	*10.07	5.73					*6.34	3.69	5.94	
-3.0 m	Front outrigger and rear blade down (over rear)	*27.33	*27.33			*10.07	7.19					*6.34	4.60		
	Front blade and rear outrigger down (over rear)	*27.33	*27.33		16.01	*10.07	7.19					*6.34	4.82		
												*6.34			
	4 outrigger down (over rear)	*27.33	*27.33	*16.12	10.12	*10.07	8.88					0.34	5.60		

## ZAXIS 190W 2-PIECE BOOM, 2.40 M ARM, STANDARD CHASSIS, WIDE GAUGE, 4 000 KG COUNTERWEIGHT

						Load	radius					At max. reach			
	Stabilization	1.5	5 m	3.0	) m	4.5	i m	6.0	6.0 m 7.5 m		i m	At max.		eacn	
		Ů	<b>P</b>	ů	<b>•</b>	ů	<b>⊕</b>	ů	<b>©</b>	ů	<b>©</b>	ů	<b>©</b>	Me	
	Rear blade up (over front)					*4.85	*4.85					*4.17	*4.17		
	Rear blade down (over rear)					*4.85	*4.85					*4.17	*4.17	7	
7.5	Rear outrigger down (over rear)					*4.85	*4.85					*4.17	*4.17		
7.5 m	Front outrigger and rear blade down (over rear)					*4.85	*4.85					*4.17	*4.17	5.	
	Front blade and rear outrigger down (over rear)					*4.85	*4.85					*4.17	*4.17		
	4 outrigger down (over rear)					*4.85	*4.85					*4.17	*4.17		
	Rear blade up (over front)					*4.81	*4.81	*4.84	3.42			*3.70	2.94		
	Rear blade down (over rear)					*4.81	*4.81	*4.84	3.88			*3.70	3.35		
0.0	Rear outrigger down (over rear)					*4.81	*4.81	*4.84	4.45			*3.70	*3.70		
6.0 m	Front outrigger and rear blade down (over rear)					*4.81	*4.81	*4.84	*4.84			*3.70	*3.70	6	
	Front blade and rear outrigger down (over rear)					*4.81	*4.81	*4.84	*4.84			*3.70	*3.70		
	4 outrigger down (over rear)					*4.81	*4.81	*4.84	*4.84			*3.70	*3.70		
	Rear blade up (over front)			*7.48	*7.48	*5.80	5.22	5.12	3.49			*3.57	2.38	Т	
	Rear blade down (over rear)			*7.48	*7.48	*5.80	*5.80	*5.13	3.90			*3.57	2.72		
	Rear outrigger down (over rear)			*7.48	*7.48	*5.80	*5.80	*5.13	4.42			*3.57	3.15	1	
4.5 m	Front outrigger and rear blade down (over rear)			*7.48	*7.48	*5.80	*5.80	*5.13	*5.13			*3.57	*3.57	7.2	
	Front blade and rear outrigger down (over rear)			*7.48	*7.48	*5.80	*5.80	*5.13	*5.13			*3.57	*3.57		
	4 outrigger down (over rear)			*7.48	*7.48	*5.80	*5.80	*5.13	*5.13			*3.57	*3.57		
	Rear blade up (over front)			*9.13	8.98	*7.42	5.07	5.05	3.47	3.50	2.21	3.35	2.11	H	
	Rear blade down (over rear)			*9.13	*9.13	*7.42	5.70	*5.81	3.87	*4.74	2.54	*3.63	2.42		
	Rear outrigger down (over rear)			*9.13	*9.13	*7.42	6.49	*5.81	4.37	*4.74	2.94	*3.63	2.81	1	
3.0 m	Front outrigger and rear blade down (over rear)			*9.13	*9.13	*7.42	*7.42	*5.81	5.19	*4.74	3.62	*3.63	3.47	7.0	
	Front blade and rear outrigger down (over rear)			*9.13	*9.13	*7.42	*7.42	*5.81	5.33	*4.74	3.74	*3.63	3.58		
	4 outrigger down (over rear)			*9.13	*9.13	*7.42	*7.42	*5.81	*5.81	*4.74	4.15	*3.63	*3.63		
	Rear blade up (over front)			*11.21	8.88	7.52	5.02	5.05	3.35	3.43	2.15	3.22	2.00	╁	
	Rear blade down (over rear)			*11.21	10.20	*8.93	5.65	*6.54	3.81	*5.44	2.48	*3.86	2.31	7.7	
	Rear outrigger down (over rear)			*11.21	*11.21	*8.93	6.42	*6.54	4.37	4.71	2.88	*3.86	2.69		
1.5 m	Front outrigger and rear blade down (over rear)			*11.21	*11.21	*8.93	7.71	*6.54	5.19	*5.44	3.56	*3.86	3.34		
	, ,			*11.21	*11.21	*8.93	7.71	*6.54	*5.32	5.24	3.67	*3.86	3.44		
	Front blade and rear outrigger down (over rear)				*11.21			*6.54		5.39	4.08				
	4 outrigger down (over rear)  Rear blade up (over front)	*9.01	*9.01	*11.21	8.95	*8.93 *7.60	8.75 4.96	4.96	5.81 3.15	3.34	2.06	*3.86	2.03	₽	
	Rear blade down (over rear)														
	,	*9.01 *9.01	*9.01 *9.01	*13.62		*9.67 *9.67	5.69 6.51	*7.03 6.65	3.60	*4.91 4.62	2.38	*4.32 *4.32	2.35		
0 m	Rear outrigger down (over rear)			*13.62					4.16	*4.91				7	
	Front outrigger and rear blade down (over rear)	*9.01 *9.01	*9.01 *9.01		*13.62	*9.67 *9.67	7.79 8.02	*7.03 *7.03	*5.12	*4.91	3.46	*4.32 *4.32	3.42		
	Front blade and rear outrigger down (over rear)			*13.62					5.28	*4.91	3.99				
	4 outrigger down (over rear)	*9.01	*9.01	*13.62		*9.67	8.81	*7.03	5.86	4.91	3.99	*4.32	3.94	⊢	
	Rear blade up (over front)	*15.54	*15.54	15.01	8.59	7.71	4.76	4.72	2.93			3.64	2.24		
	Rear blade down (over rear)	*15.54	*15.54	*15.56	10.17	*9.84	5.48	*7.24	3.38			*5.23	2.59		
1.5 m	Rear outrigger down (over rear)	*15.54	*15.54	*15.56	12.25	*9.84	6.38	6.64				5.08	3.04		
	Front outrigger and rear blade down (over rear)	*15.54	*15.54	*15.56	15.31	*9.84	7.96	*7.24	4.89			*5.23	3.78		
	Front blade and rear outrigger down (over rear)	*15.54	*15.54		*15.56	*9.84	8.24	*7.24	5.05			*5.23	3.90		
	4 outrigger down (over rear)	*15.54	*15.54	_		*9.84	9.09	*7.24	5.65			*5.23	4.36	-	
	Rear blade up (over front)	*27.33			8.53	7.33	4.42					4.66	2.86		
	Rear blade down (over rear)		*27.33		10.11	*10.07	5.13					*6.34	3.31	4	
-3.0 m	Rear outrigger down (over rear)	*27.33	*27.33		12.18		6.02					*6.34	3.87	5	
	Front outrigger and rear blade down (over rear)	*27.33	*27.33		16.06		7.58					*6.34	4.83		
	Front blade and rear outrigger down (over rear)	*27.33	*27.33		*16.12	*10.07	7.85					*6.34	4.99		
	4 outrigger down (over rear)	*27.33	*27.33	*16.12	*16.12	*10.07	8.88					*6.34	5.59		

## **SPECIFICATIONS**

## WORKING RANGES



Unit: mm

	ZAXIS 190W								
	Monoble	ock boom	2-Piece boom						
Arm length	2.26 m	2.26 m 2.71 m		2.40 m	2.71 m				
A Max. digging reach	9 220	9 580	9 100	9 240	9 480				
A' Max. digging reach (on ground)	9 040	9 400	8 920	9 060	9 310				
B Max. digging depth	5 390	5 830	5 500	5 640	5 930				
B' Max. digging depth (2.5 m level)	5 180	5 640	5 400	5 540	5 830				
C Max. cutting height	9 160	9 250	9 670	9 780	9 850				
D Max. dumping height	6 340	6 450	6 760	6 870	6 950				
D' Min. dumping height	2 990	2 530	3 150	2 960	2 660				
E Min. swing radius	3 510	3 480	3 150	2 970	3 000				
F Max. vertical wall digging depth	4 810	5 260	4 630	4 800	5 030				

## **EQUIPMENT**

ENGINE	
Air cleaner double filters	•
Auto idle system	•
Auto shut-down control	•
Cartridge-type engine oil filter	•
Cold fuel resistance valve	0
Dry-type air filter with evacuator valve (with air filter restriction indicator)	•
Dust-proof indoor net	•
ECO/PWR mode control	•
Electrical fuel feed pump	•
Engine oil drain coupler	•
Engine warm-up device	•
Fan guard	•
Fuel cooler	•
Fuel main filter	•
Fuel pre-filter	•
High performance water separator	•
Isolation-mounted engine	•
Muffler filter	•
Pre-cleaner	0
Radiator, oil cooler and intercooler	•
Radiator reserve tank	•
50 A alternator	•

## HYDRAULIC SYSTEM

Auto power lift	•
Control valve with main relief valve	•
Extra port for control valve	•
Full-flow filter	•
High mesh full flow filter with restriction indicator	0
Hose rupture valve for arm	0
Hose rupture valve for boom	•
Pilot filter	•
Power boost	•
Shockless valve in pilot circuit	•
Steering filter	•
Suction filter	•
Swing dampener valve	•
Variable relief valve for breaker & crusher	•
Work mode selector	•

САВ	
All-weather sound suppressed steel cab	•
AM-FM radio	•
Ashtray	•
Auto control air conditioner	•
Auxiliary function lever	•
AUX. terminal and storage	•
CRES V (Center pillar reinforced structure) cab	•
Drink holder with hot & cool function	•
Electric double horn	•
Engine shut-off switch	•
Equipped with reinforced, tinted (green color) glass windows	•
Evacuation hammer	•
Floor mat	•
Footrest	•
Front window washer	•
Hot & cool box	•
Intermittent windshield wipers	•
Key cylinder light	•
Laminated round glass window	0
LED room light with door courtesy	•
OPG top guard fitted Level II (ISO10262) compliant cab	0
Pilot control shut-off lever	•
Rain guard	•
Rear tray	•
Retractable seat belt	•
ROPS (ISO12117-2) compliant cab	•
Rubber radio antenna	•
Seat adjustment part : backrest, armrest, height and angle, slide forward / back	•
Seat: air suspension seat with heater	•
Short wrist control levers	•
Sun visor (front window)	•
Transparent roof with slide curtain	•
Windows on front, upper, lower and left side can be openend	•
2 speakers	•
4 fluid-filled elastic mounts	•

## MONITOR SYSTEM

...... Standard equipment O

•

•

Alarm buzzers: overheat, engine oil pressure, overload
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc
Display of meters: Speedometer, Tachometer, Trip meter, water temperature, hour, fuel rate, clock
Other displays: work mode, auto-idle, glow, rearview •

monitor, operating conditions, etc

Attachment operational information

## LIGHTS

32 languages selection

Liaiiio	
Additional boom light with cover	0
Additional cab roof front lights	0
Additional cab roof rear lights	0
Brake lamps	•
Clearance lamps	•
Hazard lamps	•
Licence lamp	0
Rotating lamp	0
Turn signal lamps	•
Working lights	•
2 head lights	•

## UPPER STRUCTURE

Electric fuel refilling pump with auto stop and filter	•
Fuel level float	•
Hydraulic oil level gauge	•
Rear view camera	•
Rear view mirror (right & left side)	•
Side view camera	0
Swing parking brake	•
Undercover	•
4 000 kg counterweight	•
93 Ah batteries	•

## UNDERCARRIAGE

...... Optional equipment

UNDERCARRIAGE	
Front cover	0
Front dozer blade + rear outrigger	0
Front outrigger + rear dozer blade	0
Front outrigger + rear outrigger	0
Parking brake	•
Rear dozer blade	0
Rear outrigger	0
Right toolbox	0
Tire spacer	•
Toolbox: left chassis	•
Traction types pattern tires (10.00-20 14 PR)	•
Wide gauge axle	0
4 tie down hooks	•
Clamshell bracket	0

## FRONT ATTACHMENTS

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

## **ATTACHMENTS**

Accessories for 2 speed selector	0
Additional piping	0
Additional pump (30 L/min)	0
Attachment basic piping	•
Breaker and crusher piping	•
Clamshell piping	0
HSB Parts for breaker and crusher	•
Pilot accumulator	•
PTO valve	0

## MISCELLANEOUS

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

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

12 V power outlet

24 V cigarette lighter

•

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

## **MEMO**

## **MEMO**



### - Hitachi Environmental Vision 2025 -

The Hitachi Group released the Environmental Vision 2025 to curb annual carbon dioxide emissions. The Group is committed to global production while reducing environmental impact in life cycles of all products, and realizing a sustainable society by tackling three goals — prevention of global warming, recycling of resources, and enhancement of ecosystem.

#### Reducing Environmental Impact by New ZAXIS

Hitachi makes a green way to cut carbon emissions for global warming prevention according to LCA\*. New ZAXIS utilizes lots of technological advances, including the new ECO mode, and Isochronous Control. Hitachi has long been committed to recycling of components, such as aluminum parts in radiators and oil cooler. Resin parts are marked for recycling.

\*Life Cycle Assessment – ISO 14040





Prior to operating this machine, including satellite communication system, in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory standards (including safety standards) and legal requirements of that particular country. Please do not export or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your Hitachi dealer in case of questions about compliance. These specifications are subject to change without notice.

Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, customer installed and modified parts, optional parts and all standard equipment with some differences in color and features. Before use, read and understand the Operator's Manual for proper operation.

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