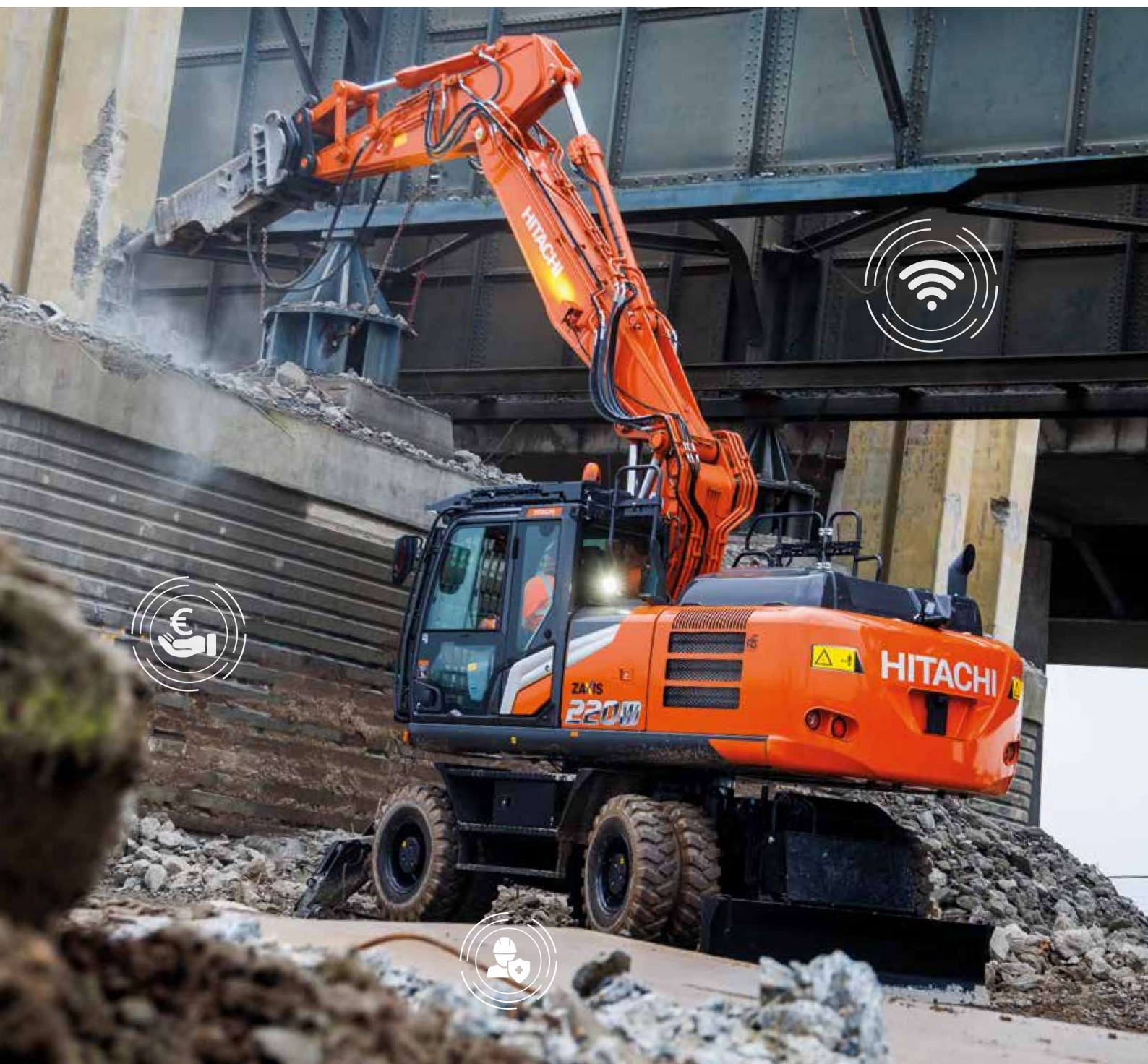


ZAXIS-7 series

HITACHI

Reliable solutions

ZAXIS220W



HYDRAULIC EXCAVATOR

Model code : ZX220W-7

Engine rated power : 128 kW

Operating weight : 20 100 – 24 900 kg

Bucket ISO heaped : 0.51 – 1.20 m³

You're in control

You're at the heart of Hitachi's design for its latest range of excavators. To continuously improve on previous generation machines we've focused on enhancing your experience in the cab as an operator.

We've considered the challenges you face as the owner of a successful business. And we've zoomed in on the ways in which we can support you over the life cycle of your machine.

By putting you at the heart of the Zaxis-7 range, we invite you to take control – over your workspace and your fleet. And by working in partnership, we will help you to create your vision.





Inside



In control of your business

8. Improve your profit



In control of your comfort

10. Feel the difference



In control of your environment

12. Increase your safety



In control of your assets

14. Boost your uptime



In control of your fleet

16. Manage your machine



In control of your uptime

18. Protect your investment



In control of your performance

20. Get more from your machine

Complete control

The new Zaxis-7 range of wheeled excavators puts you firmly in control, so you can feel assured of your machine's performance, and supported by the technological expertise and services that Hitachi provides.



The expanded cab interior provides a more comfortable working environment.



Sensors monitor oil continuously and contribute to preventative maintenance, helping to reduce downtime.



ConSite Pocket app allows you to manage and monitor your fleet remotely.



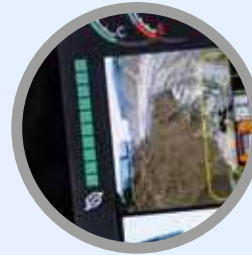
Options such as Hitachi ground engaging tools enable you to enhance the performance of your excavator.



Integrated console and seat suspension gives a greater sense of control, and helps to reduce fatigue.



Visibility of the job site is excellent thanks to the Aerial Angle camera system and new LCD monitor.



The ECO gauge on the monitor indicates how to lower fuel consumption and reduce costs.



Improved access to components ensures maintenance is quick and easy.



The HIOS III hydraulic system enhances productivity with reduced fuel consumption.



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HITACHI

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Control zone

Enhanced comfort and safety features are at your fingertips in the refined cab of Zaxis-7 excavators, giving you the power to perform productively, with ease and reduced fatigue.

- ① **Increased sweeping area of parallel link wiper** enhances visibility in difficult working conditions.
- ② **Air conditioning and audio** are easily controlled via the monitor.
- ③ **Low-reflective colour 8" LCD monitor** is easy to view and navigate.
- ④ **USB socket and smartphone holder** helps you stay connected.
- ⑤ **Drinks holder** is easy to detach for cleaning.
- ⑥ **Additional joystick controls** for effortless operation.
- ⑦ **Ergonomic design** gives you convenient access to controls.
- ⑧ **Bluetooth®** for hands-free calls and **DAB+** radio for music while you work.
- ⑨ **Multifunctional control panel** makes operation easier.
- ⑩ **Improved sound isolation** makes this one of the quietest cabs in the market.
- ⑪ **User-friendly storage space** keeps your workspace tidy and clutter-free.
- ⑫ **Coat hooks** take care of your personal belongings.
- ⑬ **New blade and outrigger lever** provides fingertip control and is within easy reach.
- ⑭ **Integrated console and seat suspension** gives a greater sense of control and helps to reduce fatigue.
- ⑮ **One-touch adjustment lever for console** so you can work comfortably in the optimum position.
- ⑯ **Increased legroom** creates a more spacious cab.
- ⑰ **Front visibility** is improved by the slim steering column (with wider adjustment angle) and smaller steering wheel.
- ⑱ **Auto working brake** helps to reduce fatigue.



Operation is easy with ergonomically designed controls and switches.



Bluetooth® connection for hands-free calls while you work.

In control of your business



Improve your profit

The success of your business depends on the reliability and efficiency of your construction machinery. With Hitachi's latest Zaxis-7 wheeled excavators, you can count on the highest quality, the ultimate in operating comfort and reduced running costs – all of which will have a positive impact on your bottom line.

You can look forward to increasing your profits thanks to the impressive fuel economy of these Stage-V compliant machines. The ZX220W-7 is equipped with the unique HIOS III hydraulic system, and achieves higher productivity with better fuel consumption than previous models, which helps to reduce costs.

The new Zaxis-7 wheeled excavators do not require the use of urea to comply with Stage V emission regulations, and this helps to reduce costs further.

Your operators can also control fuel efficiency – and reduce costs – by using the all-new ECO gauge. This is clearly visible on the multifunctional colour LCD eight-inch monitor.

In addition, you can boost your profits by working on a wider range of projects thanks to the excellent versatility of Zaxis-7 excavators. Different attachments are quickly changed using the enhanced attachment support system on the monitor.

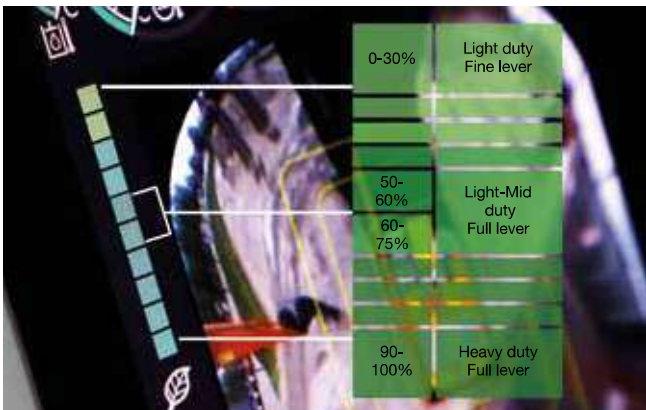
With a simple adjustment to suit your operator's preference and job site requirements, you can fine-tune your machine for optimum productivity – while still reducing fuel consumption.



The HIOS III hydraulic system contributes to significant reductions in fuel consumption.



The HIOS III hydraulic system provides optimum operating efficiency on every job site.



The ECO gauge helps to deliver better fuel consumption.



The attachment support system enables increased versatility.



You're in control with a spacious, tidy and enjoyable working environment.



The cab has ample space for your belongings.



The LCD monitor is easy to view with hi-res anti-glare screen.



In control of your comfort



Feel the difference

Hitachi's redesigned, state-of-the-art Zaxis-7 excavator cab gives you the perfect working environment. The ultra-spacious ZX220W-7 offers you an industry-leading, first-class cab with the ultimate in comfort and quality, as well as low noise levels and less vibration than the previous generation.

Feel the difference with the synchronised motion of the seat and console, designed to ensure you feel less tired at the end of the working day. Stretch out in the most spacious Hitachi cab yet, with improved pedal layout, ample head clearance and legroom. And sit comfortably thanks to the easily adjustable console height with three positions to choose from.

Easy operation comes from the new ergonomic design of the console and switches, and convenient access to controls. You can navigate quickly through the menu on the 8" LCD monitor with the multifunctional controller. The hi-res anti-glare screen is also easier to view, and the refreshed layout offers a clear display and desirable functionality – such as air conditioning, DAB+ radio and Bluetooth.

With more storage for your personal belongings, such as your coat, smartphone and drink, you'll feel instantly relaxed and ready for your shift. Added practical functions to the joysticks, such as engine idle and audio mute controls, will make your working day effortless and enjoyable.



Ergonomic multifunctional control panel provides easy access.

In control of your environment



Increase your safety

Your ability to work safely is vital, not only for your own wellbeing, but also for the successful completion of any project. To protect yourself and your machine from potential hazards, the new Hitachi Zaxis-7 excavators give you a superior view of your surroundings, so you can see the job site from all angles.

The visibility you enjoy from the cab includes an exceptional 270-degree bird's-eye view with the Aerial Angle camera system. You can choose from six image options to view the machine's immediate environment, which enables you to control your own safety – as well as that of those around you. Visibility through the cab's front window is also improved by the slim steering column (with wider adjustment angle) and smaller steering wheel.

To help you to work more confidently and efficiently, even in the most challenging of conditions, Zaxis-7 excavators are fitted with some impressive new features. From the LED work lights and the windscreen wiper with an increased sweeping area, wider mirrors (heated available as an option), to the large reflective strips on the counterweight and optional roller sunshades, you'll have the visibility you need when it matters most.

Attention to detail is also fundamental to a safe working environment – and the repositioning of the pilot shutoff lever is a perfect example. It is now within easy reach to prevent any unintentional actions. The parking brake also works with the pilot shutoff lever for added safety and convenience.



The lower first step makes entering the cab safer and easier.



Wider wiper design provides greater visibility.



Control your safety with the 270-degree view Aerial Angle camera system.



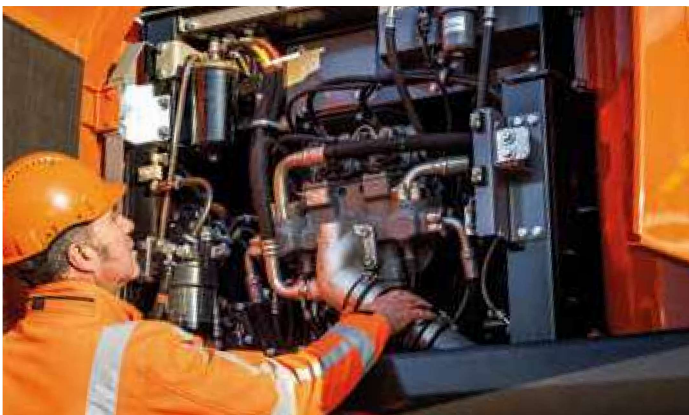
Choose between different image layouts to suit your working environment.



LED work lights improve visibility in challenging conditions.



The single-piece undercarriage frame is extremely robust.



Maintenance is easy at ground level.



Fenders on the undercarriage protect the upper structure and lights from dirt, keeping the machine clean.



Designed for durability and easy maintenance, Zaxis-7 excavators increase uptime and reduce the total cost of ownership.



In control of your assets



Boost your uptime

Completing a project on time and on budget depends on the ability of your construction equipment to perform all day, every day. That's why Hitachi owners have profited from generations of ultra-reliable and durable machinery – and the Zaxis-7 range is no exception.

The latest Hitachi wheeled excavators have been built to last, so that you can remain in complete control of your assets. They have been tested rigorously and continuously at dedicated facilities in Japan with the goal of significantly boosting your uptime.

As a result, a wide range of durable new components have been fitted to the latest Stage-V compliant machines – even down to the detail of the rigidity of the door hinges. The reliable new single-piece undercarriage benefits from greater oscillation of the axles, enhanced outrigger hydraulics, reduced risk of oil leakages, and several other improvements. Now standard on our Zaxis-7 range is a high-performance hydraulic filter to capture any dust in the hydraulic oil and help to reduce running costs.

Downtime is prevented by the durable after-treatment system, and also minimised by the priority given to easy maintenance and cleaning – saving you time and money. Peace of mind comes from such features as the two-way disconnect switch. This makes it possible to shut down power without resetting data on the monitor and prevents the battery from discharging during welding.



Manage your machine

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

Remote monitoring systems Owner's Site and ConSite send operational data daily via GPRS or satellite from your excavator to www.globaleservice.com. This includes: ratios of operating hours to enhance efficiency; fuel consumption to manage running costs; and machine location for planning purposes. ConSite summarises the information in a monthly email.

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

A unique innovation continuously monitors the quality of engine and hydraulic oil, 24/7. Data is transmitted daily via two oil sensors to Global e-Service. These detect if the oil quality has deteriorated, due to contamination or low viscosity. If this happens, you and your authorised Hitachi dealer will receive an alert.

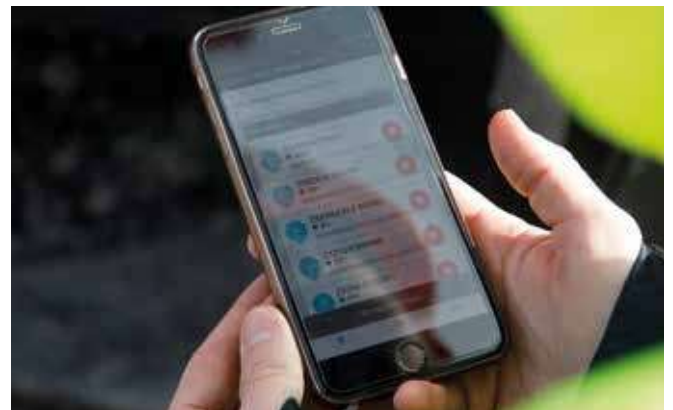
This innovative feature provides accurate estimations of when oil changes are required. It reduces maintenance and unscheduled downtime, and gives you peace of mind thanks to scheduled servicing and ultimately a higher resale value.



The unique oil sensor reduces maintenance and downtime.



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



The alerts on the ConSite Pocket App provide real-time information.



Hitachi offers a wide range of after-sales services for planning maintenance and managing running costs.



Hitachi provides the highest level of technical support.



Minimise downtime with Hitachi Genuine Parts.



HELP extended warranties and service contracts provide optimal performance.



Hitachi Premium Rental enables you to pay as you earn.



In control of your uptime



Protect your investment

If your machine will be working in severe conditions, or you want to minimise repair costs, you can take advantage of a unique extended warranty programme called HELP (Hitachi Extended Life Program) and comprehensive service contracts. These can help to optimise performance, reduce downtime and ensure a higher resale value.

We apply the same technological expertise to our wide range of high-quality parts as we do our machines. As a result, you can minimise unscheduled downtime and ensure maximum availability.

The parts range includes Hitachi Genuine Parts, Performance Parts, filters, undercarriages, and remanufactured components. We also offer ground engaging tools and buckets, which have been manufactured to the same exacting standards.

As your business grows, you may need to extend your fleet to meet the demands of new contracts. Why not try before you buy with the Hitachi Premium Rental programme? This gives you immediate access to Zaxis-7 wheeled excavators for a period of one month to a year.

Along with the reliability, quality and service you would expect from the Hitachi brand, Hitachi Premium Rental offers flexible contracts and fixed costs that make it easier for you to budget.

In control of your performance



GET more from your machine

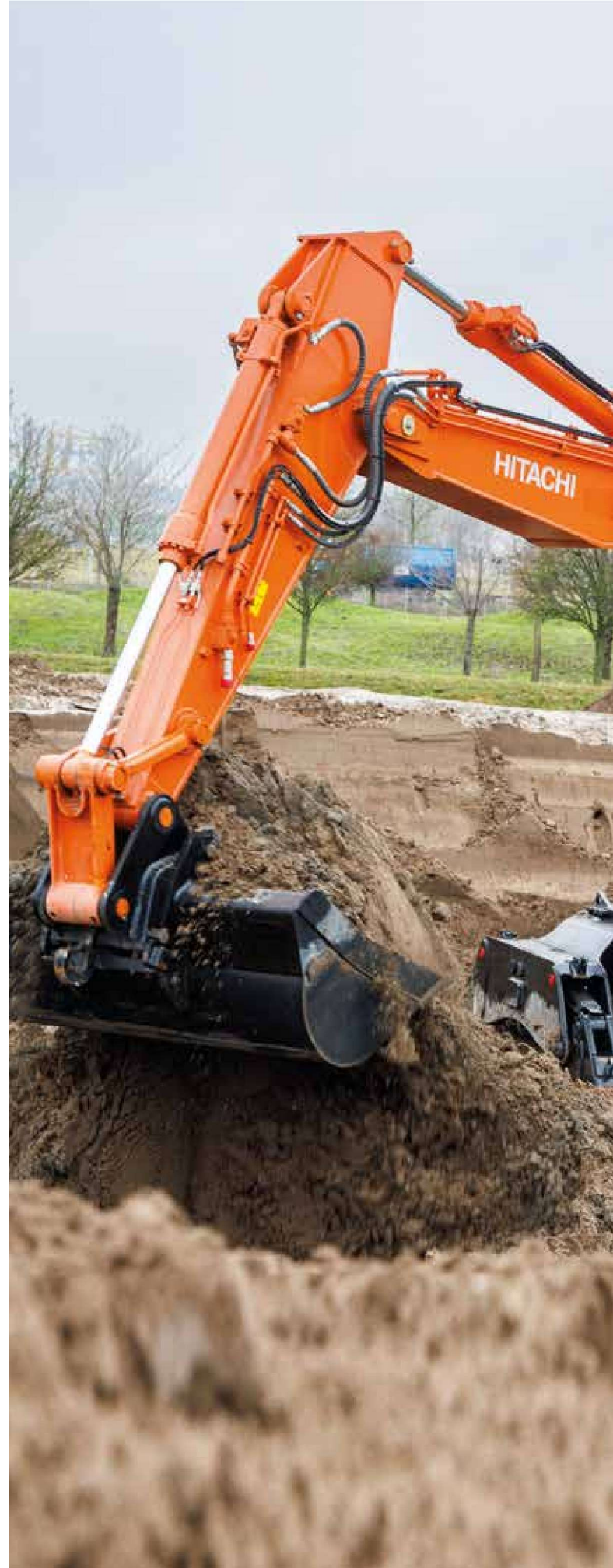
Designed to work in perfect harmony with your machine, Hitachi's buckets and ground engaging tools (GET) will increase your profit by maximising productivity and uptime. Manufactured to the same high standards as all Hitachi construction equipment, they offer unrivalled reliability and exceptional performance.

Buckets

You can increase the versatility of your excavator by choosing the right bucket for the job. For loading light materials or heavy-duty work, Hitachi buckets can be customised to meet your needs. You have a wide range of options to choose from – including digging buckets and ditch-cleaning buckets in GD and HD versions, with different capacities and widths – and quick coupler connections such as CW, pin grabber and S-coupling are also available.

Ground engaging tools

You can enhance the digging power and productivity of your excavator with Hitachi GET. Quick and safe to install and replace, they fit precisely to your attachments and can be tailored to suit the task. Using Hitachi GET can reduce your maintenance costs and downtime, lower fuel consumption and enhance the overall performance of your machine.



Hitachi buckets and GET are manufactured to the same high standards as all Hitachi construction equipment.



Hitachi buckets can be customised to suit the application.



An optional trailer support package is available for added convenience and versatility.



Hitachi GET include self-sharpening teeth and reliable adapters to ensure a precise fit.



EH dump trucks and EX ultra-large excavators



Special application excavators



Create your vision

In control of your world

When you take delivery of a Hitachi machine, you become part of the latest generation of a global family. With a 50-year heritage in designing hydraulic excavators, and a reputation as the industry's leading mining machine manufacturer, the Hitachi network will give you access to a range of exceptional construction equipment.

Like the new Zaxis-7 excavators, Hitachi wheel loaders, rigid dump trucks, and special application machines incorporate advanced technology and pioneering expertise. This is inspired by parent company Hitachi Ltd, which was founded on the philosophy to make a positive contribution to society through technology.

In addition to the latest products made at state-of-the-art facilities and built to the highest quality standards, you'll have the support of our experienced engineers and dedicated dealer personnel. You'll also benefit from market-leading services and initiatives, such as Premium Rental and Premium Used, which have been created to enhance your experience as a Hitachi customer.

Whatever vision you wish to create, Hitachi has the product, people, solutions and services you need to make it become a reality – and empower you to take control of your world.



ZW wheel loaders



Mini excavators

SPECIFICATIONS

ENGINE

Model	Isuzu 4HK1X
Type	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment	DOC+CSF+SCR system
No. of cylinders	4
Rated power	
ISO 14396 : 2002 gross	128,4 kW at 2 000 min ⁻¹
ISO 9249 : 2007 net	122 kW at 2 000 min ⁻¹
Maximum torque	670 Nm at 1 600 min ⁻¹
Piston displacement	5.193 L
Bore and stroke	115 mm x 125 mm
Batteries	2 x 12 V / 126 Ah

HYDRAULIC SYSTEM

Hydraulic Pumps

Main pumps	2 variable displacement axial piston pumps
Maximum oil flow	1 x 212 L/min
Maximum oil flow	1 x 218 L/min

Pilot pump	1 gear pump
Maximum oil flow	27.6 L/min

Steering pump	1 gear pump
Maximum oil flow	26.7 L/min

Hydraulic Motors

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

Relief Valve Settings

Implement circuit	34.3 MPa
Swing circuit	30.2 MPa
Travel circuit	35.3 MPa
Pilot circuit	4.0 MPa
Power boost	38.3 MPa

Hydraulic Cylinders

Unit: mm

	Quantity	Bore	Rod diameter
Boom (Monoblock boom)	2	125	85
Boom (2-piece boom)	2	130	85
Arm	1	135	95
Bucket	1	115	80
Positioning (2-Piece boom)	1	180	110

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 singlerow. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed	11,9 min ⁻¹
Swing torque	59,1 kNm

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)

Max. travel speed	High : 27,5 km/h
	Low : 7,4 km/h
	Creep : 2,9 km/h

Maximum traction force ... 118 kN

Gradeability

60% (31 degree) continuous

Min. turning radius

7 200 mm

Axle:

All-wheel drive.
The front axle can be locked hydraulically in any position.
Oscillating Front Axle ... ± 6°

Brakes system:

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

ENVIRONMENT

Engine Emissions

EU Stage V

Sounds Level

Sound level in cab according to ISO 6396 : 2008 LpA 71 dB(A)

External sound level according to ISO 6395 : 2008 and

EU Directive 2000/14/EC LwA 101 dB(A)

Air Conditioning System

The air conditioning system contains fluorinated greenhouse gases.

Refrigerant type: HFC-134a, GWP: 1430, Amount: 0.85 kg, CO₂e: 1.22 ton.

SERVICE REFILL CAPACITIES

Unit: L

	ZX220W-7
Fuel tank	330,0
Engine coolant	28,0
Engine oil	23,0
Swing device	6,9
Transmission	2,5
Hydraulic system	310,0
Hydraulic oil tank	115,0
DEF/AdBlue® tank	34,5
Front differential gear (STD axle)	11,0
Rear differential gear (STD axle)	14,5
Hub reduction gear	
Front axle (STD axle)	2 x 2,5
Rear axle (STD axle)	2 x 2,5

WEIGHTS

Operating Weight

		ZX220W-7	
Arm length	Stabilization	Monoblock	2-Piece
		Standard gauge / Wide gauge	Standard gauge / Wide gauge
		kg	kg
2.41 m	Rear blade	–	20 800
	Rear outrigger	–	21 100
	Outrigger and blade	–	22 100
	Front and rear outrigger	–	22 400
2.61 m	Rear blade	–	20 800
	Rear outrigger	–	21 200
	Outrigger and blade	–	22 200
	Front and rear outrigger	–	22 500
2.91 m	Rear blade	–	20 900
	Rear outrigger	–	21 200
	Outrigger and blade	–	22 200
	Front and rear outrigger	–	22 500
2.42 m	Rear blade	20 100	–
	Rear outrigger	20 400	–
	Outrigger and blade	21 400	–
	Front and rear outrigger	21 800	–
2.91 m	Rear blade	20 200	–
	Rear outrigger	20 500	–
	Outrigger and blade	21 500	–
	Front and rear outrigger	21 900	–

Including 0,80 m³ (ISO 7451 : 2007 heaped), bucket weight (660 kg) and counterweight (2 600 kg).
Counterweight : Standard 2 600 kg, Optional 4 300 kg and 5 000 kg

BUCKET AND ARM DIGGING FORCE

Unit: kN

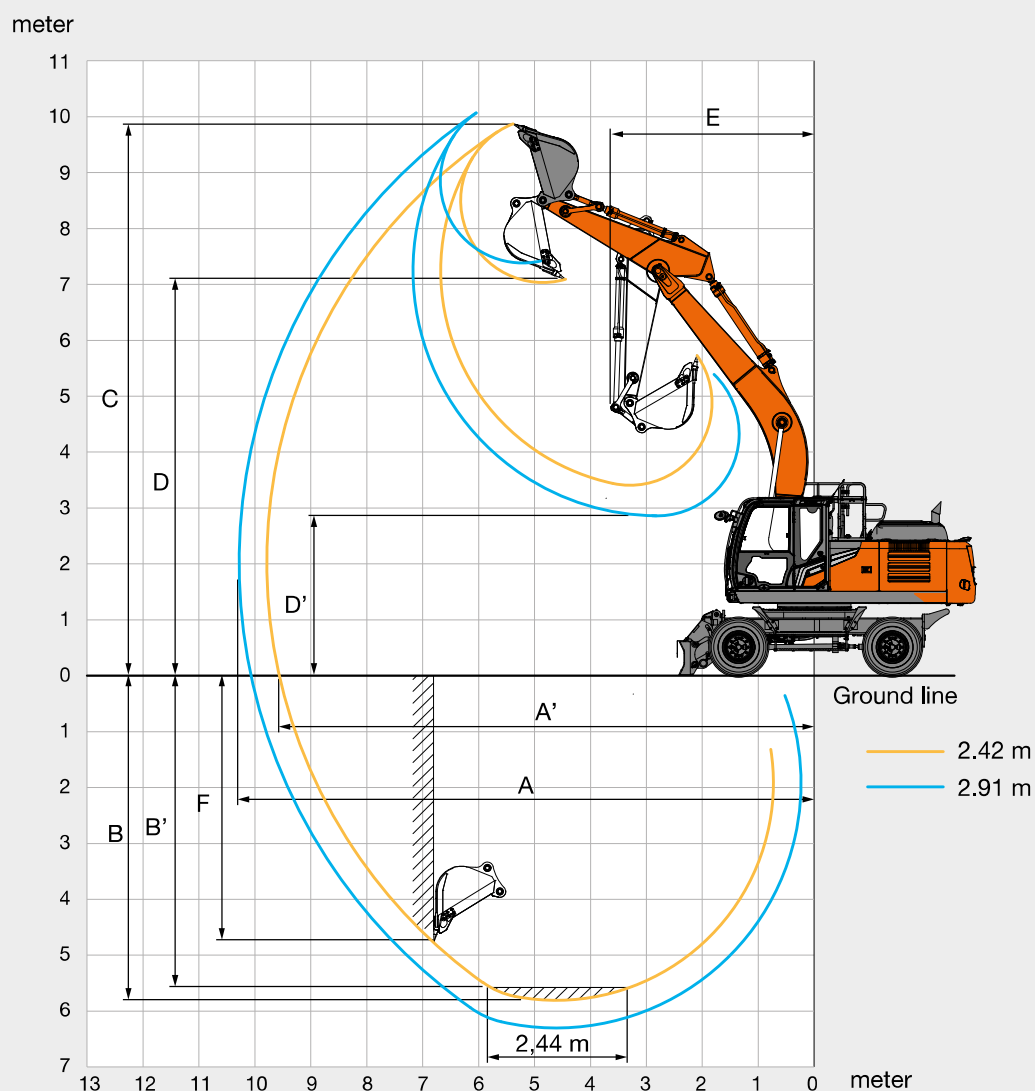
		ZX220W-7			
Boom Type	Monoblock boom		2-Piece boom		
Arm length	2.42 m	2.91 m	2.41 m	2.61 m	2.91 m
Bucket digging force* ISO 6015 : 2006	158	158	158	158	158
Arm crowd force* ISO 6015 : 2006	140	114	125	119	114

* At power boost

SPECIFICATIONS

ZX220W-7

WORKING RANGES: MONOBLOCK BOOM



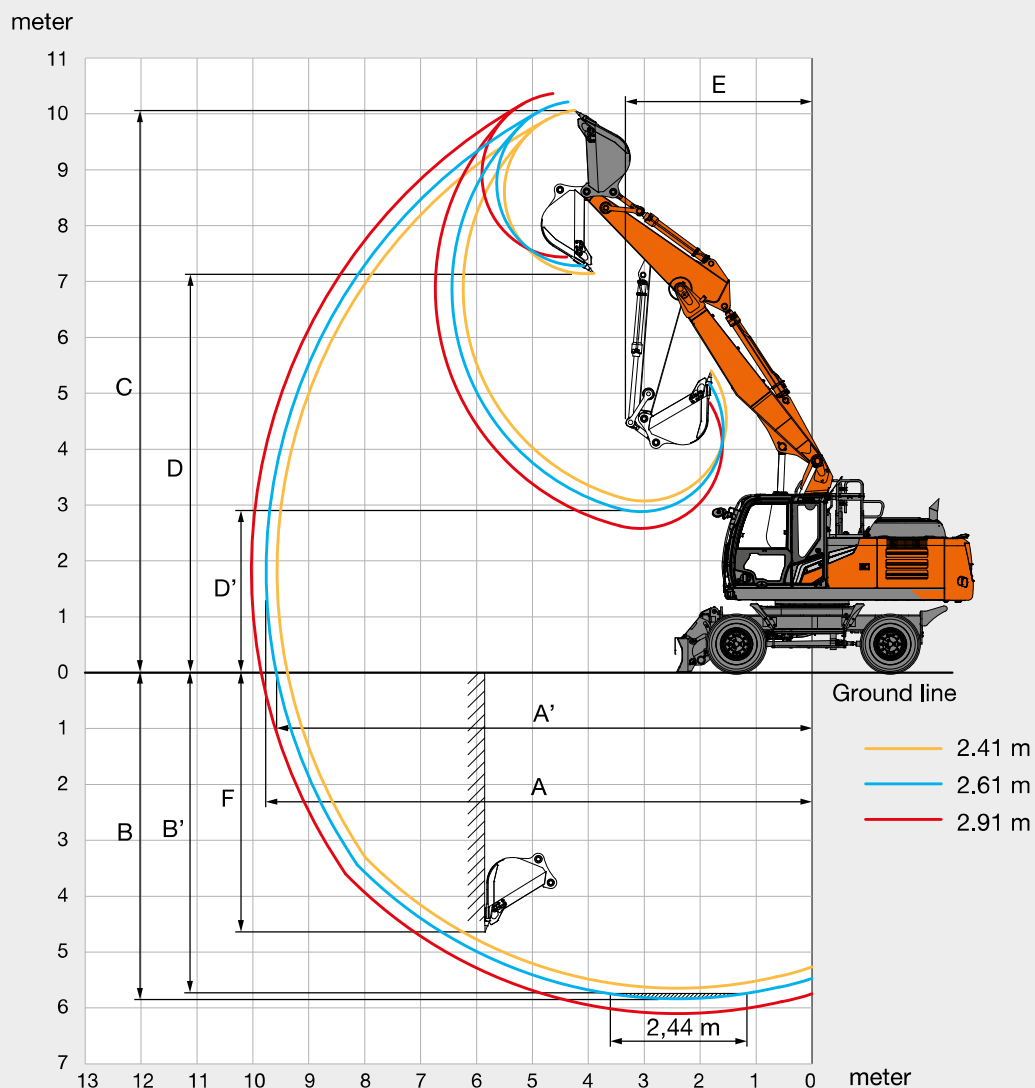
Unit: mm

Front type	ZX220W-7	
	Monoblock boom	
Arm length	2.42 m	2.91 m
A Max. digging reach	9 790	10 280
A' Max. digging reach (on ground)	9 570	10 070
B Max. digging depth	5 810	6 300
B' Max. digging depth for 2,44 m level	5 590	6 120
C Max. cutting height	9 880	10 250
D Max. dumping height	7 040	7 390
D' Min. dumping height	3 410	2 860
E Min. swing radius	3 640	3 550
F Max. vertical wall digging depth	5 080	5 770

SPECIFICATIONS

ZX220W-7

WORKING RANGES: 2-PIECE BOOM



Unit: mm

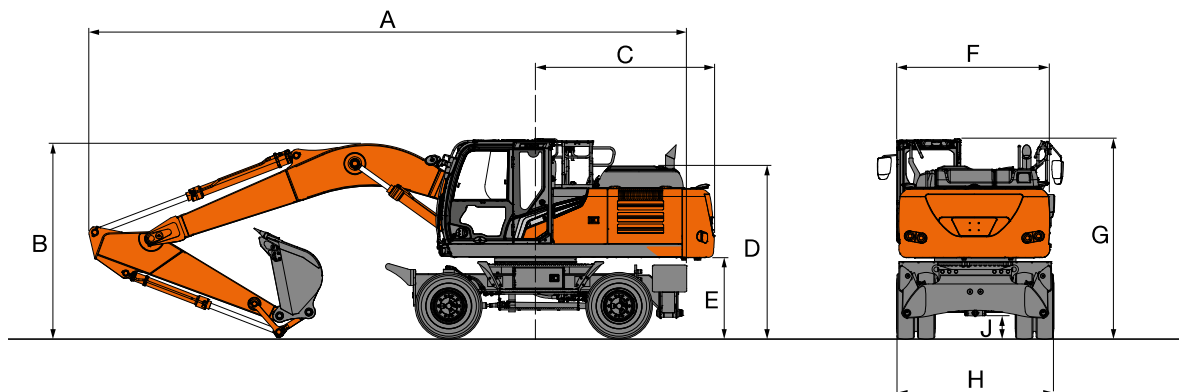
Front type	ZX220W-7		
	2-Piece boom		
Arm length	2.41m	2.61 m	2.91 m
A Max. digging reach	9 570	9 760	10 030
A' Max. digging reach (on ground)	9 380	9 580	9 850
B Max. digging depth	5 650	5 840	6 140
B' Max. digging depth for 2,44 m level	5 550	5 750	6 050
C Max. cutting height	10 070	10 210	10 370
D Max. dumping height	7 140	7 280	7 440
D' Min. dumping height	3 070	2 880	2 580
E Min. swing radius	3 330	3 400	3 420
F Max. vertical wall digging depth	4 820	5 030	5 340

SPECIFICATIONS

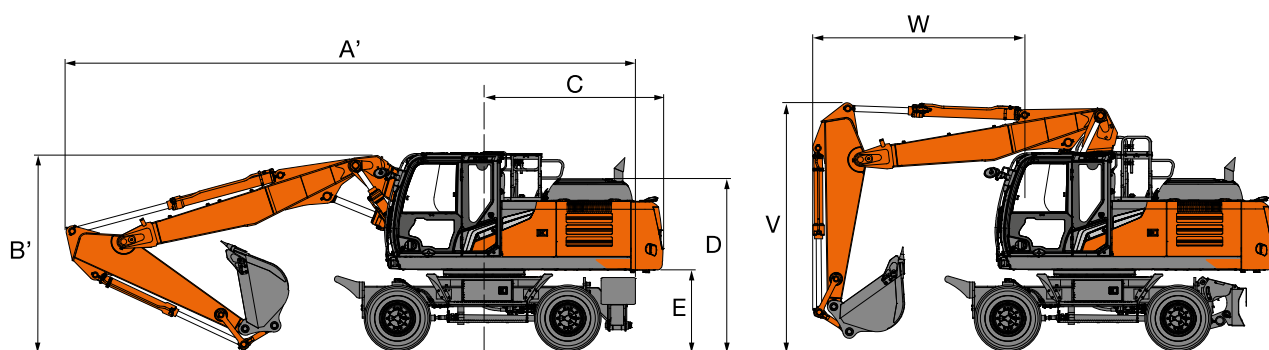
ZX220W-7

DIMENSIONS

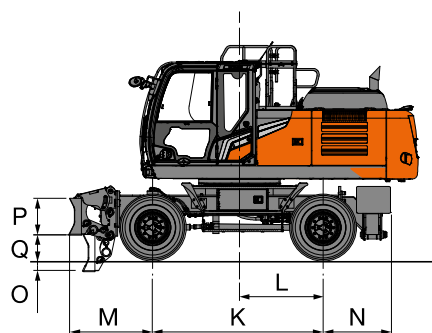
MONOBLOCK BOOM



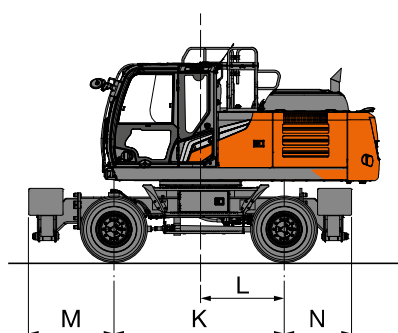
2-PIECE BOOM



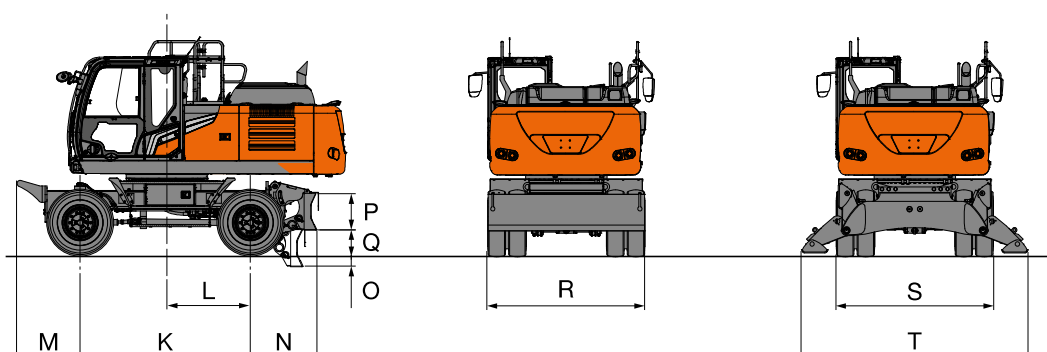
FRONT BLADE AND REAR OUTRIGGER



FRONT AND REAR OUTRIGGER



REAR BLADE



SPECIFICATIONS

ZX220W-7

DIMENSIONS

Unit: mm

		ZX220W-7				
	Stabilizer Type	Rear BL	Rear O/R	Front BL Rear O/R	Front O/R Rear BL	Front and Rear O/R
A	Overall length (with monoblock boom)					
	Arm 2.42 m	10 100	10 100	10 100	10 100	10 100
	Arm 2.91 m	10 100	10 100	10 100	10 100	10 100
A'	Overall length (with 2-piece boom)					
	Arm 2.41 m	9 645	9 645	9 645	9 645	9 645
	Arm 2.61 m	9 645	9 645	9 645	9 645	9 645
	Arm 2.91 m	9 645	9 645	9 645	9 645	9 645
B	Overall height of boom (with monoblock boom)					
	Arm 2.42 m	3 265	3 265	3 265	3 265	3 265
	Arm 2.91 m	3 225	3 225	3 225	3 225	3 225
B'	Overall height of boom (with 2-piece boom)					
	Arm 2.41 m	3 220	3 220	3 220	3 220	3 220
	Arm 2.61 m	3 270	3 270	3 270	3 270	3 270
	Arm 2.91 m	3 330	3 330	3 330	3 330	3 330
C	Rear-end swing radius	2 890	2 890	2 890	2 890	2 890
D	Engine cover height	2 770	2 770	2 770	2 770	2 770
E	Counterweight clearance	1 250	1 250	1 250	1 250	1 250
F	Overall width of upper structure	2 500	2 500	2 500	2 500	2 500
G	Overall height of cabin	3 215	3 215	3 215	3 215	3 215
H	Overall width of tires	2 540 / 2 740 *	2 540 / 2 740 *	2 540 / 2 740 *	2 540 / 2 740 *	2 540 / 2 740 *
J	Min.ground clearance	305	305	305	305	305
K	Wheel base	2 750	2 750	2 750	2 750	2 750
L	Swing-center to rear axle	1 350	1 350	1 350	1 350	1 350
M	Front overhang	1 020	1 020	1 355	1 375	1 375
N	Rear overhang	1 075	1 090	1 090	1 075	1 090
O	Max. blade lower	210	-	210	210	-
P	Blade height	600	-	600	600	-
Q	Max. blade raise	380	-	380	380	-
R	Overall blade width	2 530 / 2 730	-	2 530 / 2 730	2 530 / 2 730	-
S	Overall Width O/R Retract	-	2 470 / 2 730	2 470 / 2 730	2 470 / 2 730	2 470 / 2 730
T	Overall Width O/R Extend	-	3 650 / 3 910	3 650 / 3 910	3 650 / 3 910	3 650 / 3 910
V	Overall boom height (traveling) (for 2-Piece boom only)					
	Arm 2.41 m	3 995	3 995	3 995	3 995	3 995
	Arm 2.61 m	3 985	3 985	3 985	3 985	3 985
	Arm 2.91 m	3 985	3 985	3 985	3 985	3 985
W	Front overhang (traveling) (for 2-Piece boom only)					
	Arm 2.41 m	3 500	3 500	3 500	3 500	3 500
	Arm 2.61 m	3 500	3 500	3 500	3 500	3 500
	Arm 2.91 m	3 500	3 500	3 500	3 500	3 500

Overall machine width is the largest value of either F, H, R or S.

Transportation dimensions are A (A') , B (B') , and the largest value of either F, H, R or S.

* Equipped with wide gauge and Caliber twin tires 315 / 70R 22.5 : Dimensions H = 2 770 mm