ZAXIS 225USR SERIES

Short Rear-end Swing Version

HITACHI

ZAXIS 225 USR

■ **Engine Rated Power** : 110 kW (150 PS)

■ **Operating Weight** ZAXIS225USR : 22 000 kg
ZAXIS225USRLC : 22 500 kg
ZAXIS225USK : 22 900 kg
ZAXIS225USRLCK : 23 400 kg

■ **Backhoe Bucket** SAE, PCSA Heaped : 0.51—1.20 m^3
CECE Heaped : 0.45—1.00 m^3

HITACHI-USR
SMART & RUGGED

1.99 meter rear-end swing radius
Smaller than 12-ton class

13 % more stability than ZAXIS200
Exceeds stability of 20-ton class

12 % more production than EX225USR
(in H/P mode)

ZAXIS

FUTURISTIC PERFORMANCE

High Productivity
A truly high-performance machine

- 1.99 meter rear-end swing radius (140 mm less than ZAXIS120).
- 12% more production (compared to EX225USR).
- 110 kW (150 PS) powerful engine.
- 12% more digging force (compared to EX225USR).
- 12% less fuel consumption during light load operation from auto acceleration system (compared to normal operation).

Lower Running Costs
Stronger structural component design

- Increased wear resistance of bucket joint: WC thermal spraying.
- 40-ton class D-type frame.


Building demolition


Ditch construction


Tunnel construction


Retainer wall construction

Lower Maintenance Costs
Reduced maintenance time and expense

- Extended time between bucket joint section lubrication.
- Extended replacement interval for hydraulic oil filter.

CRES Cab
(Center pillar Reinforced Structure)
Provides Excellent Operator Comfort

- Low noise and vibration in cab.

Notes *:*
1. *Never leave the front attachment in a raised position. Make sure the front attachment is lowered to the ground before leaving the equipment unattended. (Some of the pictures in this catalog show an unmanned machine with attachments in an operating position. These were taken for demonstration purposes only and the actions shown are not recommended under normal operating conditions.)*
2. *Caution plates on the machine will vary according to country.*


◀ Sewer pipe construction


Road widening construction

Improved productivity / Shorter work time

FUTURISTIC POWER

12% increase
in Production (in H/P mode)
(compared to EX225USR)

Operates in Tight Job Sites

A rear-end swing radius that is 760 mm smaller than the ZAXIS200 and 140 mm smaller than the ZAXIS120 makes the ZAXIS225USR suitable for tough jobs in tight spaces.

Large Provides High Efficiency

The powerful engine is equipped with an intercooler to offer outstanding fuel efficiency.

107 kW (145 PS) EX225USR ▶ 110 kW (150 PS)

Excavating Power for Tough Job Sites

134 kN (13 700 kgf) EX225USR ▶ 151 kN (15 400 kgf) at power boost

More Stability than ZAXIS200 - Can Be Used in a Wide Range of Job Sites

The counterweight was specially designed for the USR model.

13% more stability than ZAXIS200

Travel and Swing Power You Can Depend on

5% more traction force than EX225USR

Auto Power Lift Increases Power on Demand

Loads are increased during lifting operations and the auto power lift function automatically provides a 6% increase in power to meet the demand.

6% increase in power automatically

Auto Acceleration System Helps Reduce Fuel Consumption

Engine speed is automatically controlled in response to lever operation. This helps reduce fuel consumption, especially during light-load work.

12% less fuel consumption than normal operation

All Excavating Operations in a Single Mode

Simply select the "digging" mode for smooth and speedy front operations.

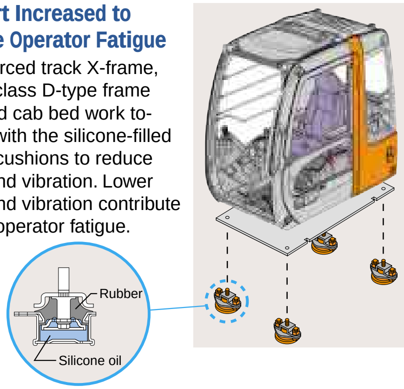
Comfort

FUTURISTIC SPACE CREATES COMFORT

CRES Cab Same as ZAXIS200

Comfort Increased to Reduce Operator Fatigue

A reinforced track X-frame, 40-ton class D-type frame and rigid cab bed work together with the silicone-filled rubber cushions to reduce noise and vibration. Lower noise and vibration contribute to less operator fatigue.



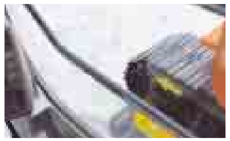
One-Glance Monitor Panel

Well-Positioned Levers and Switches

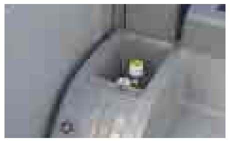
Auto Control Air Conditioner (Option)

Simply set the temperature and forget about it. Ducts are positioned to promote even air flow throughout the cab.

* Illustration shows a sample of the air flow during bi-level control.



Improved downward visibility



Storage box

Easy lock front window latch

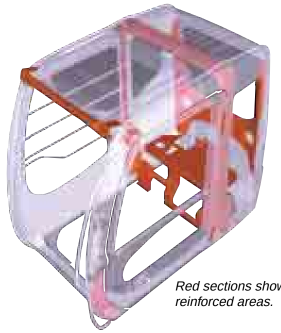
Drink holder

SAFETY

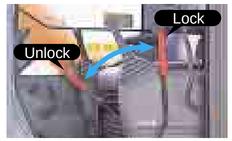
CRES Cab (CRES : Center pillar Reinforced Structure)

** The CRES cab meets OPG top guard level I (ISO).*

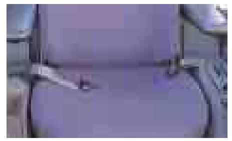
The cab is designed with "just in case" protection for the operator in mind. The rigid cab design can help prevent injury to the operator during an accident.



Red sections show reinforced areas.

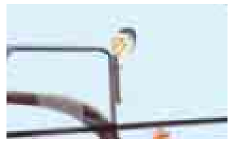


Pilot-control shut-off lever



Retractable seat belt

Left side rearview mirror



Right side rearview mirror

Easy maintenance and high durability

FUTURISTIC FUNCTIONS KEEP COSTS DOWN

Lower running costs

1. New arm design with thicker steel
2. Bucket joint pins lubricated through bosses
3. WC thermal spraying for arm and bucket joint sections
4. New HN bushing used for front sections
5. Flanged pin is used for the boom/arm joint sections and the boom foot section
6. Increased pin diameter of boom cylinder rod and boom and arm joints
7. Reinforcing rib for door covers
8. 40-ton class D-type frame
9. Increased rigidity of the track frame
10. Reinforced resin thrust plates used for front sections

WC (Tungsten Carbide) Thermal Spraying

Used at arm end and bucket connection to increase wear resistance and reduce jerking.

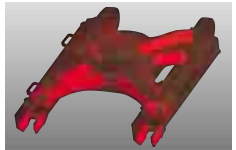
New HN Bushing Used

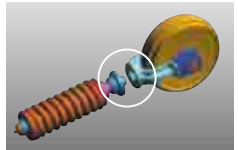
A special grease groove is used to enhance grease retention inside the HN bushing.

Time between lubrication extended to 500 hours

Reinforced Resin Thrust Plates

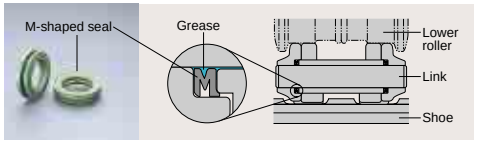
Increased wear resistance helps prevent squeaking.


Reinforced track frame sections (shown in red)


Insertion type idler yoke

Rigid Undercarriage

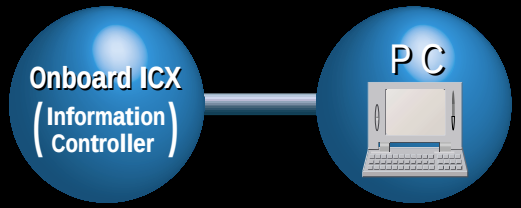
Strong undercarriage section for increased durability. Designed for tough job sites.



Longer Track Link Service Life

The M-shaped track link seal is used to enhance grease retention.

Equipment Operation Status Report



Z A X I S

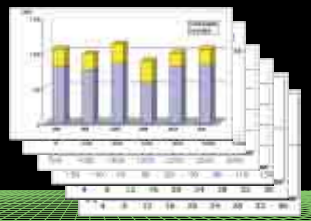
INFORMATION TECHNOLOGY SUPPORT

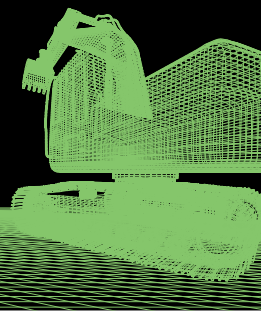
Providing the data for making the right decisions.

Information Services for Equipment

- Operation record
- Error record
- Alarm record
- Frequency distribution

Radiator coolant / hydraulic temperature etc.
and others.





Smart Saving

Advanced technology helps reduce maintenance costs

500 Hours Between Lubrication for Bucket Joint Section and Front Sections (Compared to EX225USR)

The use of the new HN bushing and WC thermal spraying process have helped dramatically increase the time between lubrication. *(See the Operators Manual)*

5 X longer for bucket section **2 X longer for front sections**

** Estimated values. The actual time between lubrication will vary according to actual work conditions.*

Undercarriage Designed for Easy Mud Removal

Tool Box Space

Hydraulic Oil Filter Only Needs Replacement Every 1000 Hours

The hydraulic oil filter can be used nearly twice as long as the previous model, dramatically reducing maintenance time and expense.

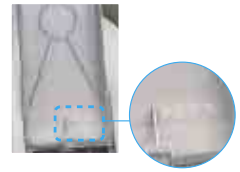
1 000 hours between hydraulic oil filter replacement

Easy-to-change Oil Filter

Can be changed from ground level.

** Picture shows arrangement as viewed from ground level looking up.*

Environmentally Friendly



- **Labeled Plastic Parts**
  The plastic parts indicate the type of plastic used to help speed recycling.
- **Lead-free Wiring**
- **Aluminium Radiator and Oil Cooler**

ZAXIS225USRK

Demolition Version K-Series (ZAXIS225USRK/ ZAXIS225USRLCK)

Designed exclusively for use with various demolition attachments.

❶ Reinforced bucket cylinder
❷ Attachment basic piping
❸ Damage prevention plate
❹ Reinforced link B for demolition
❺ K-reinforced bucket
❻ Front glass lower guard
❼ 6.0 mm (0.24") thickness undercover
❽ Track undercover
❾ Reinforced side steps (bolt mounted)
❿ 600 mm (24") reinforced triple grouser shoe
⓫ K-cab (CRES cab with overhead window & guard)
⓬ High-performance full-flow filter (with restriction indicator)
⓭ 200 kg (440 lb) added heavier counterweight
⓮ Air cleaner double filters
⓯ K-boom 5.68 m (18' 8") with small swing radius bracket

OPTION

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

Notes: Photo shown model equipped with optional breaker and crusher pipings.
Total weight of attachments to be mounted is from a standpoint of machine stability.
For more details, contact your distributor.

ENGINE

Model ..... Isuzu AA-6BG1T
Type ..... 4-cycle water-cooled, direct injection
Aspiration ..... Turbocharged, intercooled
No. of cylinders 6
Rated power
DIN 6271, net ..... H/P mode : 110 kW (150 PS) at 2 100 min^{-1} (rpm)
P mode : 103 kW (140 PS) at 1 900 min^{-1} (rpm)
SAE J1349, net ..... H/P mode : 108 kW (147 hp) at 2 100 min^{-1} (rpm)
P mode : 101 kW (137 hp) at 1 900 min^{-1} (rpm)
Maximum torque ..... 550 N·m (56 kgf·m, 405 lbf·ft) at 1 600 min^{-1} (rpm)
Piston Displacement ..... 6.494 L (396 in^3)
Bore and stroke ..... 105 mm x 125 mm (4.13" x 4.92")
Batteries ..... 2 x 12 V / 97 AH
Governor ..... Mechanical speed control with stepping motor

HYDRAULIC SYSTEM

- Work mode selector
  Digging mode / Attachment mode
- Engine speed sensing system

Main pumps ..... 2 variable displacement axial piston pumps
Maximum oil flow ..... 2 x 194 L/min (51.3 US gpm, 42.7 Imp gpm)
Pilot pump ..... 1 gear pump
Max. oil flow ..... 32 L/min (8.5 US gpm, 7.0 Imp gpm)

Hydraulic Motors

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

Relief Valve Settings

Implement circuit ..... 34.3 MPa (350 kgf/cm^2, 4 980 psi)
Swing circuit ..... 30.4 MPa (310 kgf/cm^2, 4 410 psi)
Travel circuit ..... 34.3 MPa (350 kgf/cm^2, 4 980 psi)
Pilot circuit ..... 3.9 MPa (40 kgf/cm^2, 570 psi)
Power boost ..... 36.3 MPa (370 kgf/cm^2, 5 260 psi)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Dimensions

	Qty.	Bore	Rod diameter
Boom	2	120 mm (4.72")	85 mm (3.35")
Arm	1	135 mm (5.31")	95 mm (3.74")
Bucket	1	115 mm (4.53")	80 mm (3.15")
K-bucket	1	125 mm (4.92")	85 mm (3.35")

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.
Demolition version ZAXIS225USRK and ZAXIS225USRLCK use other types of high-performance full flow filters with clog indicator.

CONTROLS

Pilot controls. Hitachi's original shockless valve and quick warm-up system built in the pilot circuit. Hydraulic warm-up control system for hydraulic oil.
Implement levers 2
Travel levers with pedals 2
Attachment pedals (Demolition Version ZAXIS225USRK / ZAXIS225USRLCK) 1

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. D-section frame for resistance to deformation.

Swing Mechanism

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.
Swing speed ..... 13.3 min^{-1} (rpm)

Operator's Cab

Independent roomy cab, 1 005 mm (40") wide by 1 675 mm (66") high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for visibility. Openable front windows (upper and lower). Adjustable, reclining seat with armrests; movable with or without control levers.
* International Standardization Organization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame. Lubricated track rollers, idlers, and sprockets with floating seals.
Track shoes with triple grousers made of induction-hardened rolled alloy. Flat and triangular shoes are also available. Heat-treated connecting pins with dust seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

Numbers of Rollers and Shoes on Each Side

Upper rollers 2
Lower rollers 7: ZAXIS225USR/225USRK
8: ZAXIS225USRLC/225USRLCK
Track shoes 46: ZAXIS225USR/225USRK
49: ZAXIS225USRLC/225USRLCK
Track guard 1: ZAXIS225USR/225USRK
1: ZAXIS225USRLC/225USRLCK

Traction Device

Each track driven by 2-speed axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable. Parking brake is spring-set/hydraulic-released disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel.
Automatic transmission system: High-Low.
Travel speeds ..... High: 0 to 5.3 km/h (3.3 mph)
Low: 0 to 3.3 km/h (2.1 mph)
Maximum traction force ..... 200 kN (20 400 kgf, 45 000 lbf)
Gradeability ..... 35° (70%) continuous

WEIGHTS AND GROUND PRESSURE

Equipped with 5.68 m (18'8") boom, 2.91 m (9'7") arm and 0.80 m³ (1.05 yd³: SAE, PCSA heaped) bucket.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	600 mm (24")	22 000 kg (48 500 lb)	49 kPa (0.50 kgf/cm², 7.11 psi)
		22 500 kg (49 600 lb)	47 kPa (0.48 kgf/cm², 6.83 psi)
	700 mm (28")	22 400 kg (49 400 lb)	43 kPa (0.44 kgf/cm², 6.26 psi)
		22 900 kg (50 500 lb)	41 kPa (0.42 kgf/cm², 5.97 psi)
	800 mm (31")	22 700 kg (50 000 lb)	38 kPa (0.39 kgf/cm², 5.55 psi)
		23 200 kg (51 200 lb)	36 kPa (0.37 kgf/cm², 5.26 psi)
Flat	600 mm (24")	22 800 kg (50 300 lb)	51 kPa (0.52 kgf/cm², 7.39 psi)
		23 300 kg (51 400 lb)	48 kPa (0.49 kgf/cm², 6.97 psi)
Triangular	760 mm (30")	23 000 kg (50 700 lb)	40 kPa (0.41 kgf/cm², 5.83 psi)
		23 600 kg (52 000 lb)	38 kPa (0.39 kgf/cm², 5.55 psi)
	900 mm (35")	24 000 kg (52 900 lb)	35 kPa (0.36 kgf/cm², 5.12 psi)
		24 600 kg (54 200 lb)	33 kPa (0.34 kgf/cm², 4.83 psi)

Figures in [ ] are data on the ZAXIS225USRLC.

Weights of the basic machines [including 6 710 kg (14 800 lb), 6 910 kg (15 200 lb) K-type counterweight and triple grouser shoes, excluding front-end attachment, fuel, hydraulic oil, engine oil and coolant etc.] are:

ZAXIS225USR..... 17 800 kg (39 200 lb) with 600 mm (24") shoes
ZAXIS225USRLC..... 18 300 kg (40 300 lb) with 600 mm (24") shoes
ZAXIS225USRK..... 18 300 kg (40 300 lb) with 600 mm (24") reinforced shoes
ZAXIS225USRLCK ... 18 800 kg (41 500 lb) with 600 mm (24") reinforced shoes

ZAXIS225USRK / ZAXIS225USRLCK (Demolition version):
Equipped with 5.68 m (18'8") K-boom with small swing radius bracket, 2.91 m (9'7") K-arm, and 0.80 m³ (1.05 yd³: SAE, PCSA heaped) K-reinforced bucket.

	Shoe width	Operating weight	Ground pressure
ZAXIS225USRK	Reinforced Triple grouser 600 mm (24")	22 900 kg (50 500 lb)	51 kPa (0.52 kgf/cm², 7.39 psi)
ZAXIS225USRLCK		23 400 kg (51 600 lb)	48 kPa (0.49 kgf/cm², 6.97 psi)

SERVICE REFILL CAPACITIES

	liters	US gal	Imp gal
Fuel tank	320.0	84.5	70.4
Engine coolant	23.0	6.1	5.1
Engine oil	25.0	6.6	5.5
Swing mechanism	6.2	1.6	1.4
Travel final device (each side)	7.2	1.9	1.6
Hydraulic system	200.0	52.8	44.0
Hydraulic oil tank	135.0	35.7	29.7

BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design. 5.68 m (18'8") boom, and 2.22 m (7'3"), 2.91 m (9'7") and 4.41 m (14'6")* arms are available. Bucket is of welded steel structure. Side clearance adjust mechanism provided on the bucket joint bracket.
* 2.91 m (9'7") arm + 1.50 m (4'11") extension arm

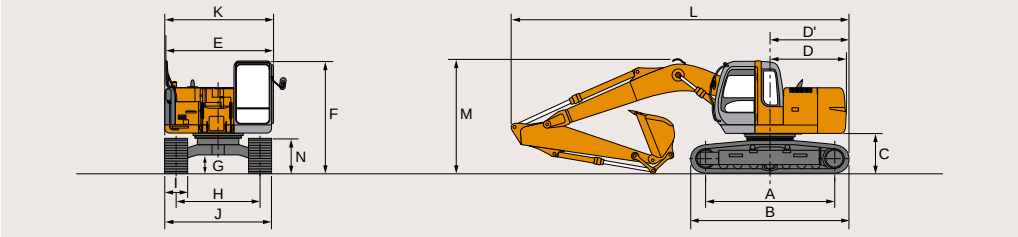
Buckets

Capacity SAE, PCSA heaped	Capacity CECE heaped	Width Without side cutters	Width With side cutters	No. of teeth	Weight	Recommendation ZAXIS225USR 2.22 m (7'3") arm	ZAXIS225USR 2.91 m (9'7") arm	ZAXIS225USR 4.41 m*5 (14'6") arm	ZAXIS225USRLC 2.22 m (7'3") arm	ZAXIS225USRLC 2.91 m (9'7") arm	ZAXIS225USRLC 4.41 m*5 (14'6") arm	ZAXIS 225USRK 2.91 m (9'7") K-arm	ZAXIS 225USRLCK 2.91 m (9'7") K-arm
0.51 m³ (0.67 yd³)	0.45 m³	720 mm (28")	850 mm (33")	3	530 kg (1 170 lb)	◎	◎	○	◎	◎	○	◎	◎
0.80 m³ (1.05 yd³)	0.70 m³	1 030 mm (41")	1 140 mm (45")	5	670 kg (1 480 lb)	◎	◎	—	◎	◎	—	◎	◎
*1 0.80 m³ (1.05 yd³)	0.70 m³	1 030 mm (41")	1 140 mm (45")	5	670 kg (1 480 lb)	◎	◎	—	◎	◎	—	◎	◎
0.91 m³ (1.19 yd³)	0.80 m³	1 150 mm (45")	1 280 mm (50")	5	720 kg (1 590 lb)	◎	○	—	◎	◎	—	○	◎
1.10 m³ (1.44 yd³)	0.90 m³	1 330 mm (52")	1 460 mm (58")	6	780 kg (1 720 lb)	□	—	—	□	○	—	—	○
1.20 m³ (1.57 yd³)	1.00 m³	1 450 mm (57")	—	6	690 kg (1 520 lb)	□	—	—	□	—	—	—	—
*1 0.80 m³ (1.05 yd³)	0.70 m³	1 030 mm (41")	1 140 mm (45")	5	770 kg (1 700 lb)	◎	◎	—	◎	◎	—	◎	◎
*2 0.80 m³ (1.05 yd³)	0.70 m³	1 030 mm (41")	1 140 mm (45")	5	770 kg (1 700 lb)	◎	◎	—	◎	◎	—	◎	◎
*3 0.80 m³ (1.05 yd³)	0.70 m³	1 030 mm (41")	1 140 mm (45")	5	770 kg (1 700 lb)	◎	◎	—	◎	◎	—	◎	◎
*4 0.80 m³ (1.05 yd³)	0.70 m³	1 030 mm (41")	1 140 mm (45")	5	770 kg (1 700 lb)	◎	◎	—	◎	◎	—	◎	◎
*1 0.91 m³ (1.19 yd³)	0.80 m³	1 150 mm (45")	1 280 mm (50")	5	830 kg (1 830 lb)	◎	○	—	◎	◎	—	○	◎
Ripper bucket: 0.60 m³ (0.78 yd³: CECE heaped), Width 800 mm (31")				3	950 kg (2 090 lb)	●	—	—	●	—	—	—	—
One-point ripper				1	540 kg (1 190 lb)	●	—	—	●	—	—	—	—
Clamshell bucket: 0.60 m³ (0.78 yd³: CECE heaped), Width 940 mm (37")				8	1 130 kg (2 490 lb)	◎	◎	—	◎	◎	—	◎	◎
Slope-finishing blade: Width 1 100 mm (43"), length 1 800 mm (71")					590 kg (1 300 lb)	◇	◇	—	◇	◇	—	—	—

* Level-pin-type bucket
*1 K-reinforced bucket
*2 Level-pin-type reinforced bucket
*3 Super V teeth type reinforced bucket
*4 H-bucket
*5 2.91 m (9'7") arm + 1.50 m (4'11") extension arm

◎ Suitable for materials with density of 1 800 kg/m³ (3 030 lb/yd³) or less
○ Suitable for materials with density of 1 600 kg/m³ (2 700 lb/yd³) or less
□ Suitable for materials with density of 1 100 kg/m³ (1 850 lb/yd³) or less
● Heavy-duty service
◇ Slope-finishing service
— Not applicable

DIMENSIONS

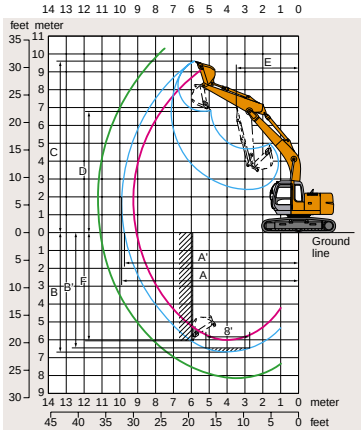


Unit: mm (ft in)

		ZAXIS225USR	ZAXIS225USRLC	ZAXIS225USRK	ZAXIS225USRLCK
A	Distance between tumblers	3 370 (11'1")		3 660 (12'0")	
B	Undercarriage length	4 170 (13'8")		4 460 (14'8")	
*C	Counterweight clearance	1 020 (3'4")		1 020 (3'4")	
D	Rear-end swing radius	1 990 (6'6")		1 990 (6'6")	
D'	Rear-end length	2 090 (6'10")		2 230 (7'4")	
E	Overall width of upperstructure	2 710 (8'11")		2 710 (8'11")	
F	Overall height of cab	2 950 (9'8")	2 950 (9'8")	3 080 (10'1")	3 080 (10'1")
*G	Min. ground clearance	450 (1'6")		450 (1'6")	
H	Track gauge	2 200 (7'3")		2 390 (7'10")	
I	Track shoe width	G 600 (24")		G 600 (24")	
J	Undercarriage width	2 800 (9'2")		2 990 (9'10")	
K	Overall width	2 860 (9'5")		2 990 (9'10")	
L	Overall length				
	With 2.22 m (7'3") arm	8 990 (29'6")	9 130 (29'11")	—	—
	With 2.91 m (9'7") arm	8 870 (29'1")	9 010 (29'7")	**8 870 (29'1")	**9 010 (29'7")
	With 4.41 m (14'6") arm	9 460 (31'10")	9 460 (31'10")	—	—
M	Overall height of boom				
	With 2.22 m (7'3") arm	3 130 (10'3")	3 130 (10'3")	—	—
	With 2.91 m (9'7") arm	2 970 (9'9")	2 970 (9'9")	**2 970 (9'9")	**2 970 (9'9")
	With 4.41 m (14'6") arm	3 550 (11'8")	3 550 (11'8")	—	—
N	Track height With triple grouser shoes	920 (3'0")	920 (3'0")		

* Excluding track shoe lug. G: Triple grouser shoe
** Equipped with K-front

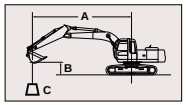
WORKING RANGES



Unit: mm (ft in)

Arm length		ZAXIS225USR / ZAXIS225USRLC 2.22 m (7'3")	ZAXIS225USR / ZAXIS225USRLC 2.91 m (7'3")	ZAXIS225USR / ZAXIS225USRLC 4.41 m (14'6")*	ZAXIS225USRK / ZAXIS225USRLCK 5.68 m (18'8") K-boom 2.91 m (9'7") K-arm
A Max. digging reach		9 250 (30'4")	9 910 (32'6")	11 260 (36'11")	9 910 (32'6")
A' Max. digging reach (on ground)		9 080 (29'9")	9 750 (32'0")	11 100 (36'5")	9 750 (32'0")
B Max. digging depth		5 980 (19'7")	6 670 (21'11")	8 160 (26'9")	5 980 (19'7")
B' Max. digging depth (8' level)		5 740 (18'10")	6 490 (21'4")	8 030 (26'4")	5 770 (18'11")
C Max. cutting height		9 170 (30'1")	9 600 (31'6")	10 220 (33'6")	10 380 (34'1")
D Max. dumping height		6 390 (21'0")	6 780 (22'3")	7 410 (24'4")	7 480 (24'7")
E Min. swing radius		3 530 (11'7")	3 540 (11'7")	3 540 (11'7")	2 720 (8'11")
F Max. vertical wall		5 140 (16'10")	6 050 (19'10")	7 540 (24'9")	5 370 (17'7")
Bucket digging force**	ISO	151 kN (15 400 kgf , 34 000 lbf)			
	SAE : PCSA	129 kN (13 200 kgf , 29 1000 lbf)			
Arm crowd force**	ISO	136 kN (13 900 kgf, 30 600 lbf)	109 kN (11 100 kgf, 24 500 lbf)	80 kN (8 200 kgf, 17 900 lbf)	109 kN (11 100 kgf, 24 500 lbf)
	SAE : PCSA	131 kN (13 400 kgf, 29 500 lbf)	102 kN (10 400 kgf, 22 900 lbf)	78 kN (8 000 kgf, 17 500 lbf)	102 kN (10 400 kgf, 22 900 lbf)

Excluding track shoe lug * 2.91 m (9'6") arm + 1.50 m (4'11") extension arm ** At power boost



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

METRIC MEASURE

ZAXIS225USR

Rating over-side or 360 degrees | Rating over-front | Unit: 1 000 kg

Conditions	Load point height	Load radius 3 m		4 m		5 m		6 m		7 m		8 m		At max. reach		
																meter
Boom 5.68 m Arm 2.91 m Bucket SAE, PCSA : 0.80 m³ CECE : 0.70 m³ Shoe 600 mm	6 m									3.41	*3.79			2.32	*2.38	8.64
	4 m							4.31	*4.34	3.30	*4.14	2.58	*4.05	1.91	*2.39	9.37
	2 m			7.26	*9.43	5.23	*6.95	3.95	*5.71	3.08	*4.99	2.45	4.02	1.76	*2.55	9.57
	0 (Ground)			6.69	*7.80	4.80	8.14	3.66	6.09	2.89	4.79	2.32	3.88	1.81	*2.91	9.28
	−2 m	*7.90	*7.90	6.66	*11.4	4.68	8.00	3.55	5.97	2.80	4.69	2.28	3.83	2.18	3.57	8.43
	−4 m	11.2	*12.4	6.81	*9.97	4.77	8.10	3.60	6.03							

Conditions	Load point height	Load radius 3 m		4 m		5 m		6 m		7 m		8 m		At max. reach		
																meter
Boom 5.68 m Arm 2.22 m Bucket SAE, PCSA : 0.80 m³ CECE : 0.70 m³ Shoe 600 mm	6 m							*4.34	*4.34					2.75	*3.90	7.88
	4 m			*6.69	*6.69	*5.58	*5.58	4.22	*4.99	3.25	*4.68			2.21	3.60	8.69
	2 m					5.09	*7.77	3.89	*6.26	3.06	4.97	2.45	4.01	2.03	3.37	8.90
	0 (Ground)					4.78	8.10	3.66	6.08	2.90	4.80	2.36	3.91	2.11	3.52	8.59
	−2 m			6.78	*10.1	4.75	8.07	3.60	6.02	2.86	4.76			2.56	4.22	7.65
	−4 m	*10.6	*10.6	6.98	*8.96	4.90	*7.44	3.74	*5.98							

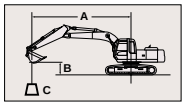
ZAXIS225USRLC

Unit: 1 000 kg

Conditions	Load point height	Load radius 3 m		4 m		5 m		6 m		7 m		8 m		At max. reach		
																meter
Boom 5.68 m Arm 2.91 m Bucket SAE, PCSA : 0.80 m³ CECE : 0.70 m³ Shoe 600 mm	6 m									*3.79	*3.79			*2.38	*2.38	8.64
	4 m					*4.69	*4.69	*4.34	*4.34	3.71	*4.14	2.91	*4.05	2.18	*2.39	9.37
	2 m			8.25	*9.43	5.90	*6.95	4.46	*5.71	3.49	*4.99	2.78	*4.54	2.03	*2.55	9.57
	0 (Ground)			7.67	*7.80	5.46	*8.65	4.16	*6.90	3.29	5.52	2.66	4.47	2.09	*2.91	9.28
	−2 m	*7.90	*7.90	7.63	*11.4	5.34	*9.00	4.04	6.91	3.20	5.42	2.61	4.42	2.49	*3.61	8.43
	−4 m	*12.4	*12.4	7.79	*9.97	5.43	*8.11	4.10	*6.65							

Conditions	Load point height	Load radius 3 m		4 m		5 m		6 m		7 m		8 m		At max. reach		
																meter
Boom 5.68 m Arm 2.22 m Bucket SAE, PCSA : 0.80 m³ CECE : 0.70 m³ Shoe 600 mm	6 m							*4.34	*4.34					3.09	*3.90	7.88
	4 m			*6.69	*6.69	*5.58	*5.58	4.73	*4.99	3.66	*4.68			2.51	*3.94	8.69
	2 m					5.76	*7.77	4.39	*6.26	3.46	*5.41	2.78	4.60	2.32	3.87	8.90
	0 (Ground)					5.44	*9.01	4.15	7.03	3.30	5.52	2.69	4.50	2.42	4.05	8.59
	−2 m			7.75	*10.1	5.41	*8.88	4.10	6.96	3.26	5.48			2.91	4.85	7.65
	−4 m	*10.6	*10.6	7.96	*8.96	5.57	*7.44	4.24	*5.98							

Notes: 1. Ratings are based on SAE J1097.
2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is a hook (not standard equipment) located on the back of the bucket.
4. *Indicates load limited by hydraulic capacity.



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

METRIC MEASURE

ZAXIS225USRK

Rating over-side or 360 degrees | Rating over-front | Unit: 1 000 kg

Conditions	Load point height	Load radius 3 m		4 m		5 m		6 m		7 m		8 m		At max. reach		
																meter
K-boom 5.68 m K-arm 2.91 m K-bucket SAE, PCSA : 0.80 m³ CECE : 0.70 m³ Shoe 600 mm	8 m							*3.17	*3.17					*2.45	*2.45	7.18
	6 m							*4.54	*4.54	3.39	*3.97			*2.25	*2.25	8.64
	4 m			*5.47	*5.47	*5.60	*5.60	4.32	*5.17	3.27	*4.66	2.52	4.16	1.84	*2.26	9.37
	2 m			7.32	*10.0	5.24	*7.50	3.93	*6.10	3.04	5.03	2.39	4.01	1.69	*2.42	9.57
	0 (Ground)			6.72	*7.60	4.79	*8.23	3.62	6.15	2.83	4.81	2.26	3.87	1.74	*2.78	9.28
	−2 m	*7.68	*7.68	6.69	*9.05	4.67	*7.53	3.50	6.01	2.74	4.71	2.21	3.82	2.07	*3.30	8.43
	−4 m			*6.33	*6.33	4.77	*5.47	3.57	*4.49	2.83	*3.31					

ZAXIS225USRLCK

Conditions	Load point height	Load radius 3 m		4 m		5 m		6 m		7 m		8 m		At max. reach		
																meter
K-boom 5.68 m K-arm 2.91 m K-bucket SAE, PCSA : 0.80 m³ CECE : 0.70 m³ Shoe 600 mm	8 m							*3.17	*3.17					*2.45	*2.45	7.18
	6 m							*4.54	*4.54	3.81	*3.97			*2.25	*2.25	8.64
	4 m			*5.47	*5.47	*5.60	*5.60	4.84	*5.17	3.69	*4.66	2.87	*4.22	2.12	*2.26	9.37
	2 m			8.34	*10.0	5.93	*7.50	4.45	*6.10	3.45	*5.19	2.73	*4.55	1.96	*2.42	9.57
	0 (Ground)			*7.60	*7.60	5.47	*8.23	4.14	*6.62	3.24	*5.50	2.60	4.48	2.02	*2.78	9.28
	−2 m	*7.68	*7.68	7.69	*9.05	5.35	*7.53	4.01	*6.21	3.15	*5.12	2.55	*4.13	2.38	*3.30	8.43
	−4 m			*6.33	*6.33	5.45	*5.47	4.08	*4.49	3.24	*3.31					

Notes: 1. Ratings are based on SAE J1097.
2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is a hook (not standard equipment) located on the back of the bucket.
4. *Indicates load limited by hydraulic capacity.

ZAXIS225USR SERIES

STANDARD EQUIPMENT

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

ENGINE
- H/P mode control
- E mode control
- 50 A alternator
- Dry-type air filter with evacuator valve (with safety element)
- Cartridge-type engine oil filter
- Cartridge-type fuel filter
- Radiator and oil cooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system
- Auto acceleration system

HYDRAULIC SYSTEM
- Work mode selector
- Engine speed sensing system
- E-P control system
- Power boost
- Auto power lift
- Quick warm-up system for pilot circuit
- Shockless valve in pilot circuit
- Boom-arm anti-drift valve
- Control valve with main relief valve
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter

CAB
CRES (Center pillar Reinforced Structure) cab
- OPG top guard fitted level Ⅰ (ISO) compliant cab.
- All-weather sound-suppressed steel cab
- Tinted (bronze color) glass windows
- 4 fluid-filled elastic mounts
- Openable front windows-upper, and lower and left side windows
- Intermittent windshield retractable wipers
- Front window washer
- Adjustable reclining seat with adjustable armrests
- Footrest
- Electric double horn
- AM - FM radio with digital clock
- Auto-idle / acceleration selector
- Seat belt
- Drink holder
- Cigar lighter
- Ashtray
- Storage box
- Glove compartment
- Floor mat
- Heater
- Pilot control shut-off lever
- Engine stop knob

MONITOR SYSTEM
- Meters:
  Hourmeter and trip-meter, engine coolant temperature gauge and fuel gauge
- Warning lamps:
  Alternator charge, engine oil pressure, engine overheat, air filter restriction and minimum fuel level.
- Pilot lamps:
  Engine preheat, work light, auto-idle, auto-acceleration, digging mode and attachment mode
- Alarm buzzers:
  Engine oil pressure and engine overheat

LIGHTS
- 2 working lights

UPPERSTRUCTURE
- Undercover
- 6 710 kg (14 800 lb) counterweight
- Fuel level float
- Hydraulic oil level gauge
- Tool box
- Rearview mirror (right & left side)
- Swing parking brake

UNDERCARRIAGE
- Travel parking brake
- Travel motor covers
- Track guards and hydraulic track adjuster
- Bolt-on sprocket
- Upper rollers and lower rollers
- Reinforced track links with pin seals
- 600 mm (24") triple grouser shoes

FRONT ATTACHMENTS
- HN bushing
- WC thermal spraying
- Reinforced resin thrust plate
- Flanged pin
- Bucket clearance adjust mechanism
- Monolithically cast bucket link A
- Centralized lubrication system
- Dust seal on all bucket pins
- 2.91 m (9'7") arm
- 0.80 m^3 (1.05 yd^3 : SAE, PCSA heaped) bucket

MISCELLANEOUS
- Standard tool kit
- Lockable machine covers
- Lockable fuel filling cap
- Skid-resistant tapes, plates and handrails
- Travel direction mark on track frame

ZAXIS225USRK / ZAXIS225USRLCK (Demolition version)
- K-cab (CRES cab with overhead window and guard)
- K-boom 5.68 m (18'8") with small swing radius bracket and K-arm 2.91 m (9'7")
- 0.80 m^3 (1.05 yd^3 : SAE, PCSA heaped) K-reinforced bucket
- Reinforced link B for demolition
- Reinforced bucket cylinder
- Front glass lower guard
- Attachment basic piping
- Damage prevention plate
- 6.0 mm (0.24") thickness undercover
- Track undercover
- Reinforced side step (bolt mounted)
- 600 mm (24") reinforced triple grouser shoe
- 6 910 kg (15 200 lb) heavier counterweight
- High-performance full-flow filter (with restriction indicator)
- Air cleaner double filters

OPTIONAL EQUIPMENT

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

- Auto control air conditioner
- Suspension seat
- Hose rupture valves
- Electric fuel refilling pump
- Swing motion alarm device with lamps
- Travel motion alarm device
- Additional pump
- Transparent roof
- Fuel double filters
- Air cleaner double filters
- Tropical cover
- Large-capacity battery
- Attachment basic piping
- Accessories for breaker
- Accessories for breaker & crusher
- Accessories for 2 speed selector
- Front glass lower guard
- Front glass upper guard
- K-cab (CRES cab with overhead window and guard)
- 600 mm (24") reinforced triple grouser shoes
- Reinforced track guard (2 units each side)
- Small swing radius bracket
- Rear light

Comparative information based on current Japan domestic model.
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, go through Operators Manual for proper operation.

Hitachi Construction Machinery Co., Ltd.
Head Office: 5-1 Koraku 2-chome, Bunkyo-ku,
Tokyo 112-8563, Japan
Telephone: (03)3830-8050
Facsimile: (03)3830-8202

KS-E349P 03.03 (HP/HP, MT_3)

Printed in Japan