# **HITACHI**

Reliable solutions

# **ZA/IS280**



# **HYDRAULIC EXCAVATOR**

Model Code : ZX280-5G / ZX280LC-5G Engine Rated Power : 132 kW (177 HP)

Operating Weight: ZX280-5G: 27 400 kg / ZX280LC-5G: 28 400 kg

Backhoe Bucket: ISO Heaped: 1.00 - 1.62 m<sup>3</sup>





# **More Production with Less Fuel**

- · 9% reduction in fuel consumption
- · More fuel reduction in the ECO mode
- · Swift front movements with HIOS III hydraulics
- · Powerful lifting operation
- · Boosted swing torque
- · Enhanced power boost



## Pursuits of Performance and Durability

Page 6-7

- · Prestige R&D and quality control
- · Durable, reliable engine
- $\cdot$  Rock-solid, durable front attachment
- · Strengthened undercarriage
- · Proven upperstructure



# No Compromise on Operator Comfort

Page 8-9

- · Comfortable operating environment
- · Comfort-designed operator seat
- · Robust cal
- · New, easy-to-use multifunctional monitor



# **Simplified Maintenance**

- · Dust-proof indoor net
- · Grouped remote inspection points
- · Attractive, robust body
- · Low life cycle costs



- · Varied jobs, varied options
- $\cdot \ \mathsf{Recommended} \ \mathsf{options}$



# **Hitachi Support Chain** Page 14-15

- · Remote fleet management with Global e-Service
- · Parts and service



Note: The photos in this brochure show excavators with optional equipments such as rear view camera

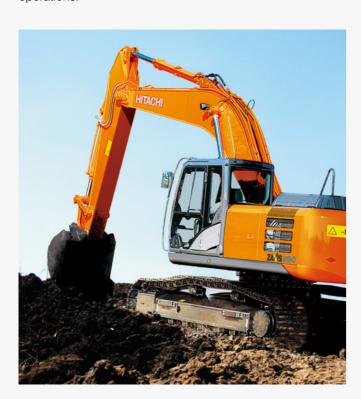
# More Production with Less Fuel



New ZAXIS is a fuel-thrifty excavator that can reduce fuel consumption by 9%, compared to the conventional ZX270-3/ZX270-3F family, thanks to the HIOS III hydraulic system and engine control system, thereby reducing CO<sub>2</sub> emissions.

#### More Fuel Reduction in the ECO mode

The ECO mode, a new economical mode, can further cut fuel consumption by 7% compared to the PWR mode, without sacrificing digging speed by optimal matching of operations.





# Swift Front Movements with HIOS\* III Hydraulics

Operating speed increases with less fuel consumption thanks to the HIOS III hydraulic system, developed by industry-leading hydraulic technologies and a wealth of experience. Actuators work quickly by boom weight, without needing a regenerative circuit and pressure oil.

\*Human & Intelligent Operation System

#### Rapid Arm Roll-in

Arm roll-in speed increases by combined flow from arm and boom cylinders through regenerative valves for productive excavation.

#### **Fast Arm Speed During Boom Lowering**

Arm speed increases by boom weight during boom lowering, without needing pressure oil from a pump. That is, arm circuit flow is increased for higher arm speed, allowing for quick loading of a dump truck and positioning of the front.

## **Powerful Lifting Operation**

The Auto Power Lift mode, which automatically surge lifting force by 10% when needed, allows for powerful lifting of buried concrete pipes or sheathing sheets.

#### Boosted Swing Torque

Allows for powerful wall cutting with the bucket, and smooth swing operation on slope.

#### **Enhanced Power Boost**

The Power Boost mode allows the operator to surge 10% more digging force for powerful excavation by pressing its button on the control lever.



# Pursuits of Performance and Durability

#### **Prestige R&D and Quality Control**

Hitachi has earned praise for technological prowess and product performance around the world.

R&D Division has a track record – including excellent design, stress analysis expertise using CAE system, and abundant production data base. What's more, a large-scale durability test field (427 hm²) allows for a series of stringent testing of new machines.

Production Division strives to automatize production processes, including robotic welding, machining, painting, assembling and transferring











### Durable, Reliable Engine

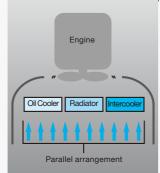
This engine has a track record showing impressive durability at countless tough job sites around the world.

The engine — associated with a rugged design, a direct fuel injection system and an elaborate governor — goes green, and complies with EU Stage II and US EPA Tier 2 emissions regulations.

The cooling system well keeps the engine cool. The engine cover has a wider air suction area, and radiators are arranged in parallel for efficient cooling. This parallel arrangement also facilitates their cleaning.

The ample-capacity intercooler and turbocharger help yield a whopping 132 kW (177 HP) output for higher production in shorter job schedule.





#### Rock-Solid, Durable Front Attachment

The boom top and foot are reinforced with thickened high-tensile steel brackets, which incorporate steel bushings to enhance durability. Arm cylinder and boom cylinders (rod extend ends) cushion shocks at stroke ends to cut noise and extend service life.

Joint pins at the front attachment are tightly fit to reduce jolt and sound. The arm-bucket joint is protected by WC thermal spraying on its contact surfaces to reduce wear and jolt. New-type HN bushings, utilized on joint pins, retain grease inside for longer greasing intervals. A reinforced resin thrust plate, mounted on the bucket pin, helps reduce wearing noise.

## Strengthened Undercarriage

The X-beam frame is made monolithically with fewer welds for higher rigidity and durability.

Track adjusters absorb impacts to crawlers. Front idlers and adjuster cylinders are integrated to increase durability. Idler brackets and travel motor brackets are both thickened for added durability.

# Proven Upperstructure

The upperstructure frame is reinforced with the proven D-section skirt to increase rigidity against damage by obstacles. A large door catch is added to reduce shocks and jolts of the cab and upperstructure.











# No Compromise on Operator Comfort

#### **Comfortable Operating Environment**

You'll feel comfortable and confident, with plenty of leg space and excellent visibility when operating the cab. The new compact console gives more leg space. The new door pillar is shifted rearward by 70 mm to widen an entry space for easy access. A new LED room light, interlocked with the door, turns on when the door opens. The front window is easily removed and stored overhead using slide rails. The overhead window is openable for ventilation. Ample air conditioner vents are located strategically for uniform air circulation inside the cab. The control panel and control levers are arranged within easy reach of the operator. AM/FM radio and AUX port (optional) for a mobile music player are available for a long work day with less fatigue. All these designs focus on operator comfort.

## Comfort-Designed Operator Seat

The luxury cloth seat is fitted with a headrest and arm rests for operator comfort. The seat can be adjusted in multiple ways, sliding and reclining, to suit operator's size and preferences. The seat can slide rearward by 40 mm more for added leg space. An air suspension with a heat pad is optional.

#### Robust Cab

The robust cab, meeting the OPG (Top Guard Level 1), protects the operator from falling objects. The pilot control shut-off lever is provided with a neutral engine start system that permits engine starting only when the pilot control shut-off lever is in Lock position.







# **New, Easy-to-Use Multifunction Monitor**

The new multi-language, multifunction monitoring system comprises a 7-inch highresolution color monitor and a multifunction controller. The monitor allows the operator to check varying operating variables: hydrauric oil temperature, fuel level, work mode, full-auto air conditioner, AM/FM radio, rear view monitor camera (optional), maintenance support, and attachment flow adjustment. Menu items can be selected and adjusted by a multifunction controller on the control panel. A new rear view monitor camera always displays the view behind the machine.





# Simplified Maintenance



#### **Dust-Proof Indoor Net**

A dust-proof indoor net, provided at the front of radiator, can be easily removed and cleaned with compressed air. At the rear of the radiator, air blowing can be done through a one-touch open cover. The air condenser is openable for easy cleaning at its rear.

# **Grouped Remote Inspection Points**

Service points are concentrated inside left and right covers that are readily accessible from ground level for convenient servicing and inspection, including water draining from the fuel tank, replenishment of coolant, and replacement of filters. The fuel tank is anti-corrosion coated on its inside, and has a large cleaning port at the bottom. These wise designs effectively keep fuel clean, and ease servicing. Handrails are provided at convenient locations for easy riding on the upperstructure. Plenty slip-resistant plates are located for safe maintenance.

## Attractive, Robust Body

Side frame tops of the undercarriage are sloped to let muck slide away. Track adjuster greasing ports are repositioned for easier lubrication, and well protected from muck packing.







# **Low Life Cycle Costs**

Service intervals are long enough to slash maintenance costs.



Consumables

# Reliable Solutions, with

# **Various Options**

## **Easy-to-Use Attachments**

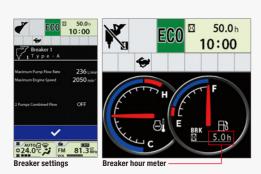
The operator can change over valves, adjust extra circuit flow, and check settings from the multifunctional monitor next to the operator seat. What's more, 11 jobs, including flow rate setting, can easily be selected by their identified names.

#### **Easy-to-Operate Breaker**

When using a breaker that requires frequent change of hydraulic oil and filters, an extra hour meter on the multifunctional monitor displays operating hours of the breaker, suggesting adequate replacement timing of oil and filters. The Breaker Alarm (optional) displays an alert mark on the monitor screen, and sounds when the breaker works continuously over one minute.

#### **Varied Jobs, Varied Options**

Lower cab front guard is provided for protection against debris during demolition and breaker operation. High-performance filters and in-line filters are available at tough job sites.





# **Recommended Options**

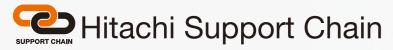










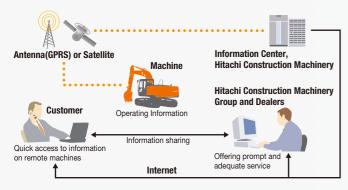


Hitachi Support Chain is a full customer support system offered after buying a Hitachi machine.

## Remote Fleet Management with Global e-Service

#### Easy Access to On-Site Machines through the Internet

This on-line fleet management system allows you to access each on-site machine from a PC in your office. You can get its operating information and location to increase productivity of the fleet and reduce downtime. Operating data and log are sent to a Hitachi server for processing, and then to customer and dealers around the world. This system is available 24 hours a day, all the year around.



Note: In Some Regions, Global e-Service Is Not Available by Local Regulations.

#### Main Features of Global e-Service

#### **Functions**

Global e-Service provides easy access to a machine on site, conveying operating information and log, including daily operating hours, fuel level, temperatures, pressures, and likes.

#### **Maintenance**

Maintenance data and log are displayed on a easy-to-read monitor screen, suggesting recommended maintenance for efficient fleet management.





### Parts and Service

Hitachi full customer support is available every area on the globe for full customer satisfaction through Hitachi local dealers.

#### **Parts**

Hitachi Global Online Network, a parts supply system, is linked with Japan Parts Center, overseas depots and over 150 dealers abroad to deliver on-line parts information, including in-stock parts, order receptions, shipments and delivery period of over one million parts and components.

#### **Genuine Hitachi Parts**

Genuine Hitachi parts, meeting Hitachi stringent quality standards, are guaranteed according to Hitachi warranty standards. The use of genuine Hitachi parts, including engine, fuel, hydraulic oil and filters, may slash running costs, and extend machine life.

#### **Ground Engaging Tools (GETs)**

Hitachi provides an array of Hitachi Ground Engaging Tools developed and built for a variety of applications. Using high-quality, well-maintained GETs will help you get customers' trust.

Note: Some dealers do not handle Hitachi GETs.

#### **Remanufactured Components**

Hitachi components are remanufactured according to the stringent remanufacturing standards at four factories around the world. They have high quality equivalent to new ones, and backed up by Hitachi warranty system.

Note: Some dealers do not handle Hitachi Remanufactured Components.

### Service

14

## **Extended Warranty - HELP**

Hitachi Standard Warranty System is available on all new Hitachi machines. In addition, Hitachi offers Hitachi Extended Life Programs (HELPs) to suit customer expectations – protecting machines under tough operating conditions, avoiding unexpected downtime, and reducing repair costs.

Note: Warranty conditions vary by equipment.

## Diagnostic Tools - Maintenance Pro

Electronic control system needs quick on-site solutions, apart from mechanical repairs. Hitachi's Maintenance Pro can diagnose machine failures in a short time by plugging a PC into a failed machine.

#### **Technical Training**

On-site servicing matters despite locations to keep the machine at peak performance and reduce downtime.

Technical Training Center (TTC), located in Japan, educates and trains service technicians and service support personnel coming from Hitachi dealers and factories on the globe according to the international training programs.



# **SPECIFICATIONS**

 ENGINE

 Model
 Isuzu CC-6BG1T

 Type
 4-cycle water-cooled, direct injection

 Aspiration
 Turbocharged, intercooled

 No. of cylinders
 6

 Rated power
 132 kW (177 HP) at 2 150 min<sup>-1</sup> (rpm)

 SAE J1349, net
 132 kW (177 HP) at 2 150 min<sup>-1</sup> (rpm)

 Maximum torque
 637 Nm (65 kgfm) at 1 800 min<sup>-1</sup> (rpm)

 Piston displacement
 6.494 L

 Bore and stroke
 105 mm x 125 mm

 Batteries
 2 x 12 V / 88 Ah

### HYDRAULIC SYSTEM

#### **Hydraulic Pumps**

=	
Main pumps	2 variable displacement axial piston pumps
Maximum oil flow	2 x 236 L/min
Pilot pump	1 gear pump
Maximum oil flow	34.0 L/min

#### **Hydraulic Motors**

Travel	2 variable displacement swash plate piston motors
Swing	1 swash plate piston motor

#### **Relief Valve Settings**

Implement circuit	34.3 MPa (350 kgf/cm <sup>2</sup> )
Swing circuit	32.4 MPa (330 kgf/cm <sup>2</sup> )
Travel circuit	34.8 MPa (355 kgf/cm <sup>2</sup> )
Pilot circuit	3.9 MPa (40 kgf/cm <sup>2</sup> )
Power boost	38.0 MPa (388 kgf/cm <sup>2</sup> )

#### **Hydraulic Cylinders**

	Quantity	Bore	Rod diameter
Boom	2	135 mm	95 mm
Arm	1	150 mm	105 mm
Bucket	1	135 mm	90 mm

## UPPERSTRUCTURE

#### **Revolving Frame**

D-section frame skirt for resistance to deformation.

#### **Swing Device**

Swash plate 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 ......
 10.3 min<sup>-1</sup> (rpm)

 Swing torque ......
 90.5 kNm (9 200 kgfm)

#### Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO $^{\star}$  Standards.

\* International Organization for Standardization

### UNDERCARRIAGE

#### Tracks

Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

#### Numbers of Rollers and Shoes on Each Side

Upper rollers	2
Lower rollers	7: ZX280-5G
	8: ZX280LC-5G
Track shoes	45 : ZX280-5G
	48: ZX280LC-5G
Track guard	1: ZX280-5G/ZX280LC-5G

#### Travel Device

Each track driven by 2-speed axial piston motor. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low.

Travel speeds	 High: 0 to 5.2 km/h
	Low: 0 to 3.1 km/h

Maximum traction force .. 246 kN (24 600 kgf)

Gradeability ...... 70% (35 degree) continuous

# SERVICE REFILL CAPACITIES Fuel tank Engine coolant

Engine oil	25.0 L
Swing device	
Travel device (each side)	9.2 L
Hydraulic system	290.0 L
Hydraulic oil tank	

. 510.0 L

. 26.0 L

#### WEIGHTS AND GROUND PRESSURE

#### **Operating weight and Ground pressure**

			Z	ZX280-5G*1		ZX280LC-5G*1	
Shoe type	Shoe width	Arm length	kg	kPa(kgf/cm²)	kg	kPa(kgf/cm²)	
		2.42 m	27 300	55 (0.56)	28 300	53 (0.54)	
	600 mm	3.11 m	27 400	55 (0.56)	28 400	53 (0.54)	
		3.76 m	27 500	55 (0.56)	28 500	53 (0.54)	
		2.42 m	27 900	48 (0.49)	28 700	46 (0.47)	
	700 mm	3.11 m	27 900	48 (0.49)	28 800	46 (0.47)	
Triple		3.76 m	28 000	48 (0.49)	28 800	46 (0.47)	
grouser		2.42 m	28 200	42 (0.43)	29 100	41 (0.42)	
	800 mm	3.11 m	28 300	43 (0.44)	29 100	41 (0.42)	
		3.76 m	28 400	43 (0.44)	29 200	41 (0.42)	
		2.42 m	28 600	38 (0.39)	29 400	36 (0.37)	
	900 mm	3.11 m	28 700	38 (0.39)	29 500	37 (0.38)	
		3.76 m	28 800	38 (0.39)	29 600	37 (0.38)	
		2.42 m	28 900	38 (0.39)	29 700	36 (0.37)	
Trianglar	900 mm	3.11 m	28 900	38 (0.39)	29 800	36 (0.37)	
		3.76 m	29 000	38 (0.39)	29 900	37 (0.38)	
		2.42 m	28 200	57 (0.58)	29 000	54 (0.55)	
Flat	600 mm	3.11 m	28 200	57 (0.58)	29 100	54 (0.55)	
		3.76 m	28 300	57 (0.58)	29 100	54 (0.55)	

<sup>\*1 :</sup>Including 1.10 m³ (ISO heaped) bucket weight (900 kg) and counterweight (5 900kg).

## WEIGHT: BASIC MACHINE and COMPONENTS

#### **Basic Machine Weight and Overall width**



Excluding front-end attachment, fuel, hydraulic oil, coolant, etc., and including counterweight.

#### ZX280-5G

Shoe width	Weight	Overall width	
600 mm	21 300 kg	3 190 mm	
700 mm	21 900 kg	3 290 mm	
800 mm	22 300 kg	3 390 mm	
900 mm	22 600 kg	3 490 mm	

#### ZX280LC-5G

Shoe width	Weight	Overall width
600 mm	22 400 kg	3 190 mm
700 mm	22 700 kg	3 290 mm
800 mm	23 100 kg	3 390 mm
900 mm	23 400 kg	3 490 mm

#### Component weights

Component weights		
	ZX280-5G / ZX280LC-5G	
Counterweight	5 900 kg	
Boom (with boom and arm cylinder)	2 930 kg	
2.42 m arm (with bucket cylinder)	1 350 kg	
3.11 m arm (with bucket cylinder)	1 430 kg	
3.76 m arm (with bucket cylinder)	1 520 kg	
1.10 m³ bucket	900 kg	

# **SPECIFICATIONS**

# BUCKET AND ARM DIGGING FORCES

Arm length	2.42 m	3.11 m	3.76 m
Bucket digging force* ISO	202 kN (20 600 kgf)	202 kN (20 600 kgf)	202 kN (20 600 kgf)
Bucket digging force* SAE : PCSA	175 kN (17 900 kgf)	175 kN (17 900 kgf)	175 kN (17 900 kgf)
Arm crowd force* ISO	182 kN (18 500 kgf)	144 kN (14 700 kgf)	126 kN (12 900 kgf)
Arm crowd force* SAE : PCSA	174 kN (17 700 kgf)	138 kN (14 100 kgf)	122 kN (12 400 kgf)

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

## BACKHOE ATTACHMENTS

Boom and arms are of welded, box-section design. 6.20 m boom, and 2.42 m, 3.11 m and 3.76 m arms are available. Bucket is of welded steel structure. Side clearance adjust mechanism provided on the bucket joint bracket.

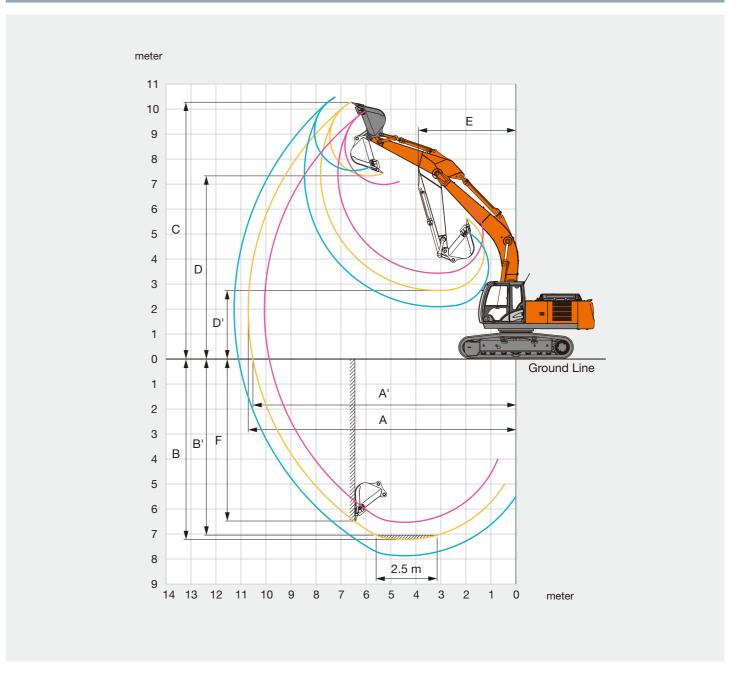
#### **Buckets**

Compaitu	14/:	dth			Recommendation							
Capacity	VVI	utri	No. Of teeth	Weight		ZX280-5G			ZX280LC-5G			
ISO heaped	Without side cutters	With side cutters			2.42 m arm	3.11 m arm	3.76 m arm	2.42 m arm	3.11 m arm	3.76 m arm		
1.00 m <sup>3</sup>	1 130 mm	1 260 mm	5	850 kg	0	0	0	0	0	0		
1.10 m <sup>3</sup>	1 220 mm	1 350 mm	5	900 kg	0	0	0	0	0	0		
1.40 m <sup>3</sup>	1 500 mm	1 630 mm	5	1 020 kg	0	0	_	0	0			
1.62 m <sup>3</sup>	1 700 mm	1 830 mm	5	1 080 kg		_	_		_	_		
*1 0.92 m <sup>3</sup>	1 130 mm	1 180 mm	5	990 kg	•	•	_	•	•	_		
*2 1.10 m <sup>3</sup>	1 220 mm	1 350 mm	5	1 030 kg	0	0	0	0	0	0		
*2 1.40 m <sup>3</sup>	1 500 mm	1 630 mm	5	1 180 kg	0	0	_	0	0			
*3 1.10 m <sup>3</sup>	1 230 mm	1 360 mm	5	1 030 kg	0	0	0	0	0	0		
*4 0.80 m <sup>3</sup>	1 000 mm		3	1 220 kg	•	•	_	•	•	_		
One-point ripper	One-point ripper			680 kg	•	•	-	•	•	_		
Center-pull type clamshell bucket: 0.60 r	Center-pull type clamshell bucket: 0.60 m³ (CECE heaped), Width 940 mm			1 130 kg	0	0	_	0	0	_		
Shell-push type clamshell bucket: 0.80 n	n <sup>3</sup> (CECE heaped),	Width 910 mm	9	1 360 kg	0	0	_	0	0	_		

<sup>\*1</sup> Rock bucket

18

# **WORKING RANGES**



Unit: mm

Arm length	2.42 m	3.11 m	3.76 m
A Max. digging reach	10 060	10 710	11 270
A' Max. digging reach (on ground)	9 860	10 520	11 090
B Max. digging depth	6 530	7 220	7 870
B' Max. digging depth for 2.5 m level	6 3 1 0	7 040	7 710
C Max. cutting height	9 910	10 270	10 470
D Max. dumping height	6 980	7 330	7 540
D' Min. dumping height	3 450	2 740	2 090
E Min. swing radius	4 060	3 900	3 890
F Max. vertical wall digging depth	5 650	6 480	7 050

Excluding track shoe lug

<sup>\*2</sup> Reinforced bucket

<sup>\*3</sup> Heavy-duty bucket

<sup>\*4</sup> Ripper bucket

<sup>©</sup> Suitable for materials with density of 2 000 kg/m³ or less

Suitable for materials with density of 1 600 kg/m³ or less

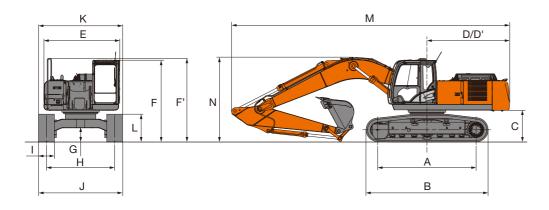
<sup>☐</sup> Suitable for materials with density of 1 100 kg/m³ or less

Heavy-duty serviceSlope-finishing service

Not applicable

# **SPECIFICATIONS**

## DIMENSIONS



Unit: mm

	ZX280-5G	ZX280LC-5G
A Distance between tumblers	3 730	4 050
B Undercarriage length	4 670	4 940
* C Counterweight clearance	1 170	1 170
D Rear-end swing radius	3 140	3 140
D' Rear-end length	3 140	3 140
E Overall width of upperstructure	2 870	2 870
F Overall height of cab	3 110	3 110
F' Overall height of upperstructure	3 180	3 180
* G Min. ground clearance	510	510
H Track gauge	2 590	2 590
I Track shoe width	G 600	G 600
J Undercarriage width	3 190	3 190
K Overall width	3 190	3 190
* L Track height with triple grouser shoes	1 070	1 070
M Overall length		
With 2.42 m arm	10 640	10 640
With 3.11 m arm	10 550	10 550
With 3.76 m arm	10 600	10 600
N Overall height of boom		
With 2.42 m arm	3 410	3 410
With 3.11 m arm	3 170	3 170
With 3.76 m arm	3 310	3 310

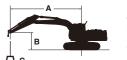
20

# **LIFTING CAPACITIES (Without Bucket)**

Notes: 1. Ratings are based on ISO 10567.

- 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.
- \*Indicates load limited by hydraulic capacity.
- 5. 0 m = Ground.

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



A: Load radiusB: Load point heightC: Lifting capacity

ZX280-5G										Ratir	ng over-froi	nt 🗀 F	Rating over	-side or 360	) degrees	Unit : kg
	Load Load radius m							At								
Conditions	point	1	.5	3	.0	4	4.5		.0	7.5		9.0		At max. reach		in .
Conditions	height m	ů	<b>©</b>	ů	<b>•</b>	ů	<b>©</b>	ů	<b>-</b>	ů	<b>©</b>	Ů	<b>-</b>	ů		meter
Boom 6.20 m	6.0							*8 040	7 650					7 570	5 360	7.46
Arm 2.42 m	4.5					*11 280	*11 280	*9 040	7 340	7 400	5 220			6 530	4 600	8.11
Counterweight	3.0					*14 220	10 430	10 130	6 950	7 220	5 050			6 030	4 220	8.44
5 900 kg	1.5							9 760	6 630	7 030	4 880			5 880	4 100	8.49
Shoe 600 mm	0 (Ground)					15 150	9 680	9 560	6 440	6 920	4 770			6 040	4 190	8.27
01100 000 11111	-1.5			*10 350	*10 350	15 180	9 700	9 510	6 400	6 900	4 760			6 610	4 570	7.75
	-3.0			*18 920	*18 920	*14 320	9 860	9 620	6 490					7 950	5 460	6.86
	-4.5			*14 680	*14 680	*11 190	10 220							*9 010	7 820	5.42
	-6.0															
Boom 6.20 m	6.0							*7 140	*7 140	*6 960	5 440			*4 740	4 660	8.19
Arm 3.11 m	4.5					*9 840	*9 840	*8 200	7 490	*7 400	5 300			*4 730	4 080	8.78
Counterweight	3.0					*12 820	10 790	*9 610	7 080	7 280	5 100	5 480	3 840	*4 890	3 780	9.09
5 900 kg	1.5					*15 230	10 050	9 860	6 700	7 060	4 900	5 390	3 750	*5 220	3 670	9.14
Shoe 600 mm	0 (Ground)					15 180	9 700	9 580	6 450	6 900	4 750			5 380	3 730	8.93
	-1.5	*6 820	*6 820	*10 250	*10 250	15 090	9 620	9 460	6 340	6 830	4 680			5 790	4 010	8.45
	-3.0	*11 900	*11 900	*16 480	*16 480	15 190	9 700	9 490	6 370	6 880	4 730			6 710	4 620	7.65
	-4.5			*17 660	*17 660	*12 950	9 960	*9 560	6 570					*8 660	6 050	6.39
	-6.0															
Boom 6.20 m	7.5									*5 160	*5 160			*3 950	*3 950	7.94
Arm 3.76 m	6.0									*6 240	5 540			*3 810	*3 810	8.82
Counterweight	4.5							*7 360	*7 360	*6 780	5 380	*5 250	3 980	*3 820	3 700	9.37
5 900 kg	3.0					*11 420	11 130	*8 830	7 210	7 350	5 150	5 520	3 870	*3 950	3 440	9.66
Shoe 600 mm	1.5					*14 210	10 260	9 960	6 790	7 100	4 930	5 390	3 750	*4 200	3 340	9.70
G1100 000 111111	0 (Ground)			*6 510	*6 510	15 250	9 750	9 610	6 470	6 900	4 740	5 290	3 660	*4 640	3 380	9.51
	-1.5	*6 480	*6 480	*9 930	*9 930	15 020	9 550	9 420	6 300	6 780	4 630	5 250	3 620	5 200	3 590	9.06
	-3.0	*10 280	*10 280	*14 500	*14 500	15 030	9 560	9 380	6 270	6 770	4 620			5 880	4 050	8.32
	-4.5	*14 880	*14 880	*19 910	19 610	*14 100	9 740	9 510	6 380					7 340	5 030	7.18
	-6.0			*14 650	*14 650	*10 530	10 150							*8 380	7 760	5.41

ZX280LC-5G										💾 Ratin	ng over-fron	it 🗀 l	Rating over	-side or 36	0 degrees	Unit : kg
	Load						Load r	adius m						At		a la
Conditions	point	1	1.5	3	3.0	4	.5	6	.0	7.	.5	9.0		At max. reach		211
Conditions	height m	Ů	<b>P</b>	ů	<b>P</b>	ů	<b>-</b>	ů		ů	<b>-</b>	Ů	<b>-</b>	Ů		meter
Boom 6.20 m	6.0							*8 040	7 800					*7 800	5 470	7.46
Arm 2.42 m	4.5					*11 280	*11 280	*9 040	7 490	8 050	5 330			7 390	4 700	8.11
Counterweight	3.0					*14 220	10 640	*10 340	7 100	8 190	5 160			6 830	4 320	8.44
5 900 kg	1.5							11 210	6 770	8 010	4 990			6 670	4 190	8.49
Shoe 600 mm	0 (Ground)					*16 230	9 900	11 000	6 590	7 890	4 880			6 870	4 290	8.27
0.100 000 11111	-1.5			*10 350	*10 350	*15 820	9 920	10 950	6 540	7 870	4 870			7 530	4 680	7.75
	-3.0			*18 920	*18 920	*14 320	10 080	*10 890	6 640					9 080	5 580	6.86
	-4.5			*14 680	*14 680	*11 190	10 430							*9 010	7 990	5.42
	-6.0															
Boom 6.20 m	6.0							*7 140	*7 140	*6 960	5 550			*4 740	*4 740	8.19
Arm 3.11 m	4.5					*9 840	*9 840	*8 200	7 640	*7 400	5 410			*4 730	4 170	8.78
Counterweight	3.0					*12 820	11 000	*9 610	7 230	*8 100	5 210	5 570	3 930	*4 890	3 870	9.09
5 900 kg	1.5					*15 230	10 260	*10 920	6 850	8 040	5 010	6 110	3 840	*5 220	3 760	9.14
Shoe 600 mm	0 (Ground)					*16 280	9 920	11 020	6 600	7 870	4 860			*5 800	3 820	8.93
	-1.5	*6 820	*6 820	*10 250	*10 250	*16 210	9 830	10 900	6 490	7 800	4 790			6 590	4 100	8.45
	-3.0	*11 900	*11 900	*16 480	*16 480	*15 200	9 920	10 930	6 520	7 850	4 840			7 650	4 730	7.65
	-4.5			*17 660	17 660	*12 950	10 170	*9 560	6 720					*8 660	6 190	6.39
	-6.0															
Boom 6.20 m	7.5									*5 160	*5 160			*3 950	*3 950	7.94
Arm 3.76 m	6.0									*6 240	5 650			*3 810	*3 810	8.82
Counterweight	4.5							*7 360	*7 360	*6 780	5 490	*5 250	4 070	*3 820	3 790	9.37
5 900 kg	3.0					*11 420	11 340	*8 830	7 360	*7 560	5 270	6 250	3 960	*3 950	3 530	9.66
Shoe 600 mm	1.5					*14 210	10 470	*10 310	6 930	8 070	5 040	6 120	3 840	*4 200	3 420	9.70
	0 (Ground)			*6 510	*6 510	*15 830	9 970	11 060	6 620	7 870	4 850	6 010	3 750	*4 640	3 460	9.51
	-1.5	*6 480	*6 480	*9 930	*9 930	*16 270	9 770	10 860	6 450	7 750	4 740	*5 880	3 710	*5 360	3 670	9.06
	-3.0	*10 280	*10 280	*14 500	*14 500	*15 740	9 780	10 820	6 420	7 740	4 730			*6 650	4 140	8.32
	-4.5	*14 880	*14 880	*19 910	*19 910	*14 100	9 960	*10 550	6 530					*8 280	5 150	7.18
	-6.0			*14 650	*14 650	*10 530	10 370							*8 380	7 930	5.41

<sup>\*</sup> Excluding track shoe lug G: Triple grouser shoe

# **EQUIPMENT**

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

Standard equipment

O: Optional equipment

	ZX280-5G / ZX280LC-5G
ENGINE	
Air cleaner double filters	•
Auto idle system	•
Cartridge-type engine oil filter	•
Cartridge-type fuel pre-filter	•
Cartridge-type fuel main filter	•
Dry-type air filter with evacuator valve (with air filter restriction indicator)	•
ECO/PWR mode control	•
Engine warm-up device	•
Fan guard	•
Water separator	•
Pre-cleaner	0
Dust-Proof indoor net	•
Radiator reserve tank	•
50 A alternator	•

HYDRAULIC SYSTEM	
Auto power lift	•
Control valve with main relief valve	•
Full-flow filter	•
High mesh full flow filter with restriction indicator	0
Pilot filter	•
Power boost	•
Suction filter	•
One extra port for control valve	•
Work mode selector	•

• : Standard equipment O : O	ptional equipmen
	ZX280-5G / ZX280LC-5G
CAB	
All-weather sound suppressed steel cab	•
AM-FM radio with 2 speaker	•
Ashtray	•
Auto control air conditioner	•
AUX. terminal and storage	0
Cab (Center pillar reinforced structure)	•
Drink holder	•
Drink holder with hot & cool	•
Electric double horn	•
Engine shut-off lever	•
Evacuation hammer	•
Fire extinguisher bracket	0
Floor mat	•
Footrest	•
Front window washer	•
Front windows on upper, lower and left side can be opened	•
Lower cab front guard	0
Upper cab front guard	0
Glove compartment	•
Hot & cool box	•
Intermittent windshield wipers	•
Key cylinder light	•
LED room light with door courtesy	•
OPG top guard Level I (ISO10262) compliant cab	•
Pilot control shut-off lever	•
Rear tray	•
Retractable seat belt	•
Rubber radio antenna	•
Seat : mechanical suspension seat	0
Seat : air suspension seat with heater	0
Seat adjustment part : backrest, armrest, height and angle, slide forward / back	•
Short wrist control levers	•
4 fluid-filled elastic mounts	•
24V cigarette lighter	•

ZX280-5G / ZX280LC-5G
•
•
•
•
•
0

LIGHTS	
Additional cab roof front lights	0
Additional boom light with cover	0
2 working lights	•

UPPER STRUCTURE	
Electric fuel refilling pump	0
Fuel level float	•
Hydraulic oil level gauge	•
Rear view camera	0
Rear view mirror (right & left side)	•
Swing parking brake	•
Tool box	•
Undercover	•
6.0 mm reinforced undercover	0
Utility space	•
5 900 kg counterweight	•
2 x 88 Ah batteries	•

	ZX280-5G ZX280LC-5G
UNDERCARRIAGE	
Bolt-on sprocket	•
Reinforced track links with pin seals	•
Travel motor covers	•
Travel parking brake	•
9.0 mm reinforced track undercover	0
Track guard (each side) and hydraulic track adjuster	•
Upper and lower rollers	•
3 track guards	0
4 tie down hooks	•
600 mm triple grouser shoes	•

FRONT ATTACHMENTS	
Centralized lubrication system	•
Dirt seal on all bucket pins	•
Flanged pin	•
HN bushing	•
Reinforced resin thrust plate	•
WC (tungsten-carbide) thermal spraying	•
1.10 m³ bucket (ISO heaped)	•
3.11 m arm	•
6.20 m boom	•

ATTACHMENTS	
Attachment basic piping	0
Breaker and crusher piping	0
High mesh full flow fillter with restriction indicator	0
Parts for breaker and crusher	0
2 pump combined flow for attachment basic piping	0
Line filter	0

MISCELLANEOUS	
Lockable fuel refilling cap	•
Lockable machine covers	•
Onboard information controller	•
Skid-resistant tapes, plates and handrails	•
Standard tool kit	•
Travel direction mark on track frame	•
Global e-Service	•



#### **Hitachi Environmental Vision 2050**

Our Environmental Vision envisions a low-carbon society; a resource efficient society; a harmonized society with nature. To achieve such a sustainable society, we have established a set of long-term environmental targets called Hitachi Environmental Innovation 2050.

#### **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



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

These specifications are subject to change without notice.

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

Hitachi Construction Machinery Co., Ltd.
 www.hitachi-c-m.com

KS-EN193Q 19.07 (KM/SHO,MT2)