# **TATA HITACHI**

# Reliable solutions

# ZA/IS470H



Model Code : ZX 470H

Engine Rated Power : 235 kW (315 HP)

Operating Weight

Backhoe : 47 100 kg

Loading Shovel : 47 500 kg

**Bucket Capacity** 

Backhoe ISO Heaped : 1.9 - 3.1 m<sup>3</sup> Loading Shovel ISO Heaped : 2.6 m3

# NEW ZAXIS Now, with the Power of GI

A ZAXIS hallmark – industry-leading hydraulic technology, and performance no other can beat. The New ZAXIS-GI Series Excavators provide reliable solutions: impressive fuel economy, swift front movements, and easy operation. Another highlight in the new Zaxis-GI series is the optimized hydraulic system and engine which is the result of Hitachi's technological prowess and expertise. The New ZAXIS-GI Series features the key benefits of high power, high fuel efficiency and high durability, all of which serve to ensure best in class performance and low running costs.





# Large Production with Less Fuel Page 4-5

- · Higher level of performance
- · Lower fuel with higher productivity
- · Sustainable efficiency
- · Powerful efficiency



"No Compromise on Operator Comfort"

- · Large roomy cabin
- Enhanced visibility
- · User friendly functionality, safe cabin
- · Enjoy your work



# Pursuits of Performance and Durability

- · Durable parts
- · Reliable engine
- · Rock solid front attachment
- · Strengthened undercarriage
- · Proven superstructure



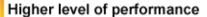
# Simplified Maintenance

- · Easy access
- · Easy servicing
- · Easy cleaning
- · Quick lubrication
- · Large capacity fuel tank
- · Low life cycle costs





# Large Production with Less Fuel



Customers around the world told us that the ideal large excavator attains more production. So our engineers used the latest innovations to create the new generation of Tata Hitachi large excavators according to these criteria.

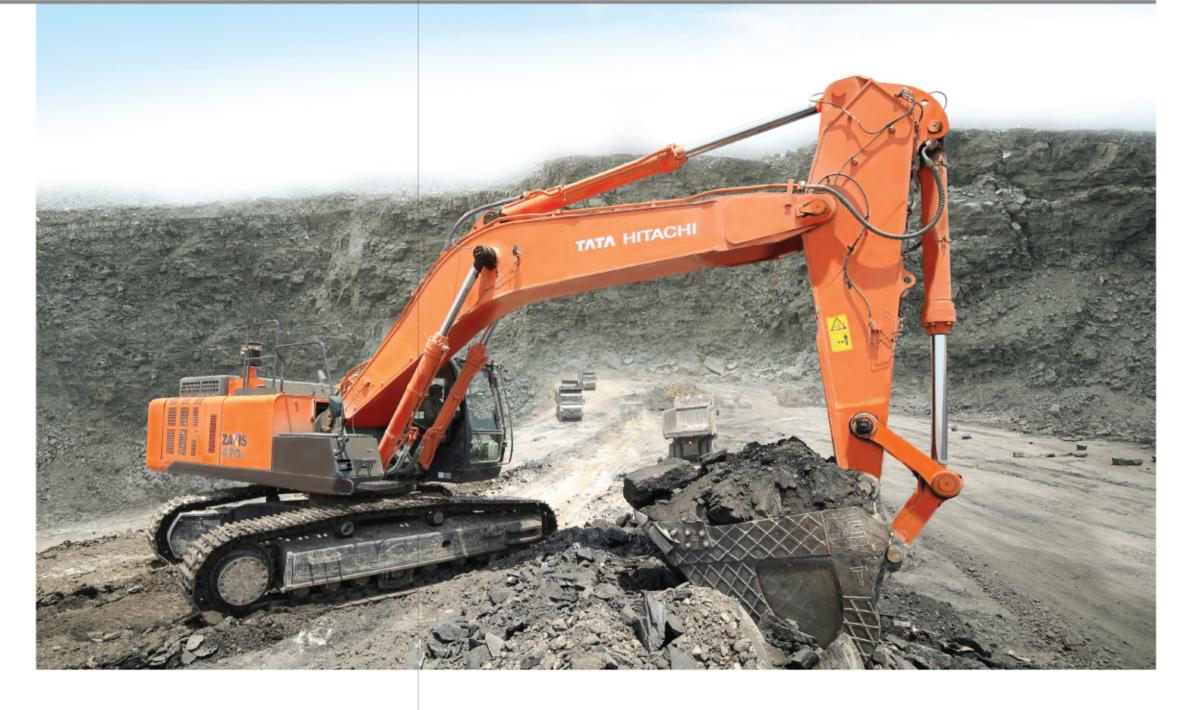
The new hydraulic system allows the operator to manoeuvre the machine easily and perform smooth combined operations quickly, whether the machine is digging or loading a dump truck.

The front speed is optmimset by reducing the pressure loss in circuits and the swing torque has increased by 9% campread to ZAXIS 450H. The speed of light-load operations such as grading has also been improved due to larger volume of hydraulic flow

#### Lower fuel with higher production

The success of the business is influenced by the productivity and efficiency of the equipment. Ultimately, the investment in Tata Hitachi Construction Machinery can help to meet production targets and compete successfully to win tenders within your market

In PWR mode, the ZAXIS 470H uses less fuel, while increasing the productivity as the ZAXIS 450H model in the same mode (power)\*. All modes therefore result in faster operation, with lower fuel consumption.



#### Sustainable efficiency

The sustainable development of the Tata Hitachi product range to minimise its impact on the environment continues to be one of our main priorities.

To reduce emissions, prevent fuel wastage and lower noise levels in the cab, the ZAXIS 470H has an Auto Shut-down feature. This automatically drops the engine revolutions to low idle and then stops the engine after the pilot shut-off lever has been raised.

#### Powerful efficiency

The new ZAXIS 470H is equipped with a powerful new-generation engine, which delivers higher productivity with greater fuel efficiency. The new engine has a common rail-type fuel injection system, which delivers the precise quantity of pressurised fuel to achieve effective combustion and reduces fuel consumption and particulate matter.

The HIOS IIIB hydraulic system has also been applied to the new ZAXIS 470H to reach higher yields with better fuel consumption than the previous model.



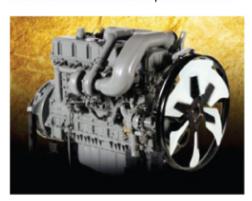
# Pursuits of Performance and Durability

#### **Durable parts**

Our large excavators have been designed to deliver increased levels of availability and productivity even on the toughest job sites. The aim behind manufacturing such durable machines was to ultimately ensure a lower cost of ownership for our customers. The strengthened boom and arm on each new ZAXIS 470H are highlights of the machine's enhanced durable characteristics. Both features allow it to cope well with working long hours in rugged environments.

A filter-type high-performance water separator effectively captures moisture in the fuel, reducing impurities and helping to minimise any fuel-related engine problems. Dual fuel main filters and pre-filters are provided as standard on the ZAXIS 470H to reduce fuel system failures.

The fuel injector is protected by diamond-like carbon (DLC) coating, which enhances its reliability and durability, and the engine has a twin-layer fuel main filter that doubles filtration performance.



#### Reliable engine

This EPA Tier II 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.

A simple cooling system, consisting of a radiator and oil cooler, facilitates smooth cooling air flow for improved cooling efficiency. The combination of a 235 kW (315 HP) engine and the new HIOS IIIB hydraulic system meets requirements, in terms of both output and fuel consumption.



#### Rock solid front attachment

The new ZAXIS adopts the boom and arm used for heavy-duty versions of the conventional ZAXIS series standard models to increase the strength, allowing it to function optimally at tough job sites such as mines / quarries / stone / granite, where an endless stream of operations are required. It also has a wide applicable scope by using a bucket for civil engineering work or one for quarrying, depending on the intended use.

The arm cylinder, boom cylinders and bucket cylinder for the retract side cushion shocks at the stroke ends to reduce noise and extend the service life.

#### Strengthened undercarriage

The new undercarriage is an integral construction, the track center and side frame of which are welded together. The lower center of gravity of the body improves stability. For idler brackets, where stress is concentrated in transit, the box-structure and

reinforcing plates limit deformation and enhance travel stability. An enhanced twostep side step ladder is also provided to facilitate entering/alighting from the cab.

#### Proven superstructure

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 upper-structure.



# No Compromise on Operator Comfort

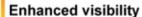




#### Large roomy cabin

It's essential for you to feel comfortable while you work, especially if you are operating an excavator for lengthy periods of time in a mining/quarry or large-scale construction site. We had reviewed the ergonomic design of its ZAXIS 470H excavator cab to ensure that you can complete your shift with ease and enjoy the rest of your day.

The fully adjustable air-suspension seat absorbs vibrations and helps to minimise operator fatigue. Its new sliding mechanism means that it can be moved back further than ever before. More leg room is also available as the space underneath the monitor has been expanded. The pressurized cab keeps dust and particles from entering. Lots more air vents for air conditioner are located strategically for uniform air circulation inside the cab.



Health and safety are of paramount importance in busy quarries and construction sites. With the latest innovations, the new ZAXIS 470H offers enhanced visibility, particularly on the right-hand side of the machine, to help you avoid any unnecessary damage, and ultimately save you time and money. The monitor and door have been repositioned, which improves your view and provides easier access to the cab. The excavator is also equipped with the latest rear-view camera (optional), giving you a broader visual range.



#### User-friendly functionality, safe cabin

The advance technology that is incorporated with in the new ZAXIS is one of its many advantages. The ergonomic controls and easy to view monitor place the power firmly in your hands. The new LCD monitor which displays a comprehensive range of useful technical information allows you to check the machine status and settings at a glance. For easy operation, the monitor and ergonomically designed switches have been repositioned and are both conveniently located on the right hand side of the cab. FOPS (falling Object Protection System) cab complying ISO 3449 level "II" is standard. Option of ISO 3449 level "II" cab is also available. Seat belt with reminder is provided as standard fitment.

#### Enjoy your work

By creating a relaxed and pleasant workspace, our aim was to make your day in the cab of the new ZAXIS more enjoyable and therefore more satisfying. If you enjoy listening to the radio as you work, you will find that the controls for the AM/FM stereo radio are now fully adjustable from the monitor. Alternatively, if you wish to plug in a USB, that facility is also provided to the sound system, so that you can work smoothly and efficiently to your favourite music.



# Simplified Maintenance





#### Easy access

The design of the new ZAXIS 470H incorporates a range of convenient features for routine maintenance. They have been created by our engineers in order to save you time and make life a little less stressful. The fuel filters and engine oil filter can all be replaced from the excavator's walkway. Other work on the upper structure of the machine, like replacing the air cleaner, can be carried out easily.

#### Easy servicing

The new ZAXIS 470H is equipped with a solenoid fuel pump (optional), which means there is no need to pump manually if the engine stops due to lack of fuel or while the main fuel filter is being changed. The machine's utility space stores an electric grease pump, hose reel (optional) and tool box. This means that batteries and an electrical equipment box are conveniently located in one place.

#### Easy cleaning

To maximise productivity and ensure optimum levels of availability in the quarry/mining or on any construction site, we have introduced a variety of quick solutions to the new ZAXIS 470H for routine maintenance and cleaning. One example of these convenient features can be seen on the exterior of the machine, where the air conditioning condenser can be easily opened for cleaning the condenser and radiator located behind. The cleaning process is also easier thanks to the parallel positioning of the cooling package.



#### Fast lubrication

The arm and boom have their own centralized greasing points for fast lubrication. a stand center light lubrication system is provided for front attachment.

#### Large capacity fuel tank

Equipped with a 705 L large capacity fuel tank for longer operations. Solenoid fuel pump (optional) makes fuel filling faster.

#### Low life cycle costs

Service intervals are long enough to slash maintenance costs.

## **Auto Level Crowd Mechanism**

Tata Hitachi's unique patented auto level crowd mechanism of the ZAXIS 470H shovel version gives exceptional job efficiency, loading capability and operating ease. The level crowding operation are greatly simplified with just one control lever needed, the result is relatively shorter cycle time and increased productivity. The design also enables the crowd force to become strongest around the maximum reach point where the force is more required.

The parallel link mechanism keeps the bucket digging angle constant and level cylinder circuit maintains the bucket height constant. Due to this feature the need of the additional clean up equipment is also eliminated as it also ensures a level mine floor contributing to increased tyre life of hauling equipment. It also facilitates the Auto-bucket level raise avoiding spillage of the material apart from contributing greatly to the increased productivity.





Auto level crowd system facilitates automatic return of the bucket to dig position, giving the machine better crowd force and heaping ability. The auto level raise mechanism eliminates the need to control the bucket while rising and avoids spillage of the material. This feature plays an important role in the faster cycle time of the ZAXIS 470H.

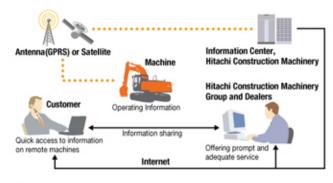
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# Remote Fleet Management with Global e-Service

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.



**SPECIFICATIONS** 

ENGINE	
Model	Isuzu AA-6WG1TQA
Type 4-cycle v	water-cooled, direct injection
Aspiration	
No. of cylinders	6
Rated	power
ISO 9249, net	H/P mode:
(With Fan) 235 kW (3	315 HP) at 1 800 min-1 (rpm)
SAE J1349, net	H/P mode:
(With Fan) 231 kW (3	310 HP) at 1 800 min-1 (rpm)
Maximum torque 1 275 Nm (130	) kgf m) at 1 500 min-1 (rpm)
Piston displacement	
Bore and stroke	147 mm x 154 mm
Batteries	2 x 12 V / 170 Ah

HYDRAULIC SYSTEM	
Hydraulic Pumps	
Main pumps 2 varial	ole displacement axial piston pumps
Maximum oil flow	2 x 360 L/mir
Pilot pump	1 gear pump
	30 L/mir
Hydraulic Motors	
Travel 2 ax	ial piston motors with parking brake
	2 axial piston motors
Relief Valve Settings	
Implement circuit	31.9 MPa (325 kgf/cm <sup>2</sup> )
Swing circuit	28.4 MPa (290 kgf/cm <sup>2</sup> )
Travel circuit	35.3 MPa (360 kgf/cm <sup>2</sup> )
Pilot circuit	3.9 MPa (40 kgf/cm <sup>2</sup>
	35.3 MPa (360 kgf/cm <sup>2</sup>

#### Hydraulic Cylinders

	Quantity	Bore Rod	Diameter
Boom	2	170 mm	115 mm
Arm	1	190 mm	130 mm
Bucket	1	170 mm	120 mm

#### UPPERSTRUCTURE

#### Revolving Frame

D-section frame for resistance to deformation.

#### Swing Device

#### Operator's Cab

Independent spacious cab, 1 025 mm wide by 1 675 mm high, confirming to ISO\* 3445 line level I Standard.

\* International Organization for Standardization

#### UNDERCARRIAGE

#### Track

Track shoes with triple grousers made of induction-hardened rolled alloy.

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

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

Upper rollers		2
Lower rollers		8
Track shoes .		49
Track guard .		Standard
Full quard on	tional	

#### Travel Device

Each track driven by axial piston motor through reduction gear for counterrotation of the tracks. Parking brake is spring-set/hydraulicreleased disc type.

Automatic transmission system: High-Low.

#### SOUND LEVEL

Sound level in cab according to ISO 6396 ...... LpA 75 dB(A)

SERVICE REFILL CAPACITIES	
Fuel tank	705.0 L
Engine coolant	61.0 L
Engine oil	55.0 L
Swing device (each side)	6.5 L
Travel device (each side)	11.0 L
Hydraulic system	510.0 L
Hydraulic oil tank	310.0 L

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# **SPECIFICATIONS**

#### WEIGHTS AND GROUND PRESSURE

Equipped with 3.1m3 GP bucket, 6.3m boom and 2.5m arm

Model	Operating weightv	Ground pressure	
Zx470H Bachkoe	47 100 kg	0.894 kgf/sq cm <sup>2</sup>	87.7 kPa
Zx470H Shovel	47 500 kg	0.902 kgf/sq cm <sup>2</sup>	88.5 kPa

#### BUCKET AND ARM DIGGING FORCE

Boom length	6.3 m BE-boom		
Arm length	2.5 m BE-arm	2.9 m BE-arm	
Bucket digging force* ISO	285 kN (29 130 kgf)	285 kN (29 130 kgf)	
Bucket digging force* SAE : PCSA	257 kN (26 240 kgf)	257 kN (26 240 kgf)	
Arm crowd force* ISO	294 kN (30 050 kgf)	256 kN (26 140 kgf)	
Arm crowd force* SAE : PCSA	285 kN (29 130 kgf)	249 kN (25 420 kgf)	

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

#### BACKHOE BUCKETS

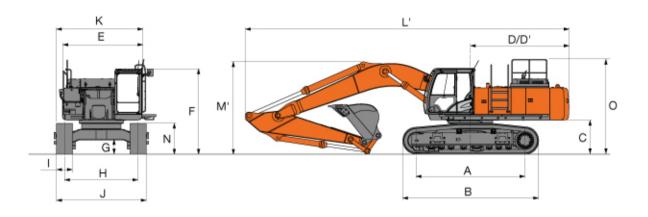
		Width	dth				Recommendation	
SI. No.		No.of teeth	No.of teeth Weight	R ecommended maximum material	6.3 m Boom			
NO.		side cutter	cutter			density	2.5 m Arm	2.9 m Arm
1	3.1m <sup>3</sup>	1722 mm	1862 mm	5	2310 kg	1800 kg/m <sup>3</sup>	1	×
2	3.0m <sup>3</sup>	1762 mm	1902 mm	5	2055 kg	1800 kg/m <sup>3</sup>	1	×
3	2.8m <sup>3</sup>	1682 mm	1822 mm	5	1920 kg	1800 kg/m <sup>3</sup>	0	/
4	2.5m <sup>3</sup>	1760 mm	1826 mm	5	2560 kg	2000 kg/m <sup>3</sup>	1	/
5	1.9m <sup>3</sup>	1400 mm	1466 mm	5	2083 kg	Boulders	1	/
6	3.0m <sup>3</sup>	2506 mm	No side cutter	No tooth points	1182 kg	1000 kg/m <sup>3</sup>	×	х
7	2.8m <sup>3</sup>	2387 mm	No side cutter	No tooth points	1137 kg	1000 kg/m <sup>3</sup>	×	×
8	1.0m³	1132 mm	No side cutter	4	1227 kg	1800 kg/m <sup>3</sup>	×	х

### LOADING SHOVEL BUCKET

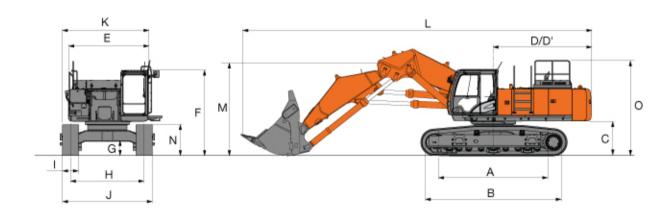
SI. No.	Туре	Capacity	Maximum width	No. of teeth	Weight
1	Bottom Dump Type general purpose Bucket	2.6 m <sup>3</sup>	1722 mm	6	3050 kg
2	Slag	2.6 m <sup>3</sup>		6	

#### DIMENSIONS

#### Backhoe



#### Loading Shovel



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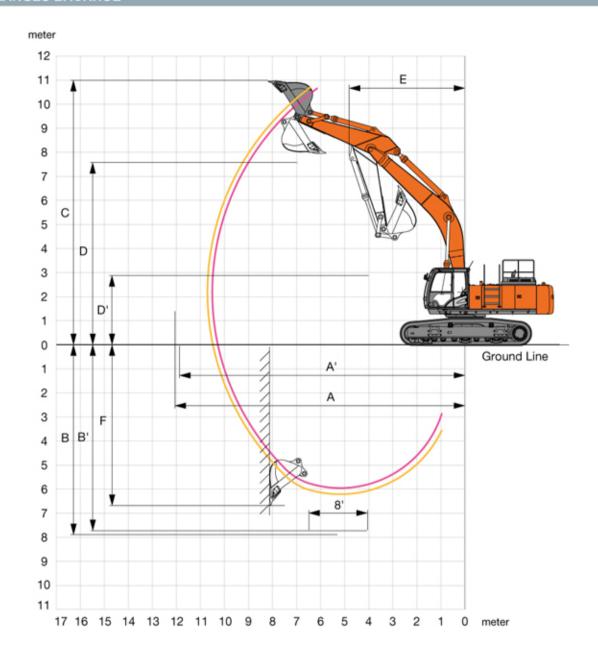
A Distance between tumblers	4 040
B Under carriage length	5 040
"1 C Counter weight clearance	1 2 3 0
D Rear-end swing radius	3 670
D' Rear-end length	3 660
E Overall width of upperstructure	3 310
F Overall height of cab	3 170
" G Min. ground clearance	495
H Track gauge	2 740
I Track shoe width	G 600
J Undercarriage width	3 340
K Overall width	3 820
L Overall length	12 110
M Overall height of boom	4 000
L' Overall length	12 010
M'Overall height of boom	3 480
N Track height	1 150
O Overall height of base machine	3 540

<sup>&</sup>quot; Excluding track shoe lug G: Triple grouser shoe

<sup>✓</sup> Option is available Option is technically feasible but generally not offered \*ISO heat

# **SPECIFICATIONS**

#### WORKING RANGES BACKHOE

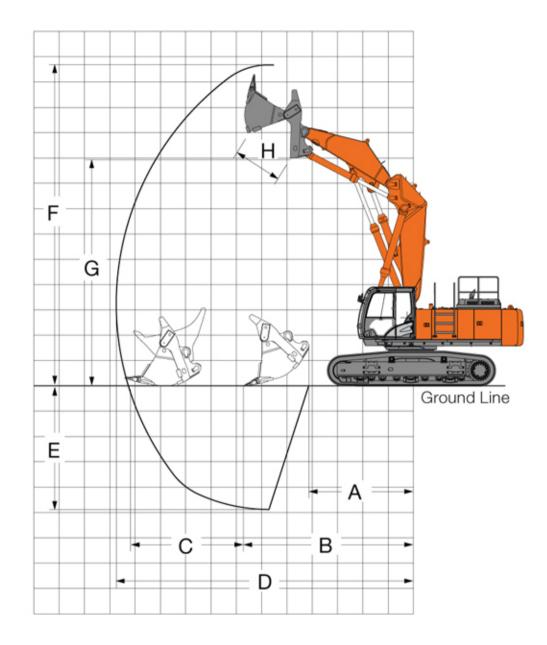


Unit: mm

	6.3 m E	E-boom
Arm length	2.5 m BE-arm	2.9 m BE-arm
A Max. digging reach	10 460	10 850
A' Max. digging reach (on ground)	10 240	10 640
B Max. digging depth	5 920	6 360
B' Max. digging depth (8'level)	5 740	6 200
C Max. cutting height	10 530	10 760
D Max. dumping height	7 190	7 210
D' Min. dumping height	3 550	3 030
E Min. swing radius	3 930	3 930
F Max. vertical wall	4 380	4 150

Excluding track shoe lug

#### WORKING RANGES LOADING SHOVEL



Unit: mm

Item	Bottom dump type
A Min. digging distance	2 750
B Min. Level crowding distance	5 010
C Level crowding distance	3 370
D Max. digging reach	4 760
E Max. digging depth	4 130
F Max. cutting height	10 070
G Min. dumping height	7 500
H Min. Bucket tilting angle.on ground	54 <sup>0</sup>
I Max. bucket opening width	1 390

Excluding track shoe lug

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# **LIFTING CAPACITIES**

#### LIFTING LOAD CHART OF ZAXIS470GI WITH 6.3m BOOM 2.5m ARM WITHOUT BKT



											Rating o	ver-front	🕽 Rating o	wer-side or 3	80 degrees	Unit : kg
	Load					Load	radius									
Conditions	point	1.5	5 m	3	m	4.5	5 m	6	m	7.5	5 m	1	9m	, A	t max. read	n
	height m	ů	<b>⊕</b>	ů	<b>⊕</b>	ů	<b>⊕</b>	ů	⊕	ů	<b>⊕</b>	ů	<b>⊕</b>	ů	<b>⊕</b>	meter
BE boom 6.3 m	7.5							15*	14					12*	12	6.7
BE arm 2.5 m	6							15.3°	14.0	14.0"	9.7			11.9*	9.2	7.7
	4.5							16.9°	13.3	14.0	9.4			11.9	8.0	8.3
without Bucket	3					21.7*	20.7	18.7*	12.5	13.6	9.1			11.0	7.4	8.6
	1.5							18.5*	11.9	13.2	8.7			10.8	7.2	8.6
Shoe 600 mm	0 (Ground)							18.2*	11.6	13.0	8.5			11.2	7.4	8.4
	-1.5					27.2*	17.6	18.1*	11.5	13.0	8.5			11.3	8.1	7.8
	-3					25.2*	17.6	16.7*	11.7					13.7*	9.8	6.9
	-4.5					21.5*	18.0									

Notes: 1. Lifting capacity of the ZX series does not exceed 75% of tipping bad with them achine on firm, level ground or 87% of full hydrulic capacity. 2.\* Indicates bad limited by hydraulic capacity.

#### LIFTING LOAD CHART OF ZAXIS470GI WITH 6.3m BOOM 2.9m ARM WITHOUT BKT



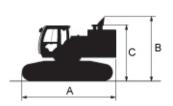
es Unit:k	wer-side or 360 degrees	(Con Rating o	wer-front	👸 Rating o
	At many manch			
KGITI	At max, reach	Qm		7.5 m

	Load					Load	radius								t max. read	
Conditions	point	1.5	im	3	m	4.5	5 m	6	m	7.5	5 m	9	m	Α,	max. reac	•
Containons	height m	ů	<b>-</b>	ů	<b>-</b>	ů	<b>⊕</b>	ů	⊕	ů	<b>⊕</b>	ů	<b>⊕</b>	ů	<b>⊕</b>	meter
BE boom 6.3 m	7.5							14*	14"					8*	8*	7.1
BE arm 2.9 m	6							14.8*	14.2	13.4"	9.9			7.8*	7.8*	8.0
	4.5					20.8*	20.8*	16.4*	13.6	14.2	9.6			7.8*	7.7	8.6
without bucket	3					25.1*	19.4	18.4*	12.8	13.8	9.2			8.2*	7.1	8.9
Shoe 600 mm	1.5					27.6*	18.2	18.8	12.1	13.4	8.9			8.9*	7.0	8.9
	O (Ground)					27.7*	17.8	18.3	11.8	13.1	8.6			10.0	7.1	8.6
	-1.5			23.3*	23.3*	26.1*	17.8	18.2	11.6	13.0	8.6			11.7	7.7	8.1
	-3			29.2*	29.2*	21.8*	18.0	17.6*	11.8					13.7*	9.2	7.2
	-4.5															

Notes : 1. Lifting capacity of the ZX series does not exceed 75% of tipping bad with them achine on firm, level ground or 87% of full hydrulic capacity. 2. \* Indicates bad limited by hydraulic capacity.

# **TRANSPORTATION**

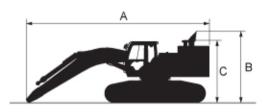
#### BASIC MACHINE (WITHOUT COUNTERWEIGHT)



Shoe width	А	В	C"	Overall width*2	Weight
600 mm	5 470 mm	3 320 mm	3 540 mm	3 310 mm	27 500 kg

<sup>™</sup> Without exhaust funnel

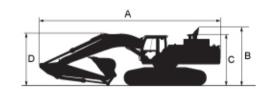
#### BASIC MACHINE FITTED WITH BOOM AND NO SIDEWALK



Boom length	Shoe width	А	В	Ci	Overall width <sup>-2</sup>	Weight
6.3 m BE	600 mm	9 170 mm	3 320 mm	3 540 mm	3 310 mm	32 300 kg

<sup>&</sup>quot; Without exhaust funnel

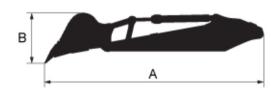
#### BASIC MACHINE FITTED WITH FRONT AND SIDEWALK



Boom length	6.3 m BE			
Arm length	2.5 m BE	2.9 m BE		
A	11 660 mm	11 320 mm		
В	3 870 mm			
C"	3 400 mm			
D	4 300 mm	3 740 mm		

ч Without exhaust funnel

#### ARM AND BUCKET



Arm	Bucket SAE, PCSA heaped	А	В	Overall width	Weight
2.5 BE	2.50 m <sup>2</sup>	5 650 mm	1 470 mm	1 820 mm	5 000 kg
2.9 BE	2.30 m <sup>3</sup>	6 030 mm	1 340 mm	1 700 mm	4 800 kg

#### BUCKET



#### Rock bucket

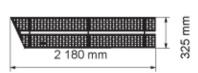
Buci	ket		D.	Overall	Weight	
ISO heaped	CECE heaped	^	_ B	width	weight	
1.9 m²	1.7 m²	2 030 mm	1 480 mm	1 500 mm	2 070 kg	
2.5 m³	2.2 m³	1 950 mm	1 650 mm	1 820 mm	2 360 kg	

#### COUNTERWEIGHT 9 080 kg

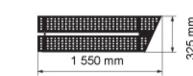


Overall height: 1 340 mm

#### LEFT FRONT SIDEWALK 28 kg



Overall height: 142 mm



LEFT REAR SIDEWALK 20 kg

Overall height: 142 mm

<sup>&</sup>lt;sup>12</sup> Undercarriage retracted

<sup>&</sup>lt;sup>12</sup> Undercarriage retracted

# **EQUIPMENT**

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

500	Mo.	- alar	rm	only	indica	tion

ENGINE	
Auto idle system	S
Cartridge-type engine filter	s
Dry-type air double filter with evacuator valve (with air filter restriction indicator)	S
Cartridge-type engine oil filter	S
Cartridge-type fuel filter	
Power mode control (PWR(Power) ECO(Economy)	S
Isolation-mounted engine	s
Pre-cleaner	s
Radiator, oil cooler	S
Radiator reserve tank	s
50 A alternator	S

HYDRAULIC SYSTEM	
Control valve with main relief valve	S
Drain filter	S
Engine speed sensing system	S
E-P control system	S
Extra port for control valve	S
Pilot filter	S
Power boost	S
Quick warm-up system for pilot circuit	S
Shockless valve in pilot circuit	S
Suction filter	S
Work mode selector	S

CAB	
Additional fuse box	S
Adjustable armrests	S
Sound suppressed	s
Steel cab	S
AM-FM radio, USB music play	s
Ashtray	s
Auto control air conditioner	S
Auto-idle selector	s
Drink holder	S
Engine shut-off cable	S
Evacuation hammer	s
Floor mat	S
Front window washer	s
Windshield wiper	S
Pilot control shut-off lever	S
2 Point Seat Belt	s
Rubber radio antenna	s
Seat : Adjustable reclining mechanical suspension	S
Short wrist control levers	s
Storage box	S
Front Guard-Top	0
Front Guard-Bottom	0
2 speaker	S
6 fluid-filled elastic mounts	s
Mobile charger	S

MONITOR SYSTEM	
Alarm buzzers: overheat, engine oil pressurre, Overload	S
Alarms: overheat, engine warning, engine oil pressure, alternator*, minimum fuel level, air filter restriction*, work mode	s
Display of meters: water temperature, hour Other displays: work mode, auto-idle	s

S : Standard equipment	S:	Star	ndard	egui	pmer
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O: Optional equipment

LIGHTS	
3 working lights	s
2 cab lights	S
Additional working lights (boom right side)	S

UPPER STRUCTURE	
Electric fuel refilling pump with auto stop	0
Rear view mirror(right & left side)	S
Side walk (cab side)	S
Swing parking brake	S
Tool box	S
Utility space	S

UNDERCARRIAGE	
Bolt-on sprocket	S
Full track guard	0
Hydraulic track adjuster	S
ldler track guard	S
Travel motor covers	S
Travel parking brake	S
Upper and lower rollers	S
600 mm triple grouser shoes	S

FRONT ATTACHMENTS	
Automatic centralized lubrication system (except arm front end joints)	s
Damage prevention plate	S
Square bars	S
Dirt seal on all bucket pins	S
1.9 m <sup>3</sup> (ISO heaped) bucket (granite bucket)	0
3.1 m <sup>3</sup> (ISO heaped) bucket (G.P)	0
2.5 m <sup>3</sup> (ISO heaped) H.D (with side shrouds)	0
3.0 m <sup>3</sup> (ISO heaped) G.P (with side shrouds)	0
6.3 m BE-boom	S
2.5 m BE-arm	s
2.9 m BE-arm	0

MISCELLANEOUS	
Anti-slip steps and handrails	S
Lockable fuel refilling cap	S
Lockable machine covers	S
Onboard information controller	S
Standard tool kit	S

OTHERS	
Clobal a conside	

The Specifications are subject to change without prior notice. The machine depicted may vary from the actual machine. Please contact our nearest office for latest specifications. Accessories shown here are not part of the standard equipment. Performance of the machine may vary with site and operating conditions encountered.

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