



Reliable solutions

# ULTRA PERFORMANCE



## **ULTRA PERFORMANCE**





## Limitless Reliability and Durability

## Top-Notch Technology

#### State-of-the-art R&D and Quality Control

Tata Hitachi is known for its technological prowess and product performance. The R&D Division has a track record of excellent design, stress analysis expertise using CAE system, and an abundant production data base. A large scale durability test field allows for a series of stringent testing of new machines.

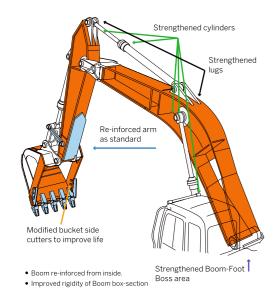




#### Rock-Solid, Durable Front Attachment

The robust boom and arm are designed and analysed using advanced software. They are manufactured to precision using high grade steels with state-of-the-art welding robot and machining centres. Thus, durability is built into the front attachment. 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 steel bushings, retain grease inside for longer greasing intervals. A reinforced resin thrust plate, provided at front attachment joints, helps reduce wearing noise.



#### Strengthened Undercarriage

The X-beam frame is made monolithically with fewer welds for higher rigidity and durability. Idler brackets and travel motor brackets are both reinforced for added durability



#### **Proven Upperstructure**

Track adjusters absorb impacts to crawlers. Front idlers and adjuster cylinders are integrated to increase durability.

#### **Reliable and Durable** Isuzu Engine

This tried and tested reliable Japanese engine has a track record showing impressive durability at countless tough job sites around the world. This engine with a rugged design, a direct fuel injection system and a robust mechanical governor goes green and complies with global emission

The turbo charged, inter-cooled engine yields a whopping 66kW output for higher production in shorter job schedule.



#### Human & Intelligent Operation System (HIOS-III)

Discover excellence with ZAXIS 220LC ULTRA's HIOS-III hydraulic system, developed by industry leading hydraulic technologies and a wealth of experience. Unleash superior digging forces, swift front movements, faster cycle times and precise controls resulting in higher production with low fuel consumption.

#### Generational Intelligence with New Age Micro-processor based controls

Experience advanced micro-processor based technology that enhances productivity, simplifies maintenance, and ensures exceptional performance.

#### Versatility

The ZAXIS 220LC ULTRA comes in tailor made options and is easily customizable with various attachments such as Auger, Quick Coupler, Orange Peel Grab and many more.

Option of factory fitted rock breaker piping kit is also available. Wide range of bucket options are also available to suit a variety of applications.



Alicon

Rock Breaker





## ULTRA PERFORMANCE \_\_\_

#### Unmatched Performance

- New Buckets with Higher Capacity
- Enhanced Power Boost
- Higher Swing Torque
- Auto Power Lift Mode
- Increased Working Ranges
- High Production with Low Fuel Consumption
- Faster Cycle Time



#### Limitless Reliability and Durability

- Reliable Japanese Engine
- Strengthened Bucket and Boom Cylinders WW
- Strengthened Boom
- Strengthened Undercarriage
- Reliable Pump and Motors
- Proven Upper Structure
- Reinforced Front Attachments

#### Top-Notch Technology and Versatility

- HIOS III Hydraulic System
- New-age Micro-Processor Based Controls
- ConSite Telematics Suite
- Global e-Service
- Factory fitted rock breaker piping kit
- Easily customizable with attachments, such as, rock breaker, auger, orange peel grab, quick coupler, etc.





- 7" LCD Monitor
- Auto control Air Conditioner
- Ergonomically Placed Controls
- Suspension Seat
- AM/FM, Bluetooth Music System with Powerful Speakers
- Powerful LED lights

#### Safety:

- OPG Cabin
- FOPS (Falling Object Protective Structure)
  Level 2

   Level 2

   Tevel



### Assured Support

- Extended Warranty
- Wide-spread Dealer Network
- Field Diagnostic Vehicle
- Mobile Workshop









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## Redefined Comfort and Safety



#### Safe and Robust Cab

- The robust cab, meeting the OPG (Top Guard Level 1) criteria, protects the operator from falling objects.
- Optional enhanced safety and DGMS compliance facility is available:
- Auto Fire Detection and Suppression System (AFDSS) is available as optional feature and can be factory fitted
- Auto centralized lubrication system (ACLS) provides lubrication to all the pins
- Swing alarm system can be provided to meet safety requirement
- Travel alarm to alert nearby equipment/people during travel operation of the machine.

· Engine stop cable

monitor

Rear tray

· Bottle holder

Overhead window

· Powerful LED lights

• 7" LCD display - multipurpose

Front guard for cabin glass

• AM/FM, Bluetooth music

system with powerful speakers

#### **Cabin Features**

- Plush comfortable reclining seat with armrest and adjustable headrest
- Air Lumbar Support
- Air conditioning
- Smooth control levers
- Engine emergency shut-off switch
- · Horn function even in machine off condition
- · Engine stop switch

### **Comfort-Designed Operator Seat**

Experience spacious and ergonomically designed cabin for comfort and productivity, featuring ample space and strategically



New Multi-function





Ergonomic



Lever locking and wide door for easy ingress

## Assured Support

Genuine Tata Hitachi Parts meet stringent quality standards. These parts are guaranteed to perform and are backed by Tata Hitachi's warranty.

Developed in synergy with our machines, Tata Hitachi ensures wide spread dealer network which also offers Field Diagnostic Vehicle and Mobile Workshop for quicker after-sales service.

Tata Hitachi also offers extended warranty so that our customers get high levels of performance, reliability and peace of mind.

Extended service intervals for reduced maintenance cost:

- Engine oil change: 500 hours
- Engine oil filter change: 500 hours
- Fuel filter change: 500 hours
- Hydraulic oil filter change: 1000 hours
- Hydraulic oil change: 5000 hours











Guaranteed availability - Increased uptime and maximum production.

Fix before failure to ensure

maximum reliability of machines.



Higher resale value of equipment after the end of the contract.

at site on 365\*24 hours basis

Trained and experienced manpower



Onsite availability of float aggregates.



Exclusive onsite warehouse for complete contract period.



#### **MONTHLY** REPORT VIA E-MAIL

Know everything about your machine & how to increase productivity while reducing costs



Advises you on ways to fine tune everyday operations



Pre-emptive information of your machine's health



Real time notification to you and the dealer to avoid machine breakdowns



**ULTRA** 

Benchmarking your machine against similar class machines in the region





ZAXIS

### **Specifications**

#### ENGINE ..lsuzu CC-6BG1T Model ..4-cycle water-cooled, direct injection Type. Aspiration ..Turbocharged, intercooled No. of cylinders Rated power ISO 9249 / SAE J1349, net ..168 HP (170 PS) at 2 100 min<sup>-1</sup> (rpm) ..637 Nm (65 kgfm) at 1 800 min<sup>-1</sup> (rpm) Maximum torque. ...6.494 L Piston displacement Bore and stroke .105 mm x 125 mm ...2 x 12 V / 88 Ah Batteries

#### HYDRAULIC SYSTEM Under die De

Hydraulic Pumps	
Main pumps	2 variable displacement axial piston pumps
Maximum oil flow	2 x 212 L/min
Pilot pump	1 gear pump
Maximum oil flow	33.6 L/min
Relief Valve Settings	
Implement circuit	350 kgf/cm2 (34.3 Mpa)
Swing circuit	310 kgf/cm2 (30.4 Mpa)
Travel circuit	350 kgf/cm2 (34.3 Mpa)
Pilot circuit	40 kgf/cm2 (3.9 Mpa)
Power boost	388 kgf/cm2 (38.0 MPa)

#### SERVICE REFILL CAPACITIES

400.0 L
23.0 L
25.0 L
6.2 L
6.8 L
240.0 L
135.0 L

#### UNDER CARRIAGE

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 roller	2
Lower roller	8
Track shoes	
Track guard	4

#### Travel Device

Travel speeds..

Each track driven by 2-speed axial piston motor.

Parking brake is spring-set/hydraulic-released disc type.

Automatic transmission system: High-Low.

Low: 0 to 3.5 km/h ..184 kN (18 800 kgf) Maximum traction force . .70% (35 degree) continuous Gradeability.

UPPER STRUCTURE	
Swing speed	

#### BUCKET AND ARM DIGGING FORCES

Arm length	2.4 m (STD)	2.91 m
Bucket digging force* ISO	158 kN (16 100 kgf)	158 kN (16 100 kgf)
Bucket digging force* SAE : PCSA	139 kN (14 200 kgf)	139 kN (14 200 kgf)
Arm crowd force* ISO	139 kN (14 200 kgf)	114 kN (11 600 kgf)
Arm crowd force* SAE : PCSA	133 kN (13 600 kgf)	110 kN (11 200 kgf)

\* At Power Boost

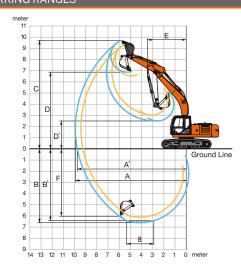
..High: 0 to 5.1 km/h

#### BACKHOE ATTACHMENTS

Capacity ISO	Wid	th	Tooth	Weight	Max. Material Density (kg/m³)	Arm
heaped m <sup>3</sup>	Without side cutters	With side cutters	Point (no's)	kg	iviax. Waterial Delisity (kg/iii )	Length (m)
0.9 GP	1 130 mm	1 240 mm	5	745	Heavy-Duty Services	2.9
1.0 HD	1 245 mm	1 269 mm	4	962	2 000	2.4
1.1 GP	1 330 mm	1 440 mm	6	929	1800	2.4
1.22 ELM	1 460 mm	1 570 mm	6	857	1 100	2.4
Block Handling	1 236 mm	-	4	1240	G&M	2.4
1.7	1 802 mm	-	-	799	1150	2.4

G & M - Granite and Marbel

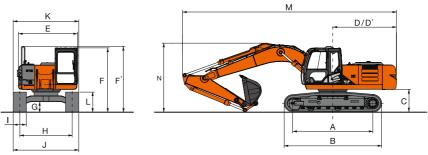
#### WORKING RANGES





### Specifications

#### DIMENSIONS



	,	
Α	Distance between tumblers	3 660
В	Undercarriage length	4 460
*C	Counterweight clearance	1040
D	Rear-end swing radius	2 910
D'	Rear-end lengh	2 910
Е	Overall width of upperstructure	2 700
F	Overall height of cab	2 940
F'.	Overall height of upperstructure	3 010
*G	Min. ground clearance	450

		ZX220LC (S	ΓD/HD) Unit: mm
Н	Track gauge		2 390
- 1	Track shoe width		600
J	Undercarriage width		2 990
K	Overall width		2 990
*L	Track height with triple	grouser shoes	920
М	Overall length	With 2.4 m arm	9 750
		With 2.9m arm	9 750
Ν	Overall height of boom	With 2.4 m arm	3 030
		With 2.9m arm	3 070
		* Excluding track shoe lug	G: Triple grouser shoe

#### WEIGHTS AND GROUND PRESSURE

			ZX220L	C (STD) *1	ZX220LC (HD) *2			
Shoe type	Shoe width	Arm length kg		hoe width Arm length kg kPa (kgf/cm2)		kg	kPa (kgf/cm2)	
Triple grouper	600 mm	2.4 m	21 200	48 (0.49)	21 300	48 (0.49)		
Triple grouser	600 11111	2.91 m	21 400	49 (0.50)	21 500	48 (0.49)		
Triple grouser	600 mm	2.4 m	21 400	49 (0.50)	21 500	49 (0.50)		
HD	000111111	2.91 m	21 600	49 (0.50)	21 700	49 (0.50)		

\*1:Including 1.1 m³ (ISO heaped) bucket weight (STD: 929 kg) and counterweight (4600 kg). | \*2:Including 1.0 m³ (ISO heaped) bucket weight (HD: 962 kg) and counterweight (4600 kg).

#### LIFTING CAPACITIES

Notes: 1. Ratings are based on ISO 10567.

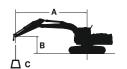
-1.5

-3.0

-4.5

- 2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
- 3. The load point is the center-line of the bucket pivot mounting pin on the arm.
- 4. \*Indicates load limited by hydraulic capacity.
- For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.

\*9 900



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

3 670 7.21

5 330 5.51

4.71

4 470

5 670

\*6 980

\*7 110

### ZX220LC (STD/HD

600 mm

ZX220LC (STD	/HD)								Rating o	ver-front 🌘	🕽 Rating o	ver-side or 3	60 degrees	Unit : kg	
	Load					Load	radius					۸+	mavimum	rooch	
Conditions	point	1.5 m		3.0 m		4.5	4.5 m		6.0 m		7.5 m		At maximum reach		
Contactions	height m	ů	<b>©</b>	ů		Ů		Ů		Ů		ů		meter	
Boom 5.68 m	6.0							*5 430	5 410			*5 520	4 470	6.75	
Arm 2.4 m	4.5					*6 910	*6 910	*5 930	5 270			*5 620	3 740	7.49	
	3.0					*8 850	7 600	*6 780	5 040	5 540	3 650	5 140	3 390	7.87	
Counterweight 4 600 kg	1.5					*10 500	7 160	7 560	4 830	5 430	3 550	4 990	3 270	7.95	
4000 kg	() (Ground)					*11 210	6.970	7 400	4 690	5 360	3 490	5 130	3 350	7.74	

6 950

7 060

7 350

7 360

7 450

4 660

4 740

ZX220LC (Optional) Hating over-front Rating over-front Rating over-side or 3											360 degrees	unit : kខ្		
	Load			At maximum reach										
Conditions	point	1.5	m	3.0	) m	4.5	5 m	6.0	) m	7.5	m	1 ^	t maximum	reacri
Conditions	height m	ů		Ů		Ů		Ů		Ů		Ů		meter
Boom 5.68 m	6.0							*4 810	*4 810			*3 970	3 870	7.33
Arm 2.91 m	4.5					*6 080	*6 080	*5 370	5 250	*5 080	3 690	*3 920	3 300	8.01
	3.0					*8 020	7 640	*6 270	5 000	*5 470	3 580	*4 030	3 010	8.37
Counterweight 4 600 kg	1.5					*9 850	7 130	*7 200	4 760	5 350	3 460	*4 310	2 900	8.45
0	0 (Ground)			*4 770	*4 770	*10 870	6 860	7 300	4 590	5 250	3 370	4 580	2 960	8.25
Shoe width: 600 mm	-1.5	*5 410	*5 410	*9 040	*9 040	*11 030	6 780	7 220	4 520	5 220	3 350	4 990	3 210	7.75
000111111	-3.0	*9 910	*9 910	*14 930	13 340	*10 400	6 850	7 260	4 550			5 950	3 800	6.90

\*10 130

\*7 560

ZAXIS

## Equipment

ZX220LC ULTRA	STD	HD
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	•	•
Fan guard	•	
Water separator	•	
Pre-cleaner		
Dust-Proof indoor net		
		_
Radiator reserve tank	•	•
50 A alternator	•	•
HYDRAULIC SYSTEM		1
Auto power lift	•	•
Control valve with main relief valve	•	•
Full-flow filter	•	•
High mesh full flow filter with restriction indicator	0	0
Pilot filter	•	•
Power boost	•	•
Suction filter	•	•
Extra port for control valve		
Work mode selector	_	_
		_
CAB	_	_
All-weather sound suppressed steel cab	•	•
AM-FM radio with 2 speakers	•	•
Ashtray	•	•
Auto control air conditioner	•	•
Drink holder	•	•
Drink holder with hot & cool	•	•
Electric horn	•	•
Engine shut-off lever	•	
Evacuation hammer	•	
Floor mat	•	
		_
Footrest	•	_
Front window washer	•	•
Front windows on upper, lower and	•	•
left side can be opened	_	_
Lower cab front guard	•	•
Upper cab front guard	•	•
Hot & cool box	•	•
Intermittent windshield wipers	•	•
Room light	•	•
FOPS Level 1 compliant cabin	•	•
FOPS Level 2 compliant cabin with top guard		
(IS/ISO 3449/ ISO 10262)	0	0
Pilot control shut-off lever	•	•
Seat belt with warning system	•	•
Radio antenna	•	•
AUX port	•	•
Seat:Mechanical suspension seat with		
air lumbar support	•	
Seat adjustment : backrest, armrest, height and	•	
angle, slide forward / back		
Short wrist control levers	•	
4 fluid-filled elastic mounts		
LIGHTS		
Additional cab roof front lights	•	•
Additional boom light (right side)	0	0
2 working lights (boom left side, tool box)	•	•
Light on the counter weight		

ZX220LC ULTRA	STD	HD
MONITOR SYSTEM		
Meters : Hr meter, breaker hour meter		
engine coolant, temperature gauge and fuel gauge	•	•
Warning indicators : Alternator charge, engine oil		
pressure, engine overheat, air filter restriction,	•	•
low fuel level, engine preheat	_	
Indicators : Engine preheat, work modes, auto idle work light and fuel consumption	•	•
Alarm buzzers : Low engine oil pressure and	•	•
engine overheat		
On board display of Radio & Air conditioner	•	•
UPPER STRUCTURE		
Electric fuel refilling pump with auto stop function	•	•
Fuel Level Float	•	•
Hydraulic oil level gauge	•	•
Rear view mirror (right & left side)	•	•
Swing parking brake	•	•
Tool box	•	•
Undercover	•	•
Utility space (behind cabin)	•	•
UNDERCARRIAGE		
Bolt-on sprocket	•	•
Reinforced track links with pin seals	•	•
Reinforced idler bracket	•	•
Travel motor covers	•	•
Travel parking brake	•	•
Track guard (each side) and hydraulic track adjuster	•	•
Upper and lower rollers	•	•
2 track guards	•	•
4 tie down hooks	•	•
600 mm triple grouser shoes	•	0
600 mm HD triple grouser shoes	0	•
800 mm triple grouser shoes	0	•
FRONT ATTACHMENTS		
Centralized lubrication system	0	0
Dirt seal on all bucket pins	•	•
Flanged pin	•	
Reinforced link B	•	_
WC (tungsten-carbide) thermal spraying	•	-
Seat screws for breaker attachment	•	
ATTACHMENTS		
Breaker and crusher piping	0	0
High mesh full flow fillter with restriction indicator	0	0
Parts for breaker and crusher	0	0
Line filter	0	0
	U	
MISCELLANEOUS		
Auto Lubrication	0	
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	•	•
Battery Cut-off Switch	•	•
Travel alarm	0	0
Swing alarm	0	0
AFSS phase-I	0	0
Rear view camera	0	0

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

ullet : Standard equipment  $\,{f O}$  : Optional equipment

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Authorised Dealer