



Reliable solutions

ULTRA PERFORMANCE



ULTRA PERFORMANCE



ZAXIS

U3

Unmatched Performance

Limitless Reliability and Durability

Higher Production with Less Fuel

*HIOS III hydraulic system and engine control system, thereby reducing CO2

Lower Fuel Consumption in ECO Mode

to the PWR mode.



Rapid Arm Roll-in

 $\label{lem:combined} \mbox{Arm roll-in speed increases by combined flow from arm and}$ boom cylinders through regenerative valves for productive

Fast Arm Speed During Boom Lowering

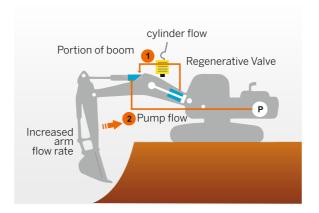
In ZAXIS 140H ULTRA, for boom lowering, pressurized oil from the boom cylinder bottom side is delivered to its rod side, assisted by boom weight. At the same time, pressurised oil from the pump is delivered to the arm cylinder for faster arm

Powerful Lifting of Material

The Auto Power Lift mode, which automatically surges lifting force by 6% when needed, allows for powerful lifting.

Enhanced Power Boost

The enhanced power boost when applied, allows the operator to increase the digging force by 5%. This can be actuated by pressing the button on the control lever.



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.





Reliable and Durable 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 norms.

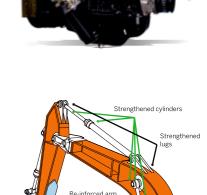
The turbo charged, inter-cooled engine yields a whopping 66kW output for higher production in shorter job schedule.



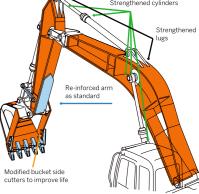
Rock-Solid, Durable Front Attachment

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.



. Improved rigidity of Boom box-sec



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.



emissions.

The ECO mode is a new economical mode that gives high productivity with less fuel and can cut fuel consumption by 10% compared



excavation.



ZAXIS

ULTRA PERFORMANCE ___

Unmatched Performance

- Regeneration Circuits
- Enhanced Power Boost
- Best-in-class Swing Speed
- · Auto Power Lift Mode
- High Production with Low Fuel Consumption
- Faster Cycle Time
- Swift Front Attachment Movements



Limitless Reliability and Durability

TATA HITACHI

- Reliable Japanese Engine
- Robust Structures
- Strengthened Undercarriage
- Reliable Pump and Motors
- Proven Upper Structure
- Reinforced Front Attachments
- Durable Components

Top-Notch Technology and Versatility Top-Notch Technology Top-

- 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.



Redefined Comfort and Safety

- Well Ventilated and Spacious Cabin
- Auto control Air Conditioner
- Ergonomically Placed Controls
- Suspension Seat
- AM/FM, Bluetooth Music System with Powerful Speakers

Safety:

- OPG Cabin
- Powerful LED lights



Assured Support

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





06

07

Top-Notch Technology and Versatility

Redefined Comfort and Safety

Human & Intelligent Operation System (HIOS-III)

precise controls resulting in higher production with low fuel consumption.

Generational Intelligence with New Age Micro-processor based controls

simplifies maintenance, and ensures exceptional performance.

Versatility

The ZAXIS 140H 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.

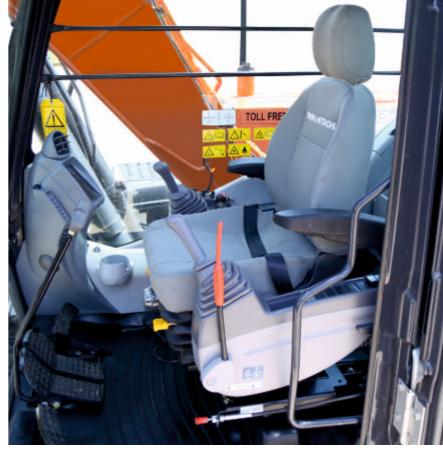


Comfort-Designed Operator Seat

The ergonomically designed suspension seat is fitted with a head rest and arm rests for enhanced operator comfort. The seat can be adjusted in multiple ways: sliding and reclining, to suit operator's preferences. The seat can slide rearward for added leg space.

Safe and Robust Cab

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



Cabin Features

- Roomy cabin
- · Ergonomic work area
- Plush comfortable reclining seat with hand rest and adjustable head rest
- · Air conditioning
- · Smooth control levers
- Engine emergency shut off switch
- Horn function even in machine off condition
- · Engine stop switch
- · Engine stop cable
- · Multipurpose monitor
- Rear tray
- · Bottle holder
- · Front guard for cabin glass
- · Overhead window
- AM/FM, Bluetooth music system with powerful
- · Powerful LED lights



New Multi-function



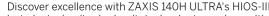






Drink holder





Discover excellence with ZAXIS 140H 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

Experience advanced micro-processor based technology that enhances productivity,



Tata Hitachi Genuine Parts meet stringent quality standards. These parts are guaranteed to perform and

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.





are backed by Tata Hitachi's warranty.







Fix before failure to ensure

maximum reliability of machines.



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

Trained and experienced

manpower



Onsite availability of float aggregates.



Exclusive onsite warehouse for complete contract period.



MONTHLY REPORT VIA E-MAIL

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



Advises you on ways to fine tune everyday operations



Pre-emptive information of your machine's



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



ANALYSIS Benchmarking your

machine against similar class machines in the region



Specifications

ENGINE .Isuzu CC-4BG1T Model . .4-cycle water-cooled, direct injection Type.. Aspiration.. ...Turbocharged, intercooled No. of cylinders ... Rated power ISO 9249, net. ..66.0 kW (88.5 HP) at 2150 rpm ..66.0 kW (88.5 HP) at 2150 rpm SAE J1349, net. Maximum torque. .347 Nm (35.4 kgfm) at 1600 rpm Piston displacement4.329 L ..105 mm x 125 mm Bore and stroke. Batteries2 x 12 V / 55 Ah

HYDRAULIC SYSTEM

Hydraulic Pumps Main pumps2 variable displacement axial piston pumps Maximum oil flow. .2 x 105 L/min Pilot pump. ..1 gear pump ..30.24 L/min Maximum oil flow.

Hydraulic Motors Travel. ..2 variable displacement axial piston motors

wing	1 axial piston moto
elief Valve Settings	
nplement circuit	34.3 MPa (350 kgf /cm²

Implement circuit	34.3 MPa (350 kgf /cm ⁻)
Swing circuit	32.3 MPa (330 kgf /cm²)
Travel circuit	34.3 MPa (350 kgf /cm²)
Pilot circuit	4.0 MPa (41kgf /cm²)
Power hoost	36 3 MPa (370 kgf /c m²)

Hydraulic Cylinders

	Quantity	Bore	Rod Diameter
Boom	2	105 mm	70 mm
Arm	1	115 mm	80 mm
Bucket	1	100 mm	70 mm

■■ UPPER STRUCTURE

Revolving Frame

D-section frame skirt for resistance to deformation.

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is $single-row, shear \, type \, ball \, bearing \, with \, induction \, hardened \, internal \, gear. \, Internal \, constant \, and \, constant \, constant$ $gear \, and \, pinion \, gear \, are \, immersed \, in \, lubricant.$

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

Swing speed.13.7 min-1 (rpm)

Operator's Cab

Independent spacious cab, 1005 mm wide by 1675 mm high, conforming to ISO* Standards.

* International Organization for Standardization

BUCKET AND ARM DIGGING FORCES

Arm length	2.10 m
Bucket digging force	104 kN (10 600 kgf)
Arm digging force	77 kN (7 900 kgf)

SERVICE REFILL CAPACITIES

Fuel tank	250.0 L
Engine coolant	
Engine oil	18.5 L
Swing device	3.2 L
Travel device (each side)	4.0 L
Hydraulic system	170.0 L
Hydraulic oil tank	69.0 L

UNDER CARRIAGE

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 roller	1
Lower rollers	
Track shoes	44
Track guard	1

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 speedsHigh: 0 to 5.5 km/h Low: 0 to 3.4 km/h Maximum traction force102 kN (10400 kgf) ..70% (35 degree) continuous Gradeability.....

W WEIGHTS AND GROUND PRESSURE

Operating weight and ground pressure

Chaatina	Choo width	Arm longth	Z>	(140H
Shoe type	Shoe width	Arm length	kg	kPa(kgf/cm²)
Triple grouser	500 mm	2.10 m	13 360	41 (0.42)

WEIGHT: BASIC MACHINE AND COMPONENTS

Basic Machine Weight and Overall Width



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

ZX140H

Shoe width	Weight	Overall width
500 mm	10 899 kg	2 431 mm

Component Weights

	ZX140H
Counterweight	2 610 kg
Boom (with boom and arm cylinder)	1 250 kg
2.10 m arm (with bucket cylinder)	556 kg
3.01 m arm (with bucket cylinder)	701 kg
0.70 m³ bucket	525 kg

ZAXIS

OHILL HILL	l	nit:	mm
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		ZX140H		
	Arm length	2.10 m	3.01 m	
Α	Max. digging reach	7 900	8 740	
A'	Max. digging reach (on ground)	7 770	8 620	
В	Max. digging depth	5 150	6 060	
В	Max. digging depth for 2.5 m level	4 910	5 870	
С	Max. cutting height	8 370	8 900	
D	Max. dumping height	5 960	6 490	
D'	Min. dumping height	2 487	1 607	
Е	Min. swing radius	2 310	2 590	
F	Max. vertical wall digging depth	4 650	5 500	

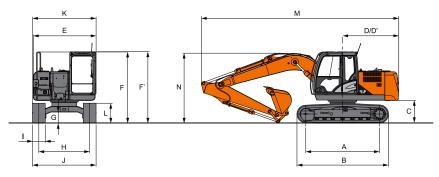
BACKHOE ATTACHMENTS

Boom and arm is are of welded, box-section design. 4.60 m boom with 2.10 m or 3.01 m arm is available. Bucket is of welded steel structure with side clearance adjust mechanism provided on the bucket joint bracket.

Buckets

Capacity	Width				Recomn	nendation
PCSA	Without side cutters	With side cutters	No. Of teeth	Weight	2.10 m arm	3.01 arm
0.7 m3 (GP)	1066 mm	1186 mm	5	508 kg	✓	
0.6 m3 (HD)	931 mm	_	4	574 kg	✓	
0.45 m3	802 mm	_	4	475 kg		✓

.I DIMENSIONS



	Α	Distance between tumblers	2 880
	В	Undercarriage length	3 580
	*C	Counterweight clearance	865
	D	Rear-end swing radius	2 190
	Е	Overall width of upperstructure	2 431
	F	Overall height of cab	2 718
	F.	Overall height of upperstructure	2 718
	*G	Min. ground clearance	440
	Н	Track gauge	1 990

1	Track shoe width		500
J	Undercarriage width		2 490
K	Overall width		2 490
*L	Track height with triple	height with triple grouser shoes	
М	Overall length	With 2.10 m arm	7 658
		With 3.01m arm	7 710
N	Overall height of boom	With 2.10 m arm	2 579
		With 3.01m arm	2 680
		# Evaluding treat about up	C. Triple areases alone

Unit: mm

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