

# **ULTRA PERFORMANCE**

**NEW**  
**ZAXIS 140<sub>H</sub>**  
**ULTRA**





NEW

ZAXIS ULTRA

Introducing the all-new ZAXIS 140H ULTRA, an excavator that delivers unmatched performance with exceptional efficiency and precision. Its limitless reliability and durability ensures resilience in the toughest condition. Boasting top-notch technology & versatility it incorporates innovative features for unparalleled functionality. Prioritizing the operator's well-being, it offers redefined comfort & safety with an ergonomically designed cabin loaded with safety measures. Backed by Tata Hitachi's assured support, this excavator guarantees peace of mind throughout its lifespan.





# Unmatched Performance

## Higher Production with Less Fuel

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

## Lower Fuel Consumption in ECO Mode

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

## 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

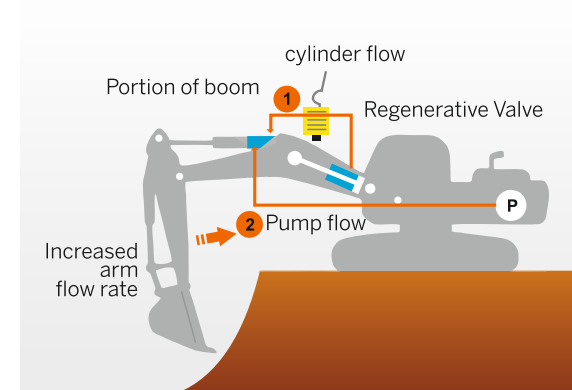
In ZAXIS 140H ULTRA, for boom lowering, pressurized oil from the boom cylinder bottom side is delivered to its rod side, assisted by boom weight. At the same time, pressurised oil from the pump is delivered to the arm cylinder for faster arm movement.

## 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

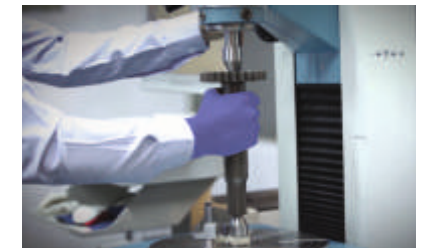
The enhanced power boost when applied, allows the operator to increase the digging force by 5%. This can be actuated by pressing the button on the control lever.



# Limitless Reliability and Durability

## 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.

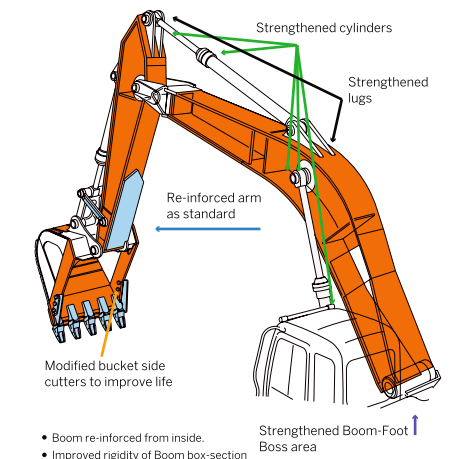
The turbo charged, inter-cooled engine yields a whopping 66kW output for higher production in shorter job schedule.



## 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.



## 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.





# 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

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



## 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.



## 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





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

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 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 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.



Alicon  
Rock Breaker



Auger



Orange  
Peel Grab

## 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 speakers
- Powerful LED lights



New Multi-function  
Monitor



Ergonomic  
Control Lever



Lever locking



Emergency engine  
stop switch



Drink holder



Wide door for easy ingress





Tata Hitachi Genuine 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.



Guaranteed availability - Increased uptime and maximum production.



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



Onsite availability of float aggregates.



Fix before failure to ensure maximum reliability of machines.



Trained and experienced manpower



Exclusive onsite warehouse for complete contract period.



## MONTHLY REPORT VIA E-MAIL

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



## SITE EFFICIENCY PARAMETERS

Advises you on ways to fine tune everyday operations



## CAUTION ALARM

Pre-emptive information of your machine's health



## EMERGENCY ALARM

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



## PERFORMANCE ANALYSIS

Benchmarking your machine against similar class machines in the region



Download the **ConSite Pocket** app today

- ✓ Minimise downtime
- ✓ Support your business



## ENGINE

Model .....Isuzu CC-4BG1T  
Type .....4-cycle water-cooled, direct injection  
Aspiration.....Turbocharged, intercooled  
No. of cylinders .....4

### Rated power

ISO 9249, net .....66.0 kW (88.5 HP) at 2150 rpm  
SAE J1349, net .....66.0 kW (88.5 HP) at 2150 rpm  
Maximum torque .....347 Nm (35.4 kgfm) at 1600 rpm  
Piston displacement .....4.329 L  
Bore and stroke .....105 mm x 125 mm  
Batteries .....2 x 12 V / 55 Ah

## HYDRAULIC SYSTEM

### Hydraulic Pumps

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

### Hydraulic Motors

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

### Relief Valve Settings

Implement circuit .....34.3 MPa (350 kgf /cm<sup>2</sup>)  
Swing circuit.....32.3 MPa (330 kgf /cm<sup>2</sup>)  
Travel circuit .....34.3 MPa (350 kgf /cm<sup>2</sup>)  
Pilot circuit .....4.0 MPa (41kgf /cm<sup>2</sup>)  
Power boost.....36.3 MPa (370 kgf /c m<sup>2</sup>)

### 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.

### Swing Device

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

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

Swing speed .....13.7 min-1 (rpm)

### Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 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 .....19.0 L  
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 .....7  
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 speeds .....High : 0 to 5.5 km/h  
.....Low : 0 to 3.4 km/h

Maximum traction force .....102 kN (10400 kgf)  
Gradeability.....70% (35 degree) continuous

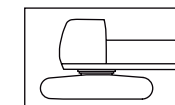
## WEIGHTS AND GROUND PRESSURE

### Operating weight and ground pressure

Shoe type	Shoe width	Arm length	ZX140H	
			kg	kPa(kgf/cm <sup>2</sup> )
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.

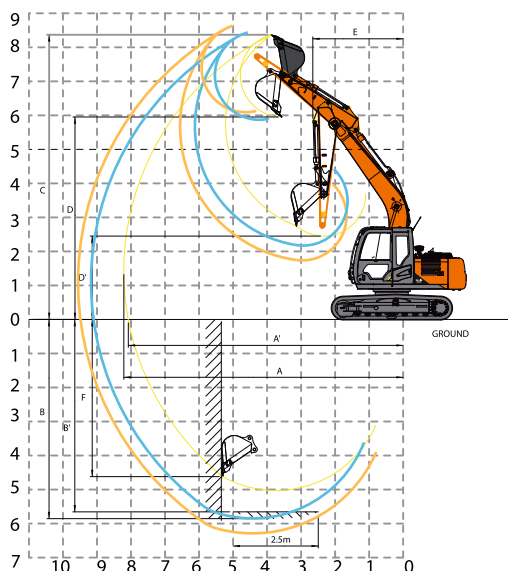
ZX140H		
Shoe width	Weight	Overall width
500 mm	10 899 kg	2 431 mm

### 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 m <sup>3</sup> bucket	525 kg



## WORKING RANGES



Unit: mm

		ZX140H	
		2.10 m	3.01 m
A	Max. digging reach	7 900	8 740
A'	Max. digging reach (on ground)	7 770	8 620
B	Max. digging depth	5 150	6 060
B'	Max. digging depth for 2.5 m level	4 910	5 870
C	Max. cutting height	8 370	8 900
D	Max. dumping height	5 960	6 490
D'	Min. dumping height	2 487	1 607
E	Min. swing radius	2 310	2 590
F	Max. vertical wall digging depth	4 650	5 500



## BACKHOE ATTACHMENTS

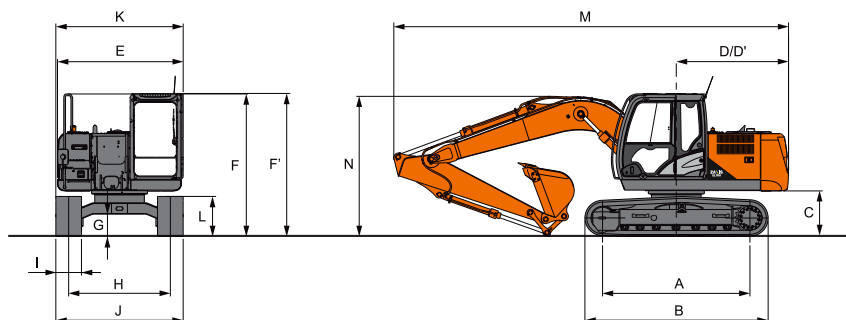
Boom and arm is of welded, box-section design. 4.60 m boom with 2.10 m or 3.01 m arm is available. Bucket is of welded steel structure with side clearance adjust mechanism provided on the bucket joint bracket.

### Buckets

Capacity	Width		No. Of teeth	Weight	Recommendation	
PCSA	Without side cutters	With side cutters			2.10 m arm	3.01 arm
0.7 m <sup>3</sup> (GP)	1066 mm	1186 mm	5	508 kg	✓	
0.6 m <sup>3</sup> (HD)	931 mm	—	4	574 kg	✓	
0.45 m <sup>3</sup>	802 mm	—	4	475 kg		✓



## DIMENSIONS



Unit: mm

A	Distance between tumblers	2 880	I	Track shoe width	500
B	Undercarriage length	3 580	J	Undercarriage width	2 490
*C	Counterweight clearance	865	K	Overall width	2 490
D	Rear-end swing radius	2 190	*L	Track height with triple grouser shoes	790
E	Overall width of upperstructure	2 431	M	Overall length	With 2.10 m arm 7 658 With 3.01m arm 7 710
F	Overall height of cab	2 718	N	Overall height of boom	With 2.10 m arm 2 579 With 3.01m arm 2 680
F'	Overall height of upperstructure	2 718			
*G	Min. ground clearance	440			
H	Track gauge	1 990			

\* Excluding track shoe lug G: Triple grouser shoe

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VALUE



### OUR RANGE OF PRODUCTS



Authorised Dealer

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