

# ULTRA PERFORMANCE

NEW

ZAXIS 140H  
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

# Limitless Reliability and Durability

## Higher Production with Less Fuel

\*HIOS III hydraulic system and engine control system, thereby reducing CO<sub>2</sub> 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

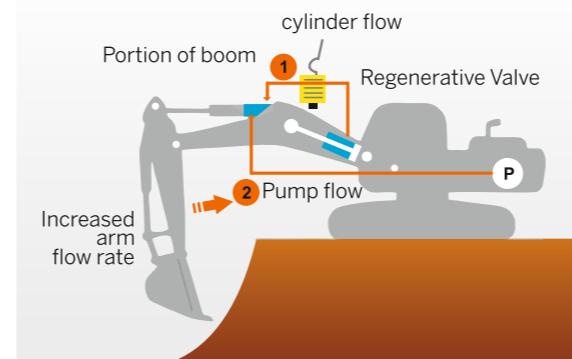
In ZAXIS 140H ULTRA, for boom lowering, pressurized oil from the boom cylinder bottom side is delivered to its rod side, assisted by boom weight. At the same time, pressurized oil from the pump is delivered to the arm cylinder for faster arm movement.

## Powerful Lifting of Material

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

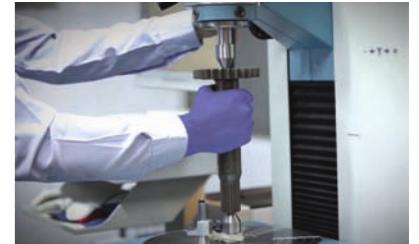
## Enhanced Power Boost

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.



## 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.

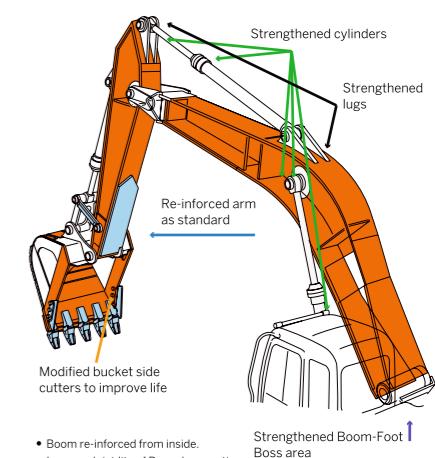
The turbo charged, inter-cooled engine yields a whopping 66kW output for higher production in shorter job schedule.



## 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.



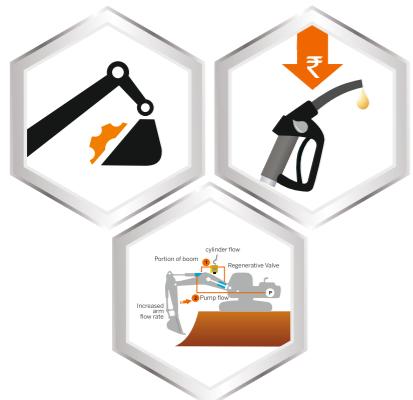
## Proven Upperstructure

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

# ULTRA PERFORMANCE

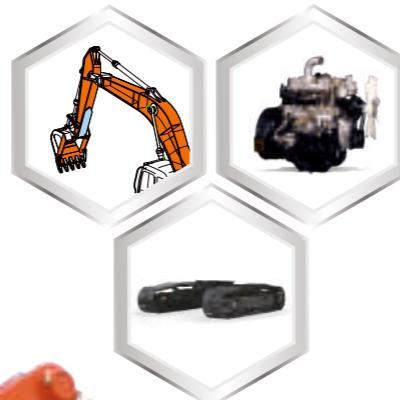
## Unmatched Performance

- 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



# Top-Notch Technology and Versatility

## 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.



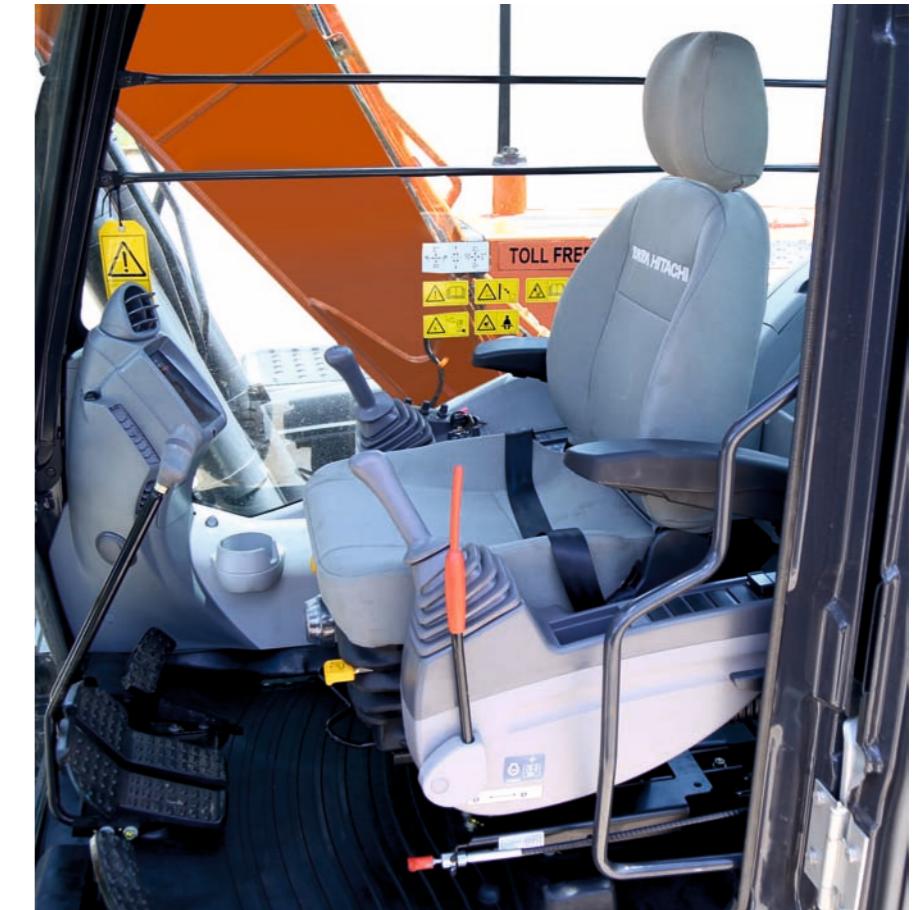
# Redefined Comfort and Safety

## 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

# Assured Support

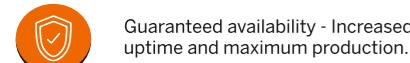
Tata Hitachi Genuine Parts meet stringent quality standards. These parts are guaranteed to perform and are backed by Tata Hitachi's warranty.

Developed in synergy with our machines, Tata Hitachi ensures wide spread dealer network which also offers



## EXTENDED WARRANTY

COMPLETE PEACE OF MIND



Guaranteed availability - Increased uptime and maximum production.



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



Fix before failure to ensure maximum reliability of machines.



Trained and experienced manpower



Onsite availability of float aggregates.



Exclusive onsite warehouse for complete contract period.

# ConSite

Consolidated Solution for Construction Sites

### 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



# Specifications

## ENGINE

|                           |  |
|---------------------------|--|
| Model                     | .....Isuzu CC-4BG1T  |
| Type                      | .....4-cycle water-cooled, direct injection  Turbocharged, intercooled |
| Aspiration                | .....Turbocharged, intercooled   |
| No. of cylinders          | .....4   |
| <b>Rated power</b>        |  |
| 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/cm <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<sup>-1</sup>(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

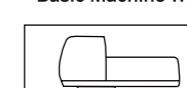
## WEIGHTS AND GROUND PRESSURE

### 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

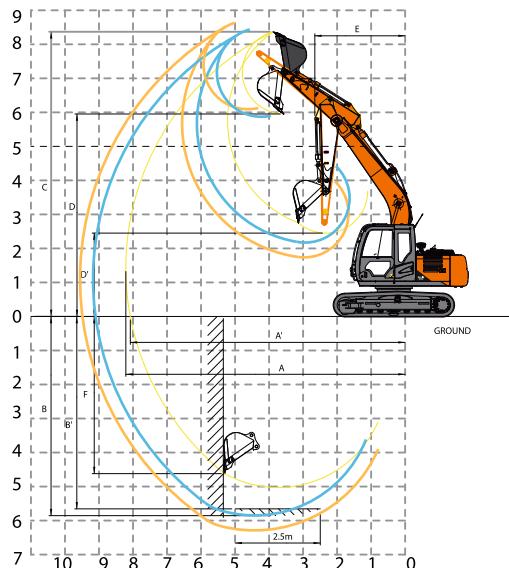
| Shoe width | Weight    | Overall width |
|------------|-----------|---------------|
| 500 mm     | 10 899 kg | 2 431 mm      |

### 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



| Arm length |                                    | 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

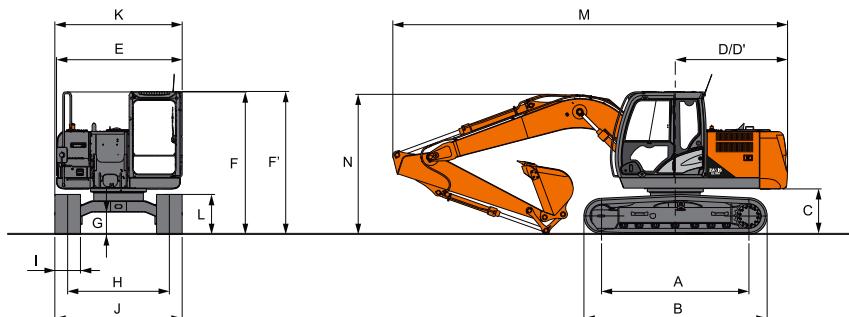
Boom and arm is are of welded, box-section design. 4.60 m boom with 2.10 m or 3.01 m arm is available. Bucket is of welded steel structure with side clearance adjust mechanism provided on the bucket joint bracket.

### Buckets

| Capacity    | Width                |                   | No. Of teeth | Weight | Recommendation |            |
|-------------|----------------------|-------------------|--------------|--------|----------------|------------|
|             | Without side cutters | With side cutters |              |        | 2.10 m arm     | 3.01 m arm |
| PCSA        |                      |                   |              |        |                |            |
| 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 |                | ✓          |



## DIMENSIONS



|    |                                  |       |
|----|----------------------------------|-------|
| A  | Distance between tumblers        | 2 880 |
| B  | Undercarriage length             | 3 580 |
| *C | Counterweight clearance          | 865   |
| D  | Rear-end swing radius            | 2 190 |
| E  | 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   |
| H  | Track gauge                      | 1 990 |

|    |  |                 |
|----|--|-----------------|
| I  | Track shoe width                       | 500             |
| J  | Undercarriage width                    | 2 490           |
| K  | Overall width                          | 2 490           |
| *L | Track height with triple grouser shoes | 790             |
| M  | Overall length                         | With 2.10 m arm |
|    |  | 7 658           |
|    |  | With 3.01m arm  |
| N  | Overall height of boom                 | With 2.10 m arm |
|    |  | 2 579           |
|    |  | With 3.01m arm  |
|    |  | 2 680           |

\* Excluding track shoe lug G: Triple grouser shoe

## Tata Hitachi Construction Machinery Company Private Limited

Registered Office: Jubilee Building, 45 Museum Road, Bangalore, India 560025  
Telephone: +91 80 66953301 / 02 / 03 / 04 / 05 | Email: info@tatahitachi.co.in

www.tatahitachi.co.in

Toll Free Number 1800 121 6633

[Facebook](#) [Twitter](#) [Instagram](#) [LinkedIn](#) [YouTube](#)

EXTENDED WARRANTY

SUPPORT CHAIN

CERTIFIED USED EQUIPMENT

PREMIUM USED

VALUE



Authorised Dealer

These 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.