HYDRAULIC EXCAVATOR
Model Code: ZX180LC-5B / ZX180LCN-5B
Engine Rated Power: 90.2 kW (121 HP)
Operating Weight ZX180LC-5B: 18 500 - 20 100 kg
ZX180LCN-5B: 18 200 - 19 500 kg
Backhoe Bucket ISO Heaped: 0.45 - 1.00 m³
WALK AROUND

CONTENTS

4-5 Performance
Enhanced power, torque and speed ensure the optimum performance of every Hitachi machine.

6-7 Productivity
The new ZAXIS have a high impact on efficiency but a low impact on the environment.

8-9 Comfort
The cab of the new ZAXIS provides a safer and comfortable work space.

10-11 Durability
Hitachi is renowned for manufacturing high-quality machines that can meet the demands of the toughest job sites.

12-13 Maintenance
Easily accessible features for cleaning and routine maintenance maximise the availability of the ZAXIS 180.

14-15 Hitachi Support Chain
A wide range of after-sales services and support options is available to all our customers.

16-24 Specifications

Higher productivity
The HIO3 III hydraulic system achieves higher productivity with better fuel consumption than the conventional ZAXIS model, which helps to reduce costs.

Added durability
The strengthened brackets on the boom end and foot are equipped with bushings to withstand rugged environments.

Faster movement
The arm recirculation cancel and hydraulic boosting systems increase the arm speed during operation.

Enhanced versatility
The attachment support system allows for the easy installation of attachments.
The design of the new Hitachi ZAXIS 180 medium excavator is inspired by one aim – empower your vision. It delivers on five key levels: performance, productivity, comfort, durability and reliability. We recognise that fleet owners require high-quality, efficient machines that can work effectively, even in challenging conditions. We also realise that operators need a safer, user-friendly work space, and a machine that can respond to their skills with speed and precision. And to achieve a satisfying result, on time, on budget and to a high standard, we have aimed to maximise availability of the new ZAXIS 180 with easy maintenance features and the Hitachi Support Chain after-sales programme.

**Expanded leg room**
The seat and console can slide further back on the new ZAXIS, providing a more comfortable working environment for the operator. The rightside console has been ergonomically re-designed.

**Ultimate comfort**
The heated air suspension seat is ideal in cold climates and absorbs vibration during operation minimising operator fatigue.

**Easily accessible information**
The large multi-function LCD monitor screen is easy to view in bright sunlight or darkness and provides technical data.

**Quick and easy service access**
The air conditioning condenser can be easily opened for cleaning the condenser and radiator. Inspection parts are conveniently located.
PERFORMANCE

The powerful ZAXIS 180 has been designed to deliver an outstanding level of performance, but with lower fuel consumption than its predecessor. Its enhanced hydraulics ensure a smooth, fast and precise operation on any earthmoving or construction site, helping you to increase production and meet targets successfully. Reduced fuel consumption will have a direct impact on your running costs and overall profitability, allowing you to make a quick return on your initial investment.
Enhanced power and speed set a new standard on the job site

Higher level of performance
Winning tenders and meeting production targets are highly competitive processes for you to develop your business. The choice of construction machinery is of paramount importance and your success relies on the productivity and efficiency of your equipment.

The new HIOS III 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.

Furthermore, a reduction of 22% in fuel consumption is also possible in ECO mode*. This still delivers a relatively high level of productivity using the same amount of fuel.

Lower fuel with high productivity
The success of your business is influenced by the productivity and efficiency of your equipment. Ultimately, your investment in Hitachi construction machinery can help you to meet production targets and compete successfully to win tenders within your market.

The hydraulic boosting system and other hydraulic systems enable the arm roll-in speed to increase when the load is relatively low. Our tried-and-tested power-boost feature has also increased by 10% to deliver an enhanced level of excavating performance and lifting power.

The versatility of the ZAXIS 180 may be evidenced by the attachment support system, with 11 modes that can be registered on the monitor for the easy fitment of different attachments.

* Based upon typical work pattern collected via Global e-Service

Key features

- 4% reduction in fuel consumption (PWR mode vs ZX-3 P-mode)*
- 22% reduction in fuel consumption (ECO mode vs ZX-3 P-mode)*
- HIOS III hydraulic system – higher productivity and lower fuel consumption
- Attachment support system
- Power-boost
The new ZAXIS medium excavators may have a smaller impact on the environment, but they also have a greater impact on productivity levels. Designed with a variety of powerful and innovative features, the new ZAXIS 180 can help to increase production on any job site in an efficient and sustainable way. This results in a cleaner, quieter working environment and a healthier profit for your business.
Striking a balance between powerful and sustainable efficiency

Sustainable efficiency

We are dedicated to the sustainable development of the Hitachi product range, particularly for use on urban job sites. Therefore, the new ZAXIS 180 is a sign of our commitment to minimising the impact of construction machinery on the environment in compliance with EU emission control Stage IIIB.

The ZAXIS 180 has been fitted with a muffler filter to capture air pollutants, which is automatically burnt thanks to an oxidation catalyst and exhaust temperature control. The variable geometry turbocharger and high volume-cooled EGR (Exhaust Gas Recirculation) also help to reduce nitrous oxide levels.

As well as reducing emissions, the ZAXIS 180’s Auto Shut-down helps to prevent fuel wastage and lowers the level of noise in the cab.

In addition, all resin parts on the new ZAXIS medium excavator range are suitable for recycling and clearly marked for ease of use in this process.

Powerful efficiency

We are also focusing on finding the right balance between people, planet and profit. So, we have assessed the total cost of ownership for the new ZAXIS 180 to ensure that your new machine contributes to the profitability of your business.

The powerful new-generation Stage IIIB-compliant engine in the ZAXIS 180 delivers higher productivity, with greater fuel efficiency and is fitted with state-of-the-art controls throughout all of the components.

Hitachi medium excavators are renowned for their powerful and reliable performance, especially when there are daily targets and ultimate deadlines to meet on busy job sites. The latest range of ZAXIS models have been designed for increased productivity without burdening the environment through sustainable operations.

Key features

- Powerful and sustainable
- Stage IIIB-compliant engine
- Muffler filter that captures particulate matter
- Variable geometry turbocharger
- High volume-cooled EGR system
- Environmentally friendly design
- Auto Shut-down – fuel saving for carbon dioxide reduction
A comfortable working environment is a top priority for owners and operators, so we aimed to design a cab for the new ZAXIS medium excavator range that would reflect their requirements and exceed their expectations. With excellent all-round visibility, ample leg room and a range of user-friendly features, the cab of the ZAXIS 180 is safe and spacious, helping you to feel in complete control.
Inside and out, the new ZAXIS medium excavators lead the way

From the comfort of the cab
After a long shift on a road construction site or in the quarry, you need to feel ready to enjoy the rest of your day. Hitachi has taken the lead in operator comfort with the new ZAXIS 180, so that you can do just that.

The fully adjustable air-suspension seat features a new sliding mechanism with the capacity to be moved back further than ever before. The space underneath the monitor has also been expanded to allow for more leg room. The pressurized cab keeps dust and particles from entering.

All-round visibility
Busy construction sites demand your full attention to avoid unnecessary damage or health and safety issues. The enhanced visibility – especially down the right-hand side of the new ZAXIS – will also save you time (and money), thanks to the latest innovations from Hitachi.

The repositioning of the monitor and door enhances your view, as well as making access to and from the cab much easier. The latest rear-view camera offers a closer view of the counterweight to minimise the blind spot.

User-friendly functionality
Hitachi has invested heavily in the advanced technology inherent within the new ZAXIS. The power remains firmly at your fingertips thanks to the functionality of the colour monitor and ergonomic controls.

The new multi-function LCD monitor has a large seven-inch screen that is easy to view. It provides a wide range of useful technical information, including a clear indication of the machine’s status and settings with multi-lingual support in up to 32 languages. The monitor and ergonomically designed switches have been grouped together within easy reach of your right hand. The proportional switch in the new, optional, auxiliary function lever allows easy control of the front attachment.

Enjoy your work
Time flies when you’re having fun, but we also realise that a happy operator is also a more productive one. That’s why we have renewed our focus on providing a relaxed and enjoyable working environment within the cab.

The controls for the AM/FM stereo radio are now fully adjustable from the colour monitor. An auxiliary terminal has also been added to the sound system, so that you can work efficiently and smoothly to your favourite music via devices such as MP3 players and the inclusion of storage for an MP3 player.

Key features
- High-spec ROPS pressurised cab
- Enhanced visibility
- New colour LCD monitor
- Easily accessible real-time information
- Expansive leg room
- Ergonomically designed control panel
- Auxiliary terminal and storage for an MP3 player
Several decades of manufacturing high-quality construction equipment has given Hitachi unrivalled expertise in developing machines that can cope with the toughest job sites and most challenging projects. The new ZAXIS medium excavator range is a perfect example and incorporates the latest advancements in technology. So you can be assured of its reliability and durability for even the most difficult working conditions.
Build to conquer tough working environments

Durable parts
The new ZAXIS 180 has been designed to operate in the most challenging of working conditions. Tough job sites require reliable machines, which deliver increased levels of availability and productivity. The bottom line is that you will enjoy a lower cost of ownership thanks to the durability of our medium excavators.

The strengthened boom end and foot on each new ZAXIS 180 are good examples. The brackets on the boom end and foot have been equipped with bushings to enhance their durable characteristics and withstand the rigours of long hours in rugged environments.

A filter-type high-performance water separator is provided standard. It captures moisture in fuel, even from fuel which contains a large amount of moisture.

Reinforced undercarriage
The front idler and adjuster cylinder have been reinforced on the ZAXIS 180 for added durability. In addition, mud no longer sticks to the adjuster cylinder.

Reliability has been further addressed with increase in the welded section parts that comprise the X-beam. The travel motor brackets’ upper and lower plates have been extended, which has delivered a 40% reduction in stress.

ROPS-compliant cab
The pressurised and ROPS-compliant CRES V (Center pillar reinforced structure) cab prevents the penetration of dust and protects you from the potential risks of the job site. The Roll-over Protective Structure (ROPS) is designed to protect the operator in the unlikely event of the machine tipping or rolling over.

Key features
- Proven Hitachi quality
- More than 40 years of expertise
- Strengthened front attachment
- Reinforced undercarriage
The new ZAXIS 180 has been designed to enable you to carry out quick and convenient maintenance and service checks, guaranteeing higher availability and greater reliability of your machine. Many features are easily accessible from ground level and some have been repositioned, making it simpler and less time-consuming to perform routine maintenance and cleaning procedures. This means you can spend more time doing the work you really enjoy.
Keep working for longer thanks to user-friendly accessible features

**Easy access**
We have made life easier for you by introducing a range of convenient features integrated within the new ZAXIS range of medium excavators. Our engineers have assessed your requirements and integrated a number of time-saving factors for routine maintenance.

Using the technology within the multi-function LCD monitor you can check engine oil volumes and see the warning light that appears when the hydraulic oil and fuel filters are due for replacement. In addition, you can set the routine service schedule to help prevent breakdowns each time the ignition switch is turned on.

On the exterior of the ZAXIS 180, the air conditioning condenser can be easily opened for cleaning the condenser and radiator. Severe blockages can also be cleared by blowing air through the convenient one-touch openable upper cover above the radiator.

From ground level, you can replace the fuel filters, engine oil filter and air cleaner, and other work is aided by non-slip steps for easy access to the upper structure of the machine.

**Easy cleaning**
We believe that easy routine maintenance enhances the levels of productivity and availability for your machine. That’s why we have designed the ZAXIS 180 with a series of convenient and quick solutions, so that you can enjoy long, trouble-free days on the job site.

The interior anti-dust filter is a good example of these initiatives. It has been placed on the outside of the air conditioning condenser and fuel cooler, and away from the fan so that dust and particles can be caught evenly without them collecting in one place.

The cooling package has been placed in parallel and the slanted side frame also aids the cleaning process.

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**Key features**
- Global e-Service monitors muffler filter
- Daily checks from ground level
- Oil volumes checked from the operator’s seat
- Quick and easy service access
SUPPORT CHAIN

As soon as you become a Hitachi customer, you can rely on first-class after-sales service from your authorised dealer. Hitachi provides extensive support to each of the dealers within the European network, so that they can ensure your ZAXIS 180 continues to meet your requirements and exceed expectations. To further protect your investment in Hitachi construction machinery, we have introduced the Hitachi Support Chain after-sales programme. This gives you the flexibility to create a tailor-made service plan from the following key-areas, “links” in the chain of service available from Hitachi via your local dealer.
A flexible after-sales programme created to protect your investment

Global e-Service

The new ZAXIS excavator is equipped with a GPRS communication system*. This sends a wide range of machine data to the Hitachi main server. Via the Global e-Service database, you will have remote access to all of this data. All you need is an internet connection and your Global e-Service log-in details.

Global e-Service enables you and your dealer to download and share this data, helping you to remotely manage your fleet. The online facility also helps your dealer to proactively advise you on preventive maintenance and related special offers.

The latest information on the ZAXIS excavator is available 24/7 and includes operational data, such as the number of working hours, fuel consumption figures, working modes and location. This helps you to reduce running costs, plan jobs efficiently and keep up to date with machine maintenance – to ensure optimum performance and minimal downtime.

Technical support

The professional and highly trained Hitachi service team combines the global expertise and knowledge of Hitachi Construction Machinery with your local language and culture. We take a proactive approach towards customer service by continuously training our dealer personnel, so that the available global knowledge is passed on to each individual technician in our dealer network.

Extended warranty and service contracts

Every new Hitachi model is covered by a full manufacturer’s warranty. However, your ZAXIS excavator may require extra protection due to severe working conditions or to minimise equipment repair costs.

To meet these demands, our dealers offer the option of a unique extended warranty programme (HELP – Hitachi Extended Life Program) and comprehensive service contracts – the most effective way to optimise the performance of your new ZAXIS excavator.

Parts and Remanufactured Components

Hitachi offers different lines of parts and components to suit your specific needs. In addition to our range of genuine parts, there are other options available:

- If your machines have been working for several years, Hitachi can offer a second line of genuine parts as an attractively priced solution.
- For that highly demanding application or climate, Hitachi provides a line of parts with extra performance.
- When you are looking for an economical solution for preventive replacements, remanufactured components are the best option.

Whatever choice you make, you can be assured of the renowned Hitachi quality and warranty to give you added peace of mind.

Your Hitachi dealer can supply you with more details on each of the above parts lines.

* The GPRS communication system is standard equipment for new ZAXIS excavators, however, the availability of the communication system depends on licensing regulations in your country. Please contact your Hitachi dealer for more information or to apply for a Global e-Service account.

Key features

- Check each of your machines from your office – 24/7
- Have a remote insight into fuel consumption
- Check the current and previous locations and movements of your machine(s)
- See maintenance status and items due for renewal on each of your machines
- Receive e-mail notifications for any machine alerts, unexpected movements and so on
**SPECIFICATIONS**

**ENGINE**

- **Model**: Isuzu AM-4JJ1X
- **Type**: 4-cycle water-cooled, common rail direct injection
- **Aspiration**: Variable geometry turbocharged, intercooled, cooled EGR
- **Aftertreatment**: Muffler filter
- **No. of cylinders**: 4
- **Rated power**:
  - ISO 9249, net: 90.2 kW (121 HP) at 2 200 min⁻¹
  - EEC 80/1269, net: 90.2 kW (121 HP) at 2 200 min⁻¹
  - SAE J1349, net: 90.2 kW (121 HP) at 2 200 min⁻¹
- **Maximum torque**:
  - 406 Nm (41.4 kgf·m) at 1 800 min⁻¹
- **Piston displacement**: 2.999 L
- **Bore and stroke**: 95.4 mm x 104.9 mm
- **Batteries**: 2 x 12 V / 74 Ah

**HYDRAULIC SYSTEM**

**Hydraulic Pumps**

- Main pumps: 2 variable displacement axial piston pumps
- Maximum oil flow: 2 x 191 L/min
- Pilot pump: 1 gear pump
- Maximum oil flow: 33.6 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/cm²)
- Swing circuit: 32.4 MPa (330 kgf/cm²)
- Travel circuit: 34.3 MPa (350 kgf/cm²)
- Pilot circuit: 3.9 MPa (40 kgf/cm²)
- Power boost: 38.0 MPa (388 kgf/cm²)

**Hydraulic Cylinders**

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Bore</th>
<th>Rod diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>2</td>
<td>120 mm</td>
<td>85 mm</td>
</tr>
<tr>
<td>Arm</td>
<td>1</td>
<td>125 mm</td>
<td>90 mm</td>
</tr>
<tr>
<td>Bucket</td>
<td>1</td>
<td>105 mm</td>
<td>75 mm</td>
</tr>
<tr>
<td>Positioning</td>
<td>1</td>
<td>150 mm</td>
<td>100 mm</td>
</tr>
</tbody>
</table>

¹ : For 2-piece boom

**UPPERSTRUCTURE**

**Revolving Frame**

D-section frame for resistance to deformation.

**Swing Device**

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type.

- **Swing speed**: 14.1 min⁻¹ (rpm)
- **Swing torque**: 53 kNm (5 410 kgf·m)

**Operator’s Cab**

Independent spacious cab, 1,005 mm wide by 1,675 mm high, conforming to ISO Standards.

* International Organization for Standardization

**UNDERCARRIAGE**

**Tracks**


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

- Upper rollers: 2
- Lower rollers: 7
- Track shoes: 46
- 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 5.3 km/h
  - Low: 0 to 3.4 km/h

- **Maximum traction force**: 169 kN (17 250 kgf)

- Gradeability: 70% (35 degree) continuous

**SOUND LEVEL**

- Sound level in cab according to ISO 6396: LpA 70 dB(A)
- External sound level according to ISO 6395 and EU Directive 2000/14/EC: Lwa 100 dB(A)

**SERVICE REFILL CAPACITIES**

<table>
<thead>
<tr>
<th>Component</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel tank</td>
<td>320.0 L</td>
</tr>
<tr>
<td>Engine coolant</td>
<td>22.0 L</td>
</tr>
<tr>
<td>Engine oil</td>
<td>17.0 L</td>
</tr>
<tr>
<td>Swing device</td>
<td>6.2 L</td>
</tr>
<tr>
<td>Travel device (each side)</td>
<td>6.8 L</td>
</tr>
<tr>
<td>Hydraulic system</td>
<td>220.0 L</td>
</tr>
<tr>
<td>Hydraulic oil tank</td>
<td>125.0 L</td>
</tr>
</tbody>
</table>
## WEIGHS AND GROUND PRESSURE

### Operating Weight and Ground Pressure

<table>
<thead>
<tr>
<th>Shoe type</th>
<th>500 mm</th>
<th>600 mm</th>
<th>700 mm</th>
<th>800 mm</th>
<th>900 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm length</td>
<td>2.26 m</td>
<td>2.71 m</td>
<td>2.26 m</td>
<td>2.71 m</td>
<td>2.26 m</td>
</tr>
<tr>
<td>Monoblock boom (with arm cylinder and boom cylinder)</td>
<td>18 200 kg</td>
<td>18 900 kg</td>
<td>18 200 kg</td>
<td>18 900 kg</td>
<td>18 200 kg</td>
</tr>
<tr>
<td>2-Piece boom (with arm cylinder and boom cylinder)</td>
<td>18 400 kg</td>
<td>19 200 kg</td>
<td>18 400 kg</td>
<td>19 200 kg</td>
<td>18 400 kg</td>
</tr>
<tr>
<td>2.26 m arm (with bucket cylinder)</td>
<td>36 (0.37) kPa/cm²</td>
<td>36 (0.37) kPa/cm²</td>
<td>36 (0.37) kPa/cm²</td>
<td>36 (0.37) kPa/cm²</td>
<td>36 (0.37) kPa/cm²</td>
</tr>
<tr>
<td>2.71 m arm (with bucket cylinder)</td>
<td>37 (0.38) kPa/cm²</td>
<td>37 (0.38) kPa/cm²</td>
<td>37 (0.38) kPa/cm²</td>
<td>37 (0.38) kPa/cm²</td>
<td>37 (0.38) kPa/cm²</td>
</tr>
</tbody>
</table>

### Basic Machine Weight and Overall Width

#### ZAXIS 180LC

<table>
<thead>
<tr>
<th>Shoe width</th>
<th>600 mm</th>
<th>700 mm</th>
<th>800 mm</th>
<th>900 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>14 700 kg</td>
<td>14 900 kg</td>
<td>15 200 kg</td>
<td>15 500 kg</td>
</tr>
<tr>
<td>Overall width</td>
<td>2 800 mm</td>
<td>2 900 mm</td>
<td>3 000 mm</td>
<td>3 100 mm</td>
</tr>
</tbody>
</table>

#### ZAXIS 180LCN

<table>
<thead>
<tr>
<th>Shoe width</th>
<th>500 mm</th>
<th>600 mm</th>
<th>700 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>14 300 kg</td>
<td>14 600 kg</td>
<td>14 800 kg</td>
</tr>
<tr>
<td>Overall width</td>
<td>2 500 mm</td>
<td>2 590 mm</td>
<td>2 690 mm</td>
</tr>
</tbody>
</table>

### Components Weight

<table>
<thead>
<tr>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counterweight</td>
</tr>
<tr>
<td>Monoblock boom (with arm cylinder and boom cylinder)</td>
</tr>
<tr>
<td>2-Piece boom (with arm cylinder and boom cylinder)</td>
</tr>
<tr>
<td>2.26 m arm (with bucket cylinder)</td>
</tr>
<tr>
<td>2.71 m arm (with bucket cylinder)</td>
</tr>
<tr>
<td>0.70 m³ bucket</td>
</tr>
</tbody>
</table>

### BUCKET AND ARM DIGGING FORCE

#### ZAXIS 180LC / ZAXIS 180LCN

<table>
<thead>
<tr>
<th>Arm length</th>
<th>2.26 m</th>
<th>2.71 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bucket digging force* ISO</td>
<td>127 kN (13 000 kgf)</td>
<td>112 kN (11 400 kgf)</td>
</tr>
<tr>
<td>Bucket digging force* SAE: PCSA</td>
<td>108 kN (11 100 kgf)</td>
<td>95 kN (9 700 kgf)</td>
</tr>
<tr>
<td>Arm crowd force* ISO</td>
<td>95 kN (9 700 kgf)</td>
<td>91 kN (9 300 kgf)</td>
</tr>
<tr>
<td>Arm crowd force* SAE: PCSA</td>
<td>104 kN (10 600 kgf)</td>
<td>91 kN (9 300 kgf)</td>
</tr>
</tbody>
</table>

* At power boost
# SPECIFICATIONS

## WORKING RANGES

### MONOBLOCK BOOM

<table>
<thead>
<tr>
<th>Dimension</th>
<th>ZAXIS 180LC</th>
<th>ZAXIS 180LCN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm length</td>
<td>2.26 m</td>
<td>2.71 m</td>
</tr>
<tr>
<td>A  Max. digging reach</td>
<td>9 070</td>
<td>9 430</td>
</tr>
<tr>
<td>A' Max. digging reach (on ground)</td>
<td>8 910</td>
<td>9 270</td>
</tr>
<tr>
<td>B  Max. digging depth</td>
<td>6 120</td>
<td>6 570</td>
</tr>
<tr>
<td>B' Max. digging depth (2.5 m level)</td>
<td>5 870</td>
<td>6 320</td>
</tr>
<tr>
<td>C  Max. cutting height</td>
<td>9 290</td>
<td>9 400</td>
</tr>
<tr>
<td>D  Max. dumping height</td>
<td>6 450</td>
<td>6 570</td>
</tr>
<tr>
<td>D' Min. dumping height</td>
<td>3 030</td>
<td>2 580</td>
</tr>
<tr>
<td>E  Min. swing radius</td>
<td>3 140</td>
<td>3 130</td>
</tr>
<tr>
<td>F  Max. vertical wall digging depth</td>
<td>5 210</td>
<td>5 550</td>
</tr>
</tbody>
</table>

Excluding track shoe lug

### 2-PIECE BOOM

<table>
<thead>
<tr>
<th>Dimension</th>
<th>ZAXIS 180LC</th>
<th>ZAXIS 180LCN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm length</td>
<td>2.26 m</td>
<td>2.71 m</td>
</tr>
<tr>
<td>A  Max. digging reach</td>
<td>8 980</td>
<td>9 350</td>
</tr>
<tr>
<td>A' Max. digging reach (on ground)</td>
<td>8 810</td>
<td>9 190</td>
</tr>
<tr>
<td>B  Max. digging depth</td>
<td>5 640</td>
<td>6 050</td>
</tr>
<tr>
<td>B' Max. digging depth (2.5 m level)</td>
<td>5 520</td>
<td>5 940</td>
</tr>
<tr>
<td>C  Max. cutting height</td>
<td>8 300</td>
<td>8 500</td>
</tr>
<tr>
<td>D  Max. dumping height</td>
<td>7 320</td>
<td>7 590</td>
</tr>
<tr>
<td>D' Min. dumping height</td>
<td>2 800</td>
<td>2 800</td>
</tr>
<tr>
<td>E  Min. swing radius</td>
<td>2 280</td>
<td>2 280</td>
</tr>
<tr>
<td>F  Max. vertical wall digging depth</td>
<td>4 690</td>
<td>5 100</td>
</tr>
</tbody>
</table>

Excluding track shoe lug

Unit: mm
# DIMENSIONS

<table>
<thead>
<tr>
<th></th>
<th>ZAXIS 180LC</th>
<th>ZAXIS 180LCN</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Distance between tumblers</td>
<td>3 370</td>
<td>3 370</td>
</tr>
<tr>
<td>B Undercarriage length</td>
<td>4 170</td>
<td>4 170</td>
</tr>
<tr>
<td>C Counterweight clearance</td>
<td>1 030</td>
<td>1 030</td>
</tr>
<tr>
<td>D Rear-end swing radius</td>
<td>2 550</td>
<td>2 550</td>
</tr>
<tr>
<td>D' Rear-end length</td>
<td>2 530</td>
<td>2 530</td>
</tr>
<tr>
<td>E Overall width of upperstructure</td>
<td>2 480</td>
<td>2 480</td>
</tr>
<tr>
<td>F Overall height of cab</td>
<td>2 950</td>
<td>2 950</td>
</tr>
<tr>
<td>F' Over height of upperstructure</td>
<td>3 010</td>
<td>3 010</td>
</tr>
<tr>
<td>G Min. ground clearance</td>
<td>450</td>
<td>450</td>
</tr>
<tr>
<td>H Track gauge</td>
<td>2 200</td>
<td>1 990</td>
</tr>
<tr>
<td>I Track shoe width</td>
<td>G 600</td>
<td>G 500</td>
</tr>
<tr>
<td>J Undercarriage width</td>
<td>2 800</td>
<td>2 480</td>
</tr>
<tr>
<td>K Overall width</td>
<td>2 800</td>
<td>2 500</td>
</tr>
<tr>
<td>L Track height with triple grouser shoes</td>
<td>920</td>
<td>920</td>
</tr>
</tbody>
</table>

**MONOBLOCK BOOM**

<table>
<thead>
<tr>
<th></th>
<th>ZAXIS 180LC</th>
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</thead>
<tbody>
<tr>
<td>M Overall length</td>
<td>9 070</td>
<td>9 070</td>
</tr>
<tr>
<td>With 2.26 m arm</td>
<td>9 040</td>
<td>9 040</td>
</tr>
<tr>
<td>N Overall height of boom</td>
<td>3 100</td>
<td>3 100</td>
</tr>
<tr>
<td>With 2.26 m arm</td>
<td>3 080</td>
<td>3 080</td>
</tr>
</tbody>
</table>

**2-PIECE BOOM**

<table>
<thead>
<tr>
<th></th>
<th>ZAXIS 180LC</th>
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</tr>
</thead>
<tbody>
<tr>
<td>M Overall length</td>
<td>8 920</td>
<td>8 920</td>
</tr>
<tr>
<td>With 2.26 m arm</td>
<td>8 910</td>
<td>8 910</td>
</tr>
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<td>N Overall height of boom</td>
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<td>3 030</td>
</tr>
<tr>
<td>With 2.26 m arm</td>
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</tbody>
</table>

* Excluding track shoe lug  
G: Triple grouser shoe
## LIFTING CAPACITIES

Notes:
1. Ratings are based on ISO 10567.
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.
5. 0 m = Ground.

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities without bucket.

### ZAXIS 180LC MONOBLOCK BOOM

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Load point height (m)</th>
<th>Load radius (m)</th>
<th>At max. reach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.5</td>
<td>3.0</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boom 5.50 m</td>
<td>6.0</td>
<td>8 970</td>
<td>5 780</td>
</tr>
<tr>
<td>Arm 2.26 m</td>
<td>4.5</td>
<td>7 730</td>
<td>5 540</td>
</tr>
<tr>
<td>Counterweight 3 900 kg</td>
<td>1.5</td>
<td>8 770</td>
<td>5 320</td>
</tr>
<tr>
<td>Shoe 600 mm</td>
<td>-1.5</td>
<td>8 060</td>
<td>5 800</td>
</tr>
<tr>
<td></td>
<td>-3.0</td>
<td>8 470</td>
<td>5 300</td>
</tr>
<tr>
<td></td>
<td>-4.5</td>
<td>9 360</td>
<td>5 380</td>
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#### ZAXIS 180LC 2-PIECE BOOM

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</tr>
<tr>
<td>2-Piece Boom</td>
<td>7.5</td>
<td>*5 920</td>
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</tr>
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<td>4.5</td>
<td>*9 190</td>
<td>*9 910</td>
</tr>
<tr>
<td>3 900 kg</td>
<td>3.0</td>
<td>*11 640</td>
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</tr>
<tr>
<td>Shoe 600 mm</td>
<td>1.5</td>
<td>*13 670</td>
<td>*11 390</td>
</tr>
<tr>
<td>(Ground)</td>
<td>-1.5</td>
<td>*17 090</td>
<td>*17 090</td>
</tr>
<tr>
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<td>*14 190</td>
</tr>
<tr>
<td>-4.5</td>
<td>-3.0</td>
<td>-20 770</td>
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</tr>
<tr>
<td>-4.5</td>
<td>-3.0</td>
<td>*17 230</td>
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</tr>
</tbody>
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<td>-3.0</td>
<td>*17 230</td>
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</tr>
</tbody>
</table>

#### Lifting Capabilities

**Rating over-front**
- At max. reach

**Rating over-side or 360 degrees**
- Unit: kg

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

---

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

---
# EQUIPMENT

## ENGINE
- Air cleaner double filters
- Auto idle system
- Auto shut-down control
- Cartridge-type engine oil filter
- Cartridge-type fuel pre-filter
- Cartridge-type fuel main filter
- Dust-proof indoor net
- Dry-type air filter with evacuator valve (with air filter restriction indicator)
- Electrical fuel feed pump
- ECO/PWR mode control
- Engine oil drain coupler
- Engine warm-up device
- Fan guard
- Fuel cooler
- Cold fuel resistance valve
- High performance water separator
- Isolation-mounted engine
- Muffler filter
- Pre-cleaner
- Radiator, oil cooler and intercooler
- Radiator reserve tank
- 50 A alternator

## CAB
- Auxiliary function lever (Breaker assist)
- All-weather sound suppressed steel cab
- AM-FM radio
- Ashtray
- Auto control air conditioner
- AUX terminal and storage
- CRES V (Center pillar reinforced structure) cab
- Drink holder with hot & cool function
- Electric double horn
- Engine shut-off switch
- Equipped with reinforced, tinted (green color) glass windows
- Evacuation hammer
- Fire extinguisher bracket
- Footrest
- Front window washer
- Windows on front, upper, lower and left side can be opened
- Glove compartment
- Hot & cool box
- Intermittent windshield wipers
- Key cylinder light
- Laminated round glass window
- LED room light with door courtesy
- OPG front guard Level II (ISO10262) compliant cab
- OPG top guard fitted Level II (ISO10262) compliant cab
- Pilot control shut-off lever
- Rain guard
- Rear view camera
- Rear view mirror (right & left side)
- Swing parking brake
- Tool box
- Undercover
- Utility space
- 2 x 74 Ah batteries

## MONITOR SYSTEM
- Alarm buzzers: overheat, engine oil pressure, overload
- Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, work mode, overload, etc
- Display of meters: water temperature, hour, fuel rate, clock
- Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions, etc
- 32 languages selection

## UNDERCARRIAGE
- Bolt-on sprocket
- Reinforced track links with pin seals
- Travel motor covers
- Travel parking brake
- Track undercover
- 1 track guard (each side) and hydraulic track adjuster
- 2 track guards (each side) and hydraulic track adjuster
- 4 tie down hooks
- 600 mm triple grouser shoes
- 500 mm triple grouser shoes
- ZAXIS 180LC
- ZAXIS 180LCN

## FRONT ATTACHMENTS
- Casted bucket link A
- Centralized lubrication system
- Dirt seal on all bucket pins
- Flanged pin
- HN bushing
- WC (tungsten-carbide) thermal spraying
- Welded bucket link A with welded hook

## ATTACHMENTS
- Accessories for 2 speed selector
- Additional pump (30 L/min)
- Assist piping
- Attachment basic piping
- Breaker and crusher piping
- HSB Parts for breaker and crusher
- Pilot accumulator

## MISCELLANEOUS
- Global e-service
- 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
- Theft prevention system

---

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

* Hitachi Construction Machinery cannot be held liable for theft, any system will just minimize the risk of theft.
Built on the foundation of superb technological capabilities, Hitachi Construction Machinery is committed to providing leading-edge solutions and services to contribute as a reliable partner to the business of customers worldwide.

Prior to operating this machine, including satellite communication system, in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory standards (including safety standards) and legal requirements of that particular country. Please do not export or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your Hitachi dealer in case of questions about compliance.

These specifications are subject to change without notice.

Built on the foundation of superb technological capabilities, Hitachi Construction Machinery is committed to providing leading-edge solutions and services to contribute as a reliable partner to the business of customers worldwide.

Reducing Environmental Impact by New ZAXIS
Hitachi makes a green way to cut carbon emissions for global warming prevention according to LCA*. New ZAXIS utilizes lots of technological advances, including the new ECO mode, and Isochronous Control. Hitachi has long been committed to recycling of components, such as aluminum parts in radiators and oil cooler. Resin parts are marked for recycling.

*Life Cycle Assessment – ISO 14040

The Hitachi Group released the Environmental Vision 2025 to curb annual carbon dioxide emissions. The Group is committed to global production while reducing environmental impact in life cycles of all products, and realizing a sustainable society by tackling three goals — prevention of global warming, recycling of resources, and enhancement of ecosystem.

Hitachi Environmental Vision 2025

Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, customer installed and modified parts, optional parts and all standard equipment with some differences in color and features. Before use, read and understand the Operator’s Manual for proper operation.

Hitachi Construction Machinery
www.hcme.com  8 Jan 2013

KS-EN217EU