ZAXIS-5G series
Material Handling Machine

MATERIAL HANDLING MACHINE
ZAXIS240LC / ZAXIS330LC

APPLICATION & ATTACHMENT

<table>
<thead>
<tr>
<th>Model Code</th>
<th>ZX240LC-5G</th>
<th>ZX330LC-5G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Rated Power</td>
<td>132 kW (177 HP)</td>
<td>184 kW (246 HP)</td>
</tr>
<tr>
<td>Operating Weight</td>
<td>27 600 - 28 800 kg</td>
<td>37 700 - 38 700 kg</td>
</tr>
</tbody>
</table>

Reliable solutions
Under tough working environments, the Hitachi material handling machine can work dynamically with less jerking, increasing productivity, fuel efficiency, safety and maintainability. The machine is purpose built for extra-wide working ranges using the long reach front. The high lift cab gives a clear view of work places. A wide selection of attachments also gives the machine excellent versatility to suit diverse job needs on different job yards, including scrap yards, auto wrecking yards and log yards.
Pursuits of Performance and Durability

Durable, Reliable Engine (Non-Common Rail Type)

This green engine has a track record of working on countless job sites around the world, meeting the EU stage II and US EPA Tier 2 emissions regulations. It is a non-common rail-type, featuring high durability and reliability, teamed up with a direct fuel injection system and an advanced governor to deliver plenty of power. The cooling package is well designed to keep the engine cool. The engine cover has a wide air suction aperture, and radiators are arranged in parallel for effective cooling.

Gooseneck Type Front

The gooseneck type front brings about high production in handling long materials. Arm lifting force is boosted even more with double arm cylinders on boom sides, helping reduce falling objects. Structures are strengthened with reinforced plates at key areas, and welded in a new way to build up more suitable weld beads, avoiding stress concentration. Hydraulic piping and hoses at the front are streamlined using new clamps to increase durability.

Performance

High controllability – a Hitachi tradition – helps increase production in tough material handing applications with smooth starts and stops of swing.

Fuel-Efficient Operation

New ZAXIS achieves fuel-efficient operation thanks to the HIOS III hydraulic system and engine control system.

Double Arm Cylinders

Double arm cylinders are positioned optimally to give the arm more lifting power in wider working ranges, increasing productivity.

High Lift Cab

The linkage cab is redesigned for higher stability and rigidity by strengthening the linkage itself and repositioning lift cylinders. This design approach can reduce cab shaking significantly, especially at starts and stops of cab rising.
Safety and Simplified Maintenance

**Emergency Linkage Cab Lowering System**  
(Operable from within cab and ground-level)

Even if the hydraulic system or the electric system fails, the high lift cab can be safely lowered with dual safety measures – an emergency switch within cab and one at the linkage foot.

**Emergency Evacuation Ladder**

Even if the engine fails, or the lift cylinders or linkage is damaged, the operator can get out of the cab by breaking the rear window with an evacuation hammer, and descend on to the ground through an emergency evacuation ladder provided at the linkage top.

**Hose Rupture Valves for Arm and Boom**

Hose rupture valves are utilized to hold the front in position, even if piping or hose is ruptured, avoiding its free fall.

**Remote Centralized Greasing**

Lubricating points are centralized at the boom foot for safe, easy greasing. Also, the linkage cab lubricating points can be remotely greased from the ground.

**Rear View Camera (Optional)**

A rear view camera is provided optionally behind the counterweight. The operator can always check the view from the camera through a 7-inch high definition color monitor in the cab.

**Dust-Proof Indoor Net**

The air conditioner condenser package is redesigned for ease of cleaning. A dust-proof indoor net, provided at the front of the air conditioner condenser, can be easily removed, and cleaned with compressed air. The rear of the radiator can also be cleaned by air blowing through a one-touch open cover. The air conditioner condenser is openable at its rear for easy cleaning.

**Openable Cab Front Upper Guard**

The cab front upper guard can be opened for convenient cleaning of the windshield glass window.
**SPECIFICATIONS**

**ZX240LC-5G**

**ENGINE**

- Model: Isuzu CC-680GT
- Type: 4-cylinder water-cooled, direct injection
- Aspiration: Turbocharged, intercooled
- No. of cylinders: 6
- Rated power: ISO 9249, net: 132 kW (177 HP) at 2,150 rpm
- SAE J1349, net: 132 kW (177 HP) at 2,150 rpm
- Maximum torque: 637 Nm (65 kgm) at 1,800 rpm
- Piston displacement: 6,494 L
- Bore and stroke: 105 mm x 125 mm
- Batteries: 2 x 12 V / 88 Ah

**独立 spacious cab, 1,005 mm wide by 1,675 mm high, Operator's Cab released disc type. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type.**

**Swing Device**

- D-section frame skirt for resistance to deformation.

**Hydraulic System**

- Main pumps: 2 variable displacement axial piston pumps
- Maximum oil flow: 2 x 223 L/min
- Pilot pump: 1 gear pump
- Maximum oil flow: 32.1 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: 34.8 MPa (355 kgf/cm²)
- Pilot circuit: 3.9 MPa (40 kgf/cm²)
- Power boost: 38.5 MPa (398 kgf/cm²)

**Hydraulic Cylinders**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Bore</th>
<th>Rod diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>2</td>
<td>120 mm</td>
</tr>
<tr>
<td>Arm</td>
<td>2</td>
<td>115 mm</td>
</tr>
<tr>
<td>Engine</td>
<td>1</td>
<td>120 mm</td>
</tr>
</tbody>
</table>

**Upper Structure**

**Swing Device**

- Swing speed: 11.0 m/min (rpm)
- Swing torque: 77.5 Nm (7 900 kgf/m)

**Operator's Cab**

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

**Component Weights**

- Counterweight: 7,300 kg
- Lift stroke: 1,200 mm
- Length: 710 mm
- Weight: 2,840 mm
- Width: 1,200 mm

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

- Upper rollers: 2
- Lower rollers: 9
- Track shoes: 51
- 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: 222 kN (22,600 kgf)
- Gradients: 70% (35 degrees) continuous

**Service Refill Capacities**

- Fuel tank: 156.0 L
- Engine oil: 25.0 L
- Hydraulic oil: 106.0 L
- Engine coolant: 26.0 L
- Coolant: 26.0 L
- Water: 25.0 L
- Hydraulic system: 280.0 L
- Hydraulic oil tank: 156.0 L
- Battery: 510.0 L

**Engine**

- Rated power: ISO 9249, net 132 kW (177 HP) at 2,150 min
- SAE J1349, net 132 kW (177 HP) at 2,150 min
- Maximum torque: 637 Nm (65 kgf) at 1,800 min
- Bore and stroke: 105 mm x 125 mm
- Piston displacement: 6,494 L
- Aspiration: Turbocharged, intercooled
- Model: Isuzu CC-6BG1T

**Dimensions**

- Arm: 2,120 mm
- Boom: 2,125 mm

**Weights and Ground Pressure**

- Weight: 27,600 kg
- Ground pressure: 16.4 kPa (0.16 kgf/cm²)
- Length: 7,220 mm
- Height: 980 mm
- Width: 1,160 mm
- Overall length: 3,490 mm

**Weigh Basic Machine and Components**

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

- Excluding: 7.00 m boom, 6.00 m gooseneck type arm, 7,300 kg counterweight.

**Linkage Cab**

- Unit: mm

**WEIGHT BASIC MACHINE and COMPONENTS**

<table>
<thead>
<tr>
<th>Triple grouser shoe</th>
<th>Weight</th>
<th>Overall width</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 mm</td>
<td>22,500 kg</td>
<td>3,350 mm</td>
</tr>
<tr>
<td>700 mm</td>
<td>23,200 kg</td>
<td>3,350 mm</td>
</tr>
<tr>
<td>800 mm</td>
<td>23,200 kg</td>
<td>3,350 mm</td>
</tr>
<tr>
<td>900 mm</td>
<td>23,800 kg</td>
<td>3,490 mm</td>
</tr>
</tbody>
</table>

**weigh Basic Machine and Components**

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

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<td>23,200 kg</td>
</tr>
<tr>
<td>900 mm</td>
<td>23,800 kg</td>
</tr>
</tbody>
</table>

**Fuel capacity**

- Fuel tank: 510.0 L
- Engine oil: 25.0 L
- Hydraulic oil: 106.0 L
- Engine coolant: 26.0 L
- Coolant: 26.0 L
- Water: 25.0 L
- Hydraulic system: 280.0 L
- Hydraulic oil tank: 156.0 L
- Battery: 510.0 L

**Arm and Boom Specifications**

- 7.00 m boom, 6.00 m gooseneck type arm, 7,300 kg counterweight.

**Work Capacity**

- Maximum traction force: 222 kN (22,600 kgf)
- Travel speeds: High: 0 to 5.5 km/h
- Low: 0 to 3.4 km/h
- Maximum oil flow: 32.0 L/min

**Max Oil Flow**

- Travel circuit: 34.8 MPa (355 kgf/cm²)
- Swing circuit: 32.4 MPa (330 kgf/cm²)
- Power boost: 38.0 MPa (388 kgf/cm²)
- Maximum torque: 637 Nm (65 kgf) at 1,800 min

**Dimensions**

- Unit: mm

<table>
<thead>
<tr>
<th>ZX240LC-5G</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Distance between tumblers</td>
</tr>
<tr>
<td>B Undercarriage length</td>
</tr>
<tr>
<td>C Counterweight clearance</td>
</tr>
<tr>
<td>D Rear-end swing radius</td>
</tr>
<tr>
<td>E Overall width of upperstructure</td>
</tr>
<tr>
<td>F Overall height of cab</td>
</tr>
<tr>
<td>G Min. ground clearance</td>
</tr>
<tr>
<td>H Track gauge</td>
</tr>
<tr>
<td>I Track shoe width</td>
</tr>
<tr>
<td>J Undercarriage width</td>
</tr>
<tr>
<td>K Overall width</td>
</tr>
<tr>
<td>L Overall length</td>
</tr>
<tr>
<td>M Overall height of boom</td>
</tr>
<tr>
<td>N Track height with triple grouser shoes</td>
</tr>
<tr>
<td>O Overall height</td>
</tr>
</tbody>
</table>

* Excluding track shoe lug
**SPECIFICATIONS**

**ZX240LC-5G GOOSENECK TYPE ARM**

**WORKING RANGES**

**LIFTING CAPACITIES (Without Bucket)**

**NOTE:**
1. Lifting capacity of the ZX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity (ISO 10567).
2. Indicates load limited by hydraulic capacity.

**ZX240LC-5G GOOSENECK TYPE ARM**

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Load point height (m)</th>
<th>Load radius (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A:</strong> Arm length</td>
<td>7.00</td>
<td>2.32</td>
</tr>
<tr>
<td><strong>B:</strong> Arm point height</td>
<td>6.00</td>
<td>2.10</td>
</tr>
<tr>
<td><strong>C:</strong> Min. swing radius at max. height (arm point)</td>
<td>3.00</td>
<td>1.10</td>
</tr>
<tr>
<td><strong>D:</strong> Max. arm point depth</td>
<td>6.00</td>
<td>2.70</td>
</tr>
<tr>
<td><strong>E:</strong> Max. arm point depth reach</td>
<td>6.80</td>
<td>3.20</td>
</tr>
</tbody>
</table>

**EQUIPMENT**

**ENGINE**
- Air cleaner double filters
- Auto idle system
- Cartridge type engine oil filter
- Cartridge type pre-filter

**HYDRAULIC SYSTEM**
- Auto power lift
- Control valve with main relief valve
- Full-free filter
- High-flow full free filter with restriction indicator

**UPPER STRUCTURE**
- Electric fuel refilling pump
- Fuel level float
- Hydraulic oil level gauge

**MISCELLANEOUS**
- Locatable fuel refilling cap
- Locatable machine covers
- Onboard information controller
- Skid-resistant tapes, plates and handrails
- Standard tool kit
- Windshield power cleaner

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

**ZX330LC-5G**

**ENGINE**
- Model: Isuzu AH-6HK1X
- Type: 4-cylinder water-cooled, direct injection
- Aspiration: Turbocharged, intercooled
- No. of cylinders: 6
- Rated power: ISO 9049, net: 184 kW (246 HP) at 2,000 min⁻¹ (rpm)
  - SAE J1349, net: 184 kW (246 HP) at 2,000 min⁻¹ (rpm)
- Maximum torque: 873 Nm (89.0 kgf·m) at 1,700 min⁻¹ (rpm)
- Piston displacement: 7,730 L
- Bore and stroke: 115 mm x 125 mm
- Batteries: 2 x 12 V / 128 Ah

**HYDRAULIC PUMPS**
- Main pumps: 2 variable displacement axial piston pumps
- Maximum oil flow: 2 x 279 L/min
- Pilot pump: 1 gear pump
- Maximum oil flow: 32.8 L/min

**Hydraulic Motors**
- Travel: 2-speed axial piston motor
- Swing: 1 swash plate piston motor

**Relief Valve Settings**
- Implantment circuit: 34.3 MPa (350 kgf/cm²)
- Swing circuit: 32.4 MPa (330 kgf/cm²)
- Travel circuit: 34.8 MPa (355 kgf/cm²)
- Power boost: 38.0 MPa (388 kgf/cm²)

**Hydraulic Cylinders**
- **Quantify**
  - Boom: 2
  - Arm: 2

**HAZARD STRUCTURE**
- Revolving Frame: D-section frame skirt for resistance to deformation
- Swing Device: Swash plate piston motor with planetary reduction gear is bathed in oil.
  - Swing circle: Single-row
  - Swing torque: 120 kNm (12 200 kgf·m)
- Travel Device: Each track driven by 2-speed axial piston motor
  - Parking brake: Spring-set/hydraulic-released disc type
  - Automatic transmission system: High-Low
  - Travel speeds:
    - High: 0 to 4.9 km/h
    - Low: 0 to 3.1 km/h

**WEIGHTS AND METRICS**

### UNDERCARRIAGE

**Tracks**

**Numbers of Rollers and Shoes on Each Side**
- Upper rollers: 2
- Lower rollers: 8
- Track shoes: 48
- Track adjusters: 3

**Swing Device**
- Each track driven by 2-speed axial piston motor.
  - Parking brake: Spring-set/hydraulic-released disc type.

**Swing Torque**
- 120 kNm (12 200 kgf·m)

**Swing Speed**
- 10.7 min⁻¹

**Swing Parking Brake**
- Spring-set/hydraulic-released disc type

**Travelling Device**
- 32.4 MPa (330 kgf/cm²)
- 34.8 MPa (355 kgf/cm²)

**Swing Circuit**
- 32.4 MPa (330 kgf/cm²)

**Implement Circuit**
- 34.3 MPa (350 kgf/cm²)

**Service Refill Capacities**
- Fuel tank: 630.0 L
- Engine oil: 37.700 L
- Hydraulic oil: 37.700 L
- Hydraulic oil tank: 180.0 L
- Engine coolant: 35.0 L
- Fuel tank: 630.0 L

**WEIGHT, BASIC MACHINE and COMPONENTS**
- **ZX330LC-5G**
  - Total weight: 4,350 kg
  - Undercarriage length: 4,940 mm
  - Counterclockwise clearance: 1,160 mm
  - Rear-end swing radius: 3,700 mm
  - Overall width of upperstructure: 3,160 mm
  - Overall length: 12,610 mm

**WEIGHTS AND GROUND PRESSURE**

**Triple grouser shoe**
- Weight: 31,600 kg
- Ground pressure: 61 kPa (0.62 kgf/cm²)
- Length: 600 mm
- Total weight: 1,250 mm

**WEIGHT, BASIC MACHINE and COMPONENTS**

**Triple grouser shoe**
- Weight: 31,600 kg
- Ground pressure: 61 kPa (0.62 kgf/cm²)
- Length: 600 mm
- Total weight: 1,250 mm

**Component Weights**
- **Disassembly Conditions**
  - Counterweight: 10,000 kg
  - 8.50 m boom (60th arm cylinder): 3,020 kg
  - 6.20 m gooseneck type arm: 1,560 kg

**DIMENSIONS**

**ZX330LC-5G GOOSENECK TYPE ARM**

<table>
<thead>
<tr>
<th>Component</th>
<th>Unit: mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Overall height of cab</td>
</tr>
<tr>
<td>B</td>
<td>Operator’s view point</td>
</tr>
<tr>
<td>C</td>
<td>Lift stroke</td>
</tr>
<tr>
<td>D</td>
<td>Operator’s view between swing center</td>
</tr>
<tr>
<td>E</td>
<td>Overall width upperstructure (including cab sidewalk)</td>
</tr>
</tbody>
</table>

*International Standardization for Organization
**SPECIFICATIONS**

**ZX330LC-5G GOOSENECK TYPE ARM**

**WORKING RANGES**

**LIFTING CAPACITIES (Without Bucket)**

NOTE 1. Lifting capacity of the ZX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity. (*2* indicates load limited by hydraulic capacity).

**ENGINE**
- Air cleaner double filters
- Auto idle system
- Cartridge-type engine oil filter
- Cartridge-type fuel main filter
- Cartridge-type fuel pre-filter
- Cartridge-type engine oil filter
- Auto idle system
- Air cleaner double filters

**HYDRAULIC SYSTEM**
- Auto power lift
- Control valve with main relief valve
- Foul-proof full flow filter with restriction indicator
- Filter Oil
- Power boost
- Suction filter
- One relief port for control valve
- Work mode selector

**CAB**
- All-weather sound suppressed steel cab
- AM/FM radio with 2 speakers
- Air filter

**EQUIPMENT**
- Standard equipment
- Optional equipment

**UNDERCARRIAGE**
- Standard equipment
- Optional equipment

**MISCELLANEOUS**
- Standard equipment
- Optional equipment

*Excluding track shoe lug

**WORKING RANGES**

**LIFTING CAPACITIES (Without Bucket)**

**EQUIPMENT**
- Standard equipment
- Optional equipment

**UNDERCARRIAGE**
- Standard equipment
- Optional equipment

**MISCELLANEOUS**
- Standard equipment
- Optional equipment
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