ZW series

ZW 140

WHEEL LOADER

- Model Code: ZW140
- Operating Weight: 10 240 - 10 540 kg
- Bucket Capacity: ISO Heaped: 1.5 - 2.3 m³
- Max. Engine Output: 96 kW (129 HP)
Introducing the New-Generation Wheel Loaders:

ZW Series

Light, Agile Footwork Plus Increased Productivity

The ZW140 is packed with numerous innovative technologies and mechanisms. The electronic control HST system makes possible light, agile footwork. Four work modes can be selected according to job needs, with best matching of traction force and breakout force. What’s more, the ZW140 offers more impressive features: operating ease, enhanced safety, increased durability, and simplified maintenance.

Productivity
- Four work modes selectable to suit job needs
- 2-Motor HST system for powerful acceleration and higher travel speed (Maximum 39 km/h)
- Throttle limit for higher fuel efficiency
- Improved fundamental performance
- Smooth speed shift by electronic control
- High-torque engine
- Torque proportional differential (Standard)
- Limited slip differential (Optional)
- Advanced speed selector for four maximum speeds
- The first speed selector for efficient loading and operations in confined space
- Inching pedal for easy positioning in confined space
- Ride control system (Optional)
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Panoramic comfortable cab
- Bi-level auto air conditioner and pressurized cab
- Front & rear defrosters
- Low noise design
- Panoramic cab
- Enhanced upward visibility
- Good rear visibility
- Ergonomically positioned switches and controls
- Air suspension seat
  Pages 8-9

Enhanced Durability
- Robust differential gears
- Durable axles
- Robust frame
- Hydraulically operated cooling fan with heat-sensing system
- Capacious hydraulic oil cooler
- Protected fuel tank
- Aluminum radiator and oil cooler
- O-Ring Seal (ORS) joints and water-resistant electric connectors
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Easy Maintenance
- Conveniently located filters
- Easy-to-replace air conditioning filters
- Strategically located Fuel supply port
- Easy-to-read monitor
- Flat cab floor
- Dirt-Less (DL) front frame
  Pages 12-13

Safety
- Full fan guard
- Emergency steering system (Optional)
- Mis-operation protection
- ROPS / FOPS cab
- Highly reliable dual-line brake system
- Other safety features
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Environment
- Common rail fuel injection system
- Hitachi Silent (HS) fan
- Low noise engine
- A recyclable machine
  Page 15

Specifications
  Pages 16-19

- The new engine complies with the Emission Regulations U.S EPA Tire3, and EU Stage III A
- The advanced low noise design complies with the coming EU noise regulation 2000 / 14 / EC, STAGE II

Note: Pictures may or may not include standard and optional equipment that are specified individually by countries.
**Increased Productivity with Advanced HST System, an Hitachi Original Technology**

Optimum traction force can be selected to suit job needs by electronic matching control. The HST system is further improved for increased job efficiency.

### Four work modes selectable to suit job needs

<table>
<thead>
<tr>
<th>Work Modes</th>
<th>Materials to Be Handled</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P mode</strong></td>
<td>Scooping up and crowding</td>
</tr>
<tr>
<td></td>
<td>Relatively large crushed stones</td>
</tr>
<tr>
<td></td>
<td>Concrete slag</td>
</tr>
<tr>
<td></td>
<td>Stone with large specific gravity, clayey soil</td>
</tr>
<tr>
<td><strong>N mode</strong></td>
<td>Normal operation</td>
</tr>
<tr>
<td></td>
<td>Small crushed stones</td>
</tr>
<tr>
<td></td>
<td>Gravel</td>
</tr>
<tr>
<td></td>
<td>Cobble</td>
</tr>
<tr>
<td></td>
<td>Sand</td>
</tr>
<tr>
<td></td>
<td>Plastics, industrial wastes, chips</td>
</tr>
<tr>
<td><strong>L mode</strong></td>
<td>Loading and light excavation</td>
</tr>
<tr>
<td><strong>S mode</strong></td>
<td>Snow plowing and swamping operation</td>
</tr>
<tr>
<td></td>
<td>Snow</td>
</tr>
</tbody>
</table>

The throttle limit cuts maximum engine speed by 10% for higher fuel efficiency. For higher fuel efficiency, the HST system, maximum traction force is not reduced with the reduction in engine speed.

### Improved Fundamental Performance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Big Traction Force</strong></td>
<td></td>
</tr>
<tr>
<td>Max. output</td>
<td>96 kW (129 HP)</td>
</tr>
<tr>
<td>Max. torque</td>
<td>540 N·m (55 kgf·m)</td>
</tr>
<tr>
<td><strong>Big Dumping Clearance and Reach</strong></td>
<td></td>
</tr>
<tr>
<td>Dumper clearance</td>
<td>2 843 mm</td>
</tr>
<tr>
<td>Dumper reach</td>
<td>905 mm</td>
</tr>
</tbody>
</table>

The new engine is ruggedly designed to yield big torque with less vibration for increased durability. This facilitates climbing steep slopes and long uphills with limited speed drop. This engine is a clean engine that complies with the latest global emission regulations.

### High-Torque Engine

- Max. output: 96 kW (129 HP)
- Max. torque: 540 N·m (55 kgf·m)

The two-motor HST system is newly developed to achieve high-efficient operation in a wide speed range. For instance, at a low speed, two motors yield big traction torque, while at a high speed, a single motor allows for high travel speed of 39 km/h. Moreover, this system makes possible easy slope climbing and smooth acceleration/deceleration with the accelerator pedal only.

### Torque Proportional Differential (Standard)

The torque proportional differential adjusts driving forces to both wheels. When road resistances under both wheels are different, this feature minimizes slippage of a wheel on softer ground, unlike conventional differentials. This feature enables the ZW series to get out of swamps or rough terrain easily.

### Limited Slip Differential (Optional)

On snowy roads and rough terrain, the limited slip differential can work instead of the torque proportional differential. This delivers effective driving force to both wheels for enhanced grip and less slippage during travel.

### 2-Motor HST System for Powerful Acceleration and Higher Travel Speed (Maximum 39 km/h)

The throttle limit cuts maximum engine speed by 10% for higher fuel efficiency. For the HST system, maximum traction force is not reduced with the reduction in engine speed.

### Torque Proportional Differential

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### Limited Slip Differential

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Agile Footwork for Increased Productivity

Fast, light footwork. Speed selection to suit job needs. Improved controllability and combined operations. Those bring about high productivity.

Advanced Speed Selector for Four Maximum Speeds

The fully automatic HST system is utilized for the selection of four maximum speeds according to job needs. Optimum speed can be selected with less shocks for smooth travel.

The First Speed Selector for Efficient Loading and Operations in Confined Space

When the first speed range is selected, four travel speeds can be further selected to suit job needs and jobsite conditions. No need for skillful control of the accelerator and brake.

Inching Pedal for Easy Positioning in Confined Space

The operator can easily control travel speed with the inching pedal, regardless of the accelerator pedal, by adjusting the delivery flow from the hydraulic pump. This eases positioning in loading operation.

New Hydraulic Circuit for Smoothly Combined Operation

With the new parallel/tandem hydraulic circuit, the lift arm and bucket can be operated simultaneously. This is a new function to increase loading and excavating efficiency.

Sophisticated Mechanisms for Higher Job Efficiency

Float System

The float system lets the lift arm follow up road irregularities by using its self-weight only, without using its hydraulic circuit. This system is useful in soil-splinter collecting during loading, and snow removing.

Lift Arm Kick-Out System (Optional)

The lift arm can automatically be raised up to the preset level. This function is convenient when loading onto a dump truck, and when operating at confined job sites with restricted working height.

Bucket Auto Leveler

The bucket can automatically be leveled parallel to the ground after dumping the bucket. This can eliminate cumbersome bucket repositioning for efficient loading.

Operator-Friendly Designs for Higher Job Efficiency

Restriction Valve

The restriction valve can effectively reduce shocks when stopping the lift arm. The bucket does not have a shockless circuit to allow efficient mud removal.

Ride Control System (Optional)

The ride control reduces pitching and bouncing during traveling on rough terrain and snow road by automatic control of the implement. Shocks and vibration can be well suppressed for riding comfort.

1st speed select switch

First Speed Selector (4 speeds selectable)

1st range
7 km/h
2nd range
13 km/h
3rd range
20 km/h
4th range
28 km/h

1st speed select switch

First Speed Selector (4 speeds selectable)
The bi-level air conditioner allows air conditioning at foot space and overhead simultaneously. Airflow volume and direction can automatically be adjusted according to the temperature setting. The pressurized cab shuts out dust and debris even in dusty environment.

The bi-level air conditioner allows air conditioning at foot space and overhead simultaneously. Airflow volume and direction can automatically be adjusted according to the temperature setting. The pressurized cab shuts out dust and debris even in dusty environment.

The hat is provided atop the cab to form an air space. This greatly helps reduce the temperature rise in the cab, and increases the cooling efficiency of the air conditioner.

The multi-functional joystick lever is provided atop of the control lever for operating ease.

The steering wheel is tiltable and to suit operator of all builds for comfortable operation.

The panoramic cab gives almost all-round visibility with the widened front glass window and pillar less cab rear corners. Front wheels are always in the operator's vision, enhancing safety and increasing loading efficiency.

The mechanical suspension seat wall absorbs shocks and vibrations from the machine body to reduce operator's physical stresses for enhanced comfort.

The air suspension seat is an option.

The multi-functional joystick lever is provided atop of the control lever for operating ease.

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Enhanced Durability

Durability is enhanced with a number of advanced mechanisms for long, continuous operation.

**Dependable Drive System**

**Durable Axles**
Front and rear axles are improved for durability. The axle housing is thickened for tough operation at quarries.

**Robust Differential Gears**
Differential gears are thickened to increase rigidity.

**Improved Braking Ability**
The brake is a wet-type multi-plate brake, and housed in the axle.

**Hydraulically Operated Cooling Fan with Heat-Sensing System**

Fan speed can be adjusted depending on fluid temperature to effectively cool down coolant and hydraulic oil. The result is extended component service life and reduction in fuel consumption. The fan is also separate from the engine for easy servicing.

**Capacious Hydraulic Oil Cooler**
The ample cooling capacity of the hydraulic oil cooler helps reduce oil temperature fluctuation, and extend service life of components.

**Robust Frame**
The box-section frame is thickened and strengthened to resist torsion and increase durability. Center pins are widely spaced for higher resistance to torsion.

**Protected Fuel Tank**
The large counterweight is arranged to protect the fuel tank from collisions with obstacles during operation.

**Aluminum Radiator and Oil Cooler**
The radiator and oil cooler are made of aluminum instead of conventional steel or copper for corrosion prevention.

**LED Indicators and Instruments**
On the indicators, monitors and alarms, many LEDs are utilized for longer service life resulting in less failure, enhancing the reliability.

**O-Ring Seal (ORS) Joints and Water-Resistant Electric Connectors**
Numerous elaborate components are utilized for higher durability and reliability. The proven ORS joints and high-pressure hydraulic lines are utilized in the hydraulic system, and water-resistant wiring connectors in the electrical system.
Reduced Running Costs

Running and maintenance costs are reduced greatly with concentrated inspecting points and durable components.

- **Easy-to-Read Monitor**
  - The HN bushing containing high-viscosity oil is provided at each joint to reduce grease consumption, extend lubrication intervals (100 to 500 hours), and increase durability.

- **Replacement Alerting**
  - Engine oil / filter, fuel filter, hydraulic oil / filter, transmission oil / filter, Axle oil.

- **Reduced Running Costs**
  - Running and maintenance costs are reduced greatly with concentrated inspecting points and durable components.

- **Conveniently Located Filters**
  - Fuel filter, fuel pre-filter with sedimentary function and engine oil filter are strategically located for the convenient daily inspection and servicing.

- **Extended Engine Oil Replacement Intervals (Up from 250 to 500 Hours)**
  - Engine oil capacity and filter capacity are increased for longer filter replacement intervals, reducing maintenance time and downtime.

- **Easy Draining**
  - The engine oil drain port is located for the convenience of maintenance. No need for reaching under the machine.

- **Easy-to-Replace Air Conditioning Filters**
  - The fresh air filter can easily be replaced from the cab, and circulation air filter also replaced by detaching the drink holder.

- **HN Bushings**
  - Features long life and high durability. High-viscosity oil is vacuum impregnated in sintered high-hardness metal. During operation oil oozes from the pores of the bushing into the clearance between pins and bushing providing lubrication.

- **Easy-to-Read Monitor**
  - With the easy-to-read monitor, the operator can see instructions for scheduled servicing and maintenance.

  **Monitor Indication Items**
  - Clock, service intervals, travel speed, mileage, hour meter

  **Replacement Alerting**
  - Engine oil / filter, fuel filter, hydraulic oil / filter, transmission oil / filter, Axle oil.

- **Flat Cab Floor**
  - The cab floor is stepless (flat) for ease of cleaning.

- **Strategically Located Fuel Supply Port**
  - The fuel supply port is located for convenient fuel supply from the ground.

- **Dirt-Less (DL) Front Frame**
  - The DL front frame is shaped for easy removal of dirt, stones and snow.

- **Hydraulically Operated Cooling Fan**
  - The rotation of the hydraulically operated cooling fan with heat-sensing system is equipped as standard. The fan itself can swing open for easy cleaning.
Safety-First Design

Achieving a High-Level of Safety in the Working Environment with an Array of Advanced Mechanisms.

Mis-Operation Protection:
Starting Engine: The engine will start only when the Forward / Reverse lever is in neutral.
Starting: The transmission is disabled when the parking switch is in the ON position, even if selecting Forward or Reverse.
Leaving from Operator Seat: Control levers and Forward / Reverse lever are locked to prevent accidental operation.
Stopping Engine: The spring-set/hydraulic-released parking brake is automatically applied even if failing to apply it.

Retractable Seat Belt
The cooling fan is enclosed by a full guard (metal net) to protect service technicians from injury during servicing and maintenance.

Emergency Steering System
The emergency electric pump delivers the necessary oil pressure for power steering even in the case of an emergency. This allows normal steering at all times even if the engine fails.

Highly Reliable Dual-Line Brake System
The dual-line hydraulic brake system is utilized: even if one line fails, the other can work for braking. The brake is an enclosed wet single-plate type for reliable braking.

Full Fan Guard
The ROPS / FOPS cab is provided to protect the operator from injury in an accident.

ROPS: Roll-Over Protective Structure: ISO3477
FOPS: Falling Object Protective Structure: ISO3449

Environmentally Friendly Design

A Cleaner Machine
The ZW Series is equipped with a clean but powerful engine to comply with Tier 3 and Stage III A. An engine emission regulations effective in the U.S. EPA and European Union from 2006. Exhaust gas is partly re-combusted to reduce particulate matter (PM) output and lower nitrogen oxide (NOx) levels.

Common Rail Type Fuel Injection System
In this fuel injection system complying with the Emission Regulations, one fuel pump runs to generate high pressure for distributing fuel to each injector per cylinder through a common rail. By electronic control, fuel injection volume and timing can be precisely regulated for efficient combustion and higher horsepower. This also reduces PM* (diesel plume), fuel consumption and vibration.

*Particulate matter

Important: The use of fuels other than diesel fuel (EN590) is prohibited. Otherwise, the engine may be damaged.

A Quieter Machine
A number of features make this machine quieter. First, isochronous control of the engine speed means a restriction of engine speed during no-load and light-duty operation to suppress sound. A fan with curved blades reduces air resistance and airflow noise.
Third, a time-tested muffler suppresses engine noise significantly and reduces emissions. This advanced low noise design complies with the 2000 / 14 / EC, Stage II, directive effective in the European Union from 2006.

Hitachi Silent (HS) Fan

A Recyclable Machine
Approximately 96% of the ZW Series can be recycled. The resin parts are marked to facilitate recycling. The machine is completely lead-free. The radiator and oil cooler are made from aluminum and all wires are lead-less. In addition, bio-degradable hydraulic oil is available for jobsites where special environmental care is required.

Low Noise Engine
Engine noise is effectively reduced by increasing engine mechanical strength with rigid cylinder block, and by utilizing the elaborate gear train on the flywheel side.

The HS fan is capable of reducing air resistance and air flow sound are utilized at the radiator and oil cooler for quieter operation.
**ENGINE**
- Make: Cummins QSB4.5
- Type: 4-cylinder, water-cooled, direct injection
- Aspiration: Turbocharged and charge air cooled
- Maximum power: 160 horsepower @ 2,200 rpm
- SAE J1349, Without Fan net: 96 kW (129 HP) @ 2,200 rpm
- ISO 9240, Without Fan net: 96 kW (129 HP) @ 2,200 rpm
- EEC 80/1269, Without Fan net: 96 kW (129 HP) @ 2,200 rpm
- Bore and stroke: 107 mm x 124 mm
- Piston displacement: 4.46 L
- Batteries: 2 x 12 V D26CCA, 80AH, 140-min rated reserve
- Air cleaner: Two element dry type with restriction indicator

**BRAKES**
- Service brakes: Hydraulically operated cooling fan with heat sensing system
- Parking brake: Spring applied, hydraulically released, wet disc type with drive through prevention mechanism

**STEERING SYSTEM**
- Type: Articulated frame steering
- Steering mechanism: Cylinder mounted hydraulic power steering with orbital
- Steering angle: Each direction 40°; total 80°
- Relief pressure: 19.6 MPa (200 kgf/cm²)
- Cylinders: Two double-acting piston type
- Gear ratio: 2: x 65 mm x 141 mm
- Minimum turning radius at the centerline of outside tire: 4,950 mm

**HYDRAULIC SYSTEM**
- Arm and bucket are controlled by Joystick lever
- Arm controls: Three position valve: Raise, lower, float
- Bucket controls: with automatic bucket return-to-dig controls
- Main pump: Gear type 159 L/min 220 min-1
- Load & steer: Gear type 159 L/min 220 min-1
- Relief pressure setting: 20.6 MPa (210 kgf/cm²)
- HST charging pump: Gear type 41L, 110 min-1 220 min-1
- Transmission charging pump: Gear type 17L, 82 min-1
- Fan pump: Gear type 30 L/min 220 min-1
- Hydraulic cylinders:
  - Type: Two arm and one bucket, double acting type
  - No. x Bore x Stroke: 2: x 125 mm x 620 mm
  - Bucket: 1: x 150 mm x 449 mm
  - Filtration: Full-flow 10 micron return filter in reservoir
- Hydraulic cycle times:
  - Lift arm raise: 6.0 s
  - Lower: 3.0 s
  - Bucket drop: 1.3 s
  - Total: 10.3 s

**SERVICE REEF CAPACITIES**
- Fuel tank: 180.0 L
- Engine coolant: 25.0 L
- Engine oil: 14.0 L
- Transmission gear box: 10.0 L
- Rear axle differential & wheel hubs: 24.0 L
- Hydraulic reservoir tank: 80.0 L

**POWER TRAIN**
- Electrical-controlled/ HST system
- Torque proportioning differentials, front and rear
- HST (Hydrostatic Slacks Transmission) system provides additional hydraulic braking capacity

**HYDRAULIC SYSTEM**
- Bucket auto lever
- Final system
- Reverse operation system
- Relief pressure: 20.6 MPa (210 kgf/cm²)
- HST charging pump: Gear type 41L, 110 min-1 220 min-1
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  - Lift arm raise: 6.0 s
  - Lower: 3.0 s
  - Bucket drop: 1.3 s
  - Total: 10.3 s

**ENGINE**
- Diesel, 4-cycle, turbocharged and charge air cooled
- Power: 160 horsepower @ 2,200 rpm
- Fuel: Diesel
- Oil: SAE 10W-30

**AXLE AND FINAL DRIVE**
- Drive system: Four-wheel drive system
- Front & rear axle: Semi-floating
- Front: Fixed to the front frame
- Rear: Center pivot
- Reduction and differential gear:
  - Two stage reduction with torque proportioning differential
- Oscillation angle:
  - Final drive: Planetary final drive

**HYDRAULIC SYSTEM**
- Three-spool main control valve
- Third spool operation
- Multi-function joystick lever
- Multi-functional joystick lever and auxiliary lever for third function
- Boom auto lever
- Lift arm kick-out system

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- Fuel tank: 180.0 L
- Engine coolant: 25.0 L
- Engine oil: 14.0 L
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- Hydraulic reservoir tank: 80.0 L

**POWER TRAIN**
- Electrical-controlled/ HST system
- Torque proportioning differentials, front and rear

**OPERATOR'S STATION**
- Cab:
  - ROPS / FOPS / Multi-plane isolation mounted for noise / Vibration reduction / Front and rear windshield washers / Safety glass
- Air filter:
  - Air filter double element
- Air heater (For cold start)
- Quick-release fuel pre-filter with water separator
- Air filter double element
- Engine oil cooler
- Environmentally friendly engine oil drain
- Coolant recovery tank
- Fan pump:
  - Standard pump: 120 min-1
  - Main pump: 110 min-1
- Main pump:
  - Gear type: 159 L/min 220 min-1
  - Relief pressure setting: 20.6 MPa (210 kgf/cm²)
- Fan pump:
  - Gear type: 17 L/min 82 min-1
  - Relief pressure setting: 19.6 MPa (200 kgf/cm²)
- Hydraulic reservoir tank:
  - 2,000 min-1
- Rear axle differential & wheel hubs:
  - 24.0 L
- Hydraulic reservoir tank:
  - 80.0 L

**BATTERIES AND ATTACHMENTS**
- General purpose bucket with bolt-on cutting edges:
  - 280 mm (Bolt-on)
- Bucket auto lever
- Final system
- Reverse operation system
- Relief pressure: 20.6 MPa (210 kgf/cm²)
- HST charging pump: Gear type 41L, 110 min-1 220 min-1
- Transmission charging pump: Gear type 17L, 82 min-1
- Fan pump: Gear type 30 L/min 220 min-1
- Hydraulic cylinders:
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- Hydraulic cycle times:
  - Lift arm raise: 6.0 s
  - Lower: 3.0 s
  - Bucket drop: 1.3 s
  - Total: 10.3 s

**ELECTRICAL**
- 24-volt electrical system
- Standard battery: 12 volt with 62CCA, 80 Ah
- Alternator: 65 A and 24-volt
- Lights:
  - Driving with guards / Turn signals with hazard switch / Trip / Tail and back-up lights
  - Work lights on cab, front (2)
  - Work lights, rear (2)
  - Horn, with push button in center of steering wheel and switch on joystick lever knobs or right console

**Optional equipment may vary by country, so please consult your Hitachi dealer for details.**

**LOADERS**
- Retractable seat belt, 50 mm
- Large tray and drink holder
- Rubber floor mat
- Adjustable steering column
- Steering wheel, textured with spinner knobs
- Rear view mirrors, outside (2) and inside (2)
- Handrails and steps, ergonomically located and slip resistant
- Coal hook

**OTHERS**
- Full rear fender and mud guard
- Rear license plate bracket
- Wheel blocks
- High lift arm
- Emergency steering system
- Bottom guards, front frame and transmission

Note: *: ROPS (Roll Over Protective Structure) Conforms to ISO 3471:1994
**: FOPS (Falling Objects Protective Structure) Conforms to ISO 3449:1992
## DIMENSIONS & SPECIFICATIONS

### BUCKET SELECTION GUIDE

<table>
<thead>
<tr>
<th>Material Density</th>
<th>1 kg/m³</th>
<th>1.15 kg/m³</th>
<th>1.3 kg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200</td>
<td>1.9 m³</td>
<td>1.8 m³</td>
<td>1.7 m³</td>
</tr>
<tr>
<td>1300</td>
<td>2.0 m³</td>
<td>1.9 m³</td>
<td>1.8 m³</td>
</tr>
<tr>
<td>1400</td>
<td>2.3 m³</td>
<td>2.2 m³</td>
<td>2.1 m³</td>
</tr>
</tbody>
</table>

2. Static tipping load and operating weight marked with * include 17.5-25-12PR (L3) tires (No ballast) with lubricants, full fuel tank and operator.

### SPECIFICATIONS

#### General purpose

- **Bucket type**: Standard Arm
- **With bolt-on cutting edges**: ISO heaped: 1.9 m³, ISO struck: 1.6 m³, Overall length: 6.910 m, Overall height: 3.720 m, Turning radius (Centerline of outside tire): 4.950 m, Overall operating height: 5.140 m, Height to bucket hinge pin, fully raised: 4.090 m, Dumping clearance 45 degree, full height: 3.250 m, Reach: 45 degree dump, full height: 1.020 m, Digging depth (Horizontal digging angle): 200 mm, Max. roll back at carry position: 50 deg.
- **Static tipping load**: Straight: 6.050 kg, Full 40 degree turn: 6.070 kg
- **Breakout force**: 96 kg, (29.790 kgf), 254 kg, (90.600 kgf), 354 kg, (121.800 kgf)
- **Operating weight**: 10.290 kg, 10.240 kg, 10.300 kg

#### High lift arm

- **Bucket type**: High Lift Arm
- **With bolt-on cutting edges**: ISO heaped: 1.6 m³, ISO struck: 1.2 m³, Overall length: 7.240 m, Overall height: 4.010 m, Turning radius (Centerline of outside tire): 4.950 m, Overall operating height: 5.140 m, Height to bucket hinge pin, fully raised: 4.090 m, Dumping clearance 45 degree, full height: 3.160 m, Reach: 45 degree dump, full height: 1.080 m, Digging depth (Horizontal digging angle): 210 mm, Max. roll back at carry position: 50 deg.
- **Static tipping load**: Straight: 6.300 kg, Full 40 degree turn: 6.410 kg
- **Breakout force**: 114 kg (11.623 kgf), 124 kg (12.640 kgf)
- **Operating weight**: 10.540 kg, 10.460 kg

2. Static tipping load and operating weight marked with * include 17.5-25-12PR (L3) tires (No ballast) with lubricants, full fuel tank and operator.
These specifications are subject to change without notice. Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in colour and features. Before use, read and understand the Operator’s Manual for proper operation.