ACERA GEOSPEC

Hydraulic Excavators

SUPER

SK75

- Bucket Capacity: 0.4 m³ ISO heaped
- Engine Power: 41kW/2,200 min⁻¹ (rpm)
- Operating Weight: 7,510 kg

We Save You Fuel
Achieving a Low-Carbon Society
The new ACERA GEOSPEC series utilizes the cutting edge technologies of KOBELECO, demonstrating the superior problem-solving capability of hydraulic excavators in today’s construction industry. The smooth power maximizes operation capability, minimizes consumption and reaches a new stage for environmental protection.

Equipped with a newly designed power system, the ACERA GEOSPEC series completely presents its features of low oil consumption and high productivity. It will meet customers’ latest demands while maintaining basic performance. Due to the adoption of cats for large excavators, operators will not tire easily even when working for long periods. The sturdy body and reliable components make maintenance much easier.

The debut of the SK75-8 model makes it the most reliable product in the ACERA GEOSPEC series for various customers.
Pursuing the “Three E’s”
The Perfection of Next-Generation, Network Performance

Enhancement
Greater Performance Capacity
- New hydraulic circuit; load sensing system installed.
- High-efficiency, PFR-pump fuel injection engine
- Powerful travel and arm/bucket digging force

Economy
Improved Cost Efficiency
- Advanced power plant that reduces fuel consumption
- Easy maintenance that reduces upkeep costs
- High structural durability and reliability that retain machine value longer

Environment
Features That Go Easy on the Earth
- Auto Idle Stop as standard equipment

The “GED” in GEOSPEC expresses our deep respect for our planet and for the solid ground where excavators are in their element. This is accompanied by SPEC, which refers to the performance specifications needed to get the job done efficiently as we carry on the tradition of the urban-friendly ACERA series.
Capable and powerful GEOSPEC SUPER!

Reduce unnecessary consumption with powerful operation power!

“Top-Class” Powerful Digging
Max. arm crowding force: 39.4 kN \(\{4.0 \text{tf}\}\)
Max. bucket digging force: 52.7 kN \(\{5.4 \text{tf}\}\)

Shorter Cycle Times
Swing Speed: 11.5 min\(^{-1}\)

Significant Extension of Continuous Working Hours
The combination of a large-capacity fuel tank and excellent fuel efficiency provides maximum extension for continuous operation hours.

Light Lever Operation
Lighter levers mean less operator fatigue over long hours of operation.

Dozer blade (Optional)
The unique curve of the dozer blade helps to perform effective blade operation by turning up soil forward like a wave. The square-pipe-shaped arm is made of thick steel plate and boasts a high torsional rigidity.

Fuel tank capacity: 140 L

Large capacity bucket 0.4 m\(^3\)
Performance

Simple Select: Two Digging Modes

S-Mode: For normal operations with lower fuel consumption.
H-Mode: For heavy duty when a higher performance level is required.

HD (high strength) arm

In order to make customers feel more comfortable during operation, the cab has the same specifications as the cab of a large excavator.

Technology 1 New Hydraulic System

The use of one pump and a load sensing system reduces hydraulic power loss. A new hydraulic system has been installed that keeps energy loss to the minimum through circuits that minimize pressure loss, an advanced high efficiency pump, and other features.

The load sensing system is powerful and makes simultaneous operations easy, and KOBELCO’s unique tuning makes starts smoother. Together they achieve a feel in the control levers that is most 'natural', closest to what the operator expects.

Technology 2 Highly reliable engine

The new engine is a PFR-pump fuel injection engine for high reliability. It is equipped with cooled EGR that lowers the temperature of the air intake to reduce its oxygen concentration. It achieves big reductions in particulate matter (PM) and NOx emissions while boosting output.

Technology 3 Total Tuning Through Advanced ITCS Control

The next-generation engine control is governed by a new version of ITCS, which responds quickly to sudden changes in hydraulic load to ensure that the engine runs as efficiently as possible with a minimum of wasted output.

ITCS (Intelligent Total Control System) is an advanced, computerized system that provides comprehensive control of all machine functions.

Photos in this catalog are the optional specs with dozer blade.
Easy to maintain GEOSPAC SUPER!

Easy and convenient operation!

Comfortable “On the Ground” Maintenance

All of the components that require regular maintenance are laid out for easy access. Newly designed, the bonnet opens widely and at a lower level.

The battery and radiator are configured in the left case cover.

Easy to clean cooling unit

Radiator

Battery

Space is reserved for tools and grease etc., which are necessary for daily maintenance and repair.

The engine is located at the center of the tail portion for easy inspection and repair.

Air cleaner

Engine oil filter

Radiator reservoir tank

More Efficient Maintenance Inside the Cab

- Detachable two-piece floor mat with handles for easy removal. A floor drain is located under the mat.
- Easy-access fuse box. More finely differentiated fuses make it easier to locate malfunctions.
- Air conditioner filter can be easily removed without tools for cleaning.
- Hour meter can be checked while standing on the ground.
- Special crawler frame design is easily cleaned of mud.
Double-Element Air Cleaner as Standard

The large-capacity element features a double-filter structure that keeps the engine running clean even in dusty environments.

Air cleaner (double element)

Highly-Durable Super-fine Filter

The high-capacity hydraulic oil filter incorporates glass fiber with superior cleaning power and durability. With a replacement cycle of 1,000 hours and a construction that allows replacement of the filter elements only, it’s both highly effective and highly economical.

Monitor Display with Essential Information for Accurate Maintenance Checks

- Display only the maintenance information that’s needed, when it’s needed.
- Self-diagnostic function that provides early warning detection and display of electrical system malfunctions.
- Record function of previous breakdowns including irregular and transient malfunctions.

The main control valve is located in the right case cover for easy inspection and repair.

Fuel filter
Pre fuel filter (with built-in water separator)
Hydraulic control valve
Clean and comfortable GEOSPEC SUPER!

Equipped with the same cab as a large excavator!

Wide Field of View Liberates the Operator
The front field of view easily clears ISO standards, while the peripheral view reduces blind spots to a minimum.

- A long wiper covers a wide area for a broad view in bad weather.
- Back mirrors provide a safe view of the rear.
- Reinforced green glass windows meet European standards.

Wide-Access Cab Ensures Smooth Entry and Exit
The cab entry angle for easy entrance and exit.

Reduced Vibration for Fatigue-Free Operation
The rigid cab construction and liquid-filled viscous cab mounts minimize cab vibration. In addition, the use of new lower rollers on the crawlers cuts travel vibration in half compared with previous models.

- New reclining seat can be lowered well down to the back.
Comfort and Safety

Delicate and complete GEOSPEC!

Take various scenarios into consideration to prevent any potential danger!

Safety Features That Take Various Scenarios into Consideration

- Firewall separates the pump compartment from the engine
- Hammer for emergency exit

Newly Designed Information Display Prioritizes Visual Recognition

The analog gauge provides information that’s easy to read regardless of the operating environment. The information display screen has been enlarged, and a visor if attached to further enhance visibility.

Double slide seat
Powerful automatic air conditioner
Spacious luggage tray
Large cup holder
### Engine

<table>
<thead>
<tr>
<th>Model</th>
<th>ISUZU 4LE2 XCUA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Direct injection, water-cooled, 4-cycle diesel engine with turbocharger, intercooler (Complies with EU (NRMV) Stage IIIA, US Tier III, and ac on regulation, etc. of emissions from non-road special motor vehicles (Japan))</td>
</tr>
<tr>
<td>No. of cylinders</td>
<td>4</td>
</tr>
<tr>
<td>Bore and stroke</td>
<td>85 mm x 96 mm</td>
</tr>
<tr>
<td>Displacement</td>
<td>2.179 L</td>
</tr>
<tr>
<td>Rated power output</td>
<td>42 kW / 2200 min⁻¹ (ISO14396: 2002)*</td>
</tr>
<tr>
<td>Max. torque</td>
<td>211 N.m, 1600 min⁻¹ (rpm) (ISO14396: 2002)*</td>
</tr>
<tr>
<td></td>
<td>200 N.m, 1600 min⁻¹ (rpm) (ISO9249: 2007)</td>
</tr>
</tbody>
</table>

*ISO 14396 meets EU regulation

### Travel System

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel motors</td>
<td>2 x axial-piston, two-step motors</td>
</tr>
<tr>
<td>Travel brakes</td>
<td>Hydraulic brake per motor</td>
</tr>
<tr>
<td>Parking brakes</td>
<td>Oil disc brake per motor</td>
</tr>
<tr>
<td>Travel shoes</td>
<td>39 each side</td>
</tr>
<tr>
<td>Travel speed</td>
<td>5.3 / 2.8 km/h</td>
</tr>
<tr>
<td>Gradeability</td>
<td>70 % (35°)</td>
</tr>
</tbody>
</table>

### Cab & Control

- **Cab**
  All-weather, sound-suppressed steel cab mounted on the silicon-sealed viscous mounts and equipped with a heavy, insulated floor mat.

- **Control**
  Two hand levers and two foot pedals for travel
  Two hand levers for excavating and swing
  Electric rotary-type engine throttle

### Hydraulic System

- **Pump**
  One variable displacement pump + 1 gear pump
  Max. discharge flow: 1 x 132 L/min, 1 x 18 L/min

- **Relief valve setting**
  Boom, arm and bucket: 29.4 MPa (300 kgf/cm²)
  Travel circuit: 29.4 MPa (300 kgf/cm²)
  Dozer blade circuit: 27.5 MPa (280 kgf/cm²)
  Swing circuit: 24.5 MPa (250 kgf/cm²)
  Control circuit: 3.5 MPa (36 kgf/cm²)
  Pilot control pump: Gear type
  Main control valves: 8-spool
  Oil cooler: Air cooled type

### Refilling Capacities & Lubrications

- **Fuel tank:** 140 L
- **Cooling system:** 8.5 L
- **Engine oil:** 11 L
- **Travel reduction gear:** 2 x 5.3 L
- **Swing reduction gear:** 1.5 L
- **Hydraulic oil tank:** 67 L / 107 L

### Swing System

- **Swing motor:** Axial piston motor
- **Brake:** Hydraulic, locking automatically when the swing control lever is in the neutral position
- **Parking brake:** Oil disc brake, hydraulic operated automatically
- **Swing speed:** 11.5 min⁻¹ (11.5 rpm)
- **Tail swing radius:** 1,750 mm
- **Min. front swing radius:** 1,760 mm

### Attachments

#### Backhoe bucket and arm combination

<table>
<thead>
<tr>
<th>Use</th>
<th>Backhoe bucket</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standard</td>
</tr>
<tr>
<td>Bucket capacity</td>
<td>ISO heaped m³</td>
</tr>
<tr>
<td></td>
<td>0.4</td>
</tr>
<tr>
<td>Opening width</td>
<td>With side cutters mm</td>
</tr>
<tr>
<td></td>
<td>970</td>
</tr>
<tr>
<td></td>
<td>Without side cutters mm</td>
</tr>
<tr>
<td></td>
<td>870</td>
</tr>
<tr>
<td>No. of bucket teeth</td>
<td>kg</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Bucket weight</td>
<td>230</td>
</tr>
<tr>
<td>Combinations</td>
<td>1.71 m standard arm</td>
</tr>
</tbody>
</table>

© Standard
**Working Ranges**

<table>
<thead>
<tr>
<th>Range</th>
<th>Standard 1.71 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>a - Max. digging reach</td>
<td>6.46</td>
</tr>
<tr>
<td>b - Max. digging reach at ground level</td>
<td>6.31</td>
</tr>
<tr>
<td>c - Max. digging depth</td>
<td>4.17</td>
</tr>
<tr>
<td>d - Max. digging height</td>
<td>7.4</td>
</tr>
<tr>
<td>e - Max. dumping clearance</td>
<td>5.33</td>
</tr>
<tr>
<td>f - Min. dumping clearance</td>
<td>2.52</td>
</tr>
<tr>
<td>g - Max. vertical wall digging depth</td>
<td>3.48</td>
</tr>
<tr>
<td>h - Min. swing radius</td>
<td>1.76</td>
</tr>
<tr>
<td>i - Horizontal digging stroke at ground level</td>
<td>2.85</td>
</tr>
<tr>
<td>j - Digging depth for 2.4 m (8') flat bottom</td>
<td>3.81</td>
</tr>
<tr>
<td>Bucket capacity ISO heaped m³</td>
<td>0.4</td>
</tr>
</tbody>
</table>

**Digging Force (ISO 6015)**

<table>
<thead>
<tr>
<th>Arm length</th>
<th>Standard 1.71 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bucket digging force</td>
<td>52.7 (5.370)</td>
</tr>
<tr>
<td>Arm crowding force</td>
<td>39.4 (4.020)</td>
</tr>
</tbody>
</table>

**Dimensions**

<table>
<thead>
<tr>
<th>Arm length</th>
<th>Standard 1.71 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Overall length</td>
<td>6.200</td>
</tr>
<tr>
<td>B Overall height (to top of boom)</td>
<td>2.650</td>
</tr>
<tr>
<td>C Overall width of crawler</td>
<td>2.470</td>
</tr>
<tr>
<td>D Overall height (to top of cab)</td>
<td>2.730</td>
</tr>
<tr>
<td>E Ground clearance of rear end*</td>
<td>745</td>
</tr>
<tr>
<td>F Ground clearance1.†</td>
<td>360</td>
</tr>
</tbody>
</table>

**Operating Weight & Ground Pressure**

In standard trim, with standard boom, 1.71 m arm, 0.4 m³ ISO heaped bucket, and dozer

<table>
<thead>
<tr>
<th>Shaped</th>
<th>Triple grouser shoes (even height)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoe width</td>
<td>mm</td>
</tr>
<tr>
<td>Overall width</td>
<td>mm</td>
</tr>
<tr>
<td>Ground pressure kPa (kg/cm²)</td>
<td>26.1 (0.27)</td>
</tr>
<tr>
<td>Operating weight</td>
<td>kg</td>
</tr>
</tbody>
</table>

* Without including height of shoe lug,
† For dozer
STANDARD EQUIPMENT

ENGINE
- Engine, ISUZU 4LE2XCUA engine with turbocharger and intercooler
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Batteries (2 x 12V – 64 Ah)
- Starting motor (24 V- 3.2 kW), 30 A alternator
- Double element air cleaner

CAB & CONTROL
- Left and right control lever, control handle
- Horn, electric
- Integrated operation panel
- Large cab
- Ashtray
- Cigarette lighter
- Cab light (interior)
- Coat hook
- Storage case
- Cup holder
- Detachable floor mat
- Seatbelt
- Headrest
- Handrails
- Defroster
- Wiper with two spray type washers
- Front window with pull-type upper half and detachable lower half
- Easy-to-read multi-display monitor
- Automatic air conditioner
- Emergency escape hammer
- Radio

CONTROL
- Working mode selector (H-mode, S-mode)

SWING SYSTEM & TRAVEL SYSTEM
- Swing rebound prevention system
- Sealed & lubricated track links
- Grease-type track adjusters
- Automatic swing brake

MIRRORS & LIGHTS
- Rear view mirrors
- Front working lights

Note: Standard and optional equipment may vary. Consult your KOBELOCO dealer for specifics.