**STANDARD EQUIPMENT**

ENGINE
- Engine, HINO J05E-TB, Diesel engine with turbocharger and intercooler
- Auto idle Stop (AIS)
- Batteries (2 x 12V - 96Ah)
- Starting motor (24V - 5kW), 50 amp alternator
- Removable clean-out screen for radiator
- Automatic engine shut-down for low engine oil pressure
- Engine oil pan drain valve
- Double element air cleaner

CONTROL
- Working mode selector (H-mode and S-mode)
- Power Boost

SWING SYSTEM & TRAVEL SYSTEM
- Swing rebound prevention system
- Straight propel system
- Two-speed travel with automatic shift down
- Sealed & lubricated track links
- Grease-type track adjusters
- Automatic swing brake

HYDRAULIC
- Arm regeneration system
- Auto warm up system
- Aluminum hydraulic oil cooler
- Removable clean-out screen for radiator
- Engine oil pan drain valve
- Double element air cleaner
- Auto idle Stop (AIS)
- Integrated left-right slide-type control box
- Cab, all-weather sound suppressed type
- Ashtray
- Cigarette lighter
- Cab light (interior)
- Coat hook
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat
- 7-way adjustable suspension seat
- Retractable seatbelt
- Headrest
- Handrails
- Heater and defroster
- Intermittent windshield wiper with double-spray washer
- Skylight
- Tinted safety glass
- Full-type front window and removable lower front window
- Easy-to-read multi-display monitor
- Automatic air conditioner
- Emergency escape hammer
- Radio, AM/FM Stereo with speakers
- Travel alarm (optional for NZ)
- Level indicator (optional for NZ)

MIRRORS & LIGHTS
- Two rearview mirrors
- Two front working lights
- Swing flashers

CAB & CONTROL
- Two control levers, pilot-operated
- Tow eyes
- Horn, electric
- Integrated left-right slide-type control box
- Cab, all-weather sound suppressed type

OPTIONAL EQUIPMENT
- Wide range of buckets
- Various optional arms
- Wide range of shoes
- Boom safety valve
- Arm safety valve
- Detachable two-piece floor mat
- 7-way adjustable suspension seat
- Retractable seatbelt
- Headrest
- Handrails
- Heater and defroster
- Intermittent windshield wiper with double-spray washer
- Skylight
- Tinted safety glass
- Full-type front window and removable lower front window
- Easy-to-read multi-display monitor
- Automatic air conditioner
- Emergency escape hammer
- Radio, AM/FM Stereo with speakers
- Travel alarm (optional for NZ)
- Level indicator (optional for NZ)

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

**ACERA GEOSPEC SK250-8/260LC-8**

**SK250**
- Bucket Capacity: 0.81 – 1.4 m³ ISO heaped
- Engine Power: 137 kW (186 PS) / 2,100 min⁻¹ (ISO14396)
- Operating Weight: 24,700 kg – SK250
  25,300 kg – SK260LC

**SK260 LC**
- Engine, HINO J05E-TB, Diesel engine with turbocharger and intercooler
- Automatic engine deceleration
- Auto idle Stop (AIS)
- Removable clean-out screen for radiator
- Automatic engine shut-down for low engine oil pressure
- Engine oil pan drain valve
- Double element air cleaner

Note: This catalog may contain photographs of machines with specifications that differ from those of machines sold in your area. Please consult your nearest KOBELCO distributor for those items you require. Due to our policy of continuous product improvements all designs and specifications are subject to change without advance notice.

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The Power Wave of Change

Announcing ACERA GEOSPEC and the Concept of Beautiful Performance.

When we set out to design our new hydraulic excavators, we kept our eyes on the big picture. Of course we wanted machines with greater digging capacity. But they also had to be fuel-efficient and economical, while imposing less of a burden on the local and global environments. Applying our advanced technologies, we developed KOBELCO’s new ACERA GEOSPEC series, an entirely new kind of excavator that beautifully balances all the demands of today’s construction industry. Lean and efficient with capacity to spare, these sleek powerhouses bring a whole new style to the worksite while setting new standards for environmental responsibility.

Pursuing the “Three E’s”
The Perfection of Next-Generation, Network Performance

Enhancement
Greater Performance Capacity
- New hydraulic circuitry minimized pressure loss
- High-efficiency, electronically controlled Common Rail 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
- Meets the latest exhaust emission standards
- Auto Idle Stop as standard equipment
- Noise reduction measures (with improvement of the sound quality) minimize noise and vibration

The “GEO” 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.
The GEOSPEC Difference:

Efficient Performance!

Amazing Productivity with a 20\% Decrease in Fuel Consumption and “Top-Class” Cost-Performance

- **Fuel Consumption**
  - Decrease in fuel consumption even when performing more work volume. (S-Mode)
  - 20\% decrease

- **Work Volume**
  - Increase in work volume using the same amount of fuel. (H-Mode)
  - 8\% increase

“Top-Class” Powerful Digging

- Max. arm crowding force: 119 kN (12.1 tf)
- Max. arm crowding force with power boost: 131 kN (13.4 tf)
- Max. bucket digging force: 170 kN (17.3 tf)
- Max. bucket digging force with power boost: 187 kN (19.1 tf)

Powerful Travel

- Travel torque: increased by 8\%
- Drawbar pulling force: 244 kN (24.8 tf)

Greater Swing Power, Shorter Cycle Times

- High output swing torque and better controlled swing speed boost working efficiency

Significant Extension of Continuous Working Hours

- The combination of a large-capacity fuel tank and excellent fuel efficiency delivers an impressive 70\% increase in continuous operation hours.**
- Fuel tank: 460L

Light Lever Operation

- It takes 10\% less effort to move the control levers, so that operators can work longer hours with less fatigue.
- 10\% Less

NEXT-3E Technology

New Hydraulic System

- Rigorous inspections for pressure loss are performed on all components of the hydraulic piping, from the spool of the control valve to the connectors. This regimen, combined with the use of a new, high-efficiency pump, cuts energy loss to a minimum.

NEXT-3E Technology

Next-Generation Electronic Engine Control

- The high-pressure, common-rail fuel-injection engine features a cooled EGR (Exhaust Gas Recirculation) device that lowers the air intake temperature to keep the oxygen concentration down. The multiple injection system features adjustable control to maximize fuel efficiency and provide powerful medium/low-speed torque. The result is a highly fuel-efficient engine that greatly reduces emissions of PM (particulate matter) and NOx into the atmosphere.

Seamless, Smooth Combined Operations

The GEOSPEC machines have inherited the various systems that make inching and combined operations easy and accurate, with further refinements that make a good thing even better. Leveling and other combined operations can be carried out with graceful ease.

- Electronic Active Control System
- Arm regeneration system
- Boom lowering system
- Variable swing priority system
- Swing rebound prevention system

NEXT-3E Technology

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.

Simple Select:

Two Digging Modes

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

Attachment Mode Selector Switch (Optional)

- There’s a choice of three different hydraulic circuits, to accommodate bucket, crusher or breaker, and the desired attachment mode can be selected with a switch, which automatically configures the selector valve. All attachment modes can be used in either S-mode or H-mode.

H-Mode

S-Mode

The GEOSPEC Difference:

Efficient Performance!
The GEOSPEC Difference: The Value and Quality of Sturdy Construction!

Stable Attachment Strength
Forged and cast components are used throughout. The arm tip's cross-sectional coefficient is 35% higher than previous models, giving the arm the same strength as the 3-faced reinforced arm that was offered only as an option before. The strength of the boom foot has also been increased by 19.6%.

Emergency Acceleration (Dial) Permits Continued Operation in the Unlikely Event of Malfunction
If unexpected trouble is experienced with the ITCS mechatronic control system, the machine can still be operated using the emergency acceleration system. Digging modes are also automatically relayed to an emergency system so that digging can continue temporarily until a service person arrives to repair the primary system.

Pre-air Cleaner (optional)
The optional pre-air cleaner prolongs a replacement cycle of main air cleaner.

Cast steel boom foot boss

Emergency acceleration

Engine throttle

Mechatronic controller

Newly designed MCU

Conventional MCU

Emergency Acceleration (Dial) Permits Continued Operation in the Unlikely Event of Malfunction

Vertical alignment and sealed cover gives better protection from water and dust
Integration in base plate boosts assembly quality
Reliable fixture to base plate

Countermeasures Against Electrical System Failure
All elements of the electrical system, including controller, have been designed for enhanced reliability.

Durability That Retains Machine Value Five and Ten Years in the Future

Enhanced Upper Carbody Strength
The structure of the lower portion of the upper frame has been reassessed and the undercover area has been minimized. Also, the side deck's cross-sectional strength has been boosted by 50%.

HD arm
Forged steel arm foot boss

Durability That Retains Machine Value Five and Ten Years in the Future
New operator’s seat covered in durable, material
High-quality urethane paint
Easily repaired bolted hand rails

The GEOSPEC Difference: Designed for the Environment and the Future! Meets Standard Values Set by Emissions Regulations
The engine used in the GEOSPEC machines represents the crystallization of various cutting-edge technologies that minimize the emission of PM (Particulate Matter), NOx, black smoke, and other emissions, thus meeting all internationally recognized environmental regulations, including US EPA Tier III, NRMM (Europe) Stage IIIA, and act on regulation, etc. of emission from non-road special motor vehicles (Japan).

Auto Idle Stop Provided as Standard Equipment
This function saves fuel and cuts emissions by shutting down the engine automatically when the machine is on stand by. It also stops the hourmeter, which helps to retain the machine’s asset value.

Automatic Acceleration/Deceleration Function Reduces Engine Speed
Engine speed is automatically reduced when the control lever is placed in neutral, effectively saving fuel and reducing noise and exhaust emissions. The engine quickly returns to full speed when the lever is moved out of neutral.

Low Noise Level and Mild Sound Quality
The electronically controlled common-rail engine has a unique fuel injection system that runs quietly. Also, the hydraulic pumps have been redesigned to produce a more pleasant sound during pressure relief. In short, the GEOSPEC series meets all requirements cited in latest EU stage II.

Meets EMC (Electromagnetic Compatibility) Standards in Europe.
Measures have been taken to ensure that the GEOSPEC machines do not cause electro-magnetic interference.
The GEOSPEC Difference:

"On the Ground" Maintenance!

The machine layout was designed with easy inspection and maintenance in mind.

**Comfortable "On the Ground" Maintenance**

The fuel filter with built-in water separator functions in two ways by removing large contaminants and separating out water.

**Quick Oil Drain Valves for Quick Maintenance**

A quick drain valve, which requires no tools, is provided as standard equipment.

**More Efficient Maintenance Inside the Cab**

To facilitate fuel tank cleaning, the fuel drain valve was made larger and fitted with a flange on the bottom.

**Long-Life Hydraulic Oil Reduces Replacement Costs**

The long-life hydraulic oil features a base oil with excellent demulsification, with optimized wear-resistant additives and antioxidants that help to boost the service life to 5,000 hours and greatly reduce the number of changes necessary.

**GEOSCAN**

GEOSCAN allows you to use the Internet to manage information from your office for machines operating in all areas. This provides a wide range of support for your business operations.

**Monitor Display with Essential Information for Accurate Maintenance Checks**

With messages including those requiring urgent action displayed in the local language, users in all parts of the world can work with greater peace of mind.

**Choice of 16 Languages for Monitor Display**

With a choice of 16 languages, users in all parts of the world can work with greater peace of mind.

**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 element only, it’s both highly effective and highly economical.

**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.

**New-Design Fuel Filter Catches 95% of Dust and Impurities**

The large-capacity fuel filter is designed specifically for common rail engines. With an increased filtering performance to 2-micron precision, this high-grade filter catches 95% of all dust particles and other impurities in the fuel.

**Monitor Display and Warning Alerts**

**Machine Maintenance Data**

Provides maintenance status of separate machines operating at multiple sites. Maintenance data is also relayed to KOBELCO service personnel, for more efficient planning of periodic servicing.

**Security System - Engine Start Alarm**

The system can be set an alarm if the machine is operated outside designated hours.

**Area Alarm**

It can also be set so that an alarm is set if the machine is moved out of its designated area to another location.
The GEOSPEC Difference: Designed from the Operator’s Point of View

Newly Designed “Big Cab”

The new “Big Cab” provides a roomy operating space with plenty of legroom, and the door opens wide for easy entry and exit. As well as giving a wide, open view to the front, the cab has increased window areas on both sides and to the rear, for improved visibility in all directions.

Wide-Access Cab Aids Smooth Entry and Exit

Easy entry and exit assured with wider cab entry and safety lock lever integrated with mounting for control lever.

Excellent Visibility

The wide open view to the front combines with minimized blind spots around the machine for greater onsite safety.

In-Cab Noise is Reduced by 3dB

Compared with previous models.

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 is attached to further enhance visibility.

Creating a Comfortable Operating Environment

- One-touch lock release simplifies opening and closing the front window
- Large cup holder
- Spacious luggage tray
- Powerful automatic air conditioner
- Two-speaker FM radio with station select

Safety Features That Take Various Scenarios into Consideration

- Firewall separates the pump compartment from the engine
- Swing flashers/rear working lights
- Level indicator that shows degree of machine tilt
- Thermal guard prevents contact with hot components during engine inspections
- Hand rails meet European standards
- Retractable seatbelt requires no manual adjustment

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The newly developed, ROPS (Roll-Over Protective Structure)-compliant cab clears ISO standards (ISO-12117-2: 2008) and ensures greater safety for the operator should the machine tip over.

Photo includes optional pedals for N&B.
**Specifications**

### Engine
- **Model**: HINO(16.0-16.5)
- **Type**: Direct injection, water-cooled, 4-cylinder diesel engine with turbocharger, intercooler (Complies with EU (HINMM) Stage IV, US EPA Tier III, and act on regulation, etc. of emission from non-road special motor vehicles (Japan))
- **No. of cylinders**: 4
- **Bore and stroke**: 112 mm x 130 mm
- **Displacement**: 5.123 L
- **Rated power output**: 137 kW/2,100 min⁻¹ (ISO14396:Without fan)
- **Max. torque**: 635 N

### Relief valve setting
- **Brake**: Hydraulic; locking automatically when the swing control lever is in the neutral position
- **Parking brake**: Hydraulic disc brake
- **Oil cooler**: Air cooled type
- **Pilot control pump**: Gear type
- **Control circuit**: 5.0 MPa {50 kgf/cm²}
- **Swing circuit**: 28.5 MPa {296 kgf/cm²}
- **Travel circuit**: 34.3 MPa {350 kgf/cm²}
- **Power Boost**: 37.8 MPa {385 kgf/cm²}
- **Boom, arm and bucket**: 34.3 MPa {350 kgf/cm²}

### Swing System
- **Type**: Two variable displacement pumps + 1 gear pump
- **Max. discharge flow**: 2 x 246 L/min, 1 x 20 L/min
- **Boom, arm and bucket**: 34.3 MPa {350 kgf/cm²}
- **Power Boost**: 37.3 MPa {385 kgf/cm²}
- **Travel circuit**: 34.3 MPa {350 kgf/cm²}
- **Swing circuit**: 34.3 MPa {350 kgf/cm²}
- **Control circuit**: 5.0 MPa {50 kgf/cm²}
- **Pilot control pump**: Gear type
- **Main control valves**: 8-spool Oil cooler: Air cooled type

### Boom, Arm & Bucket
- **Boom cylinders**: 135 min x 1.235 mm
- **Arm cylinder**: 145 mm x 1.835 mm
- **Bucket cylinder**: 125 mm x 1.200 mm

### Refilling Capacities & Lubrications
- **Fuels tank**: 460 L
- **Cooling system**: 20 L
- **Engine oil**: 21 L
- **Cooling system**: 20 L
- **Bucket cylinder**: 170 L
- **Arm cylinder**: 125 L
- **Travel oil**: 170 L
- **Bucket cylinder**: 125 L
- **Arm cylinder**: 125 L
- **Travel oil**: 170 L

### Cab & Control
- **Type**: Two hand levers and two foot pedals for travel
- **Two hand levers**: All-weather, sound-suppressed steel cab mounted on the silicon-sealed viscous mounts and equipped with a heavy, insulated floor mat.

### Swing System
- **Swing motor**: Axial-piston motor
- **Brake**: Hydraulic: locking automatically when the swing control lever is in the neutral position
- **Parking brake**: Hydraulic disc brake
- **Swing speed**: 11.8 m/min (rpm)
- **Tail swing radius**: 3,020 mm
- **Min. front swing radius**: 2,990 mm

### Attachments
- **Backhoe bucket and arm combination**

### Working Ranges
- **Boom**: 2 m/8' x 2.98 m
- **Standard arm**: 3 m/10' x 3.66 m
- **Long Arm**: 3 m/10' x 3.66 m
- **Max. digging reach**: 9.1 m
- **Max. digging depth**: 6.5 m
- **Max. digging height**: 9.6 m
- **Max. dumping clearance**: 6.5 m
- **Ground clearance**: 460 mm

### Digging Force (ISO 6015)
- **Arm length**: Short 2.5 m, Standard 2.98 m, Long 3.66 m
- **Bucket digging force**: 170 kN
- **Arm crowding force**: 142 kN

### Dimensions
- **Max. digging reach**: 9.72 m
- **Max. digging depth**: 6.52 m
- **Max. manual travel**: 9.6 m
- **D Center of swing to rear end**: 3,020 mm
- **H Finsihing system**: 112 mm

### Refilling Capacities & Lubrications
- **Bucket cylinder**: 170 L
- **Arm cylinder**: 125 L
- **Travel oil**: 170 L
- **Bucket cylinder**: 125 L
- **Arm cylinder**: 125 L

### Operating Weight & Ground Pressure
- **Boom**: 2,500 mm arm, 1.0 m³ ISO heaped bucket
- **Ground pressure**: 954 kPa

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**Not recommended**

**Recommended**

**Loading only**

**Not recommended**
## Lifting Capacities

**Notes:**
1. Do not attempt to lift or hold any load that is greater than these lifting capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the specified lifting capacities.
2. Lift capacities are based on machine standing on level, firm, and uniform ground. Users must make allowance for load conditions other than these specified, e.g. uneven ground, out of level conditions, side leans, sudden stopping of loads, hazardous conditions, experience of personnel, etc.
3. Rated load limits defined as lift point.
4. The above lifting capacities are in compliance with ISO 10567. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Lifting capacities marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.
5. Operation should be fully anticipated with the Operator’s and Maintenance Instructions before operating this machine. Rules for safe operation of equipment should be adhered to at all times.
6. Lift capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.