#### STANDARD EQUIPMENT

#### ENGINE

- Engine, ISUZU 4LE2XCUA engine with turbocharger and intercooler
- Automatic engine deceleration
   Auto Idle Stop (AIS)
- Batteries (2 x12V 64 Ah)
- Starting motor (24 V- 3.2 kW), 30 A alternator
- Double element air cleaner

CONTROL

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

- SWING SYSTEM & TRAVEL SYSTEM
- Swing rebound prevention system
- Two-speed travel with automatic shift down
- 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 KOBELCO dealer for specifics.

Note: This catalog may contain attachments and optional equipment that are not available in your area. And it may contain photographs of machines with specifications that differ from those of machines sold in your areas. 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. Copyright by KOBELCO CONSTRUCTION MACHINERY CO., LTD. No part of this catalog may be reproduced in any manner without notice.

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- **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

We Save You Fuel



## KOBELCO



#### **ACERA GEOSPEC SK75-8**

#### **Hvdraulic Excavators**





Bucket Capacity: 0.4 m<sup>3</sup> ISO heaped

Engine Power: 41kW/2,200 min<sup>-1</sup>{rpm}

Operating Weight: 7,290 kg

# Powerful, Flexible, Large Bucket Capacity

The new ACERA GEOSPEC series utilizes the cutting edge technologies of KOBELCO, 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 maintaing basic performance. Due to the adoption of cabs 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

NEXT-3E

### 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

.....

1/////

**SK75** 

**TENED** 

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

KOBELI

AD-1



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.



Capable and powerful GEOSPEC SUPER!

### **Reduce unnecessary consumption** with powerful operation power!

### "Top-Class" Powerful Digging Max. arm crowding force: 39.4 kN {4.0tf} Max. bucket digging force: 52.7kN {5.4tf}

#### Shorter Cycle Times

Swing Speed:

## 11.5min<sup>-1</sup>

#### 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.

Fuel tank capacity: 140L

#### 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.



0.4m<sup>3</sup> Large capacity bucket



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.



Photos in this catalog are the optional specs with dozer blade.

#### Simple Select: Two Digging Modes



Mode select switch

**S-Mode:** For normal operations with lower fuel consumption.

H-Mode: For heavy duty when a higher performance level is required.

#### 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 PFRpump 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**

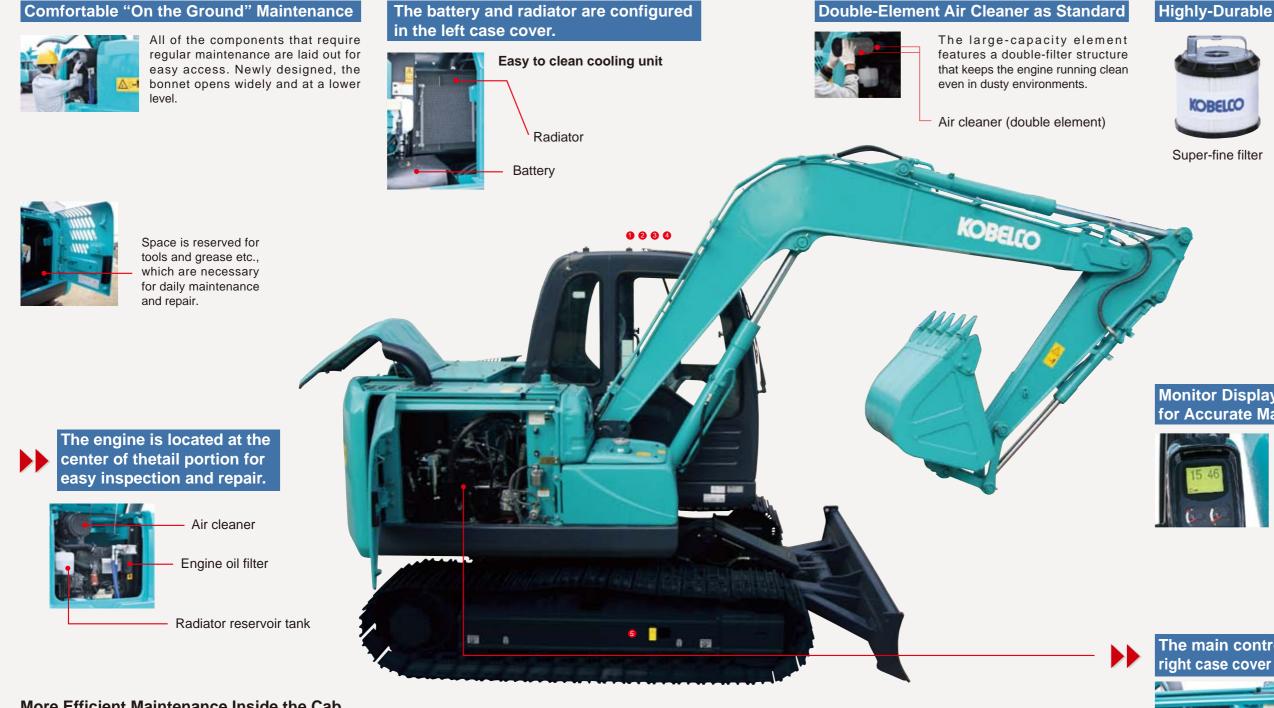
The next-generation engine control is governed by a new version of ITCS, whice responds quickly to sudden changes in hydraulic load to ensure that the engine runs as efficiently as possible with a minimum of wasted output.



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



### Easy to maintain GEOSPEC SUPER! **Easy and convenient operation!**



#### More Efficient Maintenance Inside the Cab

make it easier to



• Detachable • Easy-access fuse two-piece floor mat box. More finely with handles for differentiated fuses easy removal. A floor drain is located locate malfunctions under the mat.



• 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.



#### 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, shen 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 translent malfunctions.



Pre fuel filter (with bult-in water separator) Hydraulic control valve



### Clean and comfortable GEOSPEC SUPER! Equipped with the same cab as a large excavator!

### Delicate and complete GEOSPEC! Take various scenarios into consideration to prevent any potential danger!

#### 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 Entryand 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.



#### Reduced Vibration for Fatigue-Free Operation



•New reclining seat can be lowered well down to the back.



Double slide seat

air conditioner





Large cup holder

#### 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



### **Specifications**

## Engine

Model	ISUZU 4LE2XCUA	
Туре:	Direct injection, water-cooled, 4-cycle diesel engine with turbocharger, intercooler (Complies with EU (NRMM) Stage IIIA, US Tier III, and act on regulation, etc. of emissions from non-road special motor vehicles (Japan))	
No. of cylinders:	4	
Bore and stroke:	85 mm x 96 mm	
Displacement:	2.179 L	
Rated power output:	42 kW /2,200 min-1 (ISO14396: 2002)*	
	41 kW /2,200 min-1 (ISO9249: 2007)	
Max. torque:	211 N.m/1,600 min <sup>-1</sup> {rpm} (ISO14396: 2002)*	
	200 N.m/1,600 min <sup>-1</sup> {rpm} (ISO9249: 2007)	
	*ISO 14396 meets EU regulation	

1 gear pump

Gear type

Air cooled type

8-spool

One variable displacement pump +

1 x 132 L/min, 1 x 18 L/min

29.4 MPa {300 kgf/cm<sup>2</sup>}

29.4 MPa {300 kgf/cm<sup>2</sup>}

27.5 MPa {280 kgf/cm<sup>2</sup>}

24.5 MPa {250 kgf/cm<sup>2</sup>}

3.50 MPa {36 kgf/cm<sup>2</sup>}

Travel System

Travel motors:	2 x axial-piston, two-step motors	
Travel brakes:	Hydraulic brake per motor	
Parking brakes:	Oil disc brake per motor	
Travel shoes:	39 each side	
Travel speed:	5.3 / 2.8 km/h	
Gradeability:	70 % {35°}	

### Cab & Control

Cab	
All-weather, sound-suppressed steel cab mounted on the silicon-sea viscous mounts and equipped with a heavy, insulated floor mat.	led
Control	
Two hand levers and two foot pedals for travel	
Two hand levers for excavating and swing	

Electric rotary-type engine throttle

### 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

Hydraulic System

Type:

Max. discharge flow:

Relief valve setting

Dozer blade circuit:

Pilot control pump:

Main control valves:

**Travel circuit:** 

Swing circuit:

Oil cooler:

**Control circuit:** 

Boom, arm and bucket:

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 <sup>-1</sup> {11.5 rpm}
Tail swing radius:	1,750 mm
Min. front swing radius:	1,760 mm

### Boom, Arm & Bucket

Boom cylinders:	110 mm x 916 mm
Arm cylinder:	95 mm x 833 mm
Bucket cylinder:	80 mm x 735 mm

### Attachments

Backhoe bucket and arm combination

Use		Backhoe bucket	
		Standard	
		<b>₩ 8 8 8</b>	
Bucket capacity	ISO heaped m <sup>3</sup>	0.4	
Opening width	With side cutters mm	970	
	Without side cutters mm	870	
No. of bucket teeth		5	
Bucket weight kg		230	
Combinations 1.71 m standard arm		Ø	
		-	

© Standard

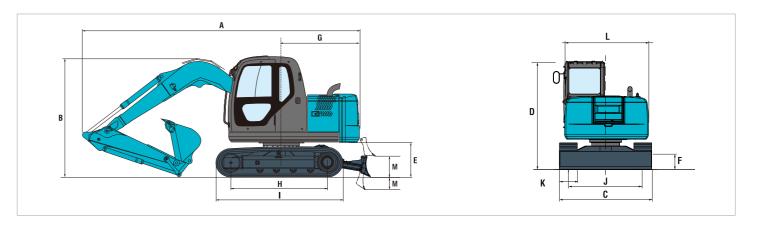
### **Working Ranges**

	Unit:m
Arm	Standard
Range	1.71 m
a- Max. digging reach	6.46
b- Max. digging reach at ground level	6.31
c - Max. digging depth	4.17
d- Max. digging height	7.4
e- Max. dumping clearance	5.33
f - Min. dumping clearance	2.52
g- Max. vertical wall digging depth	3.48
h- Min. swing radius	1.76
i - Horizontal digging stroke at ground level	2.85
j - Digging depth for 2.4 m (8') flat bottom	3.81
Bucket capacity ISO heaped m <sub>3</sub>	0.4

Digging Force (ISO 6015)	Unit: kN (kgf)
Arm length	Standard 1.71 m
Bucket digging force	52.7 {5,370}
Arm crowding force	39.4 {4,020}

### Dimensions

	Arm length	Standard 1.71 m
А	Overall length	6,200
в	Overall height (to top of boom)	2,650
С	Overall width of crawler	2,320
D	Overall height (to top of cab)	2,730
Е	Ground clearance of rear end*	745
F	Ground clearance***	360

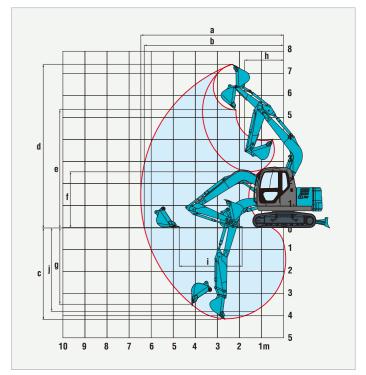


#### **Operating Weight & Ground Pressure**

In standard trim, with standard boom, 1.71 m arm, 0.4 m<sup>3</sup> ISO heaped bucket, and dozer

Shaped		Triple grouser shoes (even height)
Shoe width	mm	450
Overall width	mm	2,320
Ground pressure kPa	(kgf/cm <sup>2</sup> )	33.7 {0.31}
Operating weight	kg	7,290





---- Standard Arm

	Unit:	mm
50		

Tail swing radius	1,750
Tumbler distance	2,210
Overall length of crawler	2,830
Track gauge	1,870
Shoe width	450
Overall width of upperstructure	2,110
Dozer blade (up/down)**	475 (28°) / 305
	Tumbler distance Overall length of crawler Track gauge Shoe width Overall width of upperstructure

\* Without including height of shoe lug. \*\* For dozer