

KOBELCO

SK140SRD-7

Performance  Design

Dismantling machine

SK140SRD



Complies with the EU Stage V
exhaust emission regulation

We Save You Fuel
Achieving a Low-Carbon Society

Performance

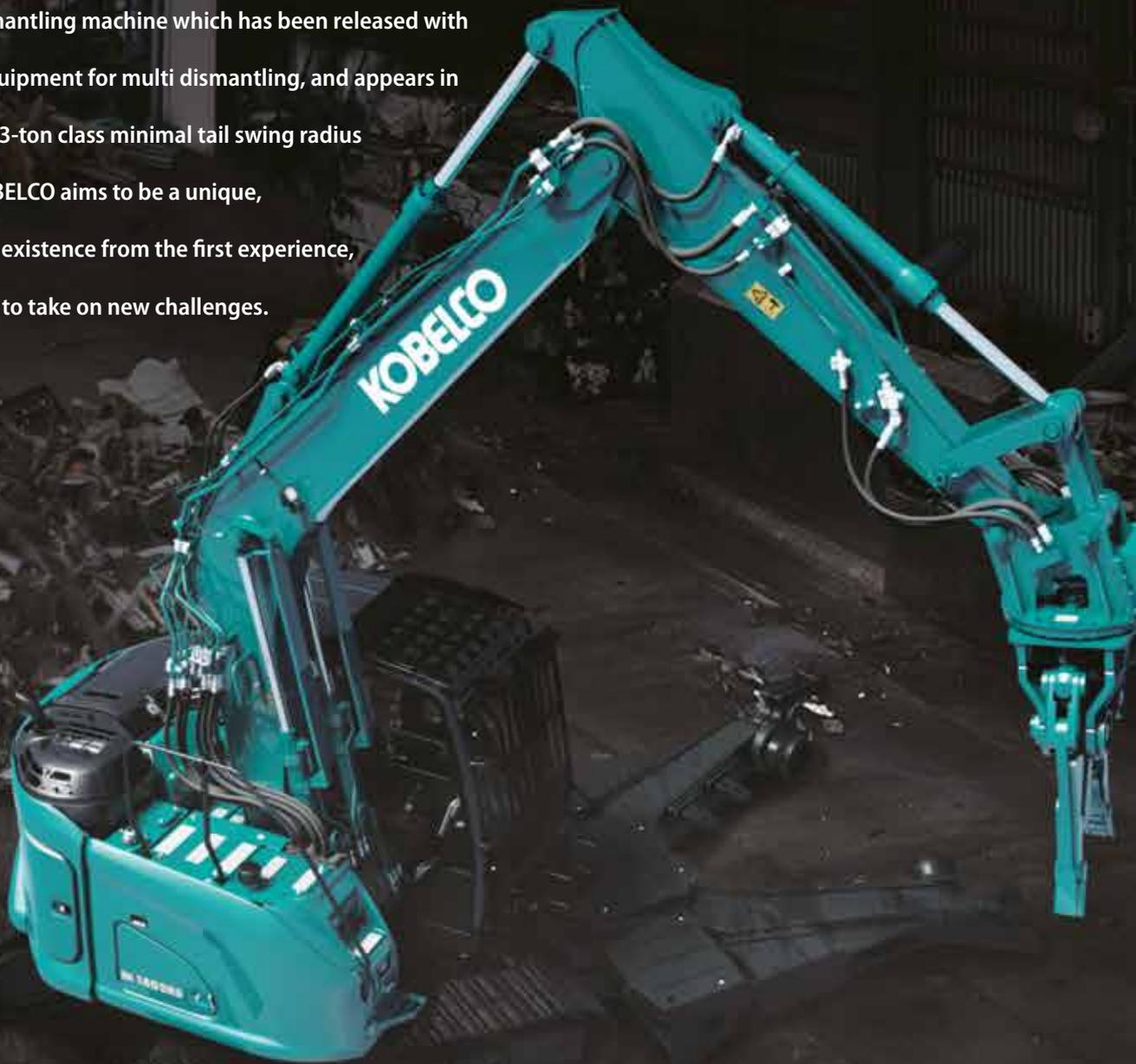


Design

PERFORMANCE – Improved power and speed, and the thorough pursuit of efficiency and productivity.

DESIGN – An operator-first design with no compromises on ease of use and comfort.

By combining these two principles, KOBELCO's new values have been achieved in the SK140SRD, the new multi-use dismantling machine which has been released with specialized equipment for multi dismantling, and appears in the lineup of 13-ton class minimal tail swing radius machines. KOBELCO aims to be a unique, unforgettable existence from the first experience, and continues to take on new challenges.



To the Next Level of Power and Functional Aesthetics

A High-Output Engine Compliant with the Newest Regulations

The high-performance engine is demonstrated in all operations, and notably allows high-load lifting and pulling to be performed smoothly.

Model: ISUZU 4JJ1XDDV A01



Engine Output

78.5 kW / 2,000 min⁻¹

ISO 14396 : without fan

Large, Easy-to-See 10-Inch Color Monitor

Important information is easy to read, and operations can be performed from a simple menu screen. The camera can also be easily checked from the large screen, contributing to safe operation.



A Jog Dial for Simple Operation

Multiple operations can be performed with the jog dial. They can be performed by simply turning, selecting, pushing, and confirming while navigating through the dial display. All operations can be smoothly performed while wearing gloves.



Advanced LED Backlights

Switches and dials utilize LED backlighting. This increases visibility at night and improves the ambiance of the interior.



New Console Tilting for Ease of Access and Exit

The left console has a safety lever to raise the console at a steep angle for ease of access and exit.



Automatic LED Door Light

The cab is equipped with a bright LED light that automatically lights up when the door is opened and when the key is turned off.



Variety and Individuality. All Parts of the Body are Specialized

HD Arm for Multi Dismantling

Dedicated reinforced HD arm

Multi-Use Dismantling Nibbler

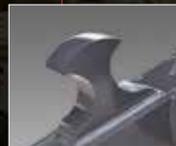
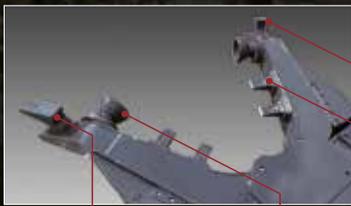
Lightweight design allows for fine movements. Shaped for smooth grabbing, picking, cutting, and pulling.

Clamp Arm

Can secure large objects, and pinch small objects. Using the equipment included with the arm allows work to be performed efficiently.

Boom Safety Valve

Prevent boom from falling if hose is damaged.



Puller

Shaped for convenient attachment to a harness.

Grip

Rotates objects forwards or backwards that are grabbed by the clamp.

Teeth

Allows objects to be crushed or cut.

Anchor

Used to bend long objects.

Dismantling Process Flow Chart

How the Car Dismantling Machine Works

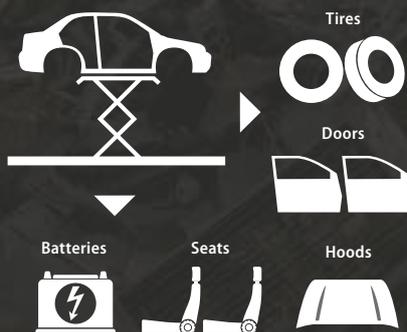
1. Collecting Fuel, Fluids and Chlorofluorocarbon Gas

Remove fluids such as fuel, anti freeze, oils and chlorofluorocarbon gas.



2. Parts Collection

Efficiently collect reusable parts.



3. Collecting undercarriage parts and engines

The car is turned to safely collect engine, exhaust system and suspension parts.



for Multi dismantling Work.

Arm Safety Valve

Prevent arm from falling if hose is damaged.

HD Boom for Multi Dismantling

Dedicated reinforced boom.

Boom Cylinder Cover

Prevents collisions from damaging the cylinder.

Boom Foot Cover / Center Cover

Prevent metal fragments from entering the cab.

Cab for Multi Dismantling

The large skylight glass is equipped with a top guard.

< Dedicated Equipment >

- Double-sided grid type guard with a holder for work boots
- FOPS Level II top guard
- Air suspension seat
- 4-inch armrest
- Cab entry step

Counterweights + Additional Weights

For maintaining the ideal balance.

4. Car Dismantling Process



After pre-processing, the car is sorted into raw components such as ferrous, non-ferrous and plastics

29

Cu

Copper

63.546

13

Al

Aluminium

26.982

Harnesses



Engine



Radiator



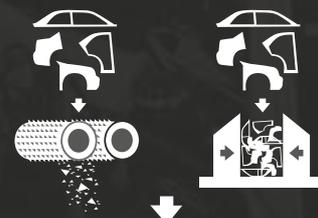
4. Processes After Removing Parts

Once thoroughly cleaned, the parts become good quality recycled parts.



5. Volume Reduction Processes

After treating, the scrap cars are cut up and crushed or pressed into materials that meet industry needs.



Blocks of material can then be distributed to smelting plants for recycling.

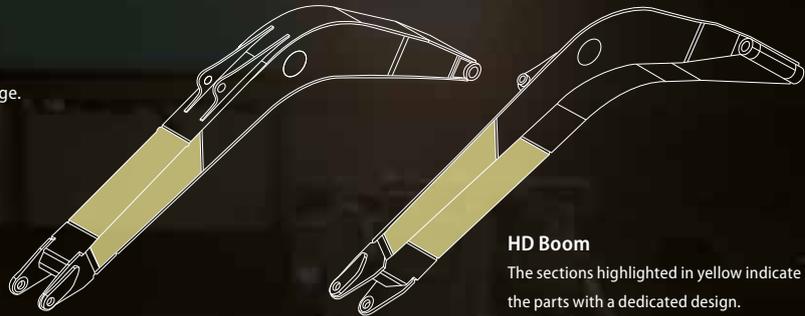


EUROPEAN WAY

A Multi-Dimensional Approach for Improved Reliability and Durability

HD Boom for Multi Dismantling

The new boom was developed specially for multi dismantling. Thick plates are used in each part, and the cross section is also large.

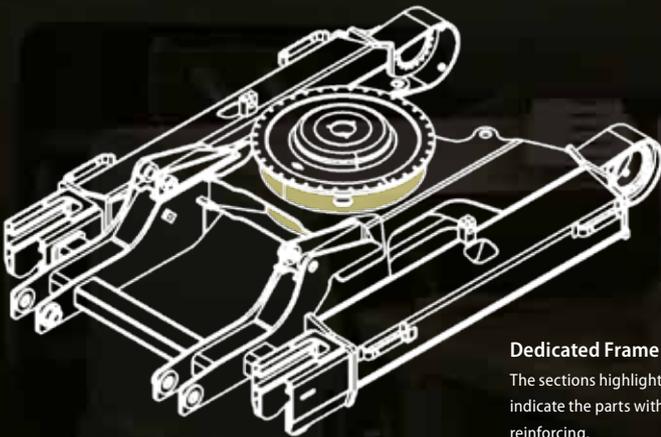


HD Boom

The sections highlighted in yellow indicate the parts with a dedicated design.

Dedicated Frame for Multi Dismantling

Due to the heavy counterweight and clamp arm of this machine, the swing area is redesigned and strengthened for longevity.



Dedicated Frame

The sections highlighted in yellow indicate the parts with additional reinforcing.

Damage-Resistant Center Cover for the Clamp Arm

The strength was improved by using a thick plate and changing the shape of the center cover that protects the opening/closing mechanism for the clamp arm. The newly designed guard protects the nibbler from deformations due to collisions.



Equipment - Center Cover / Boom Foot Cover

Stops metal fragments from entering the machine from the foot of the boom and prevents the occurrence of hydraulic issues.



Center Cover



Boom Foot Cover



Renewed Usability and Comfort, Improved Work Efficiency

Air Suspension Seat with heating



An air suspension seat manufactured by the German GRAMMER AG comes as standard equipment. It has superior shock absorption and can be used for long periods of time without causing fatigue. The included armrest is 4 inches wide.

PHC Lever for Simultaneous Operations

The PHC (Proportional hand control) lever is with a slide switch on the left and right grips for opening/closing and rotating the nibbler. Fine movements can be easily performed, and clamp-arm movements can be performed simultaneously in combination with the foot pedal for increased work efficiency.

Equipment that Improves Time Spent in the Cab



Smartphone Holder



12 V Power Supply / USB Port

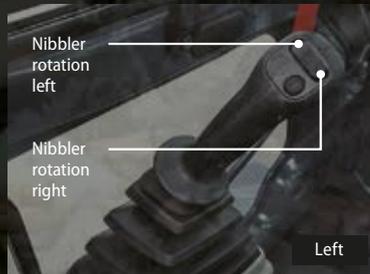


DAB+ Radio (FM/AM & AUX & USB & Bluetooth* & Hands Free Telephone)



Sun screen (optional)

*Bluetooth is a registered trademark of the Bluetooth SIG Inc.



Left



Right

Stress-Free Work Performance

Superior Stability

580kg of weights in addition to the counterweights are included as standard equipment. High stability means less rocking of the body and more efficient operation.



A New Hydraulic Control System with Improved Operability

Compared to regular excavators, the small stroke lever allows quick and accurate movements.



Functions and Equipment Designed for the Protection of Operators and Workers

Cab-Interference Prevention Apparatus that Prevents Collisions with the Nibbler

Angle sensors in the boom, arm, and idler link calculate the position and orientation of the multi-use dismantling nibbler. If the nibbler gets close to the cab, a warning will be displayed on the screen, and it will automatically stop if it enters the interference-danger zone.



Boom-Angle Sensor



Arm-Angle Sensor



Bucket-Angle Sensor



Cab Interference Warning



Cab for Multi dismantling that Includes a Top Guard

A new cab with a wiper and a large, glass skylight for a wide upper view. Standard equipment consists of a double-sided, radiator-shaped grid guard on the front, which does not obstruct the operator's field of vision, and another guard on the top. The front and right-side windows have shatterproof film applied. This protects the operator from scattering metal fragments.



A Front-Side Polycarbonate Guard is Available as an Option

This high-strength guard can block even small fragments. It has scratch resistance to maintain a clear view.



* Cannot be attached to the optional wire mesh guard.

Work Visibility for Quickly Confirming Safety

LED Lights for Improving Work Visibility

The excavator is equipped with bright LEDs on both sides of the boom, in 2 places on the top of the cab, and on the upper right of the body to ensure sufficient work visibility when working at night, during dusk, or when working inside.



2 Lights On the Boom



2 Lights On the Cab



Working Light On the Upper Body

Rear and Right-Side Images / Eagle-Eye View

The body has cameras on the rear, right, and left sides. The large color monitor can be used to check the safety of the rear and right sides which cannot be seen directly. Selectable camera displays include the simultaneous rear- and right-side (direct or right-rotated) view, the simultaneous top-down rear and right side view, and the eagle-eye view, which adds the left and shows all three directions simultaneously.



Eagle Eye View



Direct Right-Side View



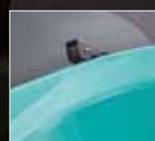
Top-Down View



Eagle-Eye View



Rear Camera



Left Camera



Right Camera



Stand-Out KOBELCO-Exclusive Technology on Multi-Dismantling Work Sites



Great Dust and Heat Protection

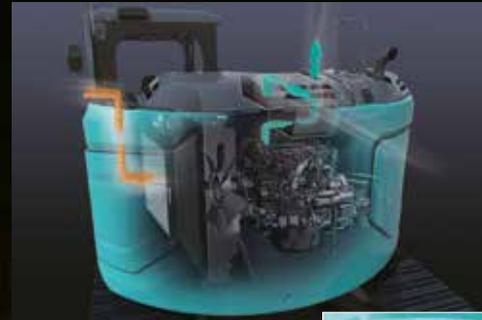
The iNDR filter stops dust from entering the machine, preventing radiator clogs and maintaining cooling performance. The iNDR filter has a shape that does not clog easily, and it can be used for long periods of time without overheating.

Superior Maintainability

Daily maintenance of the iNDR filter consists of simply a visual check. Cleaning is only necessary when significantly dirty. The filter can be easily removed without the need for tools, reducing the burden on workers and the time required for cleaning.

Impressively Quiet

The sound of the engine and cooling fan is reduced in the cab, and the unique absorptive structure achieves a high degree of silence. When operating inside, sounds are not sustained in the cab, and when working outside, the bother of nearby noise is minimized, reducing the stress of the operator.



The high-density mesh iNDR filter has a wave-shaped screen design which is resistant to clogging.

Equipment Designed Specifically for Multi dismantling



Bottom Cover of the Upper Body

Prevents objects from piercing the excavator from the bottom and protects internal components.



Under Cover of the Lower Body

The bottom surface of the lower car body is equipped with a steel-plate cover that protects the hydraulic travel system.



Boom Cylinder Guard

A steel-plate guard is equipped to protect the boom cylinder rod from scattering-metal fragments.



Ground level Urea tank

Urea filter cap is placed on the step for easy access.



Shoe-Holding Cab Guard

This space was added to hold work boots in order to keep the floor of the cab clean.



Microphone & Speaker

Verbal communication can be made outside of the cab in an easy-to-understand way thanks to the high-sensitivity microphone.



Cab Entry Step

Equipped with a large step to make entering or exiting the driver's seat easy.



Remote Fuel Drain Cock

Allows fuel to be drained without the need for excessive body contortions.



Refueling Pump

You can easily refuel without lifting the fuel carrying tank.



Specifications

Engine

Model	ISUZU 4JJ1XDDV A01
Type	Four cycle, water cooled, overhead camshaft, vertical in-line, direct injection type, with turbo-charger. EU stage V certified.
No. of cylinders	4
Bore and stroke	95.4 mm x 104.9 mm
Displacement	2,999 ml
Power output	71.3 kW / 2,000 min ⁻¹ (ISO 9249 : with fan)
	78.5 kW / 2,000 min ⁻¹ (ISO 14396 : without fan)
Max. torque	354 N·m / 1,800 min ⁻¹ (ISO 9249 : with fan)
	375 N·m / 1,800 min ⁻¹ (ISO 14396 : without fan)

Hydraulic System

Pump	
Type	Double variable displacement axial piston pumps with a gear pump
Max. discharge flow	2 x 130 L/min
	1 x 59.8 L/min
Relief valve setting	
Excavating circuits (main)	34.3 MPa
Travel circuit	34.3 MPa
Swing circuit	28.0 MPa
Pilot control circuit	5.0 MPa
Nibbler (Crusher) circuit	Open & Close 24.5 MPa Rotation 20.6 MPa
Clamp arm circuit	Open & Close 24.5 MPa Up & Down 24.5 MPa
Main control valve	12-spool
Oil cooler	Air cooled type

Swing System

Swing motor	One fixed displacement piston pump
Parking brake	Wet multiple plate
Swing speed	11.0 min ⁻¹
Swing torque	40.4 kN·m (SAE)
Tail swing radius	1,610 mm
Min. front swing radius	2,240 mm

Travel System

Travel motors	Variable displacement axial piston type x 2 pcs with counter balance valve
Travel brakes	Hydraulic brake
Parking brakes	Wet multiple plate
Travel shoes	44 each side
Travel speed	5.6 / 3.4 km/h
Drawbar pulling force	138 kN (SAE J 1309)
Gradeability	70% {35°}

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 and two padals for operation	
Rotary-type electric throttle	
Noise levels	
External	99 dB (A)
Operator	74 dB (A)

Refilling Capacities & Lubrications

Fuel tank	186 L
Cooling system	17.0 L
Engine oil	17.0 L
Travel reduction gear	2 x 2.1 L
Swing reduction gear	1.65 L
Hydraulic oil tank	89.9 L (tank oil level)
	192 L (hydraulic system)
Urea tank	26.0 L

Clamp arm ability

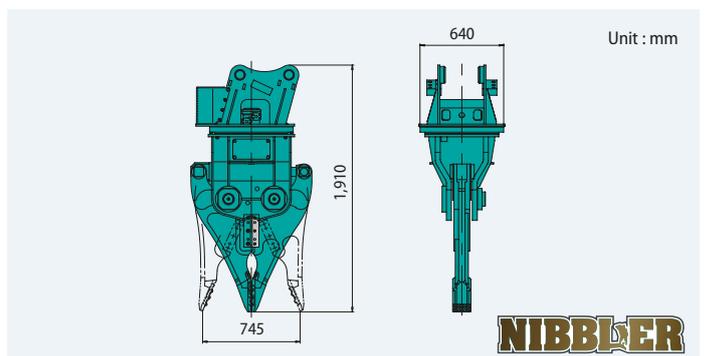
Crushing force (clamp arm tooth for rear)	324 kN
Crushing force (clamp arm tooth for front)	216 kN
Clamping force (clamp arm grip)	137 kN

Operating Weight & Ground Pressure

Shoe width	500 mm
Ground pressure	64 kPa
Operating weight	20,500 kg

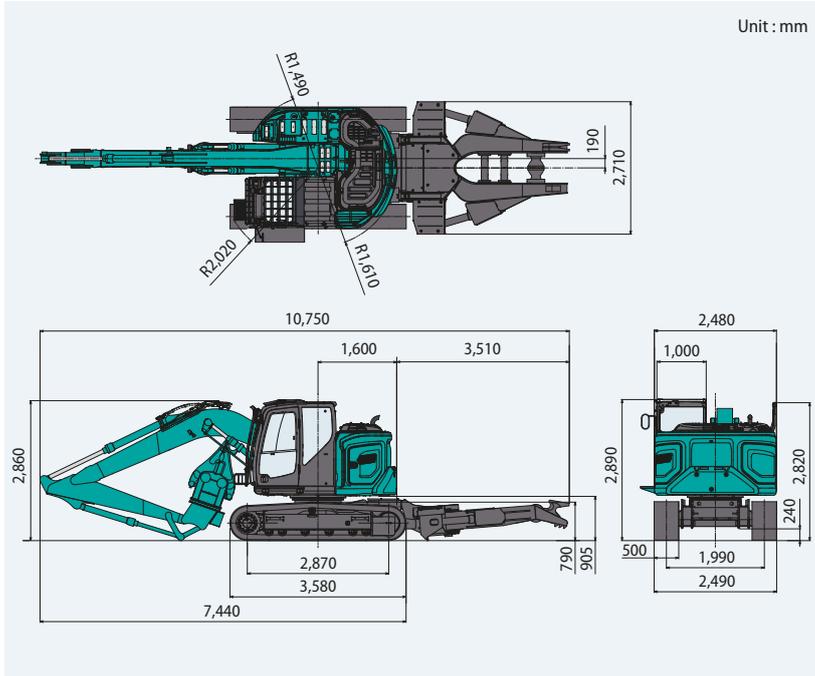
Front Attachment

Model	KHE750PR-2	
Weight	970 kg	
Shearing force (blade center)	255 kN	
Crushing force (tooth-jaw tip)	88.3 kN	
Operating pressure	Open/close	24.5 MPa
	Rotation	20.6 MPa

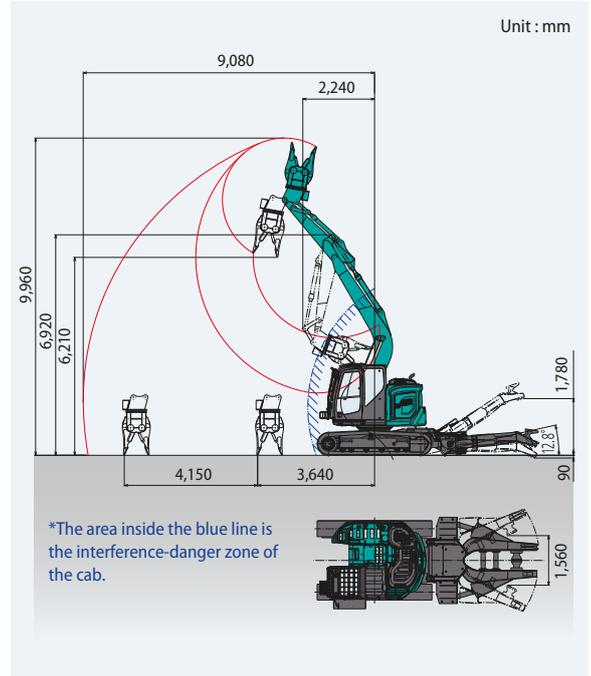




Dimensions



Working Ranges



KOMEXS

KOBELCO MONITORING EXCAVATOR SYSTEM

Total Support for Machines with Network Speed and Accuracy

KOMEXS is a satellite-based system for receiving machine information. Manage your machines anywhere in the world using the Internet. Location, workload and diagnostic data aid business operations.

Direct Access to Operational Status

Location Data

Accurate location data can be obtained even from sites where communications are difficult.

Operating Hours

A comparison of operating times of machines at multiple locations shows which locations are busier and more profitable.

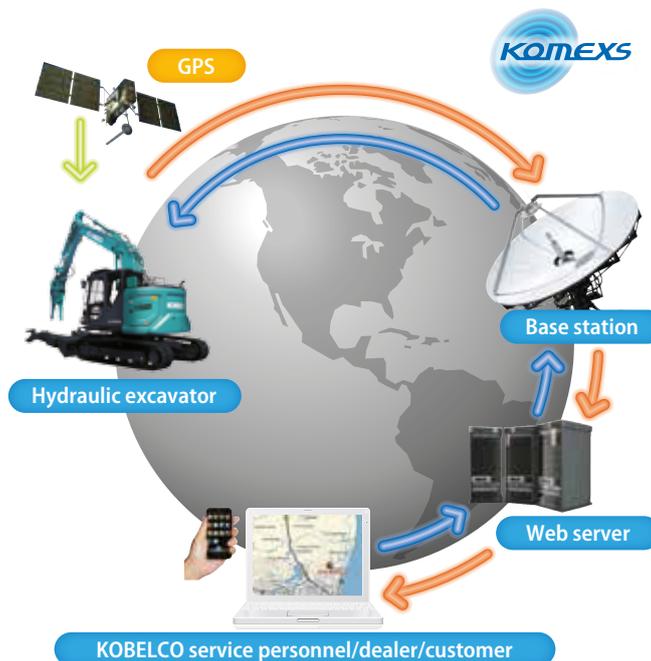
Operating hours on site can be accurately recorded, for running time calculations needed for rental machines, etc.

Fuel Consumption Data

Data on fuel consumption and idling times can be used to indicate improvements in fuel consumption.

Graph of Work Content

The graph shows how working hours are divided among different operating categories, including digging, idling, traveling, and optional operations (N&B).



Maintenance Data 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

Sends a notification if the engine is started outside of pre-defined hours.

Area Alarm

Sends a notification if the machine leaves a pre-defined area.

Standard and Optional Equipment

● = Std ○ = Opt

Category	Description	SK140SRD-7
Engine	ISUZU 4JJ1XDDV A01 (EU Stage V compliant)	●
	Exhaust DPF SCR system	●
	Alternator 24 V/50 A	●
	Starter motor 24 V/4 kW	●
	Batteries 2 x 88 Ah	●
	Fan suction type cooling system	●
	Auto deceleration function	●
Hydraulic system	Auto Idle Stop (AIS)	●
	3 work modes H, S, Eco	●
	Pressure release function	●
	Auto warm up system	●
	Proportional Hand Control (for Rotation & Nibbler piping)	●
	Hydraulic oil VG32	●
Piping	Hydraulic oil VG46	○
	Hydraulic oil VG68	○
	Rotation & Nibbler piping + safety valve (boom & arm cylinder)	●
Cabin	Air suspension seat with heating	●
	10-inch colour monitor	●
	LED door light	●
	Air-conditioner	●
	DAB+ radio (FM/AM & AUX & USB & Bluetooth* & hands-free telephone)	●
	Harness for CAB four lights and CAB yellow flasher	●
	12 V power supply	●
	Sun screen	○
	Cab entry step	●
	Work boots tray	●
Lights	LED work lights ; 2 on boom & 1 on upper frame & 2 on Cab top front	●
Working equipment	Standard HD boom (4.68 m)	●
	Standard HD arm (2.38 m)	●
	Clamp arm	●
	Nibbler KHE750PR-2	○
Counterweight	Additional counterweight (+580kg)	●
Undercarriage	500 mm GD shoe	●
	500 mm flat shoe	○
	500mm bolt on rubber pad shoe (with GD shoe)	○
	Lower frame guard	●
Safety	Engine emergency stop switch	●
	Pump emergency mode (KPSS release switch)	●
	Emergency accel dial	●
	Emergency manual valve for lowering attachment	●
	Safety valve for boom & arm cylinder	●
	Cab interference prevention system	●
	OPG Level II top guard (ISO 10262:1998)	●
	OPG Level II front guard (ISO 10262:1998)	●
	Wire mesh type front guard	○
	Cab front polycarbonate guard	○
	Eagle-eye view camera (Rear, Right, Left)	●
	Seatbelt indicator on display	●
	Travel alarm	○
Microphone & speaker	●	
Others	Refueling pump	●
	Dustproof fuel tank cap	●
	Harness for engine room light	●
	Boom cylinder guard	●
	Boom foot cover	●
	Ral color	○
	KOMEXS	●

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