KOBELCO

Performance X Design

Multi-dismantling machine

SK140SRD SK140SRD-7

SK210D SK210D-11

DRIVEN BY PASSION

US EPA Tier IV Final

EU (NRMM) Stage V

Japanese Regulations

Performance X Design

PERFORMANCE — Improved power and speed, thru the 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 has achieved their goal of creating a unique and specialized machine for the auto recycling industry, that is both compact and nimble, yet quick and strong. A machine that can work hard every day and take on the challenges it was built for.

SK210D

SK210D-11 / Multi-dismantling machine

SK140SRD

SK140SRD-7 / Multi-dismantling machine

Variety and Individuality. All Parts of the Body are Specialized for Auto Recycling Work.

Multi-use dismantling nibbler

Lightweight design allows for fine movements. Strong but narrow jaws designed to securely grab and hold on with cutting blades that can separate or downsize material.

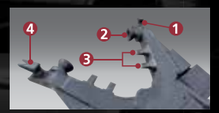
Multi-dismantling nibbler KHE750PR-2 (for SK140SRD)

Multi-dismantling nibbler KVE720PR (for SK210D)

Clamp arm

Used to hold down large objects or secure smaller objects for dismantling in conjunction with the nibbler tool.

SK210D



SK140SRD

Anchor
Used to bend long objects

Grip
Used to hold car or dash for dismantling

Teeth
Allows objects to be crushed or cut

Puller
Used to remove harness wire from instrument cluster and circuit boards

HD arm for auto recycling

Dedicated reinforced HD arm

Boom holding valve

Prevent boom from falling if hose is damaged.

Arm holding valve

Prevent arm from falling if hose is damaged.

HD boom for auto recycling

Dedicated reinforced HD boom.

Boom cylinder cover

Prevents damage to the cylinder rod.

Boom foot cover / Center cover [only SK140SRD]

Prevent material from building up around the cab.

Specialized cab for auto recycling

- Front and side window with tear and penetration-resistance film
- 2 pieces wire mesh front guard (opens for cleaning)
- FOPS Level II top guard
- Work boot tray
- Air suspension seat with heat
- Cab entry step

Heavy counterweight

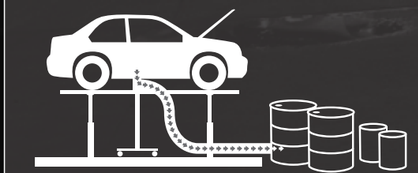
For maintaining balance while lifting heavy loads.

Dismantling process flow chart

How the car dismantling process works

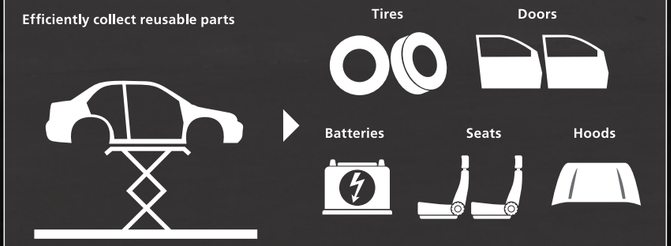
1. Collecting fuel, fluids and chlorofluorocarbon gas

Remove fluids such as fuel, anti freeze, oils and chloroflurocarbon gas



2. Parts collection

Efficiently collect reusable parts



3. Car dismantling process

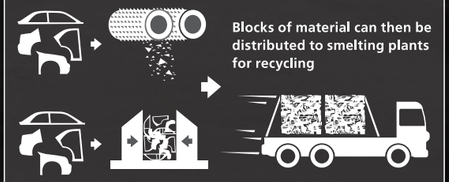
After pre-processing, the car is sorted into raw components such as ferrous, non-ferrous and plastics

3. Processes after removing parts

Once thoroughly cleaned, the parts become good quality recycled parts

4. 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

Performance X Design

To the next level of power and functional aesthetics

A high-output engine compliant with the newest regulations

Engines matched to provide maximum performance and smother operations for lifting and pulling applications.

Engine output

SK140SRD-7

96hp {71.5kW} / 2,000rpm

Model : ISUZU 4JJ1XDRAC-01

(SAE NET)

SK210D-11

160hp {119kW} / 2,000rpm

Model : YANMAR 4TN107FTT

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.

Advanced LED backlight

Switches and dials utilize LED backlighting to increase visibility at night and improves the ambiance of the interior.

Automatic LED door light

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

A jog dial for simple operation

Multiple operations can be performed with the jog dial. By simply turning, selecting, pushing, and confirming while navigating through the dial display.

New tilting console for ease of entry and exit

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

Comfort

Renewed usability and comfort, improved work efficiency.

Air suspension seat

GRAMMER* air suspension seat with heat is standard. It has superior shock absorption and can be used for long periods of time and reducing fatigue.

Equipment that improves time spent in the cab

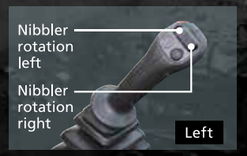
Smartphone holder

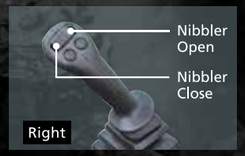
12 V Power supply / USB port

FM / AM
Bluetooth® (hands free)
Radio

Operability

Stress-free work performance.





Proportional controlled hydraulics

The nibbler open/close and rotate functions are controlled by proportional slides on the joysticks that allow for smooth and precise movement. Fine movements can be easily performed, and clamp-arm movements can be performed simultaneously in combination with the foot pedal for increased work efficiency.

Superior stability

Heavier counterweights are included as standard equipment. Higher stability means less rocking of the body and more efficient operation.

SK140SRD-7

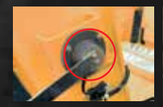
SK210D-11

Safety
Functions and equipment designed for the protection of operators and workers.

Cab interference warning

Cab-interference prevention device that prevents nibbler from contacting cab

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 protected for auto recycling

A new cab with wire mesh guard on the front and a heavy FOPS Level II guard on the top window are hinged to open for easy glass cleaning. The front and right-side windows have shatter resistant film applied to help protect the operator.

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. Must be ordered with HD bar guard.

Visibility
Better Visibility for Better 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, in 2 places on the counterweight to ensure excellent 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


2 on the counterweight

Rear left and right side images and right side images / three side view

The body has cameras on the rear, right, and left sides. The large color monitor can be used to check the visibility around the machine for additional safety. Multiple viewing options allow the operator to customize what is being displayed.


Three sided view

Unique engine cooling system -iNDr-
[Only on SK140SRD]

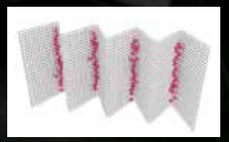
iNDr Integrated Noise & Dust Reduction Cooling System

iNDr absorbs sound energy to minimize noise by making a path of air, which cools down the engine. The SK140SRD is equipped with a selective catalytic reduction (SCR) unit, which required a new design with two offset ducts on top. This allows ample space to absorb engine noise.

Eliminating dust maintains cooling system performance

The high-density 30-mesh* filters dust in the intake air. This prevents clogging of the cooling system and the air cleaner, which maintains peak performance. The waveform filter allows air through the tops of the waves while collecting dust at the bottom, ensuring a smooth airflow.


Blocking out dust


How the filter catches dust

* "30-mesh" means that there are 30 holes formed by horizontal and vertical wires in every square inch of filter.

KOBELCO MONITORING EXCAVATOR SYSTEM KOMEXS

Total support for machines with network speed and accuracy

KOMEXS is a telematics 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.

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

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.

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.

Reliability

A multi-dimensional approach for improved reliability and durability.

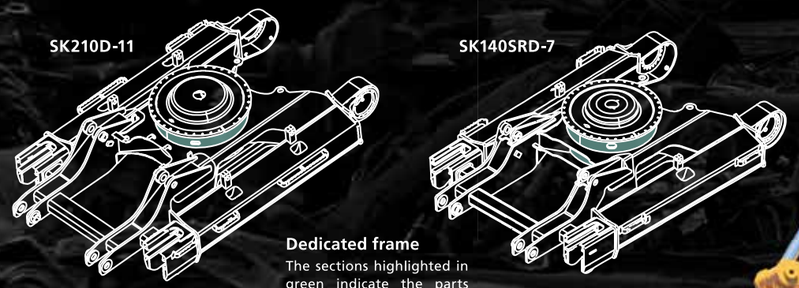
HD boom for auto recycling

A new HD boom was developed specifically for auto recycling that uses thick plating and reinforced materials.

HD boom
The sections highlighted in green indicate the parts with a dedicated design.

Dedicated frame for 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 green indicate the parts with additional reinforcing.

Damage-resistant center cover for the clamp arm

The strength was improved by using a thicker plate and changing the shape of the center cover that protects the opening/closing mechanism for the clamp arm.

Photo : SK140SRD

Equipment - center cover / boom foot cover [only SK140SRD]

Stops metal fragments from entering the machine from the foot of the boom and prevents damage to the hydraulic system..

Center cover

Boom foot cover

Equipment

Equipment designed specifically for auto recycling.

Upper frame under cover guards

Upper frame belly guards to protect the engine, hydraulic systems and operator station.

Swivel guard

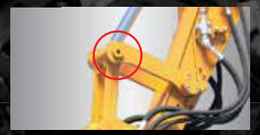
Heavy Duty guarding for the hydraulic components in the swivel/swing area.

Boom cylinder guard

A steel-plate guard is equipped to protect the boom cylinder rod from damage.

Dismantling arm cylinder [only SK210D]

Heavy duty arm cylinder made specifically for dismantling application.



Bucket cylinder rod pin [only SK210D]

The new large-diameter rod pin provides superior durability.

Hydraulic oil filter

Glass filtration material with outstanding cleaning ability and durability is used.

Dust-proof fuel tank cap

The fuel cap is lined with rubber to prevent dust from contaminating the fuel tank.

Boom & arm holding valves

Standard - to prevent boom or arm from falling if hose is damaged.

Remote fuel drain valve [only SK140SRD]

Allows for easy fuel draining if required.

Front guard(wire mesh guard)

Front windows are protected by a wire mesh guard to prevent damage and provide additional safety for the operator.

Public address system

Operator is able to alert ground workers without taking their hands off the machine controls.

Step

Equipped with a large step to make entering or exiting the cab easy.

Lower frame step [only SK210D]

An additional step is installed on the side of the crawler frame.

Travel alarm

The alarm cautions workers in the area that the machine is traveling.

Work boot tray

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

iNDr filter [only SK140SRD]

The corrugated filter design prevents clogging to reduce maintenance and assists to reduce noise.

Removable screens for easy cleaning [only SK210D]

Easily removable screens to prevent material from clogging the cooling system.

Specifications

SK140SRD SK140SRD-7

Engine

Model	ISUZU 4JJ1XDRAC-01
Type	4-cycle, water cooled, overhead camshaft, vertical in-line direct injection type, with turbocharger, Tier IV Final certified.
No. of cylinders	4
Bore and stroke	3.8" x 4.1" {95.4 mm x 104.9 mm}
Displacement	183.0 cu.in {2,999 ml}
Rated power output	96 hp {71.5 kW} / 2,000 rpm (SAE NET)
	105 hp {78.5 kW} / 2,000 rpm (Without fan)
Max. torque	261 lb-ft {354 N·m} / 1,800 rpm (SAE NET)
	277 lb-ft {375 N·m} / 1,800 rpm (Without fan)

Hydraulic system

Pump	
Type	Two variable displacement pumps + one option pump + one gear pump
Max. discharge flow	2 x 34 gpm {2 x 130 L/min} 1 x 15.8 gpm {1 x 59.8 L/min} 1 x 5 gpm {1 x 20 L/min}
Relief valve setting	
Boom, arm and bucket	4,970 psi {34.3 MPa}
Travel circuit	4,970 psi {34.3 MPa}
Swing circuit	4,060 psi {28.0 MPa}
Control circuit	725 psi {5.0 MPa}
Nibbler (Crusher) circuit	Open & Close 3,553 psi {24.5 MPa} Rotation 2,990 psi {20.6 MPa}
Clamp arm circuit	Open & Close 3,553 psi {24.5 MPa} Up&Down 3,553 psi {24.5 MPa}
Pilot control pump	Gear type
Main control valve	12-spool
Oil cooler	Air cooled type

Swing system

Swing motor	Axial piston motor
Brake	Hydraulic; locking automatically when the swing control lever is in neutral position
Parking brake	Oil disc brake, hydraulic operated automatically
Swing speed	11.0 rpm
Swing torque	29,800 lb-ft {40.4 kN·m}
Tail swing radius	5'3" {1,610 mm}

Hydraulic P.T.O.

Output / Specification	Maximum pressure psi {MPa}	Max. flow U.S. gpm, {lpm} (0 pressure)
		2,000 rpm
Nibbler	3,553 {24.5}	2 x 34.0 {2 x 130}
Rotary	2,990 {20.6}	15.8 {59.8}

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	44 each side
Travel speed	2.1 / 3.5 mph {3.4 / 5.6 km/h}
Drawbar pulling force	31,100 lb {138 kN}
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 foot pedals for front attachment and swing
Electric rotary-type engine throttle

Refilling capacities & lubrications

Fuel tank	49.1 U.S.gal {186 L}
Cooling system	4.5 U.S.gal {17 L}
Engine oil	4.5 U.S.gal {17 L}
Travel reduction gear	2 x 0.6 U.S.gal {2.1L}
Swing reduction gear	0.4 U.S.gal {1.65 L}
Hydraulic oil tank	23.7 U.S.gal {89.9 L} Tank oil level
	50.7 U.S.gal {192 L} Hydraulic system
DEF tank	6.9 U.S.gal {26 L}

Clamp arm ability

Pressing force (Clamp arm tooth tip)	11,020 lbf {49 kN}
Crushing force (clamp arm tooth for rear)	72,840 lbf {324 kN}
Crushing force (clamp arm tooth for front)	48,560 lbf {216 kN}
Clamping force (clamp arm grip)	30,800 lbf {137 kN}

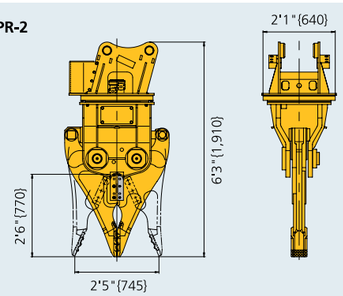
Operating weight & ground pressure

Shoe width	ft-in {mm}	19.7" {500}
Overall width of crawler	ft-in {mm}	8'2" {2,490}
Ground pressure	psi {kPa}	9.3 {64}
Operating weight	lb {kg}	45,000 {20,400} (with KHE750PR-2)

Front attachment

Model	KHE750PR-2
Weight	2,138 lbs {970 kg}
Shearing force(blade center)	57,330 lbf {255 kN}
Crushing force(tooth-jaw tip)	19,850 lbf {88.3 kN}
Operating pressure open/close	3,553 psi {24.5 MPa}
Operating pressure rotation	2,060 psi {14.2 MPa}

KHE750PR-2 (Unit : ft-in {mm})



SK210D SK210D-11

Engine

Model	YANMAR 4TN107FTT
Type	Direct injection, water-cooled, 4-cycle diesel engine with turbocharger, intercooler, Tier IV Final certified.
No. of cylinders	4
Bore and stroke	4.2" x 5.0" {107 mm x 127 mm}
Displacement	278.7 cu.in {4,567 ml}
Rated power output	160 hp {119 kW} / 2,000 rpm (SAE NET)
	170 hp {127 kW} / 2,000 rpm (Without fan)
Max. torque	577 lb-ft {783 N·m} / 1,500 rpm (SAE NET)
	594 lb-ft {805 N·m} / 1,500 rpm (Without fan)

Hydraulic system

Pump	
Type	Two variable displacement pumps + one option pump + one gear pump
Max. discharge flow	2 x 58.1 gpm {2 x 220 L/min} 1 x 13.4 gpm {1 x 50.6 L/min} 1 x 5.3 gpm {1 x 20 L/min}
Relief valve setting	
Boom, arm and bucket	4,970 psi {34.3 MPa}
Travel circuit	4,970 psi {34.3 MPa}
Swing circuit	4,210 psi {29.0 MPa}
Control circuit	725 psi {5.0 MPa}
Nibbler (Crusher) circuit	Open & Close 4,260 psi {29.4 MPa} Rotation 2,990 psi {20.6 MPa}
Clamp arm circuit	Open & Close 4,260 psi {29.4 MPa} Up&Down 4,260 psi {29.4 MPa}
Pilot control pump	Gear type
Main control valve	8-spool
Oil cooler	Air cooled type

Swing system

Swing motor	Axial piston motor
Brake	Hydraulic; locking automatically when the swing control lever is in neutral position
Parking brake	Oil disc brake, hydraulic operated automatically
Swing speed	12.7 rpm
Swing torque	52,740 lb-ft {71.5 kN·m}
Tail swing radius	9'7" {2,910 mm}

Hydraulic P.T.O.

Output / Specification	Maximum pressure psi {MPa}	Max. flow U.S. gpm, {lpm} (0 pressure)
		2,000 rpm
Nibbler	4,260 {29.4}	2 × 58.1 {2 × 220}
Rotary	2,990 {20.6}	13.4 {50.6}

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	46 each side
Travel speed	3.7 / 2.2 mph {6.0 / 3.6 km/h}
Drawbar pulling force	51,300 lb {228 kN}
Gradeability	58% {30°}

Cab & control

Cab
All-weather, sound-suppressed steel cab mounted on 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 foot pedals for front attachment and swing
Electric rotary-type engine throttle

Refilling capacities & lubrications

Fuel tank	84.5 U.S.gal {320 L}
Cooling system	5.0 U.S.gal {19 L}
Engine oil	5.4 U.S.gal {20.5 L}
Travel reduction gear	2 x 1.4 U.S.gal {5.3 L}
Swing reduction gear	0.7 U.S.gal {2.7 L}
Hydraulic oil tank	37.0 U.S.gal {140 L} Tank oil level
	79.3 U.S.gal {300 L} Hydraulic system
DEF tank	21.9 U.S.gal {83 L}

Clamp arm ability

Pressing force (clamp arm tooth tip)	13,940 lbf {62 kN}
Crushing force (clamp arm tooth for front)	74,860 lbf {333 kN}
Clamping force (clamp arm grip)	39,790 lbf {177 kN}

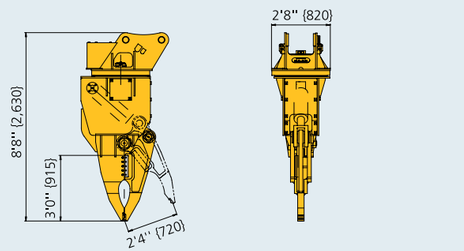
Operating weight & ground pressure

Shoe width	ft-in {mm}	23.6" {600}
Overall width of crawler	ft-in {mm}	9'2" {2,800}
Ground pressure	psi {kPa}	9.9 {68}
Operating weight	lb {kg}	67,500 {30,600} (with KVE720PR)

Front attachment

Model	KVE720PR
Weight	4,300 lbs {1,950 kg}
Shearing force(blade center)	121,170 lbf {539 kN}
Crushing force(tooth-jaw tip)	44,060 lbf {196 kN}
Operating pressure open/close	4,260 psi {29.4 MPa}
Operating pressure rotation	2,132 psi {14.7 MPa}

KVE720PR (Unit : ft-in {mm})

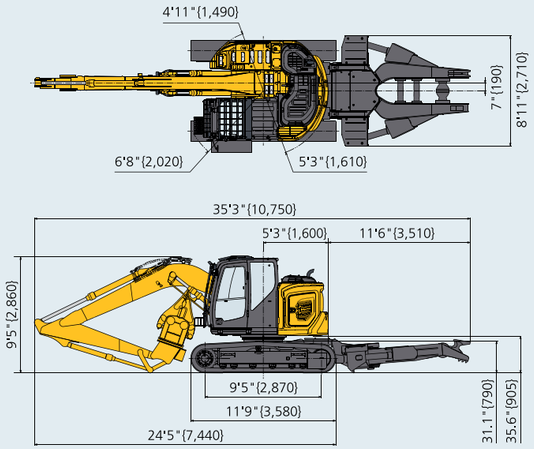


Specifications

SK140SRD SK140SRD-7

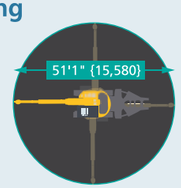
Dimensions

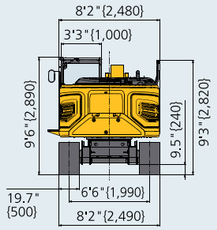
(Unit : ft-in {mm})



*Excluding height of grouser

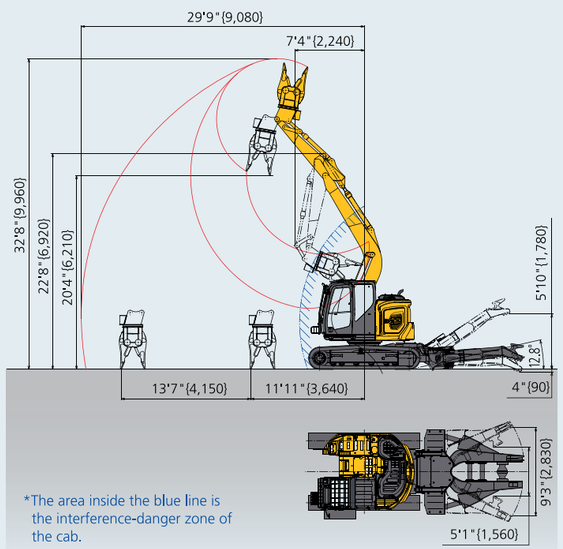
Working radius





Working ranges

(Unit : ft-in {mm})

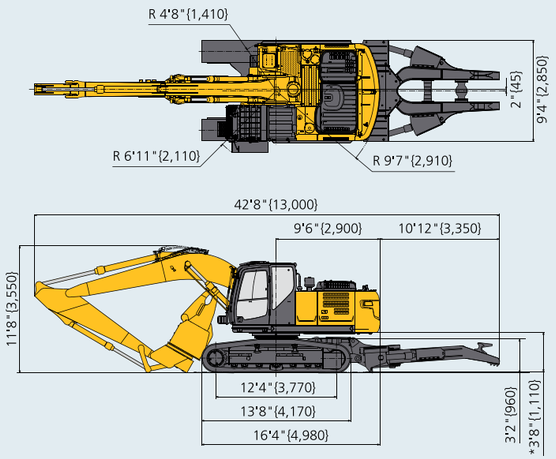


*The area inside the blue line is the interference-danger zone of the cab.

SK210D SK210D-11

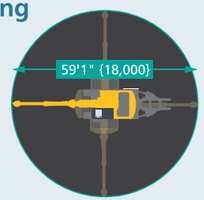
Dimensions

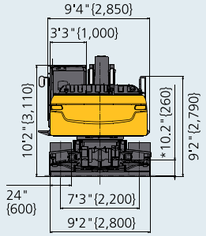
(Unit : ft-in {mm})



*Excluding height of grouser

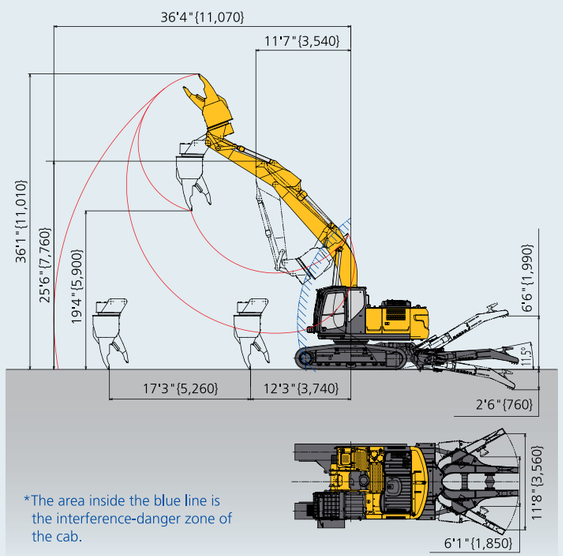
Working radius





Working ranges

(Unit : ft-in {mm})



*The area inside the blue line is the interference-danger zone of the cab.

Standard and Optional Equipment

●=Std , ○=Opt , — = not available

Category	Description	SK140SRD-7	SK210D-11
Engine	ISUZU 4JJ1XDRAC-01 (Tier IV final certified)	●	—
	YANMAR 4TN107FTT (Tier IV final certified)	—	●
	Auto engine acceleration/deceleration	●	●
	Auto Idle stop	●	●
	Dual element air cleaner	●	●
	Pre-cleaner	—	●
Hydraulic system	3 work modes H, S, Eco	●	●
	Hydraulic Pressure Release	●	●
	Swing priority	●	●
	Auto warm-up system	●	●
	Rotation and nibbler hydraulics with proportional hand control	●	●
	Hydraulic oil VG46	●	●
Cabin	Air suspension seat with heat	●	●
	10-inch color monitor	●	●
	LED door light	●	●
	Automatic climate control	●	●
	Radio (AM/FM, AUX, USB, Bluetooth® and hands-free telephone)	●	●
	12V power outlet	●	●
	Cab entry step	●	●
	Work boots tray	●	●
Lights	5 LED work lights: 2 on boom, 2 on cab front, 1 on front right	●	—
	7 LED work lights: 2 on boom, 2 on cab front, 2 on rear counterweight, 1 on front right	—	●
Working equipment	Standard HD boom 15'4" {4.68 m}	●	—
	Standard HD arm 7'10" {2.38 m}	●	—
	Standard HD boom 18'6" {5.65 m}	—	●
	Standard HD arm 9'8" {2.94 m} with rock guard	—	●
Counterweight	Standard and additional C/W 8,270 lb {3,750 kg} with swing flashers	●	—
	Heavier C/W 12,100 lb {5,490 kg} with swing flashers	—	●
Undercarriage	19.7" {500 mm} triple grouser shoe (Tracks are pre-drilled for rubber pads)	●	—
	23.6" {600 mm} triple grouser shoe	—	●
	0.35" (9 mm) thick swivel guard	●	●
	0.24" (6 mm) thick upper frame under cover guards	●	●
	Track guides (one per side)	—	●
Safety	Specialized cab for dismantling	●	●
	Top cab guard (Top guard level II ISO 10262:1998)	●	●
	Mesh-type front guard	●	●
	Bar-type front guard (Front guard level II ISO 10262:1998)	○	○
	Cab front polycarbonate guard (Bar-type front guard)	○	○
	Cab interference prevention system	●	●
	Engine emergency stop switch	●	●
	3-inch retractable seat belt	●	●
	Seatbelt indicator on display	●	●
	Travel alarm	●	●
	Public address system	●	●
	Swing flashers in counterweight	●	●
	Left and right side mirrors	●	●
	3-side 270-degree camera system	●	●
	Hose burst valve for boom and arm cylinder	●	●
Others	Boom cylinder guard	●	●
	Boom foot cover	●	—
	Angled upper deck guards	—	●
	ISO to BHL pattern changer	●	●
	Battery disconnect switch	●	●
	KOMEXS Machine Monitoring	●	●
	3 Year or 3,000 Hour Warranty	●	●

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.

KOBELCO CONSTRUCTION MACHINERY U.S.A. INC.

22350 Merchants Way, Katy, TX77449
Tel: 281-888-8430 Fax: 281-506-8713
www.KOBELCO-USA.com

Inquiries To: