

# Standard/Optional Equipment

**SK210D**  
SK210D-10

**KOBELCO**

**DRIVEN BY  
PASSION**

## Major accessories

⊙: Standard equipment, ○: Optional equipment

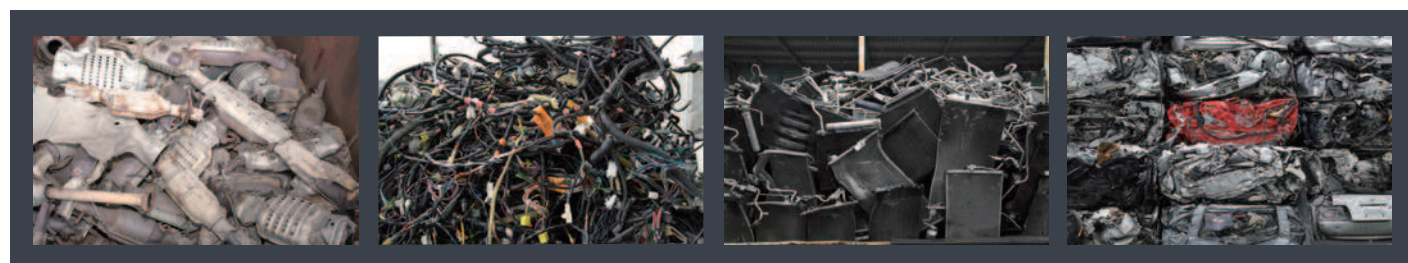
Model name	SK210D
Use	Multi-dismantling machine
● Main piping	
Boom & arm holding valve	○
● Cab	
Front-guard (vertical guard) with shatterproof film + top guard level II (Meets ISO10262)	○
Front-guard (mesh guard) with shatterproof film + top guard level II (Meets ISO10262)	○
● Boom	
HD boom	○
● Arm	
HD arm	○
● Shoe	
23.6" (600 mm) flat shoes	○
23.6" (600 mm) triple grouser shoes	○
● Counterweight	
Car dismantle counterweight with rear work light and swing flasher	○
● Lower attachment	
Open/close type clamp arm	○
● Seat	
Suspension seat with armrests	○
Air suspension seat with armrests	○
● Cab guard	
Cab front guard (polycarbonate)	○
● Front attachments	
KVE720PR	○
● Factory options	
Additional right camera + additional monitor	○

## Dedicated accessories

Dedicated upper frame
A/C condenser protective dust screen
Dust-proof fuel tank cap
Cab two lights
Cab guard with space for storage
Cab climbing step
Loudspeaker system
3-button lever grip
Cab interference prevention system
Reinforced upper main body undercover
Dedicated car dismantle frame
Lower frame step
Boom cylinder guard
Dismantling arm cylinder
Dismantling bucket cylinder

## Standard equipment

Hydraulic fluid filter restriction indicator
Travel alarm
Radio
AUX, USB, Bluetooth
12 V power source
4-inch armrest
3-inch retractable seatbelt
Rear view camera
Reinforced travel motor cover
Car body undercover
Arm rock guard



Note: This document may contain attachments and optional equipment that are not available in your area. It may also contain photographs of machines with specifications that differ from those sold in your area. Please contact your nearest KOBELCO dealer for items you require.  
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Bulletin No. SK210D-Multi\_Dismantling\_Machine-NA-101-1702M&T

## Multi-Dismantling Machine

# SK210D

SK210D-10



Courtesy of Machine.Market



# The latest technology for automotive dismantling!

## KOBELCO's multi-dismantling machines perform efficient dismantling and precise separation

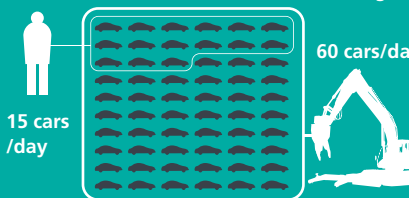


Since launching the first car-dismantling machines in Japan in 1979, KOBELCO has developed metal dismantling machines to meet the needs of the times, contributing to the growth of the metal recycling industry. Now, over 1100 KOBELCO metal dismantling machines have been delivered to customers. These machines are used to dismantle and recycle various metal scrap. It ranges from end-of-life vehicles to motorcycles, used consumer electric apparatus, and household equipment. KOBELCO machine will provide substantial benefits to the customer. KOBELCO machinery can achieve not only significant increases in efficiency, reduced man power, and improved safety and comfort, but can now also handle the precise operations required for recycling highly valued rare earth metals. KOBELCO now presents the latest model with improved performance and features, accompanied by the upgraded environmental performance and body structure strength of the base machine. With the pursuit of safer, tougher, and faster operations, the SK210D multi-dismantling machine lends a new dimension to the dismantling of end-of-life metal products.

### The multi-dismantling machine is popular for dismantling cars and can perform a wide variety of other tasks.

Equipped with uniquely designed open/close type clamp that can grab and hold varied sized components for sorting operations. Besides dismantling end-of-life vehicles, the machine can break down and separate engines and other metal products.

- Dismantles passenger automobiles about 4 times faster than manual dismantling.



- One operator can do all.
- Protects the operator from flying debris from the dismantling operation.
- Eliminated fire danger from cutting torches.
- Very versatile machine can easily move around job site.

- Works well on trucks, buses, motorcycles and others.
- Can dismantle engines at a processing efficiency approximately 10 times higher.
- Able to dismantle industrial products other than cars to separate raw materials.
- Recoverable raw materials: Iron, aluminum, copper, platinum, vanadium and others.

Note: Shows the numbers of processed cars a day (estimated by KOBELCO).

### Process of car dismantling (Example: Car dismantling)

#### 1. Incoming

Brings in an end-of-life vehicle (ELV)

#### 2. Pre-processing

Processes airbags, takes out fluorocarbon gas and drains various fluids (fuel, oil and coolant)

#### 3. Salvaging parts

Recovers tires, wheels, doors, seats, hoods and batteries.

#### 4. Dismantling car body

Recovers engines, transmissions, differential gears, suspensions, exhaust pipes, motors, radiators and harnesses.



#### 5. Dismantling the engine

Recovers generators, starter motors, compressors, harnesses and others, and removes cylinder heads.

#### 6. Shipping

After crushing the remaining automotive structures, the remaining metal can be recycled at steel mills.

### Structure of the multi-dismantling machine

#### Piping for the rotating nibbler

Hydraulic piping that is adapted for the auto-rotating type multi-dismantling nibbler.

#### Reinforced attachments

The severe duty attachment is specifically designed for the most severe dismantling applications.

#### Reinforced cylinder

Both the bucket cylinder and arm cylinder are reinforced to withstand high loads.

#### Front attachments

The SK210D comes standard with a multi-dismantling nibbler. This nibbler has an ideal design for crushing and cutting objects as well as for sorting and removing resources.

#### Cab for the multi-dismantling machine

All basic cabs are equipped with a grid type front guard and roof top guard as a standard.

#### Boom cylinder guard

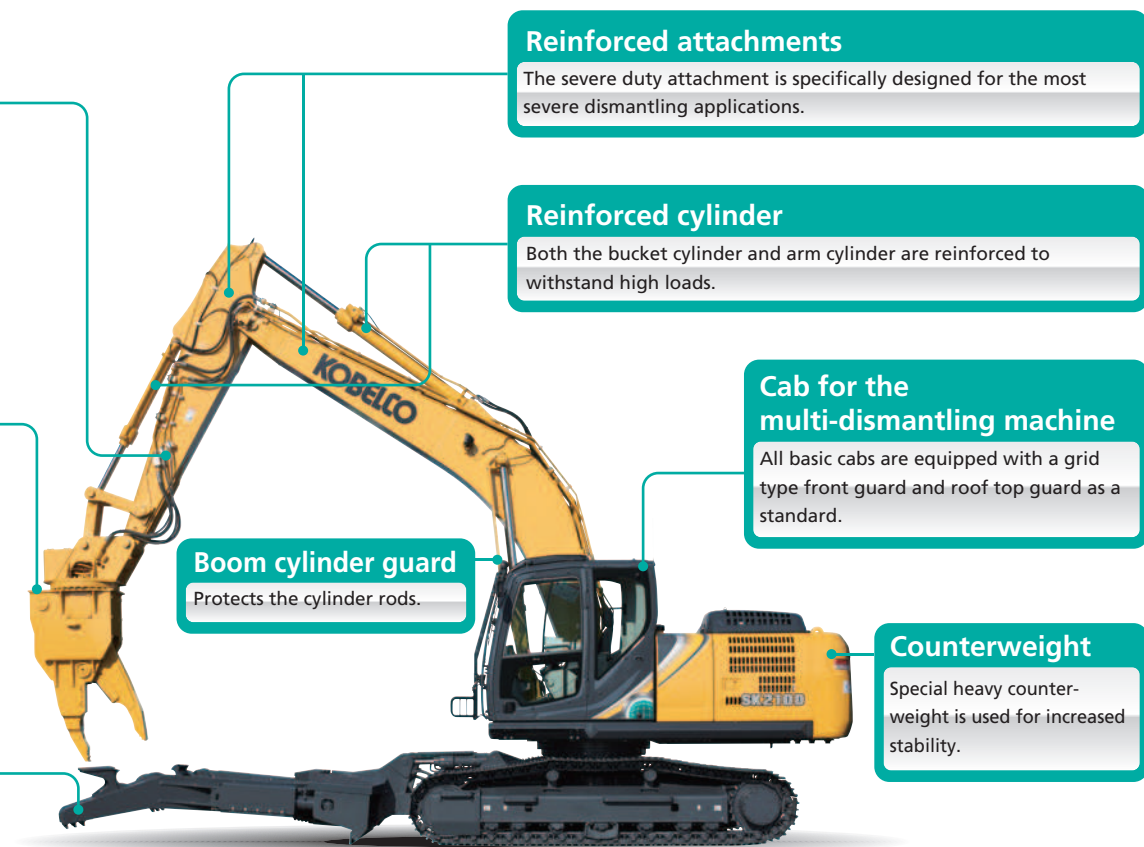
Protects the cylinder rods.

#### Clamp arm

The clamp arm opens and closes horizontally to hold down and pinch the object being dismantled.

#### Counterweight

Special heavy counterweight is used for increased stability.

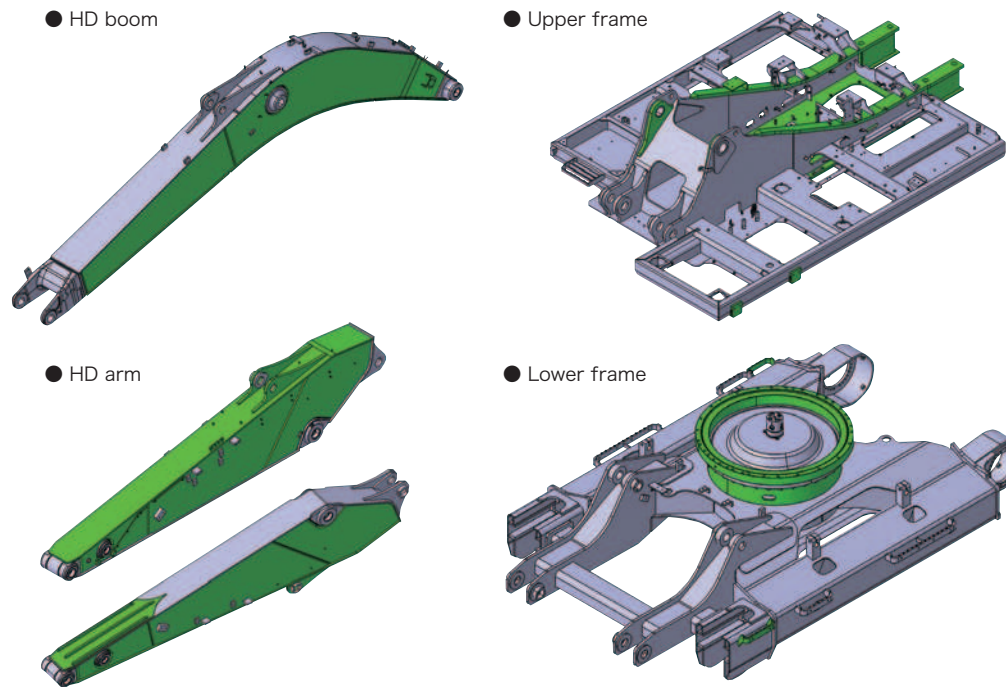




# Durability, Reliability, and Maintainability

## Structural strength

Due to the unique car dismantle demands for durability, our engineering department has given additional attention to critical related structures to insure the reliability that KOBELCO is recognized for and our customers demand.



## Long life design with reinforced parts in each section



**Boom cylinder guard**  
Protects boom cylinder rods.



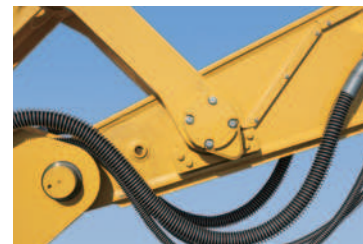
**Dismantling arm cylinder**  
Use of a dedicated cylinder with reinforced components.



**Arm rock guard**  
The front of the arm end is reinforced with a plate to improve the strength.



**Dismantling bucket cylinder**  
Use of a dedicated cylinder with reinforced components.



**Bucket angle sensor cover**  
The cover protects the bucket angle sensor installed on the idler link. A cable guard also protects the electrical cables from being cut off.



**Upper main body undercover**  
The 1/4" (6 mm) undercover guards protect critical hydraulic and electrical components.



**Lower undercover**  
The lower car body structure is fitted underneath with a 3/8" (9 mm) thick reinforced cover.



**Reinforced travel motor cover**  
A reinforced travel motor cover is used to protect critical hydraulic motor components.



**Flat shoes**  
Flat shoes that are durable against wear on concrete sites are selectable as the option. Optional



**Dust-proof fuel tank cap**  
The fuel cap is lined with rubber so that dust does not easily contaminate the fuel tank.



**Maintenance space**  
The upper space provides a comfortable platform for maintenance inside the engine hood.

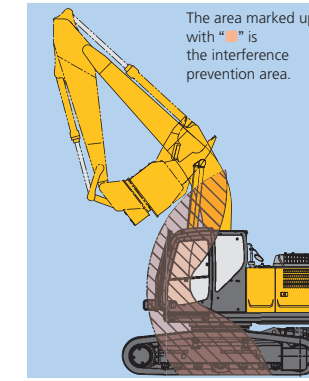
# Safety

## Thoroughly implements the safety functions required for multi-dismantling processes



## A cab interference prevention system is installed as a standard

The upgraded cab interference prevention system prevents the cab from interfering with the front attachment, ensuring operator safety. Dismantling work often involves operations near the foot of the machine. This device makes it easier to dismantle objects safely by reducing the collision warning range to the required minimum while increasing the practical work area.



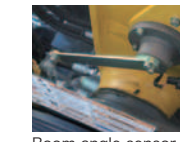
The area marked up with "X" is the interference prevention area.

### System operation

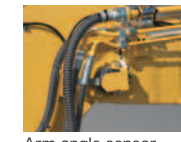
An alarm sounds when a part of the front attachment moves closer to the cab than the limit. The machine stops gradually before the front attachment interferes with the cab.

### System structure

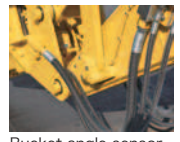
The system calculates the boom angle, arm angle, idler link motion angle to come up with the position and direction of the front attachment to control its motion. (Previous system: Calculates the arm angle to locate the arm top position)



Boom angle sensor



Arm angle sensor



Bucket angle sensor

## Various accessories that embody KOBELCO's consideration for safety



**Cab front guard**  
The windshield and the lower window are provided with a vertical grid guard of radial design so as not to block the operator's field of view. The quick open/close design makes cleaning easy.



**Glazing with shatterproof film**  
The windshield and right window are provided with shatterproof film that prevents loose glass chips from scattering even if it is smashed.



**Top guard level II (Meets ISO10262)**  
The standard feature of the grid type cab ceiling guard protects the operator against objects falling on the cab roof.



**Boom holding valve**  
The standard boom fall prevention valve provides protection against unexpected breaks in the boom cylinder piping.



**Arm holding valve**  
The standard arm fall prevention valve provides protection against unexpected breaks in the arm cylinder piping.



**Catwalk**  
The larger step makes it easy for the operator to climb into and out of the cab.



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



**Loudspeaker system**  
The high sensitivity microphone facilitates hearing.



**Travel alarm**  
When traveling onsite, the standard alarm function cautions workers in the area with an electronic sound.



**Rear swing flashers and rear work lights**  
The swing warning lamp helps prevent collisions and accidents where workers are trapped while the upper body is turning.



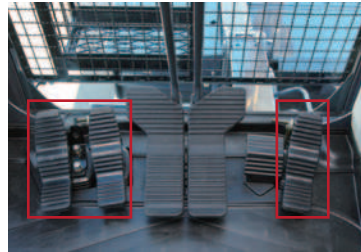
**Rear view camera**  
The view from behind the machine can be displayed with camera images on the multi-display.



**Additional right camera + monitor**  
The view from the right side of the machine can be confirmed on the standalone monitor to exclude blind spots. Optional



# Efficient dismantling achieved with KOBELCO's creativity and inspiration



**Foot pedal arrangement**  
The nibbler and clamp arm (up/down) are operated with the feet. The operation pedals are arranged to the left and right where they can be depressed easily.



**3-button grip**  
The clamp arm, used for holding and cutting the target, can be opened and closed horizontally with just the use of your fingertips.



**Suspension seat**  
The comfortable suspension seat is now a standard feature to lessen operator fatigue for long hours of work.



**Cab two lights**  
Provides a brighter field of view from the front during indoor and nighttime operations.



**Cab guard with space for storage**  
The operator puts his boots in the locker in a separate space so as not to mess up the cab floor.



**Heavy weight**  
The additional weight ensures substantial stability, making it easier to grab and raise heavy objects such as end-of-life vehicles.



**Open/close type clamp arms**  
The clamp arms for the multi-dismantling machine not only hold down an object but also pinch-hold it.



**Multi-dismantling nibbler**  
Light weight, easy to control fine motions, and good for various types of work. Its pointed shape is suitable for precisely separating objects.

Clamp arms are fitted with numerous attachments to ease the disassembly and sorting process, based upon input from actual customers.



**Puller**  
Claw type pullers are provided to remove harnesses.



**Anchor**  
Designed to bend long objects easily.



**Grips**  
The grip is able to not only grab-hold dismantled objects but also swing them forwards and backwards.



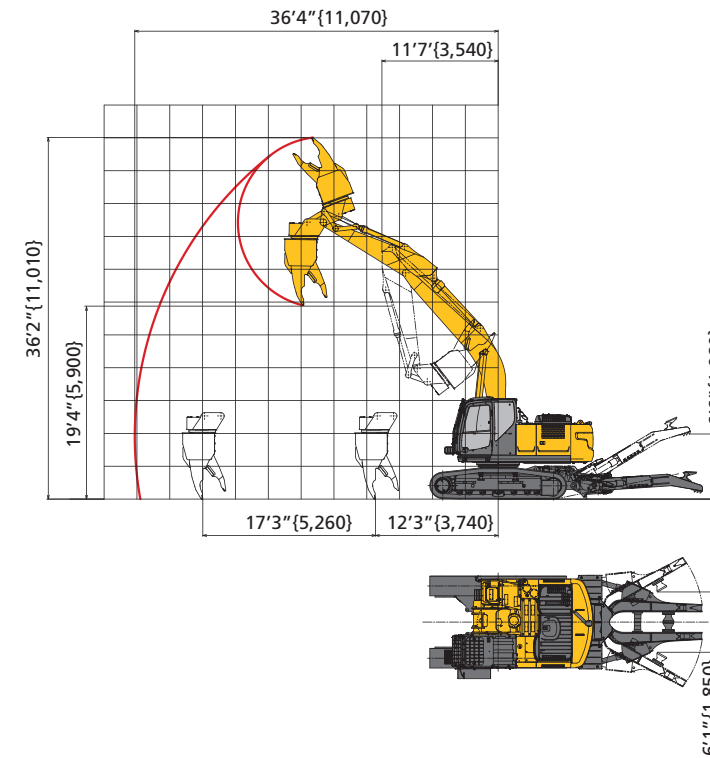
**Teeth**  
The powerful clamping action of the clamp arms can be applied to these teeth for sorting or cutting operations, such as removing aluminum cylinder heads from cast iron blocks.

## Main specifications

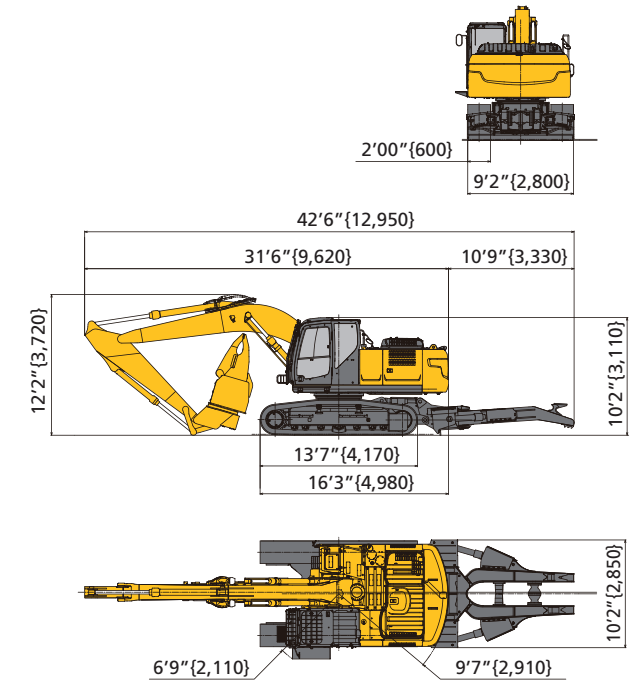
Model name	SK210D	
Machine type	SK210D-10	
Mounting attachment	KVE720PR	
Operating weight	lbs(kg)	66,100(30,000)
Ground pressure	psi(kPa)	9.7(67)
Swing speed	rpm(min <sup>-1</sup> )	12.7(12.7)
Travel speed {2nd speed/1st speed}	mph(km/h)	3.7/2.2{6.0/3.6}
Gradeability	deg(%)	11.5(20)
Engine	Model	HINO J05EUM-KSSC
	Rated output hp/rpm(kW/min <sup>-1</sup> )	160/2,000(119/2,000)
Fuel tank	gal(L)	84.5(320)
DEF/AdBlue tank	gal(L)	21.9(83)
Set hydraulic pump pressure	psi(Mpa)	4,970(34.3)
Hydraulic oil tank	gal(L)	79.3(300)
Dimensions	Overall length	ft-in(mm)
	Overall width	ft-in(mm)
	Overall height	ft-in(mm)
	Tail swing radius	ft-in(mm)

## Working range Unit: ft-in {mm}

### Multi-dismantling nibbler installed



## Dimensions Unit: ft-in {mm}



## Front attachment specifications

### Multi-dismantling nibbler

Model	KVE720PR-2	
Rotating mechanism	Hydraulic auto-rotation	
Weight	lbs(kg)	4,080 {1,850}
Maximum opening width	ft-in(mm)	2'4" {720}
Overall length	ft-in(mm)	8'6" {2,630}
Cutting force (cutter)	lbf(kN)	121,200 {539}
Tooth clamping force	lbf(kN)	44,100 {196}
Working hydraulic pressure	psi(Mpa)	4,260 {29.4}

