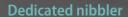






## Variety and Individuality. All Parts of the Body are



Multi dismantling nibbler: Lightweight design allows fine operation Car dismantling nibbler: Efficient car dismantling work is possible



Multi-dismantling nibbler KHE750PR-2 (for SK140SRD)



Multi-dismantling nibbler KVE720PR (for SK210D)



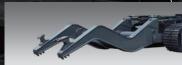
nibbler KV800PR (for SK210D)

#### Clamp arm

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



Multi-dismantling machine (4 way)



Car-dismantling machine (2 way)



SK210D



0

**Anchor** Used to bend long



Rotates objects that are grabbed by



Allows objects to be crushed or cut



Shaped for convenient

## HD arm

Reinforced HD arm.

#### **Boom safety valve**

Prevent boom from falling if hose is damaged.



the clamp

**Puller** 

attachment to a harness

## Dismantling process flow chart

How the dismantling machine 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. Collecting undercarriage parts and engines

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





Suspension



## Specialized for dismantling Work.

#### Arm safety valve

Prevent arm from falling if hose is damaged.

## Reinforced arm cylinder [only SK210D]

Reinforced to withstand high loads.

#### HD boom

Dedicated reinforced HD boom.

#### **Boom cylinder guard**

Prevents collisions from damaging the cylinder.

#### Boom foot cover / Center cover [only SK140SRD]

Prevent metal fragments from entering the cab.

## Cab for dismantling machine

The large skylight glass is equipped with a top guard.

#### < Dedicated equipment>

- Grid type front guard with a holder for work boots
- OPG Level II top guard
- Air suspension seat
- 4-inch armrest
- Cab entry step

## Counterweights

For maintaining the ideal balance.

SK140SRD: Additional weight (+580kg)

SK210D: Heavier weight (TTL 5,490kg)

#### Photo: SK210D Multi-dismantling machine

#### 4. Car dismantling process



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

# Cu Copper 63.546 Harnesses Engine Radiator

.....

**SK210D** 

#### 4. Processes after removing parts

Once thoroughly cleaned, the parts become good quality recycled parts



## EUROPEAN WAY

#### 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





To the next level of power and functional aesthetics

#### High-output engine, compliant with the latest regulations

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

#### **Engine output**

**SK210D** 

## 127 kW / 2,000 min<sup>-1</sup>

SK140SRD

## 78.5 kW / 2,000 min<sup>-1</sup>

ISO 14396: without fan



Incorporates the industry's biggest large-format monitor. The information you need is easy to see and operating the menus is simple. The large camera image means you can quickly confirm safety conditions.



## **Exquisitely designed LED** backlighting

Switches and dials are equipped with LED backlighting. In addition to increasing recognizability at night, the lighting gives the interior a classy aura.

#### Simple operation with the jog dial

Several operations combined in the jog dial. Watch the screen associated with the dial, and then turn, select, push, and go. Simple!



#### New console tilt makes getting in and out easy

The design of the left console with safety lever takes getting in and out into consideration with a large-angle recoil.





#### **Automatic lighting LED** door light

A bright LED door light turns on in conjunction with opening the door and turning off the key.



#### Air suspension seat

An air suspension seat is equipped as standard, with excellent shock absorption to prevent fatigue even when sitting for a long time. It includes a wide four-inch arm rest that allows you to take a comfortable position and a seat heater for comfortable operation even in winter season.

#### **Equipment that improves time spent** in the cab



Smartphone holder



12 V Power supply / USB port

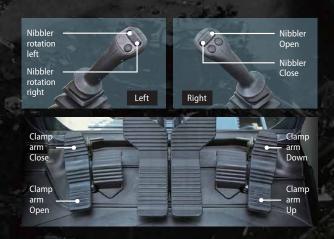


DAB+ Radio (FM/AM & AUX & USB & Bluetooth & Hands Free Telephone)



## Operability

Stress-free work performance.



## 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.

#### **Superior stability**

The SK140SRD now has a 580kg add-on weight, and the SK210D has an increased 1,670kg (TTL 5,490kg) counterweight, all equipped as standard.

The increased stability reduces sway during dismantling, affording even more efficient operation.



SK140SRD



SK210D













## Cab-interference prevention system that prevents collisions with the nibbler

The cab interference prevention system is provided as standard equipment to prevent the nibbler from contacting the cab during operation. Precise detection of the position and orientation of the nibbler minimizes the interference warning range to enable a larger effective working area. Since the nibbler tool is restricted from coming into contact with the cab, the operator is able to work more productively and with more focus on the dismantling process.





Bucket angle sensor

#### Cab for 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 grid type guard on the front, which does not obstruct the operator's field of vision, and a top guard with a gas damper. 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 type front guard.



## Visibility

Work visibility for quickly confirming safety.

#### LED work light to keep visibility in low light or at night

Equipped with five high brightness LED work lights. The lights keep the work area bright even in low light or at night. Work area safety can also be quickly confirmed.



Boom (2 lights)



Upper frame (1 light) Photo: SK140SRD



Cab top front (2 lights)



Rear counterweight (2 lights)

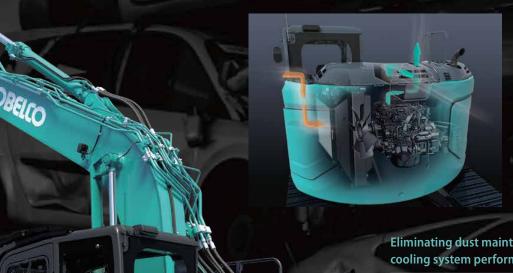




Eagle-Eye View

#### Right, left and rear view cameras / Eagle-Eye View

Cameras are equipped on the rear, right, and left sides of the base machine. Camera image is easily visible on the large 10-inch monitor. The blind spots behind and to the right can be checked in a glance from the operator's seat to confirm safety. The operator can choose how to display the camera image.



KOBELCO



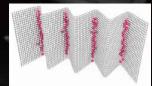
iNDr absorbs sound energy to minimize noise by making a path of air, which cools down the engine. The SK140SRD is equipped with a selective catalytic reduction (SCR) unit, which required a new design with two offset ducts on top. This allows ample space to absorb engine noise.

#### **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



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

## KOMEXE

#### 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

sk 140 SRD

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.

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

#### HD boom for dismantling

The boom was developed specially. Thick plates are used in each part. \\



#### **Dedicated frame for dismantling**

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



## Damage - resistant center cover for the clamp arm [only Multi-dismantling machine]

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.



Photo: SK140SRD Multi-dismantling machine





Reinforced upper frame under cover guards

6mm-thick steel plate cover protects devices in the base machine.



Lower frame guard

9mm-thick steel plate cover protects travel-system hydraulic circuits.



Boom cylinder guard

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



Reinforced arm cylinder [only SK210D]

Heavy duty arm cylinder made specically 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.



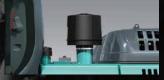
Dustproof fuel tank cap

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



Safety valve for boom & arm cylinder

Prevents attachment from falling if piping is ruptured.



Pre-aircleaner [only SK210D]

This precleaner has a high dust resistance function that extends the life of the air filter, and is maintenance-free due to the automatic dust discharge function.



Parallel wipers [only SK210D]

A large wiping area ensures a wide field of view.



Public address system

Alert workers in the area with clear audio quality.



Cab entry step

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



Lower frame step [only SK210D]

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



**Refueling pump** 

Quickly and safely refuel from the ground.



Work boots tray

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



Photo: SK210D Multi-dismantling machine



Remote fuel drain cock [only SK140SRD]

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



Removable screens for easy cleaning [only SK210D]

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



#### **Multi-dismantling machine**



## **Engine**

Model	ISUZU 4JJ1XDDV A01
Туре	Four cycle, water cooled, overhead camshaft, vertical in-line, direct injection type, with turbo-charger. (Stage V-compliant engine)
No. of cylinders	4
Bore and stroke	95.4 mm x 104.9 mm
Displacement	2,999 ml
Rated power output	78.5 kW / 2,000 min <sup>-1</sup> (ISO 14396: without fan)
Max. torque	375 N-m / 1,800 min <sup>-1</sup> (ISO 14396 : without fan)



## Hydraulic system

Pump	
Туре	Two variable displacement piston pumps + extra pump + pilot pump
Max. discharge flow	2 x 130 L/min 1 x 59.8, 1 x 20 L/min
Relief valve setting	
Boom, arm and bucket	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 valves	12-spool
Oil cooler	Air cooled type



## Swing system

Swing motor	One fixed displacement piston motor
Brake	Hydraulic
Parking brake	Wet multiple plate
Swing speed	11.0 min <sup>-1</sup>
Swing torque	40.4 kN-m



## **Travel system**

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



## Cab & control

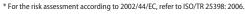
#### Cab

All-weather, sound-suppressed steel cab mounted on the silicon-sealed viscous mounts and equipped with a heavy, insulated floor mat

#### Contro

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

Noise levels		
External		99 dB (A) (2000/14/EC)
Operator		74 dB (A) (ISO 6396)
Vibration levels		
Hand/arm*		$\leq 2.5  \text{m/s}^2$
Body*		$\leq 0.5  \text{m/s}^2$
	× = .1 .1	





## Boom, arm, bucket & Clamp arm

bore x stroke (mm)

	bole x stroke (IIIII)
Boom cylinders	100 x 1,092
Arm cylinder	115 x 1,116
Bucket cylinder	100 x 903
Clamp arm up/down cylinders	110 x 220
Clamp arm open/close cylinders	120 x 510



## 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
DEF / 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

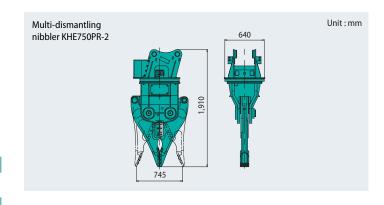
## Operating weight & ground pressure

Shoe width	500 mm
Ground pressure	64 kPa
Operating weight	20,500 kg (with KHE750PR-2)



## Front attachment

Model		KHE750PR-2
Weight		970 kg
Shearing force (blade center)		255 kN
Crushing force (tooth-jaw tip)		88.3 kN
0	open/close	24.5 MPa
Operating pressure	rotation	14.2 MPa
Max. RPM		12 min <sup>-1</sup>





#### Multi-dismantling machine / Car-dismantling machine



## **Engine**

Model	YANMAR 4TN107FTT	
Туре	Four-stroke, 4 cylinder, water-cooled, direct injection, turbo charged (with intercooler) diesel engine. (Stage V-compliant engine)	
No. of cylinders	4	
Bore and stroke	107 mm x 127 mm	
Displacement	4,567 ml	
Rated power output	127 kW / 2,000 min <sup>-1</sup> (ISO 14396: without fan)	
Max. torque	805 N-m / 1,500 min <sup>-1</sup> (ISO 14396: without fan)	



## **Hydraulic system**

Pump	
Туре	Two variable displacement piston pumps + extra pump + pilot pump
Max. discharge flow	2 x 220 L/min 1 x 50.6, 1 x 20 L/min
Relief valve setting	
Boom, arm and bucket	34.3 MPa
Travel circuit	34.3 MPa
Swing circuit	29.0 MPa
Pilot control circuit	5.0 MPa
Nibbler (Crusher) circuit	Open & Close 29.4 MPa Rotation 20.6 MPa
Clamp arm circuit	Open & Close 29.4 MPa (Multi-dismantling) Up 29.4 MPa / Down 34.3 MPa
Main control valves	8-spool
Oil cooler	Air cooled type



## Swing system

Swing motor	One fixed displacement piston motor
Brake	Hydraulic
Parking brake	Wet multiple plate
Swing speed	12.7 min <sup>-1</sup>
Swing torque	71.5 kN-m



## **Travel system**

Travel motors	Variable displacement axial piston motor x 2 pcs with Counter balance Valve
Travel brakes	Hydraulic brake
Parking brakes	Wet multiple plate
Travel shoes	46 each side
Travel speed (high / low)	6.0 / 3.6 km/h
Drawbar pulling force	200 kN (SAE)
Gradeability	58% {30°}



## Cab & control

#### Cab

All-weather, sound-suppressed steel cab mounted on the high suspention mounts filled with silicone oil and equipped with a heavy, insulated floor mat

#### Contro

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

Noise levels	
External	103 dB (A) (2000/14/EC)
Operator	71 dB (A) (ISO 6396)
Vibration levels	
Hand/arm*	$\leq$ 2.5 m/s <sup>2</sup>
Body*	$\leq$ 0.5 m/s <sup>2</sup>



## Boom, arm, bucket & Clamp arm

bore x stroke (mm)

	Multi-dismantling	Car-dismantling	
Boom cylinders	120 x 1,335		
Arm cylinder	135 x 1,558		
Bucket cylinder	120 x 1,080		
Clamp arm up/down cylinders	115 x 320		
Clamp arm open/close cylinders	125 x 590	-	



## **Refilling capacities & lubrications**

Fuel tank	321 L	
Cooling system	23 L	
Engine oil	20 L	
Travel reduction gear	2 x 4.5 L	
Swing reduction gear	2.7 L	
	140 L tank oil level	
Hydraulic oil tank	300 L hydraulic system (Multi-dismantling)	
	270 L hydraulic system (Car-dismantling)	
DEF / Urea tank	83 L	



## Clamp arm ability (Multi-dismantling)

Pressing force (clamp arm tooth tip)	62 kN
Crushing force (clamp arm tooth for front)	333 kN
Clamping force	177 kN

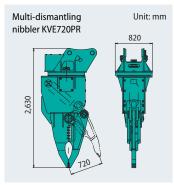
#### Operating weight & ground pressure

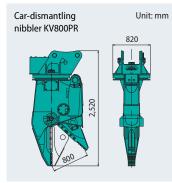
	Multi-dismantling	Car-dismantling	
Shoe width	600 mm		
Ground pressure	68 kPa	62 kPa	
Operating weight	30,500 kg (with KVE720PR)	27,500 kg (with KVE720PR)	



## Front attachment

Model		KVE720PR	KV800PR	
Weight		1,900 kg	2,100 kg	
Shearing force (blade center)		539 kN	882 kN	
Crushing force (tooth-jaw tip)		196 kN	372 kN	
Operating pressure	open/close	29.4 MPa	29.4 MPa	
Operating pressure	rotation	14.7 MPa	29.4 MPa 14.7 MPa	
Max. RPM		10 min <sup>-1</sup>	10 min <sup>-1</sup>	

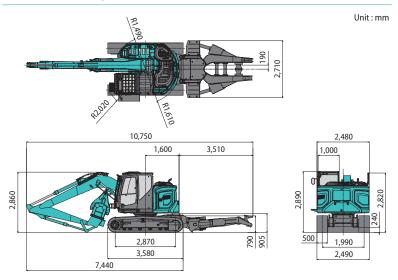




## **Dimensions**

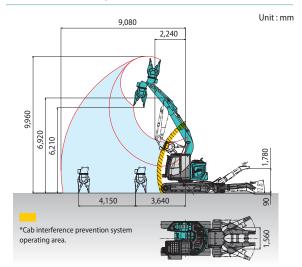
## SK140SRD

#### ■ Multi-dismantling machine



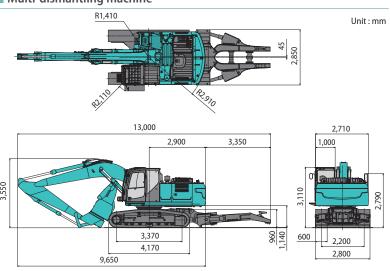
## Working ranges

#### ■ Multi-dismantling machine

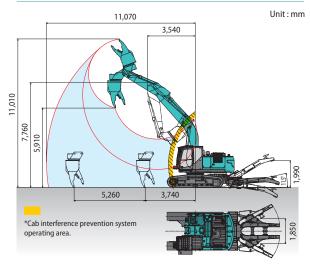


## SK2100

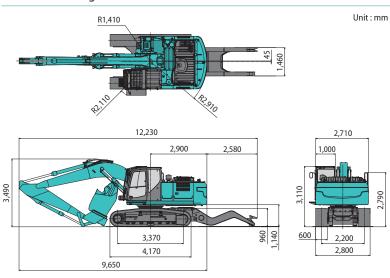
#### ■ Multi-dismantling machine



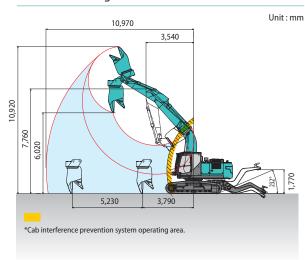
## ■ Multi-dismantling machine



#### ■ Car-dismantling machine



#### Car-dismantling machine



## **Standard and Optional Equipment**

lacktriangle =Std  $\bigcirc$  =Opt - = N/A

		SK140SRD-7	SK210	SK210D-11E	
Category	Description	Multi-dismantling Machine	Car-dismantling Machine	Multi-dismantling Machine	
ENGINE	ISUZU 4JJ1XDDV A01 (EU Stage V compliant)	•	_	-	
	YANMAR 4TN107FTT (EU Stage V compliant)	_	•	•	
	Exhaust DOC DPF SCR system  Alternator 24 V / 50 A	•	_	_	
	Alternator 24 V / 80 A	-	•	•	
	Starter motor 24 V / 4 kW	•	_	-	
	Starter motor 24 V / 5 kW	-	•	•	
	Batteries 2 x 12 V (100 Ah)	•	_	_	
	Batteries 2 x 12 V (130 Ah) Fan suction type cooling system	-	•	•	
	Auto deceleration function	•	•	•	
	Auto Idle Stop (AIS)	•	•	•	
	Pre-aircleaner Pre-aircleaner	-	•	•	
HYDRAULIC SYSTEM	3 work modes H, S, Eco	•	•	•	
	Pressure release function	•	•	•	
	Auto warm up system  Proportional Hand Control (for Rotation & Nibbler piping)		•		
	Hydraulic oil VG32	•	•	•	
	Hydraulic oil VG46	0	0	0	
	Hydraulic oil VG68	0	0	0	
PIPING	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	•	•	•	
	Parallel wiper	_	•	•	
	12 V power outlet	•	•	•	
	Sun screen  Cab entry step	•	•		
	Work boots tray	•	•	•	
	Large footrest	•	•	•	
LIGHTS	LED work lights: 2 on boom, 1 on upper frame, 2 on rear counterweight, 2 on cab top front	•	•	•	
WORKING EQUIPMENT	Standard HD boom (4.68 m)	•	-	-	
	Standard HD boom (5.65m)	_	•	•	
	Standard HD arm (2.38 m) Standard HD arm (2.94 m) with rock guard	-	-	-	
	Clamp arm (2 Way)	_	•	_	
	Clamp arm (4 Way)	•	_	•	
	Nibbler KHE750PR-2	0	-	_	
	Nibbler KVE720PR	_	0	0	
	Nibbler KV800PR	-	0 -	0	
COUNTERWEIGHT	Additional C/W (+580 kg) Heavier C/W (5,490 kg)	-	-	_	
UNDERCARRIAGE	500 mm GD shoe	•	_	_	
ONDERCARRIAGE	500 mm flat shoe	0	_	_	
	500 mm bolt on rubber pad shoe (with GD shoe)	0	_	_	
	600 mm steel shoe	-	•	•	
	600 mm flat shoe		0	0	
	Track guide (one per side)  Lower frame guard	-	•	•	
SAFETY	Engine emergency stop switch	•	•	•	
SAILII	Pump emergency mode (KPSS release switch)	•	•	•	
	Emergency accel dial	•	•	•	
	Emergency manual valve for lowing attachment	•	•	•	
	Safety valve for boom & arm cylinder	•	•	•	
	Cab interference prevention system  OPG Level II top quard (ISO 10262:1998)	•	•	•	
	OPG Level II front guard (ISO 10262:1998)	•	•	•	
	Wire mesh type front guard	0	0	0	
	Cab front polycarbonate guard	0	0	0	
	Eagle-eye view camera (Rear, Right, Left)	•	•	•	
Travel al	Seatbelt indicator on display	•	•	•	
	Travel alarm Public address system	•	•	•	
	r upiic duuress system			0	
	Extended handrail	-	•	•	
OTHERS				•	
OTHERS	Extended handrail Emergency escape hammer	•	•	•	
OTHERS	Extended handrail Emergency escape hammer Refueling pump Dustproof fuel tank cap Harness for engine room light	•	•	•	
OTHERS	Extended handrail Emergency escape hammer Refueling pump Dustproof fuel tank cap Harness for engine room light Boom cylinder guard	•	•	•	
OTHERS	Extended handrail Emergency escape hammer Refueling pump Dustproof fuel tank cap Harness for engine room light	•	•	•	

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

The air conditioning system on this machine contains fluorinated greenhouse gas HFC-134a (GWP 1430). Quantity of gas 0.8 kg (CO<sub>2</sub> equivalent 1.2 t).































Note: "Bluetooth" is a registered trademark of the Bluetooth SIG Inc.

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. Due to our policy of continuous product improvements all designs and specifications are subject to change without advance notice.

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## **KOBELCO CONSTRUCTION MACHINERY EUROPE B.V.**

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