#### Built to operate in tough working environments



The attachment has been reinforced to handle a higher work volume, with greater power and excellent durability that can withstand demanding work conditions.









Arm length (2.94 m), with a 0.80 m<sup>3</sup> bucket. \* Not including shoe lug.



#### **SPECIFICATIONS**

Model			SK210HLC	
Туре			SK210HLC-10	
PERFORMANCE				
Bucket capacity ISO h	eaped	m <sup>3</sup>	0.8	
Swing speed	wing speed min <sup>-1</sup> {rpm}		12.7 {12.7}	
Travel speed	km/h		6.0/3.6	
Gradeability	% {deg}		70 {35}	
Bucket digging force	kN {kgf}		143 {14,600}(157 {16,000}*)	
Arm crowding force	kN {kgf}		102 {10,400}(112 {11,400}*)	
WEIGHT				
Operating weight	kg		22,100	
Ground pressure	kPa {kgf/cm <sup>2</sup> }		49 {0.50}	
Shoe width	mm		600	
ENGINE				
Model			J05EUM-KSSK	
Туре			Direct injection, water-cooled,4-cylynder diesel engine with turbocharger, intercooler	
Rated power output	kW/min-1		124/2,000(ISO14396),119/2,000(ISO9249)	
Fuel tank capacity	L		320	
HYBRID SYSTEM UNIT				
Main power supply	Туре		Lithium-ion battery	
	Voltage	V	567	
Generator motor	Туре		Three-phase AC synchronous permanent magnet type	
	Rated Power Output	kW/min <sup>-1</sup>	25/1,880	
Swing motor	Туре		Three-phase AC synchronous permanent magnet type	
	Rated Power Output	kW/min <sup>-1</sup>	26/3,600	
HYDRAULIC SYSTE	м			
Pump			Two variable displacement piston pumps + one gear pump	
Relief valve setting MPa		MPa	34.3 (37.8*)	
Travel motors			2 × axial piston	
Hydraulic oil tank		L	140: tank level (244: system)	



WORKING RANGES	Unit: mm		
Model	SK210HLC		
Arm types	HD short arm (2.40m)	Arm (2.94m)	HD long arm (3.50m)
a - Max. digging radius	9,420	9,900	10,340
a' - Max. digging reach at ground level	9,240	9,730	10,170
b - Max. digging depth*	6,160	6,700	7,260
c - Max. digging height*	9,510	9,720	9,750
d - Max. dumping height*	6,680	6,910	6,970
e - Min. dumping height*	2,980	2,430	1,870
f - Max. vertical wall digging depth*	5,570	6,100	6,470
g - Min. swing radius	3,560	3,550	3,480
h - Digging depth for 2.4 m (8') flat bottom*	7,750	7,680	7,720
i - Horizontal digging stroke at ground level	4,080	5,270	6,080

Units meet SI standards \* Power Boss engaged.

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. Specialist equipment is needed to use this machine in demolition work. Before using it please contact your KOBELCO dealer. 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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\* Not including shoe lug.

## Inquiries To:

Bulletin No.SK210HLC-EU-000-0000000

# KOBELCO

# SK210HLC



Bucket Capacity : 0.80 m<sup>3</sup>

Engine Power :

124 kW / 2,000 min<sup>-1</sup>

Operating Weight : 22,100 kg - 23,100 kg



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RID

IIII SPEELING

## **Power Meets Efficiency**

In 2006, KOBELCO developed the world's first hybrid machine full hydraulic excavator in the history of hydraulic excavators. The forerunner of the hybrid machine full hydraulic excavators was the SK80H. Then, its 20-ton class successor, the SK200H-9, achieved overwhelmingly great fuel efficiency, creating a strong image of "fuel-efficient KOBELCO excavators". The SK210HLC-10, the latest model, is equipped with not only the hybrid technology developed and nurtured by KOBELCO but also a large-capacity lithium-ion battery for the first time in the industry. The technology of KOBELCO which knows hybrid machines well has enabled a compact but high-power assist, evolving its hybrid machines into "genuine hybrid machines" in terms of fuel efficiency and productivity. Furthermore, the SK210HLC-10 is equipped with newly designed extra durable devices and preventive maintenance functions to maintain its value.

To the new stage. The hybrid machines of KOBELCO greatly exceed the hybrid standards that KOBELCO has established.



## Into the era of "genuine hybrid machines". New hybrid system.

Comparison with the conventional standard machine (SK210LC-9)

The generator motor assists the engine by adding up to 25 kW (equivalent to the power output of the engine of a 5-ton class excavator).

Equipped with the large-capacity lithium-ion battery which assists the engine.

Improved fuel efficiency contributes to high performance

#### **Fuel Efficiency**

ficiency

means

"Efficiency"

H-mode, S-mode and ECO-mode are fuel efficiency modes in which fuel consumption is reduced in comparison with the previous model.



#### \* The percentages are approximate improvement rates.

## New Hybrid System

KOBELCO's original hybrid system has further evolved. The newly adopted swing electric motor provides operability unique to a hybrid machine. Furthermore, the large generator motor driven by the large-capacity lithium-ion battery constantly assists the engine, greatly reducing the engine load. The new hybrid system effectively supports fuel efficiency and power for swinging, digging, and traveling, thus realizing a workload which far exceeds that of conventional machines.



## Adoption of a lithium-ion battery for the first time in the industry

The adoption of the large-capacity lithium-ion battery reduces the size and provides mass energy storage at the same time. The battery continuously assists the hybrid machine.



Lithium-ion battery (SK210HLC-10)

Nickel-metal hydride battery (SK80H-2)

Lithium-ion battery (SK210HLC-10)

Independent swing electric system enable good operability for combined operation of swing and attachment.

During swing acceleration The swing motor is only powered by electricity accumulated in the lithium-ion battery.

During swing deceleration The braking energy generated during swing deceleration is converted into electricity, and then the electricity is accumulated in the lithium-ion battery.



## **Superior Digging Volume**

This excavator offers dynamic digging force even as it minimizes fuel consumption rates, achieving class-leading work volume. H-mode with an increased torque setting delivers about 7% greater digging volume.







Canacitors (SK200H-9)

#### While the machine is digging or traveling, an assist from the generator motor greatly reduces the engine load.

## **During high-load operation**

#### Assisting the engine by adding up to 25 kW The power of the generator motor has increased to 25 kW (equivalent to the power

output of the engine of a 5-ton class excavator). The electricity accumulated in the lithium-ion battery allows the generator motor to assist the engine. Thus, fuel consumption is reduced.



#### During low-load operation

The engine power is used to generate electricity in the generator motor. And then, the electricity is accumulated in the lithium-ion battery. Digging and traveling are done hydraulically.

Max. Bucket Digging Force





\*Values are for HD arm (2.94m