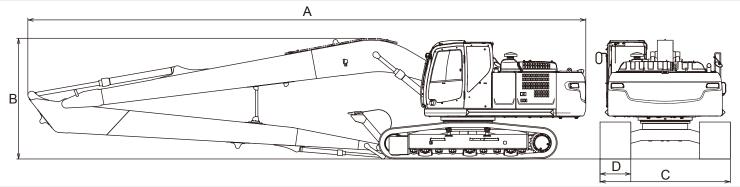


# KOBELCO LONG REACH ATTACHMENT

SK210<sub>LC</sub> SK210LC-10

SK260LC-10

# ■ Main Specifications

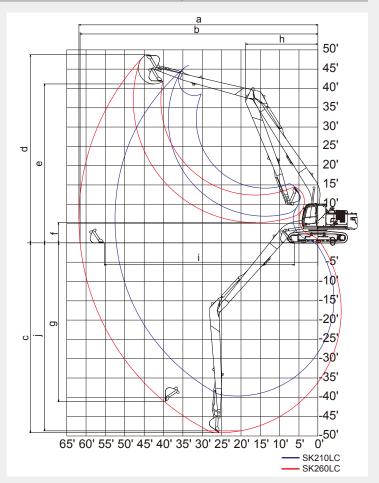


Model		SK210LC	SK260LC
Long reach attachment		50ft	60ft
Engine		HINO J05E-UM	HINO J05E-UN
Rated power output (SAE NET)	hp{kW} / rpm	160{119} /2,000	178 {133} /2,100
Swing speed	rpm	12.7	10.2
Operating weight	lbs {kg}	52,200 {23,700}	62,600 {28,400}
Ground pressure	psi {kPa}	5.9 {41}	6.1 {42}
A. Overall length	ft-in {mm}	41'8" {12,690}	47'8" {14,520}
B. Overall height	ft-in {mm}	10'3" {3,120}	10'4" {3,140}
C. Overall width	ft-in {mm}	10'5" {3,180}	11'1" {3,390}
D. Shoe width	in {mm}	31.5" {800}	31.5" {800}

Unit: ft-in

W	$\alpha$ r	kina	Ranges	4
	011	IXIII S	1 tall got	,

	SK210LC	SK260LC
	50ft	60ft
Boom	28'8"	33'11"
Range Arm	20'10"	27'1"
a- Max. digging reach	51'11"	60'10"
b- Max. digging reach at ground level	51'7"	60'6"
c - Max. digging depth	39'5"	48'4"
d- Max. digging height	45'7"	47'9"
e- Max. dumping clearance	37'10"	40'5"
f - Min. dumping clearance	6'10"	5'2"
g- Max. vertical wall digging depth	36'8"	40'5"
h- Min. swing radius	15'6"	18'4"
i - Horizontal digging stroke at ground level	38'1"	48'5"
j - Digging depth for 2.4 m (8') flat bottom	39'1"	47'10"
Bucket capacity SAE heaped cu.yd.	0.6	0.5



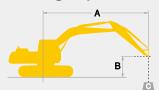
# **LONG REACH ATTACHMENT**

SK210<sub>lC</sub>

**SK260** LG SK260LC-10

SK210LC-10

# Lifting Capacities





A - Reach from swing centerline for arm top

B - Bucket hook height above/below ground

C - Lifting capacities in pounds

SK21	SK210LC 50ft Boom; 28'8", Arm; 20'10", Bucket; Less, Counterweight; 12,100 lbs, Shoe; 31.5"																					
	Δ	5	5' 10' 1:		15' 20'		0'	2	25'		30'		5'	4(	O'	45'		At Max. Reach		each		
В		-	<del>;;-</del> -	L	<del>;</del>	<u></u>	<del>;</del> -	i i	<del>;</del>	i	<del>"</del>	-	<del>"</del>		<del>;-</del> -	i	<del>"</del>	i	<del>"</del>	i	<del>;-</del> -	Radius
40'	lb																			* 2,460	* 2,460	33'7"
35'	lb													* 3,890	* 3,890					* 2,260	* 2,260	38'0"
30'	lb													* 4,790	* 4,790	* 3,150	* 3,150			* 2,150	* 2,150	41'5"
25'	lb													* 5,380	* 5,380	* 4,330	* 4,330			* 2,100	* 2,100	43'11"
20'	lb													* 5,700	* 5,700	* 5,120	4,580	* 2,790	* 2,790	* 2,090	* 2,090	45'9"
15'	lb											* 6,670	* 6,670	* 6,090	5,620	* 5,670	4,420	* 3,770	3,500	* 2,110	* 2,110	47'0"
10'	lb			* 13,270	* 13,270	* 14,180	* 14,180	* 10,530	* 10,530	* 8,570	* 8,570	* 7,360	6,820	* 6,540	5,330	* 5,960	4,230	* 4,430	3,390	* 2,180	* 2,180	47'8"
5'	lb					* 17,390	16,320	* 12,300	11,170	* 9,650	8,240	* 8,050	6,350	* 7,000	5,020	* 6,250	4,030	* 4,880	3,270	* 2,290	* 2,290	47'10"
GL	lb			* 4,710	* 4,710	* 11,510	* 11,510	* 13,630	10,200	* 10,540	7,620	* 8,660	5,940	* 7,400	4,740	6,210	3,850	* 5,020	3,160	* 2,440	* 2,440	47'5"
-5'	lb	* 4,570	* 4,570	* 6,370	* 6,370	* 11,320	* 11,320	* 14,390	9,590	* 11,150	7,170	* 9,090	5,620	7,330	4,520	6,060	3,700	* 4,580	3,080	* 2,650	* 2,650	46'6"
-10'	lb	* 6,600	* 6,600	* 8,390	* 8,390	* 12,750	* 12,750	* 14,600	9,270	* 11,410	6,890	8,870	5,400	7,170	4,370	5,960	3,610	* 3,050	* 3,050	* 2,960	* 2,960	45'0"
-15'	lb	* 8,710	* 8,710	* 10,690	* 10,690	* 15,070	13,890	* 14,300	9,180	11,280	6,780	8,760	5,300	7,100	4,300	5,930	3,590			* 3,400	3,270	42'11"
-20'	lb	* 11,000	* 11,000	* 13,350	* 13,350	* 17,560	14,120	* 13,500	9,270	* 10,790	6,800	8,770	5,310	7,130	4,330	* 4,160	3,670			* 4,070	3,660	40'0"
-25'	lb	* 13,570	* 13,570	* 16,540	* 16,540	* 15,460	14,530	* 12,110	9,500	* 9,750	6,960	* 7,910	5,450	* 6,270	4,490					* 5,210	4,320	36'3"
-30'	lb			* 16,170	* 16,170	* 12,390	* 12,390	* 9,880	* 9,880	* 7,900	7,290	* 6,060	5,770							* 5,570	5,520	31'2"
-35'	lb							* 6,180	* 6,180											* 4,670	* 4,670	24'1"

SK26	50L	C 60f	Bo	om; 3	33'11"	, Arm	; 27'1	", Bud	cket; I	_ess, (	Count	erwei	ight; 1	14,950	lbs,	Shoe;	31.5"									
	Α	5	5'	1	0'	1:	5'	2	0'	2	5'	30	)'	3	5'	4(	)'	4	5'	5	0'	55	5'	At N	lax. Re	each
В	``	i	<del>;-</del> -		<del>;-</del> -		<del>;-</del> -		<del>#</del> -	<u> </u>	<b>;-</b> -	i	<del>;-</del> -	4	<b>;-</b> -	i	<b>;-</b> -	i	<del>;-</del> -	- L	<b>;-</b> -	i	<del>;-</del> -	i	<del>;-</del> -	Radius
40'	lb																	* 2,300	* 2,300					* 2,120	* 2,120	45'5"
35'	lb																	* 3,340	* 3,340					* 2,060	* 2,060	48'9"
30'	lb																	* 3,790	* 3,790	* 2,680	* 2,680			* 2,040	* 2,040	
25'	lb																	* 3,930	* 3,930	* 3,460	* 3,460			* 2,050	* 2,050	53'6"
20'	lb															* 4,290	* 4,290	* 4,140	* 4,140	* 4,030	* 4,030	* 2,110	* 2,110	* 2,090	* 2,090	
15'	lb													* 5,010	* 5,010	* 4,660	* 4,660	* 4,410	* 4,410	* 4,220		* 2,750	* 2,750	* 2,150	* 2,150	
10'	lb									* 7,370	* 7,370	* 6,310	* 6,310	* 5,590	* 5,590	* 5,080	* 5,080	* 4,710	4,540	* 4,440	3,690	* 3,200	3,000	* 2,250	* 2,250	
5'	lb			* 6,140	* 6,140	* 15,970	* 15,970	* 11,140	* 11,140	* 8,660	* 8,660	* 7,170	* 7,170	* 6,200	* 6,200	* 5,530	5,240	* 5,040		* 4,670			2,880		* 2,380	
GL	lb					_				* 9,820		* 7,990		* 6,790		* 5,960	-	* 5,350		* 4,910		* 3,560	2,770		* 2,550	
-5'	lb		_	_			_	_		* 10,760		* 8,680		* 7,310		* 6,350		* 5,650		* 5,120		* 3,310	2,670			
-10'	lb			_						* 11,430		* 9,230		* 7,730		* 6,670		* 5,890	3,630					* 3,070		
-15'	lb									* 11,830		* 9,590		* 8,030		* 6,900			3,510					* 3,480		
-20'	lb			_						* 11,970		* 9,750		* 8,180						* 4,480	2,980			* 4,040		
-25'	lb		_	_			_	_		* 11,820		* 9,690	_	* 8,140				5,850	3,490					* 4,880	3,260	
-30'	lb			_						* 11,360		* 9,360		* 7,860		* 6,660	4,190							* 5,860		
-35'	lb	* 14,360	* 14,360	* 16,810			_	_		* 10,510		* 8,670		* 7,220	5,220									* 6,190		
-40'	lb					* 14,240	* 14,240	* 11,190	* 11,190	* 9,070	8,740	* 7,410	6,820											* 6,550	6,070	32'10"

# Notes:

- Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lift capacities.
- Lift capacities are based on machine standing on level, firm, and uniform ground. User must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, experience of personnel, etc.
- 3. Arm bucket pin is defined as lift point.

- 4. The above lifting capacities are in compliance with SAE J/ISO 10567. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Lifting capacities marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.
- Operator should be fully acquainted with the Operator's and Maintenance Instructions before operating this machine. Rules for safe operation of equipment should be adhered to at all times.
- Lift capacities apply to only machines as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

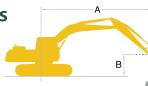
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# **KOBELCO CONSTRUCTION MACHINERY U.S.A. INC.**

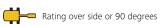
22350 Merchants Way, Katy, Texas 77449 http://www.kobelco-usa.com/

Inquiries To:	

**Lifting Capacities** 







- A Reach from swing centerline to arm tip
- B Arm bucket pin height above/below ground
- C Lifting capacities in pounds (kilograms)

SK260L	C	Standard	Arm: 9'9"	{2 <b>.</b> 98m}, no	bucket, 2'7	" {800mm}	track shoes						HE	AVY LIFT
	A		.5m}	10'{3.0m}		15 {4.6m}		20'{6.1m}		25 {7.6m}		At Max. Reach		
В		L	<del>;</del>	L	<del>;-</del> -		<del></del>		<del></del>		<del></del>		<del></del>	Radius
25 {7.6m}	lb{kg}							*12,650{5,730}	*12,650{5,730}			*11,000{4,980}	*11,000{4,980}	21'7"{6.60m}
20'{6.1m}	lb{kg}							*12,810{5,810}	*12,810{5,810}	*11,210{5,080}	11,050{5,010}	*10,350{4,690}	*10,350{4,690}	25'2"{7.68m}
15'{4.6m}	lb{kg}							*14,440{6,540}	*14,440{6,540}	*13,510{6,120}	10,870{4,930}	*10,240{4,640}	9,310{4,220}	27'4"{8.35m}
10'{3.0m}	lb{kg}					*21,840{9,900}	*21,840{9,900}	*16,880{7,650}	14,620{6,630}	*14,640{6,640}	10,490{4,750}	*10,520{4,770}	8,520{3,860}	28'6"{8.70m}
5'{1.5m}	lb{kg}					*26,610{12,070}	20,700{9,380}	*19,370{8,780}	13,830{6,270}	15,280{6,930}	10,100{4,580}	*11,210{5,080}	8,210{3,720}	28'9"{8.78m}
Ground Level	lb{kg}			*13,730{6,220}	*13,730{6,220}	*29,200{13,240}	19,880{9,010}	20,780{9,420}	13,290{6,020}	14,960{6,780}	9,800{4,440}	*12,450{5,640}	8,330{3,770}	28'2"{8.58m}
-5 {-1.5m}	lb{kg}	*16,610{7,530}	*16,610{7,530}	*26,340{11,940}	*26,340{11,940}	*29,680{13,460}	19,670{8,920}	20,520{9,300}	13,060{5,920}	14,840{6,730}	9,690{4,390}	13,650(6,190)	8,970{4,060}	26'6"{8.10m}
-10'{-3.0m}	lb{kg}	*29,290{13,280}	*29,290{13,280}	*40,290{18,270}	39,470{17,900}	*28,280{12,820}	19,870{9,010}	20,630{9,350}	13,150{5,960}			16,050{7,280}	10,480{4,750}	23 10"{7.26m}
-15 {-4.6m}	lb{kg}			*33,810{15,330}	*33,810{15,330}	*24,230{10,990}	20,500{9,290}					*17,850{8,090}	14,230{6,450}	19'5"{5.93m}

SK260LC		Long A	rm: 12'0"	{3.66m}, n	o bucket,	2'7" {800ı	nm} track	shoes		HEAVY LIFT						
	Α	5'{1	.5m}	10'{3	3.0m}	15'{4	.6m}	20'{6	.1m}	25'{7	.6m}	30'{9	).1m}	At Max	Reach	
В			<del>;</del>		<del>;-</del> -		<del></del>		<del></del>		<del>;-</del> -		<del></del>		<del></del>	Radius
25'{7.6m}	lb{kg}													*8,060(3,650)	*8,060{3,650}	24'6"{7.47m}
20'{6.1m}	lb{kg}									*11,340{5,140}	*11,340(5,140)			*7,600(3,440)	*7,600{3,440}	27'8"{8.44m}
15 {4.6m}	lb{kg}							*12,650(5,730)	*12,650{5,730}	*12,070{5,470}	11,150(5,050)			*7,500{3,400}	*7,500{3,400}	29'8"{9.05m}
10'{3.0m}	lb{kg}			*29,410{13,340}	*29,410{13,340}	*19,040{8,630}	*19,040{8,630}	*15,220(6,900)	15,050{6,820}	*13,390{6,070}	10,710(4,850)	*10,350{4,690}	8,000{3,620}	*7,640(3,460)	*7,640{3,460}	30'9"{9.38m}
5 {1.5m}	lb{kg}			*13,750{6,230}	*13,750(6,230)	*24,370{11,050}	21,440(9,720)	*17,980(8,150)	14,160{6,420}	*14,910{6,760}	10,250(4,640)	11,770{5,330}	7,790{3,530}	*8,050(3,650)	7,390{3,350}	31'0"{9.45m}
Ground Level	lb{kg}			*16,200{7,340}	*16,200(7,340)	*27,950{12,670}	20,280(9,190)	*20,220(9,170)	13,480{6,110}	15,110(6,850)	9,870(4,470)	*10,920{4,950}	7,620{3,450}	*8,790(3,980)	7,460{3,380}	30'5"{9.27m}
-5 {-1.5m}	lb{kg}	*14,590{6,610}	*14,590{6,610}	*24,010{10,890}	*24,010{10,890}	*29,400{13,330}	19,810(8,980)	20,700(9,380)	13,110{5,940}	14,880(6,740)	9,650(4,370)			*10,060(4,560)	7,930{3,590}	28'11"{8.83m}
-10'{-3.0m}	lb{kg}	*23,840{10,810}	*23,840(10,810)	*35,270(15,990)	*35,270{15,990}	*28,950(13,130)	19,820(8,990)	20,640(9,360)	13,060{5,920}	14,910(6,760)	9,680(4,390)			*12,360(5,600)	9,010{4,080}	26'5"{8.07m}
-15 {-4.6m}	lb{kg}	*35,350(16,030)	*35,350{16,030}	*37,730{17,110}	*37,730{17,110}	*26,300{11,920}	20,240(9,180)	*19,380(8,790)	13,370{6,060}					*16,230(7,360)	11,400{5,170}	22'7"{6.89m}
-20'{-6.1m}	lb{kg}					*19,210{8,710}	*19,210(8,710)							*16,850(7,640)	*16,850{7,640}	16'5"{5.02m}

- 1. Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lift capacities.

  2. Lift capacities are based on machine standing on level, firm, and uniform ground. User must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, experience of personnel, etc.

  3. Arm bucket pin, without bucket is defined as lift point.
- 4. The above lifting capacities are in compliance with SAE J/ISO 10567. They do not exceed 87 % of hydraulic lifting capacity or 75 % of tipping load. Lifting capacities marked with an asterisk (\*) are limited by hydraulic capacity
- 5. Operator should be fully acquainted with the Operator's and Maintenance Instructions before operating this machine. Rules for safe operation of equipment should be adhered to at all times.
- 6. Lift capacities apply to only machines as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD

# STANDARD EQUIPMENT

# **ENGINE**

- Turbocharged and inter-cooled HINO J05EUN-KSSD
- Tier IV Final Diesel engine
- Automatic engine decelerationTwo 12V, 112Ah batteries
- 24V, 5kW starting motor
- 60-amp alternator
- Removable radiator clean-out screen
- Automatic engine shut-down if low engine oil pressure
- Side by side oil, hydraulic and engine radiators ■ Double-element air cleaner

# CONTROL

- Working mode selector
- (H-mode, S-mode and ECO-mode)
- Heavy Lift and Power Boost "without time limit"

# SWING SYSTEM & TRAVEL SYSTEM

- Two-speed travel with automatic down shift ■ Sealed & lubricated track links
- 31'5" {800mm} track shoes
- Grease-type track adjusters Automatic swing brake
- Swing rebound prevention systemIndependent travel system
- Luggage tray
  - Detachable two-piece floor mat

■ Lower track guards

- Exclusive boom to arm regeneration systems
- Auto warm-up system
- Hydraulic oil cooler

# MIRRORS & LIGHTS

- Three rearview mirrors plus rear-view camera
- Two front working lights
- Swing flashers

# CAB & CONTROL

- ROPS cab ■ Two pilot-operated control levers
- Electric horn
- Integrated left-right slide-type control box
- All-weather, sound-insulated cab
- Interior cab light ■ Coat hook
- Large cup holder
- 7-way adjustable suspension seat
- Headrest

Manual DPF switch ■ 12V converter ■ Two-way control pattern changer

Handrails

Skylight

■ Top guard

■ Heater and defroster

■ Tinted safety glass

AM/FM stereo radio ■ Travel alarm

# **OPTIONAL EQUIPMENT**

Easy to read multi-display monitor

Attachment pressure release switch

■ Automatic climate control

■ Emergency escape hammer

■ Intermittent windshield wiper with double-spray washer

Pull-type front window and removable lower front window

- Wide range of shoes
- Boom & arm load (lock) holding valve
- Front-guard protective structures Additional hydraulic circuits

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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# **KOBELCO CONSTRUCTION MACHINERY U.S.A. INC.**

22350 Merchants Way, Katy, Texas 77449 http://www.kobelco-usa.com/

**KOBELCO** 

**Hydraulic Excavator** 

SK260LC-10



■ Bucket Capacity:

1.05 - 1.31 cu. yd. SAE

**■** Engine Power:

178 hp {133 kW} @ 2,100 rpm

**■** Operating Weight:

58,900 lbs {26,700 kg}



Bulletin No. SK260LC-10-NA-101



# More power and higher efficiency.





Power to do more, faster

# **Digging Volume**

The SK260LC offers dynamic digging force even as it minimizes fuel consumption, achieving class-leading work volume. H-mode is used for maximum productivity, delivering 5% greater digging volume.

# **Heavy Lift**

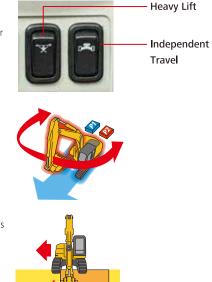
10% more hydraulic pressure (Heavy Lift) means greater lifting power, at close radius, allowing for smooth and steady operation while moving heavy objects.

# **Independent Travel**

Selecting Independent Travel dedicates one hydraulic pump to travel and one to the attachment on a continuous basis, allowing for a smooth and constant movement speed even while swinging or using the boom or attachment. With Independent Travel, safely carrying a large pipe across a job site is a breeze.

# **Swing Priority**

Our exclusive system automatically and instantly delivers full swing power during combined operations. There's no need to mode-switch to make quick work of jobs like side-digging and back-filling.



# **Power Boost**

When you need more power instantly, engage Power Boost to get 10% more power.

Max. Bucket Digging Force

With Power Boost: 42,000 lbs (187kN)

Max. Arm Crowding Force

With Power Boost: **30, 100lbs** (134kN)

# **Drawbar Pulling Force**

Excellent drawbar force lets you conquer rough terrain and slopes.

55,100lbs (245kN)

# **Conforms to Tier IV Final exhaust emissions standards**

# Reduces fuel consumption and minimizes exhaust emissions

Hino engines are renowned for fuel efficiency and environmental performance, and KOBELCO has tuned them specifically for construction machinery.

The high-pressure common rail fuel injection system, the variable-geometry (VG) turbocharger, and the exhaust gas recirculation (EGR) system reduce particulate matter (PM) while the large EGR cooler greatly reduces the formation of Nitrogen Oxide (NOx) gases.

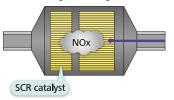


# SCR System with DEF VEW

Engine exhaust system utilizes Selective Catalytic Reduction (SCR) to convert NOx\* into harmless nitrogen and water emissions. SCR combined with a Diesel Particulate Filter (DPF) makes the SK260LC a much cleaner machine meeting US EPA regulations for Tier IV final.

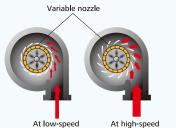
NOx reduction rate

bout 80% decrease\*



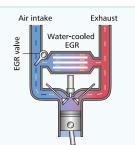
# VG turbo reduces PM

The variable-geometry turbocharger adjusts air intake to maximize combustion efficiency. At low engine speeds the nozzles are closed, the turbo speed increased and air intake is boosted. This helps lower fuel consumption.



# EGR cooler reduces NOx

Cooled exhaust gases from the EGR cooler are mixed with fresh air in the intake. The recirculated air lowers the combustion temperature which reduces NOx.





# Revolutionary technology boosts efficiency and minimizes fuel consumption

# **Operation Mode**

Improved fuel economy in ECO- and S-modes.

Compared to previous models

ECO-mode • • • About 9% improvement

S-mode • • • About 10% improvement

# Always and Forever. Yesterday, Today, and Tomorrow. We're Obsessed with Fuel Efficiency.

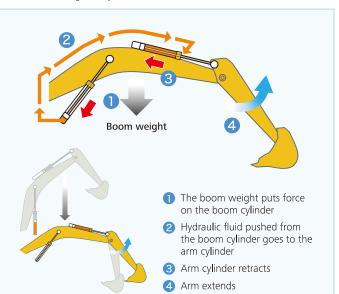
Over the past 10 years, KOBELCO has achieved an average fuel consumption reduction of 36% across its fleet. We vow to lead the industry in improving fuel efficiency.

Compared to SK260LC-6 model (2006)

ECO-mode (SK260LC-10) ··· About 36% improvement

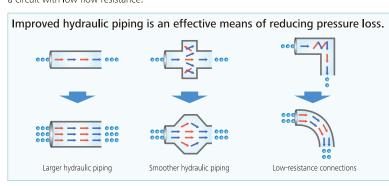
# Boom to Arm Regeneration System Web

Innovative engineering uses the downward movement of the boom to push fluid to the arm. Gravity and kinetic energy greatly reduce the amount of power needed to move fluid through the system.



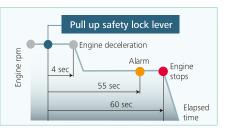
# Hydraulic circuit reduces energy loss

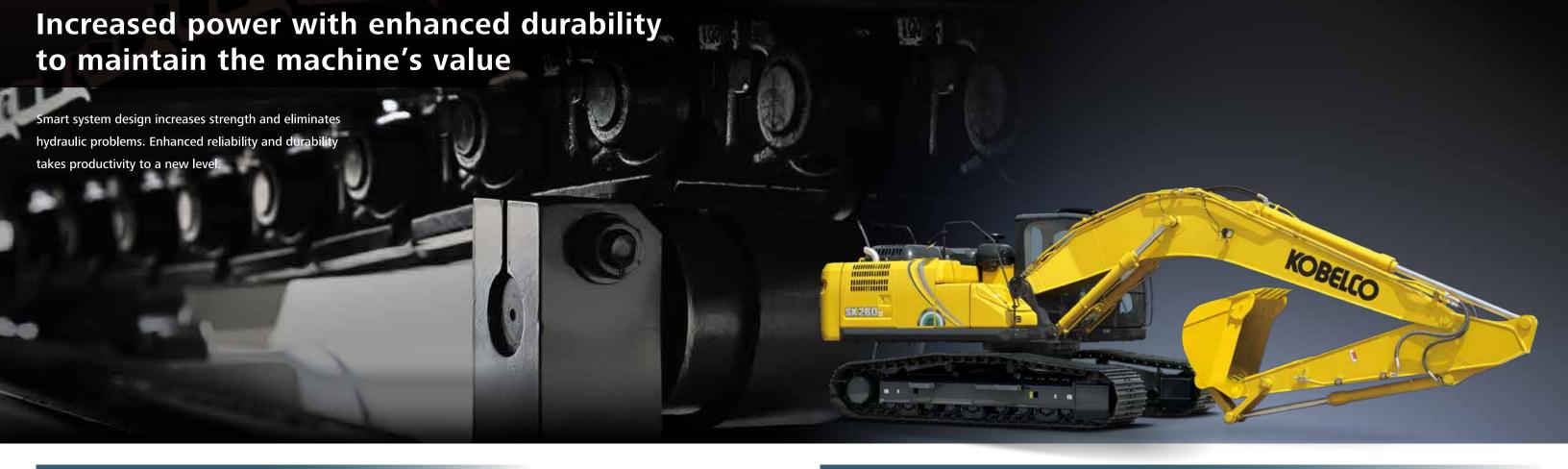
Improved hydraulic line layout minimizes hydraulic pressure resistance from turbulence and valve restrictions. Fuel efficiency is increased because it takes less energy to move fluid through a circuit with low flow resistance.



# AIS (Auto Idle Stop)

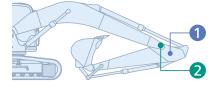
The engine will stop automatically after 60 seconds of inactivity if the safety lock lever is in the up position. This eliminates wasteful idling during standby, saving fuel and reducing  $CO_2$  emissions.





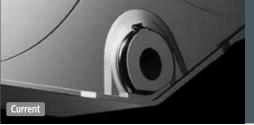
# Built to operate in tough working environments

Reinforced and redesigned boom and arm offers excellent durability during demanding work conditions to reliably handle higher work volume.



1 Enlarged reinforcement of the arm

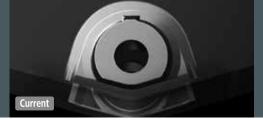
Arm: Base plate thickness has been increased.





2 Modified foot boss shape

Arm foot boss shape has been changed to better distribute stress.





# **500 Hour Attachment Lubrication Interval**

The self lubrication bushings are used at the attachment pins and the bushings with high abrasion resistant property are used at the pins around the bucket. The lubrication cycle of the lubrication points around the bucket is 250

hours and that of other lubrication points is 500 hours.

\* Additionally the two piece bucket bushings protect the side of the arm from contact and then wear from the bucket ears. Should the bucket bushings need replacement, they can be replaced separately from the larger main bushing, reducing costs.



# **Three Track Guides**

Three heavy-duty track guides installed on each crawler side frame assure stability in the most demanding situations.



# Improved filtration system reliability

Clean, contaminant-free fuel and hydraulic fluid are essential to stable performance. The improved filtration systems reduce the risk of mechanical trouble and enhance longevity and durability.

# Hydraulic fluid filter

Recognized as the best in the industry, our super-fine filter separates out even the smallest particles. A new cover prevents contamination when changing filters.

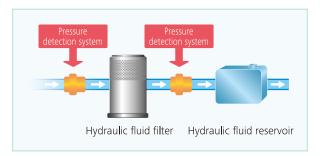






# Hydraulic fluid filter restriction indicator

Detects clogging by measuring the difference in pressure between incoming and outgoing hydraulic fluid. Detecting contaminants before they can get into the hydraulic fluid reservoir reduces the risk of damage to the hydraulic system.



# **Double-element air cleaner**

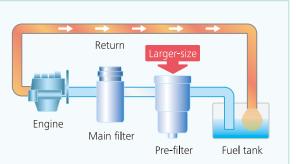
The large-capacity element features a double-filter structure that keeps the engine running clean even in industrial environments.



# Fuel filter VEW

Pre-filter with built-in water-separator maximizes filtering performance.





5

# **Comprehensive safety and intuitive operation**



# Safety

# **ROPS Cab**

ROPS (Roll-Over-Protective Structure)-compliant cab complies with ISO standards (ISO-12117-2: 2008) and ensures greater operator safety in the event of a roll-over. KOBELCO encourages operators to wear their seat belt during operation.





• Top Guard level II (Meets ISO10262)



 Mounting brackets for vandalism guards are standard equipment (contact your KOBELCO dealer to fit vandalism or front rock guards).

# **Expanded field of view for greater safety**











Standard rear-view camera eases safety checks behind the machine. Color video displays on cab monitor.



# Operator-friendly features that are easy to see, easy to use



**6** 

# **Color Multi-display**

Brilliant colors differentiate multiple graphics on cab LCD. Graphics indicate fuel consumption, maintenance intervals and more.

- 1 Analog-style gauges provide an intuitive reading of fuel level and engine temperature
- 2 Green indicates ECO mode selected or efficient operation in other modes
- 3 PM accumulation (left)/DEF level (right)
- 4 Fuel consumption/Rear-view camera
- **5** Digging mode switch
- 6 Monitor display switch

# One-touch attachment mode switch

A simple flick of switch converts the hydraulic circuit and flow amount to match attachments. Helpful icons let the operator confirm the proper configuration at a glance.



PM accumulation/DEF level



Fuel consumption



Maintenance



Breaker mode



Nibbler mode



Independent Travel mode

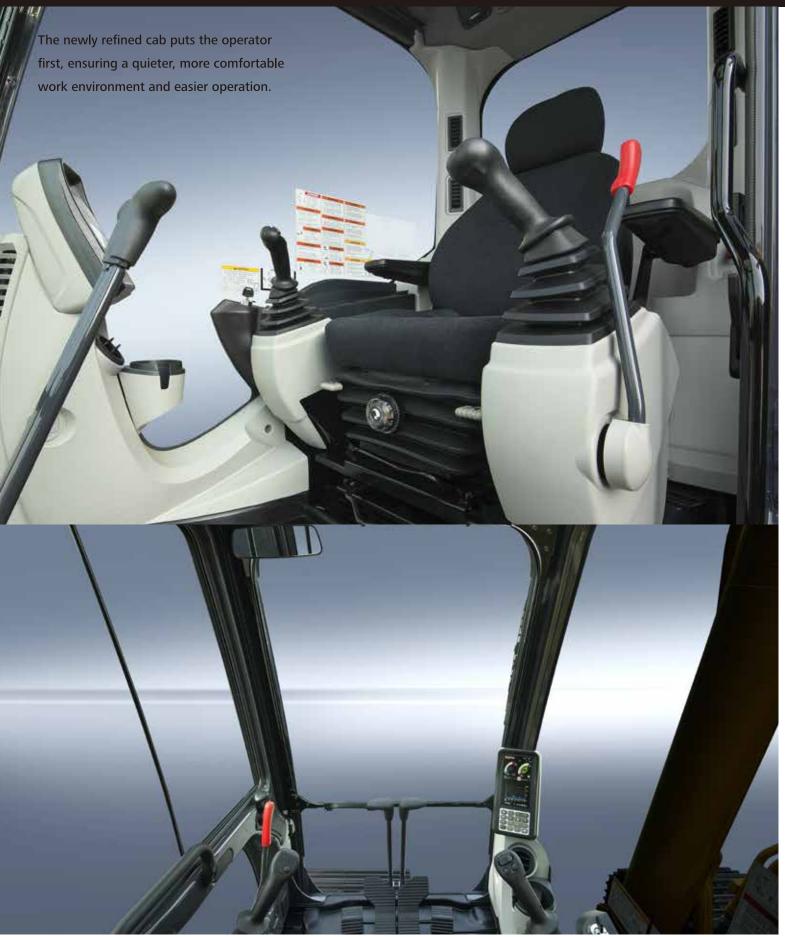


Heavy Lif



Rear-view camera

# Cab comfort takes a step ahead



# Comfort

# Climate control outlets behind the seat **WW**



# A light touch on the lever means smoother, less tiring work



It takes 25% less effort to work the operation lever, which reduces fatigue over long working hours or continuous operations.

# More comfortable seat means higher productivity

Five air outlets deliver warm or cool air directly to the operator.







# **Quiet Inside**



The high level of air-tightness ensures a quiet, comfortable cabin interior.

# Interior equipment adds to comfort and convenience







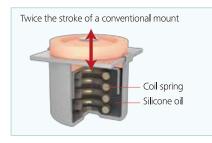
# **Large door allows** easy access in and out of the cab

The expanded cab provides plenty of room for a large door, more headroom



# **Low Vibration**

Coil springs absorb small vibrations and high suspension mounts filled with silicone oil reduce heavy vibration. The long stroke achieved by this system provides excellent vibration protection.



# Wide, Open View Liberates the Operator

The front window features one large piece of glass without a center pillar on the right side for a wide, unobstructed view.





# Easy, on-the-spot maintenance VEW



Ample space in the engine compartment allows service staff to comfortably perform maintenance in a natural body position. The distance between access steps is smaller so getting to and from the engine compartment is easier. The hood is lighter and easier to raise and lower.









The DEF fill is located inside the convenient storage compartment.

# **Ground-level Access**

Design allows for easy access at ground level for daily checks and maintenance work.







Laid out for easy access to radiator and cooling system elements



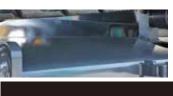
- 2 Fuel filter with integrated water separator
- Engine oil filter

# **Easy Access to In-cab Maintenance Features**





# **Easy Cleaning**







# **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



# **■** Engine

Model	HINO J05EUN-KSSD
Туре	Direct injection, water-cooled, 4-cycle diesel engine with turbocharger, intercooler (Complies with EU (NRMM) Stage IV, EPA Tier IV Final.
No. of cylinders	4
Bore and stroke	4.41" (112 mm) x 5.12" (130 mm)
Displacement	312.6 cu. in (5.123L)
Rated power output	178hp {133kW} /2,100rpm (SAE NET)
nateu power output	185hp {138kW} /2,100rpm (Without fan)
Max. torque	469lb-ft {636N.m} /1,600rpm (SAE NET)
iviax. torque	487lb-ft {660N.m} /1,600rpm (Without fan)

# I Hydraulic System

a riyaraane bystein	
Pump	
Туре	Two variable displacement pumps + 1 gear pump
Max. discharge flow	2 x 64.7 U.S.gph {2 x 245 L/min},
Widh. discharge now	1 x 5.5 U.S.gph {1 x 21 L/min}
Relief valve setting	
Boom, arm and bucket	4,970 psi {34.3 Mpa}
Power Boost	5,480 psi {37.8 Mpa}
Travel circuit	4,970 psi {34.3 Mpa}
Swing circuit	4,210 psi {28.4 Mpa}
Control circuit	725 psi {5.0 Mpa}
Pilot control pump	Gear type
Main control valves	8-spool
Oil cooler	Air cooled type

# Swing System

Swing motor	Axial piston motor
Parking brake	Oil disc brake, hydraulic operated automatically
Swing speed	10.2 rpm
Swing torque	63.300 lb.ft {85.9 kN.m} (SAE)
Tail swing radius	10'2" {3,100 mm}
Min. front swing radius	12'10" {3,910 mm}

# **■ Travel System**

Travel motors	2 x axial piston, two-speed motors
Parking brakes	Oil disc brake per motor
Travel shoes	51 each side
Travel speed	3.7 / 2.2 mph {5.8 / 3.6 km/h}
Drawbar pulling force	55,100 lbs {245 kN} (SAE J 1309)
Gradeability	70 % {35°}
Ground clearance	1'6" (460 mm)

# I Cab & Control

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

Two hand levers and two foot pedals for travel Two hand levers for excavating and swing Electric rotary-type engine throttle

# **■** Boom, Arm & Bucket

Boom cylinder	5.3" {135 mm} x 4'1" {1,235 mm}
Arm cylinder	5.7" {145 mm} x 5'4" {1,635 mm}
Bucket cylinder	4.9" {125 mm} x 3'11" {1,200 mm}

# **■** Refilling Capacities & Lubrications

Fuel tank	106.5 U.S.gal {403L}	
Cooling system	5.5 U.S.gal {21L}	
Engine oil	5.4 U.S.gal {20.5L}	
Travel reduction gear	2 x 1.3 U.S.gal {2 x 5.0 L}	
Swing reduction gear	1.3 U.S.gal {5.0 L}	
Undroulie oil tools	43.6 U.S.gal {165 L} tank oil level	
Hydraulic oil tank	72.1 U.S.gal {273 L} hydraulic system	
DEF/AdBlue tank	21.9U.S.gal {83L}	

# **■** Bucket Selection Chart

Duels at turns	Capacity (SAE)	MC-lib to about (a)	B. d. (20) is by the (b.)	Arm ft-in (m)	
Bucket type	Cubic Yard (m³)	Width Inches (m)	Bucket Weight lb (kg)	9'9"(2.98)	12'0"(3.66)
	.875 (.669)	24" (.609)	1,560 (708)	Н	Н
	1.125 (.860)	30" (.762)	1,710 (776)	Н	Н
	1.375 (1.051)	36" (.914)	1,860 (844)	Н	M
General	1.625 (1.243)	42" (1.066)	2,060 (934)	М	L
	1.71 (1.31)	48" (1.219)	2,539 (1,176)	М	X
	2.0 (1.53)	54" (1.371)	3,065 (1,390)	L	X
	2.25 (1.72)	54" (1.371)	3,331 (1,511)	L	X
	.875 (.669)	30" (.762)	1,840 (834)	Н	Н
leavy Duty	1.125 (.860)	36" (.914)	2,000 (907)	Н	M
icavy Duty	1.375 (1.051)	42" (1.066)	2,215 (1,004)	М	L
	1.625 (1.242)	48" (1.219)	2,335 (1,059)	L	X
Severe Duty	.75 (.573)	27" (.685)	2,205 (1,000)	Н	M
	1.00 (.764)	30" (.762)	2,450 (1,111)	М	X
	1.125 (.860)	36" (.914)	2,545 (1,154)	X	X

H - Used with material weight up to 3,000 lbs/cu yd (1,780 kg/m $^3$ ) M - Used with material weight up to 2,500 lbs/cu yd (1,483 kg/m $^3$ ) X - Not recommended

# ■ Working Ranges

Beem	19'9" (6.12 m)		
Range	Standard 9'9" {2.98 m}	Long 12'0" {3.66 m}	
a- Max. digging reach	33'10" {10.30}	36'0" {10.98}	
b- Max. digging reach at ground level	33'3" {10.14}	35'6" {10.82}	
c- Max. digging depth	23'0" {7.00}	25'2" {7.68}	
d- Max. digging height	32'1" {9.79}	33'6" {10.22}	
e- Max. dumping clearance	22'7" {6.88}	23'11" {7.28}	
f - Min. dumping clearance	8'4" {2.55}	6'2" {1.87}	
g- Max. vertical wall digging depth	20'2" {6.15}	22'10" {6.97}	
h- Min. swing radius	12'10" {3 91}	12'10" {3.92}	
i - Horizontal digging stroke at ground level	17'3" {5 26}	21'3" {6 48}	
j - Digging depth for 8 feet flat bottom	22'5" {6.82}	24'9" {7.54}	
Bucket capacity SAE heaped cu.yd.{m³}	1.31 {1.00}	1.05 {0.80}	

# Digging Force

Digging Force			Unit: lbs {kN}	
Arm length		Standard 9'9" {2.98 m}	Long 12'0" {3.66 m}	
CAE		35,000 {156}	35,000 {156}	
Bucket digging force	SAE	38,500 {171}*	38,500 {171}*	
	ICO	38,200 {170}	38,200 {170}	
ISO		42,000 {187}*	42,000 {187}*	
SAE		26,100 {116}	22,700 {101}	
Arm crowding force	SAE	28,600 {127}*	_	

27,400 {122}

30,100 {134}\*

23,400 {104} \*Power Boost engaged.

Unit: ft-in{m}

# Dimensions

Arm crowding force

Arm length		Standard 9'9" {2.98 m}	Long 12'0" {3.66 m}	
Α	Overall length	33'6" {10,210}	33'7" {10,230}	
В	Overall heigth (to top of boom)	10'5" {3.180} 10'10" {3.300}		
C	Overall width	11'1" {3,390}**		
D	Overall height (to top of cab)	10'2" {3,090}		
E	Ground clearance of rear end*	3'7" {1,090}		
F	Ground clearance*	1'6" {460}		

ISO

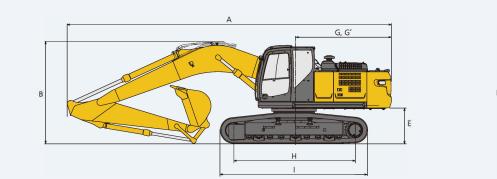
# 12m 11 10 9 8 7 6 5 4 3 2 1

	Unit: ft-in {mm}
Tail swing radius	10'2" {3,100}
Distance from center of swing to rear end	10'1" {3,070}
Tumbler distance	12'8" {3,850}
Overall length of crawler	15'3" {4,640}
Track gauge	8'6" {2,590}
Shoe Width. In(mm)	24" (600)/28"(700)/31.5"(800)
Overall width of upperstructure	10'3" {3,120}

— 9'9" {2.98 m} Standard Arm

--- 12'0" {3.66 m} Long Arm

\* Without including height of shoe lug \*\* Shoe width : 2'7" {800mm}



# **■** Operating Weight & Ground Pressure

In standard trim, with standard boom, 9'9" {2.89m} arm, and 1.31 cu.yd. {1.00 m³} SAE heaped bucket

Shaped		Triple 9rouser shoes (even hei 9ht)			
Shoe width	In(mm)	24" (600)	28"(700)	31.5"(800)	35"(900)
Ground pressure	psi {kPa}	7.5 {52}	6.6 {45}	5.8 {40}	5.2 {36}
Operating weight	lbs {kg}	57,900 {26,300}	58,900 {26,700}	59,300 {26,900}	60,100 {27,200}