

Power Meets Efficiency

Increased POWER
means increased
PRODUCTIVITY

Greater fuel
Economy means
Higher efficiency



From urban centers to mines around the world, KOBELCO's all-out innovation brings you durable, Earth-friendly construction machinery that's equal to any task all over the planet. Increased power and better fuel economy bring greater efficiency to any project. The KOBELCO SK170LC Conventional Hydraulic Excavator is more durable than ever, able to withstand the rigors of the toughest job sites. Focusing on the global environment of the future, KOBELCO offers next-generation productivity to meet the need for lower life-cycle costs and exceed the expectations of customers the world over. It all adds up to new levels of value that are a step ahead of the times.



SK170_{LC}

More Power and Higher Efficiency.

The highly efficient hydraulic system minimizes fuel consumption while maximizing power. With nimble movement and outstanding digging power, this excavator improves job productivity.

Efficient Performance! Top-Class Powerful Digging

Conforms to Tier IV Final Exhaust Emissions Standards

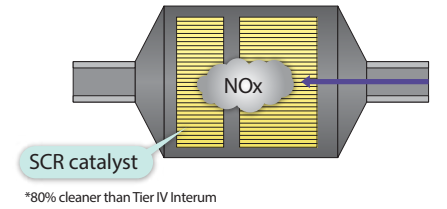
Reduces Fuel Consumption And Minimizes Exhaust Emissions

The HINO engine, (a subsidiary of Toyota) is 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, reduce particulate matter (PM) while the large EGR cooler greatly reduces the formation of nitrogen oxide (NOx) gases.



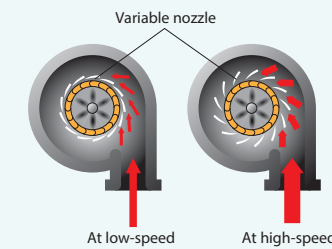
SCR System with DEF NEW

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 a much cleaner machine meeting US EPA regulations for Tier IV final.



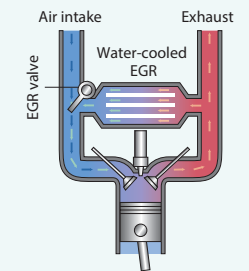
VG Turbo Reduces PM

The variable-geometry turbocharger adjusts air intake to maximize combustion efficiency and promotes faster, cleaner response to varying engine load. 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.



Power to Do More, Faster

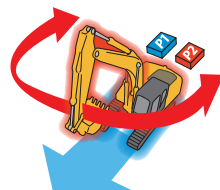
Heavy Lift

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



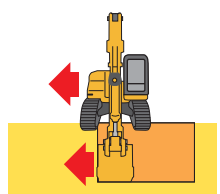
Independent Travel

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 with no time limit.

■ Max. Bucket Digging Force (ISO 6015)

With Power Boost: **28,300lbs** (126kN)

■ Max. Arm Crowding Force (ISO 6015)

With Power Boost: **17,700lbs** (78.8kN)

Drawbar Pulling Force (SAE J1309)

Excellent drawbar force lets you conquer rough terrain and slopes.

51,900lbs (231kN)



Revolutionary Technology Boosts Efficiency and Minimizes Fuel Consumption

ECO-mode: Engineered for Economy

Kobelco's ECO-mode maximizes the operating efficiency of the engine and other components to achieve much greater fuel efficiency. Just press a button to choose the operation mode best suited to the task at hand and the working conditions.

■ Optimal operation with three modes

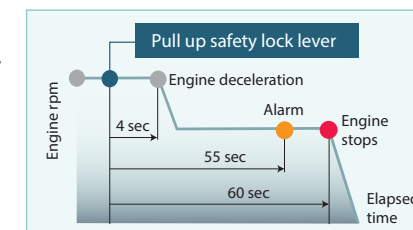
H H-mode ••• Maximum power for maximum productivity on your toughest jobs

S S-mode ••• Ideal balance of productivity and fuel efficiency for a range of urban engineering projects

E ECO-mode ••• Minimum fuel consumption for utility projects and other work that demands precision

AIS (Auto Idle Stop)

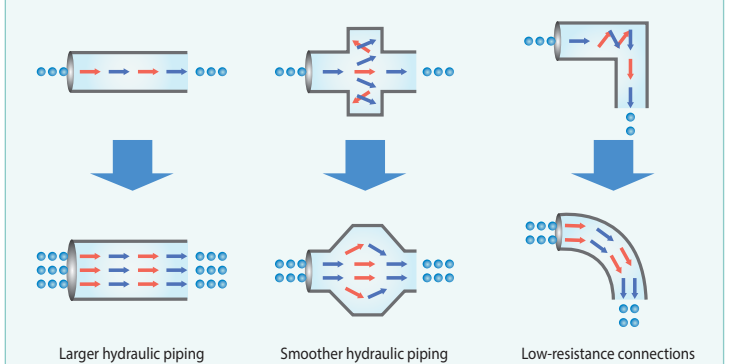
The engine will stop automatically after 60 seconds of inactivity if the safety lock lever is in the up position. This eliminates wasteful idling during standby, saving fuel and reducing CO₂ emissions.



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.

Improved hydraulic piping is an effective means of reducing pressure loss.



Increased Power with Enhanced Durability to Maintain the Machine's Value

Smart system design increases strength and eliminates hydraulic problems. Enhanced reliability and durability takes productivity to a new level.



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 premium-fine filter separates out even the smallest particles. A new cover prevents contamination when changing filters.

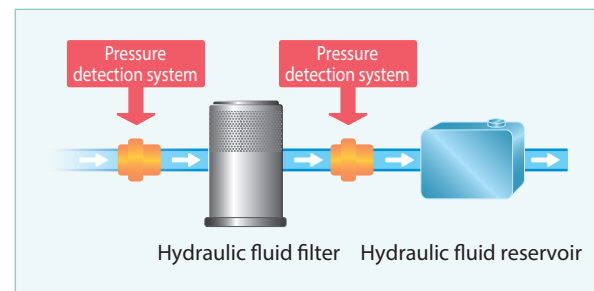


Long-life hydraulic fluid: **5,000** hours

Hydraulic fluid filter replacement cycle is **1,000** hours

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.



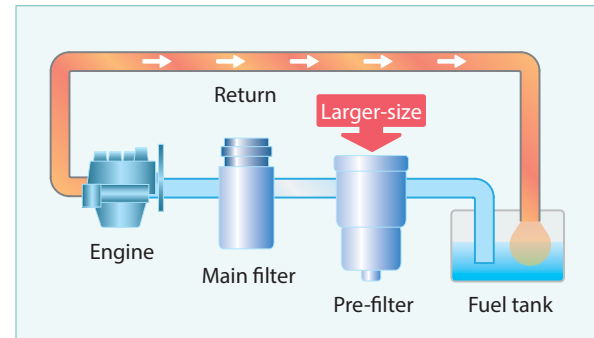
Double-element Air Cleaner

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



Fuel Filter

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



Built to Operate in Tough Working Environments

Redesigned boom offers excellent durability during demanding work conditions to reliably handle work volume.

500 Hour Attachment Lubrication Interval

The self-lubricating 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.



Optimized Specifications

KOBELCO offers standard counterweight and heavy counterweight as well as 24' (600 mm) and 31.1" (790 mm) shoe. The SK170LC features specifications that conform to shipping requirements and are optimized to address lifting capacity and ground pressure needs.

Counterweight	Shoe Width	Overall Width	Operating Weight
Std. Counterweight	24" (600 mm)	8' 6" (2,590 mm)	38,800 lbs (17,600 kg)
	28" (700 mm)	8' 10" (2,690 mm)	39,700 lbs (18,000 kg)
	31.1" (790 mm)	9' 1" (2,780 mm)	40,100 lbs (18,200 kg)
Heavy Counterweight	24" (600 mm)	8' 6" (2,590 mm)	42,100 lbs (19,100 kg)
	28" (700 mm)	8' 10" (2,690 mm)	43,000 lbs (19,500 kg)
	31.1" (790 mm)	9' 1" (2,780 mm)	43,400 lbs (19,700 kg)

Comprehensive Safety and Intuitive Operation

User-friendly design and enhanced safety means greater efficiency and productivity.



SK

Safety

ROPS/FOPS 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.



FOPS 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).

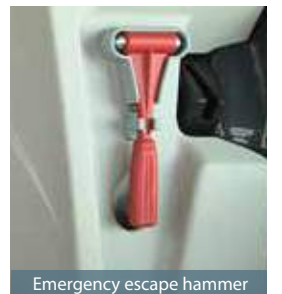
Expanded Field of View for Greater Safety



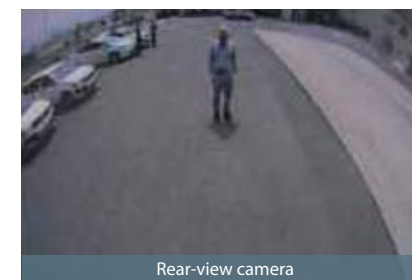
Left and right rear-view mirrors/Right bottom clearance mirror



Rear view from cab



Emergency escape hammer



Rear-view camera



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



Standard rear swing flashers and rear work lights.

Operator-friendly Features that are Easy to See, Easy to Use



Color Multi-display

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

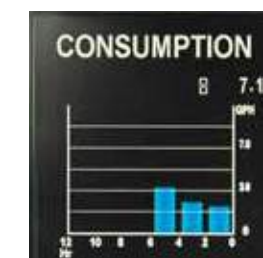
- 1 Analog-style gauges provide an intuitive reading of fuel level and engine temperature
- 2 Green indicates ECO mode selected or efficient operation in other modes
- 3 PM accumulation (left)/DEF level (right)
- 4 Fuel consumption/Rear-view camera
- 5 Digging mode switch
- 6 Monitor display switch

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 Lift



Rear-view camera

Cab Comfort Takes a Step Ahead

The newly refined cab puts the operator first, ensuring a quieter, more comfortable work environment and easier operation.



Standard suspension seat



Comfort

Climate Control Outlets Behind the Seat NEW



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

A Light Touch On the Lever Means Smoother, Less Tiring Work NEW



It takes 25% less effort to work the operation lever, which reduces fatigue over long working hours or continuous operations. *Compared to SK170LC-9 model

More Comfortable Seat Means Higher Productivity



Suspension seat absorbs vibration



Seat back can be lowered flat



Double slides allow adjustment for optimum comfort

Quiet Inside



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

Interior Equipment Adds to Comfort and Convenience



Bluetooth installed AM/FM stereo radio



USB connector/12V power outlet

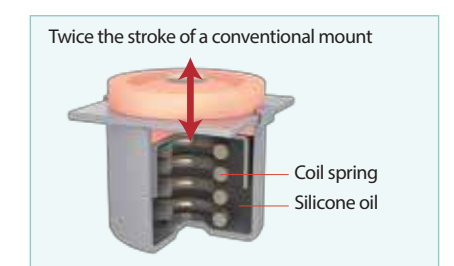
Large Door Allows Easy Access in and Out of the Cab

The expanded cab provides plenty of room for a large door, more headroom and smoother entry and exit.



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.



Spacious storage tray



Large cup holder

Efficient Maintenance Keeps the Machine in Peak Operating Condition



MAINTENANCE			
		8	7.1h
	INTERVAL	REMAINING TIME	EXCHANGE DAY
ENGINE OIL	500h	495h	--/--/--
FUEL FILTER	500h	495h	--/--/--
HYD. FILTER	1000h	995h	--/--/--
HYD. OIL	5000h	4995h	--/--/--

Machine Information Display Function

- Examples of displaying maintenance information
- Displays only the maintenance information that's needed, when it's needed
- Self-diagnostic function provides early-warning detection and display of electrical system malfunctions
- Service-diagnostic function makes it easier to check the status of the machine
- Record function for any possible on going or intermittent service issues

Easy, On-the-spot Maintenance

NEW

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.

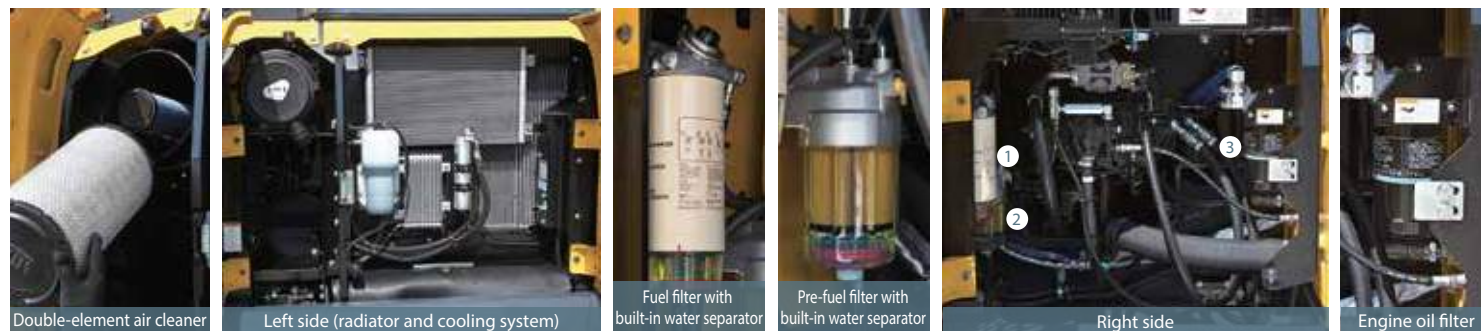


Step/storage box/DEF fill location

DEF/AdBlue tank

Ground-level Access

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



Double-element air cleaner

Left side (radiator and cooling system)

Fuel filter with built-in water separator

Pre-fuel filter with built-in water separator

Right side

Engine oil filter

Laid out for easy access to radiator and cooling system elements

- 1 Fuel filter with built-in water separator
- 2 Pre-fuel filter with built-in water separator
- 3 Engine oil filter

Easy Access to In-cab Maintenance Features

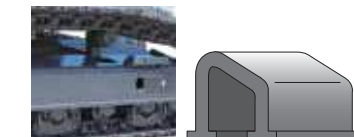


DPF manual regeneration switch



Air conditioner filter can be easily removed without tools for cleaning. One for outside air and one for inside air.

Easy Cleaning



Special sloped crawler side frame design is easily cleaned of mud.



Detachable two-piece floor mat with handles for easy removal.



Fuel tank features bottom flange and large drain valve for easy maintenance.

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

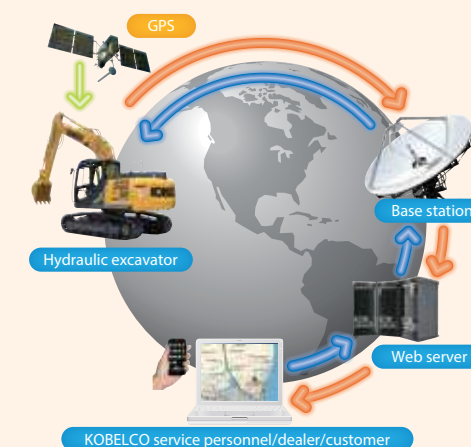
Data on fuel consumption and idling times can be used to indicate improvements in fuel consumption.

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.

Engine

Model	HINO J05EUM-KSST
Type	Direct injection, engine with intercooler, turbo-charger (Tier IV final-compliant engine)
No. of cylinders	4
Bore and stroke	4.41" (112 mm) x 5.12" (130 mm)
Displacement	312.6 cu in (5.123 L)
Rated power output	127 hp {95 kW}/2,000 rpm (SAE NET) 134 hp {100 kW}/2,000 rpm (Without fan)
Max. torque	355 lb-ft {482 N·m}/1,600rpm (SAE NET) 370 lb-ft {502 N·m}/1,600 rpm (Without fan)

Hydraulic System

Pump	
Type	Two variable displacement pumps + One gear pump
Max. discharge flow	2 x 42.3 US gph {2 x 160 L/min} 1 x 5.3 US gph {1 x 20 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	4,060 psi {28.0 MPa}
Control circuit	725 psi {5.0 MPa}
Pilot control pump	Gear type
Main control valves	8-spool
Oil cooler	Air cooled type

Hydraulic P.T.O

Specification	Output	Maximum Pressure PSI (MPa)	Max Flow US GPM, (lpm)	
			2,000 rpm	1,000 rpm
N&B		4,970 (34.3)	116.2 (320)	7.9 (80)
Rotary		2,990 (20.6)	10.8 (41)	5.3 (20)

Swing System

Swing motor	Axial piston motor
Parking brake	Oil disc brake, hydraulic operated automatically
Swing speed	12.3 rpm {12.3 min ⁻¹ }
Swing torque	38,790 lb-ft {52.6 kN} (SAE)
Tail swing radius	8' 4" (2,550 mm)
Min. front swing radius	9' 0" (2,740 mm)

Bucket Selection Chart

Bucket Duty	Capacity (SAE) Cubic Yard (m ³)	Width Inches (m)	Bucket Weight lb (kg)	Arm ft-in (m) 10' 2" (3.1)
General	.45 (.344)	20 (.508)	1,045 (474)	H
	.58 (.443)	24 (.609)	1,120 (508)	H
	.77 (.589)	30 (.762)	1,280 (581)	M
	.97 (.742)	36 (.914)	1,395 (633)	L
	1.16 (.887)	42 (1.067)	1,550 (703)	X
Heavy Duty	1.36 (1.040)	48 (1.219)	1,710 (776)	X
	.45 (.344)	20 (.508)	1,120 (508)	H
	.58 (.443)	24 (.609)	1,200 (544)	H
	.77 (.589)	30 (.762)	1,365 (619)	M
	.97 (.742)	36 (.914)	1,485 (678)	L
Severe Duty	1.16 (.887)	42 (1.067)	1,660 (753)	X
	.56 (.428)	26 (.660)	1,405 (637)	H
	.69 (.528)	31 (.787)	1,540 (698)	M
	.85 (.650)	37 (.940)	1,740 (789)	L

H - Used with material weight up to 3,000 lbs/cu yd (1,780 kg/m³)
L - Used with material weight up to 2,000 lbs/cu yd (1,186 kg/m³)
M - Used with material weight up to 2,500 lbs/cu yd (1,483 kg/m³)
X - Not recommended

Travel System

Travel motors	2 x Axial piston, two speed motors
Parking brakes	Oil disc brake per motors
Travel shoes	49 each side
Travel speed	2.9/1.7 mph {4.7/2.8 km/h}
Drawbar pulling force	51,900 lbs {231kN} (SAE J 1309)
Gradeability	70 % {35 deg}
Ground clearance	1' 5" {460 mm}

Cab & Control

Cab	All-weather, sound-suppressed steel cab mounted on the silicon-sealed suspension mounts and equipped with a heavy, insulated floor mat.
Control	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	2-3.6" {110 mm} x 3' 8" {1,156 mm}
Arm cylinder	1-4.1" {125 mm} x 4' 2" {1,285 mm}
Bucket cylinder	1-3.6" {110 mm} x 3' 4" {1,025 mm}

Refilling Capacities & Lubrications

Fuel tank	74.0 US gal {280 L}
Cooling system	5.0 US gal {19 L}
Engine oil	5.4 US gal {20.5 L}
Travel reduction gear	2x1.3 US gal {2x5.0 L}
Swing reduction gear	0.7 US gal {2.7 L}
Hydraulic oil tank	32.2 US gal {122 L} tank oil level 52.8 US gal {200 L} hydraulic system
DEF/AdBlue tank	9.0 US gal {33.9 L}

Digging Force

Arm length		Standard 10' 2" (3.10 m)	
Bucket digging force	SAE	22,700 {101}/25,000 {111}	
	ISO	25,600 {114}/28,300 {126}	
Arm crowding force	SAE	15,600 {69.4}/17,200 {76.4}	
	ISO	16,100 {71.7}/17,700 {78.8}	

Working Ranges

		Unit: ft-in (m)
Boom	17' 1" (5.20 m)	
Arm length	10' 2" (3.10 m)	
a- Max. digging reach	31' 1" (9.49)	
b- Max. digging reach at ground level	30' 6" (9.32)	
c- Max. digging depth	21' 3" (6.49)	
d- Max. digging height	32' 1" (9.77)	
e- Max. dumping clearance	23' 3" (7.10)	
f- Min. dumping clearance	7' 1" (2.15)	
g- Max. vertical wall digging depth	19' 6" (5.95)	
h- Min. swing radius	9' 0" (2.74)	
i- Horizontal digging stroke at ground level	17' 7" (5.35)	
j- Digging depth for 8' (2.4 m) flat bottom	20' 7" (6.31)	
Bucket capacity (SAE heaped)	0.82 cu yd (0.63 m ³)	

Dimensions

		Unit: ft-in (mm)
Arm length	10' 2" (3.10 m)	
A Overall length	28' 6" (8,710)	
B Overall height (to top of boom)	10' 1" (3,080)	
C Overall width**	8' 5" (2,590)	
D Overall height (to top of cab)	10' 0" (3,060)	
E Ground clearance of rear end*	3' 4" (1,050)	
F Ground clearance*	1' 5" (460)	
G Tail swing radius	8' 4" (2,550)	
G' Distance from center of swing to rear end	8' 4" (2,550)	
H Tumbler distance	10' 8" (3,280)	
I Overall length of crawler	13' 4" (4,070)	
J Track gauge	6' 5" (1,990)	
K Shoe Width	24" (600)	
L Overall width of upperstructure	8' 5" (2,590)	

* Without including height of shoe lug
** Shoe width : 2' 0" (600mm)

Operating Weight & Ground Pressure

In standard trim, with standard boom, 10' 2" {3.10m} arm, and 0.82 cu yd {0.63 m³} SAE heaped bucket

Shaped		Triple grouser shoes (even height)		
Shoe width	ft-in (mm)	24" (600)	28" (700)	31.1" (790)
Overall width of crawler	ft-in (mm)	8' 5" (2,590)	8' 10" (2,690)	9' 1" (2,780)
Ground pressure	psi (kPa)	5.8 (40)	5.1 (35)	4.6 (32)
Operating weight	lbs (kg)	38,800 (17,600)	39,700 (18,000)	40,100 (18,200)

STANDARD EQUIPMENT

ENGINE
Engine, HINO J05EUM-KSST, Diesel engine with turbocharger and intercooler, Tier IV final certified

Automatic engine deceleration
Two 12V, 92Ah 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
Swing rebound prevention system
Independent travel system
Two-speed travel with automatic down shift
Sealed & lubricated track links
24" (600 mm) track shoes
Grease-type track adjusters
Automatic swing brake
Lower track guides

HYDRAULIC

Auto warm-up system
Hydraulic oil cooler

MIRRORS & LIGHTS

Three rearview mirrors plus rear-view camera
Three front working lights (two for boom and one for right storage box)
Swing flashers and rear work lights

CAB & CONTROL

ROPS/FOPS 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
Luggage tray
Large cup holder
Detachable two-piece floor mat
7-way adjustable suspension seat
Headrest
Handrails
Heater and defroster
Intermittent windshield wiper with double-spray washer
Skylight
FOPS top guard level II

Tinted safety glass

Pull-type front window and removable lower front window
Easy to read multi-display monitor
Automatic climate control
Emergency escape hammer
Bluetooth installed AM/FM stereo radio
Travel alarm
Attachment pressure release switch
Manual DPF regeneration switch
12V power outlet
Two-way control pattern changer

OPTIONAL EQUIPMENT

Wide range of shoes
Boom & arm load (lock) holding valve
Additional hydraulic circuits
Air suspension seat
Two cab lights
Right side camera
Rain-visor
Heavy Counterweight
28" (700 mm) and 31.1" (790mm) track shoes
Vandal Guards available via KOBECO Parts department

