

SK85MSR

- Bucket Capacity:
0.11 - 0.35 m³ ISO heaped
- Engine Power:
42 kW / 2,000 min⁻¹ (ISO14396)
- Operating Weight:
8,270 kg



Complies with the latest exhaust emission regulations



US
Tier IV



EU (NRMM)
Stage IIIB



Latest Japanese
Regulations

Fuel Consumption Gives You the Competitive Edge

KOBELCO's SR hydraulic excavator has seen a new evolution. KOBELCO has installed its full range of fuel-saving technologies in this SR model, resulting in unmatched low fuel consumption that heads the class in engine-driven hydraulic excavators. Outstanding performance in tight spaces, on-site safety, less stress for the operator... KOBELCO was first to understand these demands and in response developed SR, short rear swing, excavators. The acclaimed SR concept went on to be adopted throughout the industry. But KOBELCO didn't stop there. Aware of changing needs among machine users in a changing social environment, KOBELCO has taken the SR concept through a further evolution with value-added features. KOBELCO's unique design for engine cooling, the iNDR system, cuts noise to extremely low levels. The newest KOBELCO approach to low fuel consumption, NEXT-3E, now also applies to short rear swing models, to maximize work volumes while saving on fuel. And the new ECO-mode in the SK85MSR creates even greater savings on fuel to turn SR models into exceptional high-earning machines. KOBELCO continues to lead the field in short rear swing excavators.



Five Ways the SK85MSR Scores:

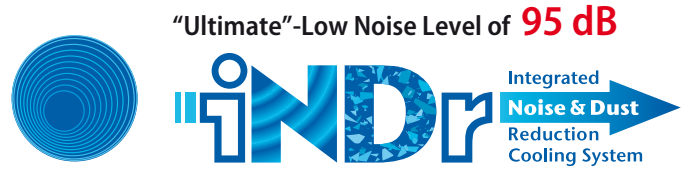
- Low Noise: iNDr
- More Work with Less Fuel!
- Efficient Performance!
- Fast, Accurate and Low-Cost Maintenance
- A Working Environment that Helps Operator Concentrate on the Job



The Revolutionary Integrated Noise and Dust Reduction Cooling System

iNDr

KOBELCO's exclusive iNDr Cooling System delivers amazingly quiet operation.



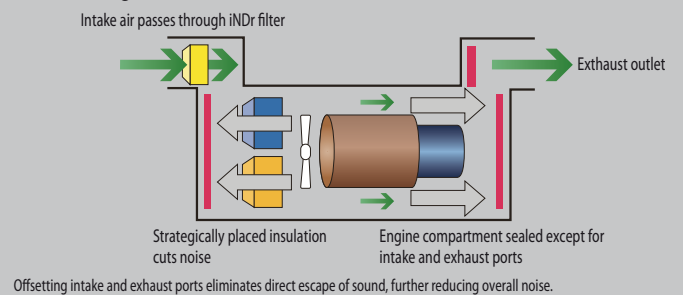
"Ultimate"-Low Noise Level of **95 dB**



"Ultimate Low Noise" Design Minimizes Sound Leakage

KOBELCO's unique iNDr system achieves exceptional results preventing engine and cooling fan noise escaping the engine compartment. This "Ultimate Low Noise" machine cuts noise to 95 dB (A) far surpassing legal requirements.

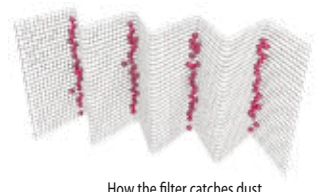
Structural Diagram



Eliminating Dust Optimizes Cooling Performance

The high-density 60-mesh filter* removes dust from the air intake, which prevents clogging of the cooling system and air cleaner, and maintains the engine at peak performance. Its wave form concentrates dust in the grooves, keeping a clear passage for a smooth flow of air.

*"60-mesh" means 60 holes per square inch.



More Work with Less Fuel!



Fuel Consumption and Work Volume

The new hydraulic system and an additional ECO-mode have cut fuel consumption by up to 31%.

H-mode (vs previous SK80MSR in H-mode)

Fuel consumption (L/h)

5 % decrease

Work volume per liter of fuel (m³/L)

11 % increase

S-mode (vs previous SK80MSR in H-mode)

Fuel consumption (L/h)

11 % decrease

Work volume per liter of fuel (m³/L)

17 % increase

ECO-mode (vs previous SK80MSR in S-mode)

Great leap forward in energy-saving performance

Fuel consumption (L/h)

31 % decrease

Work volume per liter of fuel (m³/L)

38 % increase

* Figures for fuel consumption: fuel consumed per hour (L/h) compared with previous model, in KOBELCO tests.

* Figures for work volume: digging volume per liter of fuel (m³/L) compared with previous model, in KOBELCO tests.

Significant Extension of Continuous Working Hours

The combination of a large-capacity fuel tank and excellent fuel efficiency delivers an impressive increase in the length of continuous working.



Fuel tank capacity:
120 L

ECO-mode

Work modes for a closer match to the job in hand. An addition to the existing H-mode and S-mode, the new ECO-mode saves even more energy.



H-mode: For heavy duty when a higher performance level is required.

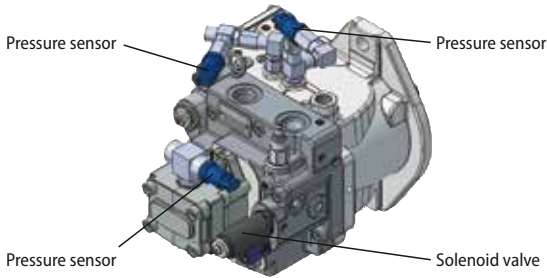
S-mode: For normal operations with lower fuel consumption.

ECO-mode: Puts priority on low fuel consumption and economic performance.



**NEXT-3E Technology
New Hydraulic System**

KOBELCO's hydraulic circuit analysis is combined with the use of new, high-efficiency pumps in a three-pump electro-hydraulic actuator control system that replaces the conventional mechanical system. It all adds up to a hydraulic system that delivers the best outcome: top-class work performance on less fuel.



**NEXT-3E Technology
Next-Generation Electronic Engine Control**

The new electronic-control common-rail engine features high-pressure fuel injection and multiple injection with improved precision. It is fitted with an EGR cooler, and DOC which deliver high output from optimized combustion and greatly reduce PM and NOx emissions.

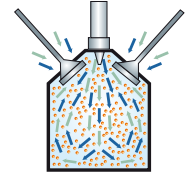


Tier 4-compliant engine

PM emissions cut: Limits creation of particulate matter (which results from incomplete combustion of fuel)

■ **Common rail system**

High-pressure injection atomizes the fuel, and injection timing is more precise, improving combustion efficiency.



■ **DOC (Diesel Oxidation Catalyst)**

The DOC contains a flow-through filter (FTF) that traps the soot component of the emissions, and through a continuous redox reaction process turns it into less harmful carbon dioxide and water. The FTF does not clog up and is maintenance-free.



NOx emissions cut: Reduces nitrous oxides

■ **EGR cooler**

While ensuring sufficient oxygen for combustion, cooled emission gases are mixed with the air intake and re-circulated into the engine. The lowered oxygen temperature lowers the combustion temperature and increases combustion efficiency.



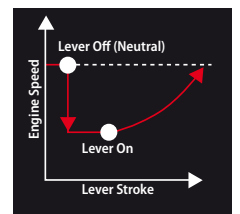
**NEXT-3E Technology
Total Tuning Through Advanced ITCS Control**

The next-generation engine control is governed by a new version of ITCS, which responds quickly to sudden changes in hydraulic load to ensure that the engine runs as efficiently as possible with a minimum of wasted output.

ITCS (Intelligent Total Control System) is an advanced, computerized system that provides comprehensive control of all machine functions.

**Automatic Acceleration/Deceleration Function
Reduces Engine Speed**

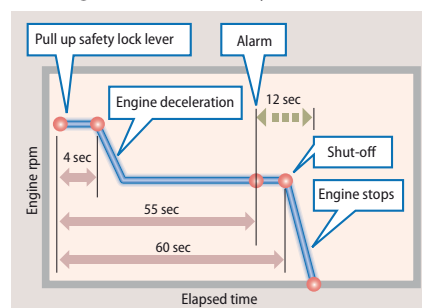
Engine speed is automatically reduced when the control lever is placed in neutral, effectively saving fuel and reducing noise and exhaust emissions. The engine quickly returns to the previous speed when the lever is moved out of neutral.



Auto Idle Stop Provided as Standard Equipment

This function saves fuel and cuts emissions by shutting down the engine automatically when the safety lock lever is pulled

up. It also stops the hour meter, which helps to retain the machine's asset value.



Efficient Performance!

Top-Class Powerful Digging

For more efficient work performance.

Max. arm crowding force: **35.2 kN {3.5 tf}**
 Max. bucket digging force: **52.7 kN {5.4 tf}**

Powerful Travel, Powerful Steering

A new type of travel motor boosts travel torque by 6%, and lighter machine weight improves steering performance by 10% over the previous model, for better maneuverability and crisper turns.

Travel torque: **6% increase**
 Drawbar pulling force: **76.8 kN {7.8 tf}**



Dozer Simultaneous Operations

With separate pumps for travel motor and dozer there's no hydraulic interference when traveling at top speed. Dozer operation is fast, rugged and stress-free.

Dozer Raising/Lowering Margin Increased

Dozer can be raised higher and powered more to make dozer work more productive.

500 mm (25 mm more than SK80MSR)



405 mm (100 mm more than SK80MSR)

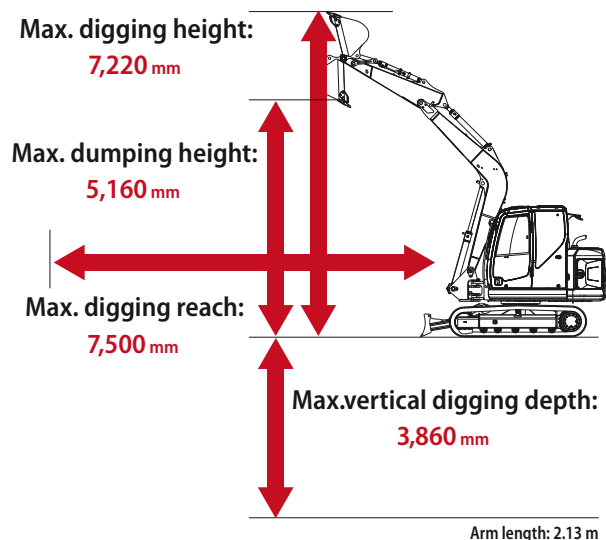
Boom Swing Mechanism

The boom can swing up to 62° to the left and 67° to the right, making it possible to perform side-digging parallel to the crawlers without moving the machine.



Excellent Working Ranges

Working ranges further extended, with significant increases in maximum working radius and maximum digging depth.



Great Swing Power, Short Cycle Times

Powerful swing power and top-class swing speed.

Swing Torque: **19.1 kN·m**
 Swing speed: **11.5 min⁻¹**

Requires 4.0 m of Working Space

With a 180° working radius of just 3,880 mm, SK85MSR only needs of space to dig, swing, and load continuously.



Working width equals the sum of the minimum front swing radius and tail swing radius.

Mild Operating Sound

The iNDR cooling system also helps to keep the machine quiet, even at close quarters. Also, the hydraulic pumps have been redesigned to produce a more pleasant sound during pressure relief.

Meets EMC (Electromagnetic Compatibility) Standards in Europe

Electrical shielding ensured that the machines clear all European standards and neither cause or are affected by electromagnetic interference.

Fast, Accurate and Low-Cost Maintenance

Comfortable "On the Ground" Maintenance

All of components that require regular maintenance are laid out for easy access. Newly designed, the bonnet opens widely and at lower level. And in a new layout, equipment that requires maintenance is positioned in easily accessible locations. The servicing jobs can be completed from ground or in the cab.

Easy access to cooling units

Left side

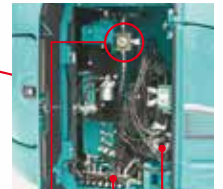


Radiator
Battery

Tool box



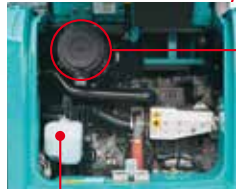
Easy access to main control valves



N&B selector (optional)
Solenoid valve
Multi control valve (optional)

Easy access to engine

Center



Radiator reservoir tank



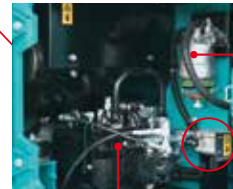
Double element air cleaner

Easy access to pump & filters

Right side



Refueling pump



Large fuel filter (with built-in water separator)

Engine oil filter

Hydraulic oil pump

Fast Maintenance



Fuel tank equipped with bottom flange and large drain valve.



Hour meter can be checked while standing on the ground.



Easy-access fuse box. More finely differentiated fuses make it easier to locate malfunctions.



Detachable two-piece floor mat with handles for easy removal. A floor drain located under floor mat.

Easy Cleaning



Internal and external air conditioner filters can be easily removed without tools for cleaning.



Special crawler frame designed is easily cleaned of mud.

iNDr Means Easy Maintenance

iNDr Filter Blocks Out Dust

Outside air goes directly from the intake duct through the iNDr filter for dust removal. The filter features a 60-mesh screen, which means it has sixty holes per inch both vertically and horizontally, with a wide front surface area according structure that resist clogging.



Visual Checking and Easy Cleaning

When checking and cleaning the cooling system, one must deal with several different components like the radiator, oil cooler and intercooler, which all must be handled in different ways. But with the iNDr filter, there's just one filter in one place. If it looks dirty during start-up inspection, it can be cleaned easily and quickly.



Highly Reliable Construction

The boom arm, and swing bracket all have large cross-section areas that provide added strength to the attachment.



Boom:
Guard plate for boom cylinder



Swing bracket:
Large, thick cast-iron swing bracket

Long-Interval Maintenance

Long-life hydraulic oil reduces cost and labor.



Super-Fine Filter

High-performance, super-fine filter has a 1,000 hour replacement cycle.



Double-Element Air Cleaner

The high-performance air cleaner has twice the capacity and service life of previous air cleaners and is installed behind the iNDr filter for even more effective cleaning performance.

KOMEXS

KOMEXS allows you to use the Internet to manage information from your office for machines operating in all areas. This provides a wide range of support for your business operations.

Direct Access to Operational Status

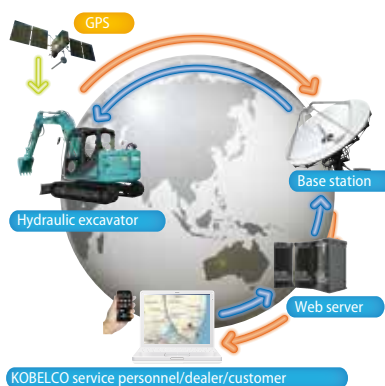
- Location Data
- Operating Hours
- Fuel Consumption Data
- Graph of Work Content
- Graph of Machine Duty Cycles

Maintenance Data and Warning Alerts

- Machine Maintenance Data

Security System

- Engine Start Alarm
- Area Alarm



Monitor Display with Essential Information for Accurate Maintenance Checks

- Displays only the maintenance information that's needed, when it's needed.
- Self-diagnostic function that provides early-warning detection and display of electrical system malfunctions.
- Record function of previous breakdowns including irregular and transient malfunction.



Choice of 16 Languages for Monitoring Display

With messages including those requiring urgent action displayed in the local language, users in all parts of the world can work with greater peace of mind.

A Working Environment that Helps the Operator Conce

Big Cab



The "Big cab" provides a roomy operating space with plenty of legroom, and the door opens wide for entry and exit. As well as giving a wide, open view to the front, the cab has increased window areas on both sides and to the rear, for improved visibility in all directions.

Excellent Visibility

Taking out the right-side cab support to make a single window has improved visibility to the right.



Wide-Access Cab Aids Smooth Entry and Exit

Easy entry and exit assured with wider cab entry and safety lock lever integrated with mounting for control levers.



Comfortable Operating Environment



Double slide seat



Reclining seat



Powerful automatic air conditioner



Two-speaker FM/AM radio with station select



One-touch lock release simplifies opening and closing front window



Travel speed select switch

Concentrate on the Job at Hand!



ROPS Cab

The newly developed, ROPS (Roll-Over-Protective Structure)-compliant cab clears ISO standards (ISO-12117-2: 2008) and ensures greater safety for the operator should the machine tip over.



To fit vandalism guards, please contact your KOBELCO dealer. (Mounting brackets for vandalism guards)



TOP guard (FOPS guard)

Safety Features That Take Various Scenarios into Consideration



Spacious luggage tray



Large cup holder



Firewall separates the pump compartment from the engine



Retractable seatbelt requires no manual adjustment

Always Easy to Read! New Information Display



Large gauges with large numbers and letters and glare-reducing visors are always easy to read regardless of working conditions.



Hammer for emergency exit

- Hand rails meet European standards
- Thermal guard prevents contact with hot components during engine inspections
- Travel alarm



Engine

Model	ISUZU AP-4LE2X
Type	Direct injection, water-cooled, 4-cycle diesel engine With turbocharger, intercooler (Complies with EU stage IIIB and US TIER IV)
No. of cylinders	4
Bore and stroke	85 mm x 96 mm
Displacement	2.179 L
Rated power output	42 kW /2,000 min ⁻¹ (ISO14396: Without fan)
Max. torque	211-N m/1,800 min ⁻¹ (ISO14396: Without fan)



Hydraulic System

Pump	
Type	Two variable displacement pumps + one gear pump
Max. discharge flow	2 x 66 L/min, 1 x 46 L/min
Relief valve setting	
Boom, arm and bucket	29.4 MPa {300 kgf/cm ² }
Travel circuit	29.4 MPa {300 kgf/cm ² }
Dozer blade circuit	22.1 MPa {225 kgf/cm ² }
Swing circuit	24.5 MPa {250 kgf/cm ² }
Control circuit	5.0 MPa {50 kgf/cm ² }
Pilot control pump	Gear type
Main control valves	13-spool
Oil cooler	Air cooled type



Swing System

Swing motor	Axial piston motor
Brake	Hydraulic; locking automatically when the swing control lever is in neutral position
Parking brake	Oil disc brake, hydraulic operated automatically
Swing speed	11.5 min ⁻¹ {rpm}
Tail swing radius	1,650 mm
Min. front swing radius	2,780 mm



Travel System

Travel motors	2x axial-piston, two-step motors
Travel brakes	Hydraulic brake per motor
Parking brakes	Oil disc brake per motor
Travel shoes	39 each side
Travel speed	5.3/2.6 km/h
Drawbar pulling force	76.8 kN {7,830 kgf} (ISO 7464)
Gradeability	70 % {35°}



Attachments

Backhoe bucket and arm combination

Use			Backhoe bucket					
			Standard	Narrow			Wide	
Bucket capacity	ISO heaped	m ³	0.28	0.11	0.14	0.18	0.22	0.35
	Struck	m ³	0.25	0.09	0.12	0.14	0.18	0.26
Opening width or X-section	With side cutters	mm	750	—	480	550	650	850
	Without side cutters	mm	680	400	410	480	580	780
No. of bucket teeth			4	3	3	3	4	4
Bucket weight		kg	210	190	160	170	190	—
Combinations	1.87 m arm		⊙	○	○	○	○	△
	2.13 m arm		△	○	○	○	⊙	—

⊙ Standard ○ Recommended △ Loading only



Cab & Control

Cab	All-weather, sound-suppressed steel cab mounted on the silicon-sealed viscous 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 and Bucket

Boom cylinder	110 mm x 916 mm
Arm cylinder	95 mm x 839 mm
Bucket cylinder	80 mm x 762 mm



Boom Swing Mechanism

Control	Foot pedal
Boom swing angle	62° to the left, 67° to the right
Swing cylinder	105 mm x 586 mm



Dozer Blade

Dozer cylinder	145 mm x 165 mm
Dimension	2,300 mm (width) x 455 mm (height)
Working range	500 mm (up) x 405 mm (down)



Refilling Capacities & Lubrications

Fuel tank	120 L
Cooling system	8.5 L
Engine oil	11 L
Travel reduction gear	2 x 1.35 L
Swing reduction gear	1.5 L
Hydraulic oil tank	36 L tank oil level 85 L hydraulic system



Working Ranges

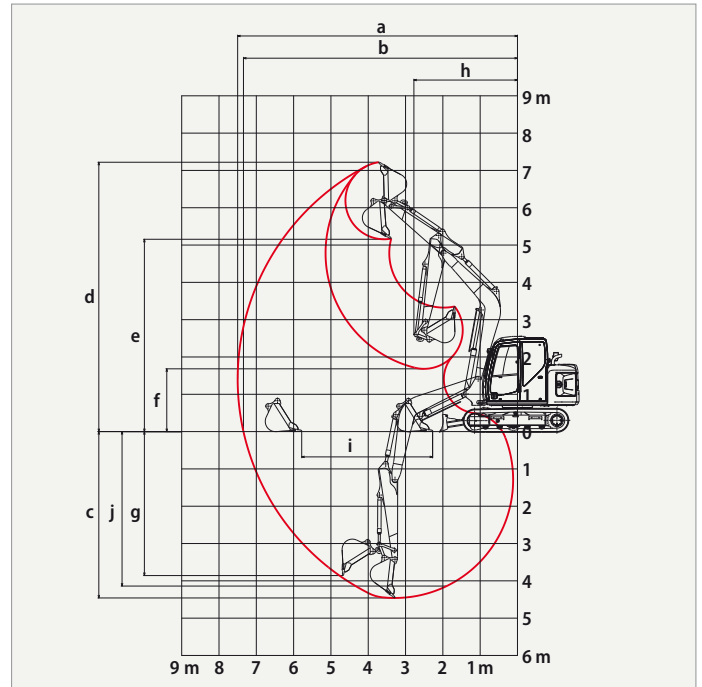
Unit: m

Range	Boom	
	1.87 m	2.13 m
a - Max. digging reach	7.24	7.50
b - Max. digging reach at ground level	7.07	7.34
c - Max. digging depth	4.20	4.46
d - Max. digging height	7.00	7.22
e - Max. dumping clearance	4.94	5.16
f - Min. dumping clearance	1.93	1.68
g - Max. vertical wall digging depth	3.50	3.86
h - Min. swing radius	2.70	2.78
i - Horizontal digging stroke at ground level	3.11	3.51
j - Digging depth for 2.4 m (8') flat bottom	3.84	4.14
Bucket capacity ISO heaped m ³	0.28	0.22

Digging Force (ISO 6015)

Unit: kN (kgf)

Arm length	1.87 m	2.13 m
Bucket digging force	52.7 {5,370}	52.7 {5,370}
Arm crowding force	37.1 {3,790}	35.2 {3,450}



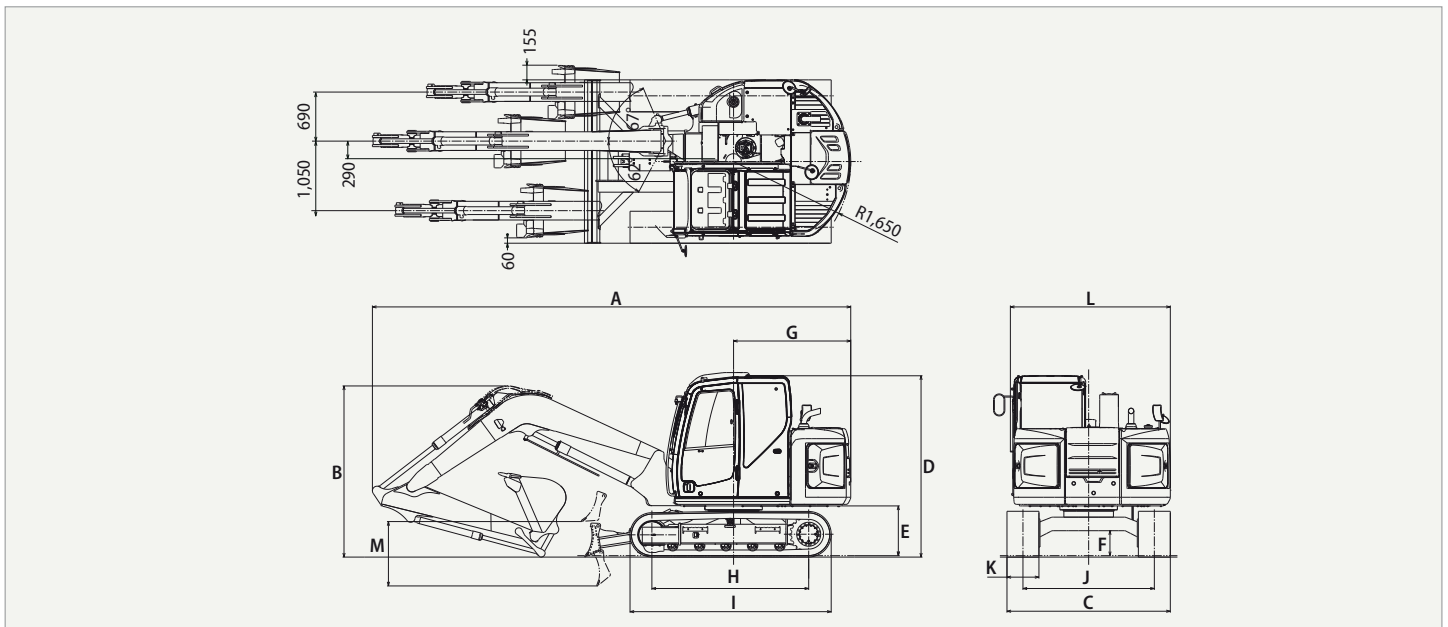
Dimensions

Arm length	1.87 m	2.13 m
A Overall length	6,740	6,760
B Overall height (to top of boom)	2,410	
C Overall width of crawler (narrow spec.)	2,300 (2,150)	
D Overall height (to top of cab)	2,600	
E Ground clearance of rear end*	700	
F Ground clearance*	350	

G Tail swing radius	1,650
H Tumbler distance	2,210
I Overall length of crawler	2,830
J Track gauge	1,850
K Shoe width	450/600
L Overall width of upperstructure	2,250
M Dozer blade (up/down)	500 (29°)/405

* Without including height of shoe lug

Unit: mm



Operating Weight & Ground Pressure

In standard trim, with standard boom, 2.13 m arm, and 0.22 m³ ISO bucket

Shaped		Triple grouser shoes (even height)	
		450	600
Shoe width	mm	450	600
Overall width of crawler	mm	2,300	2,450
Ground pressure	kPa	37.1	28.6
Operating weight	kg	8,270	8,500

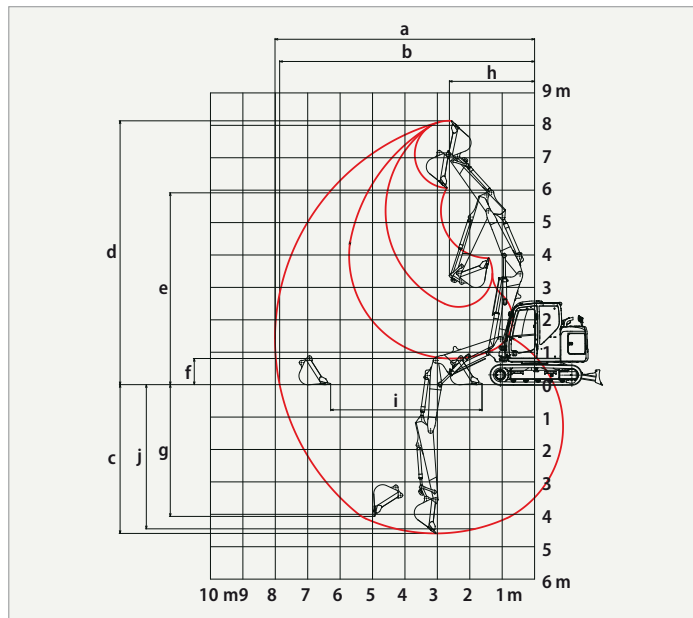
Two Piece Boom Specifications



Working Ranges

Unit: m

Boom	Arm	Two piece boom	
		1.87 m	2.13 m
Range			
a- Max. digging reach		7.75	8.01
b- Max. digging reach at ground level		7.60	7.87
c - Max. digging depth		4.33	4.59
d- Max. digging height		7.90	8.14
e- Max. dumping clearance		5.82	6.07
f - Min. dumping clearance		1.07	0.805
g- Max. vertical wall digging depth		3.78	4.06
h- Min. swing radius		2.55	2.66
i - Horizontal digging stroke at ground level		4.11	4.67
j - Digging depth for 2.4 m (8') flat bottom		4.18	4.45
Bucket capacity ISO heaped m ³		0.28	0.22



Digging Force (ISO 6015)

Unit: kN

Arm length	1.87 m	2.13 m
Bucket digging force	52.7	52.7
Arm crowding force	37.1	35.2



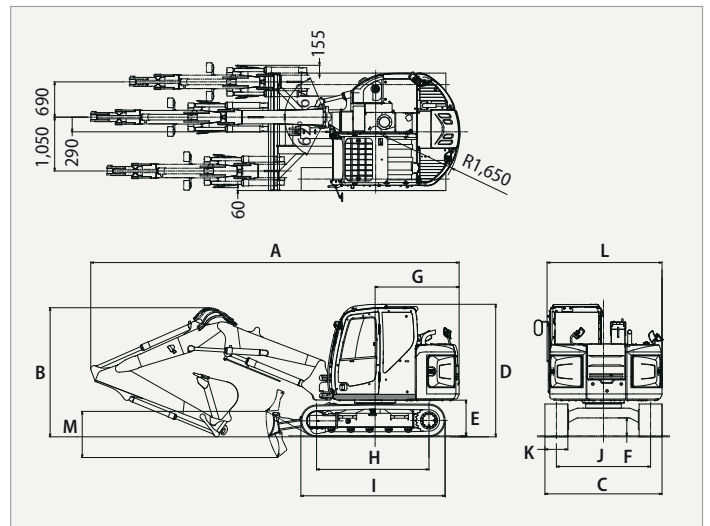
Dimensions

Unit: mm

Boom	Two Piece Boom	
Arm length	1.87 m	2.13 m
A Overall length	7,230	7,240
B Overall height (to top of boom)	2,400	2,540
C Overall width of crawler		2,300
D Overall height (to top of cab)		2,600
E Ground clearance of rear end*		*700
F Ground clearance*		*350
G Tail swing radius		1,650
H Tumbler distance		2,210
I Overall length of crawler		2,830
J Track gauge		1,850
K Shoe width		450
L Overall width of upperstructure		2,250
M Dozer blade (up/down)		500/405

* Without including height of shoe lug

Unit: mm

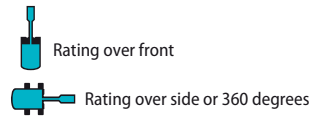
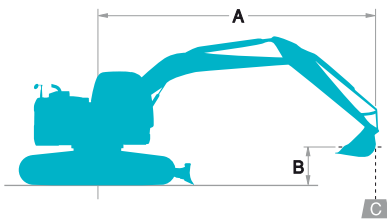


Operating Weight

In standard trim, with two piece boom, 2.13 m arm, and 0.22 m³ ISO bucket

Shaped	Triple grouser shoes (even height)	
Shoe width	mm	450
Overall width of crawler	mm	2,300
Operating weight	kg	8,590





A – Reach from swing centerline for bucket hook
 B – Bucket hook height above/below ground
 C – Lifting capacities in ton
 * Max. discharge pressure: 29.4 MPa {300 kgf/cm²}

Mono Boom Specifications

SK85MSR		Arm: 1.87 m		Bucket 0.28 m ³ ISO heaped 210 kg		Shoe: 450						
A \ B		1.5 m		3.0 m		4.5 m		6.0 m		At Max. Reach		Radius
		Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	
4.5 m	ton					*1.70	1.52			*1.05	*1.05	5.26 m
3.0 m	ton					1.67	1.45	0.99	0.86	0.99	0.85	6.02 m
1.5 m	ton			2.93	2.42	1.53	1.31	0.95	0.81	0.88	0.75	6.26 m
G.L.	ton			2.72	2.24	1.42	1.21	0.91	0.77	0.89	0.76	6.06 m
-1.5 m	ton	*3.71	*3.71	2.73	2.24	1.40	1.18			1.07	0.91	5.36 m
-3.0 m	ton			*2.79	2.35					1.91	1.61	3.80 m

SK85MSR		Arm: 2.13 m		Bucket 0.22 m ³ ISO heaped 190 kg		Shoe: 450 mm						
A \ B		1.5 m		3.0 m		4.5 m		6.0 m		At Max. Reach		Radius
		Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	
6.0 m	ton									*1.07	*1.07	4.09 m
4.5 m	ton					*1.57	*1.57			*0.89	*0.89	5.60 m
3.0 m	ton					1.72	1.50	1.03	0.90	*0.88	0.81	6.31 m
1.5 m	ton			3.05	2.54	1.59	1.36	0.98	0.85	0.84	0.73	6.54 m
G.L.	ton	*1.80	*1.80	2.79	2.30	1.47	1.25	0.94	0.80	0.85	0.73	6.35 m
-1.5 m	ton	*3.26	*3.26	2.77	2.28	1.43	1.21			1.00	0.86	5.70 m
-3.0 m	ton	*4.83	*4.83	2.86	2.36	1.47	1.26			1.58	1.35	4.30 m

SK85MSR		Arm: 1.87 m		Bucket 0.28 m ³ ISO heaped 210 kg		Shoe: 450 mm		Add. Counterweight: 300 kg				
A \ B		1.5 m		3.0 m		4.5 m		6.0 m		At Max. Reach		Radius
		Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	
4.5 m	ton					*1.70	1.68			*1.05	*1.05	5.26 m
3.0 m	ton					1.85	1.60	1.19	1.03	*1.06	0.96	6.02 m
1.5 m	ton			3.63	2.98	1.82	1.57	1.13	0.98	0.99	0.86	6.26 m
G.L.	ton			3.43	2.81	1.71	1.46	1.03	0.88	1.01	0.87	6.06 m
-1.5 m	ton	*3.71	*3.71	3.24	2.66	1.69	1.43			1.21	1.04	5.36 m
-3.0 m	ton			*2.99	2.95					*2.06	1.81	3.80 m

SK85MSR		Arm: 2.13 m		Bucket 0.22 m ³ ISO heaped 190 kg		Shoe: 450 mm		Add. Counterweight: 400 kg				
A \ B		1.5 m		3.0 m		4.5 m		6.0 m		At Max. Reach		Radius
		Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	
6.0 m	ton									*1.07	*1.07	4.09 m
4.5 m	ton					*1.57	*1.57			*0.89	*0.89	5.60 m
3.0 m	ton					*1.96	1.77	1.28	1.12	*0.88	*0.88	6.31 m
1.5 m	ton			3.93	3.25	1.83	1.58	1.22	1.06	*0.98	0.87	6.54 m
G.L.	ton	*1.80	*1.80	3.43	2.83	1.84	1.57	1.17	1.01	1.01	0.88	6.35 m
1.5 m	ton	*3.26	*3.26	3.64	2.99	1.79	1.53			1.18	1.02	5.70 m
3.0 m	ton	*4.76	*4.76	*3.45	2.90	1.85	1.58			1.84	1.58	4.30 m

Two Piece Boom Specifications

SK85MSR		Arm: 1.87 m		Bucket 0.28 m ³ ISO heaped 210 kg		Shoe: 450 mm				
A \ B		3.0 m		4.5 m		6.0 m		At Max. Reach		Radius
		Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	
6.0 m	ton			*1.47	*1.47			*1.46	*1.46	4.51 m
4.5 m	ton			1.73	1.49			1.00	0.85	5.89 m
3.0 m	ton	3.25	2.70	1.59	1.35	0.93	0.78	0.77	0.64	6.56 m
1.5 m	ton			1.38	1.15	0.85	0.71	0.68	0.56	6.78 m
G.L.	ton	*2.32	1.93	1.25	1.03	0.79	0.65	0.68	0.55	6.60 m
-1.5 m	ton	2.46	1.97	1.23	1.01			0.79	0.65	5.98 m
-3.0 m	ton	*1.47	*1.47	*1.07	*1.07			*0.97	*0.97	4.69 m

SK85MSR		Arm: 2.13 m		Bucket 0.22 m ³ ISO heaped 190 kg		Shoe: 450 mm				
A \ B		3.0 m		4.5 m		6.0 m		At Max. Reach		Radius
		Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	
6.0 m	ton			*1.57	1.52			*1.23	*1.23	4.95 m
4.5 m	ton			1.76	1.52	0.99	0.84	0.91	0.77	6.22 m
3.0 m	ton	*2.99	2.80	1.62	1.38	0.94	0.79	0.71	0.59	6.85 m
1.5 m	ton	*2.19	2.11	1.40	1.17	0.86	0.71	0.63	0.51	7.06 m
G.L.	ton	*2.29	1.92	1.25	1.03	0.79	0.65	0.62	0.51	6.89 m
-1.5 m	ton	2.42	1.93	1.21	0.99	0.77	0.63	0.72	0.59	6.30 m
-3.0 m	ton	*1.91	*1.91	1.27	1.04			*1.01	0.86	5.12 m

SK85MSR		Arm: 1.87 m		Bucket 0.28 m ³ ISO heaped 210 kg		Shoe: 450 mm		Add. Counterweight: 300 kg			
A \ B		3.0 m		4.5 m		6.0 m		At Max. Reach		Radius	
		Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees		
6.0 m	ton			*1.47	*1.47			*1.46	*1.46	4.51 m	
4.5 m	ton			1.91	1.64			1.13	0.97	5.89 m	
3.0 m	ton	3.57	2.97	1.76	1.50	1.05	0.89	0.88	0.74	6.56 m	
1.5 m	ton			1.56	1.31	0.97	0.82	0.78	0.65	6.78 m	
G.L.	ton	*2.32	2.20	1.43	1.18	0.91	0.76	0.78	0.65	6.60 m	
-1.5 m	ton	2.78	2.24	1.40	1.16			0.91	0.76	5.98 m	
-3.0 m	ton	*1.47	*1.47	*1.07	*1.07			*0.97	*0.97	4.69 m	

SK85MSR		Arm: 2.13 m		Bucket 0.22 m ³ ISO heaped 190 kg		Shoe: 450 mm		Add. Counterweight: 300 kg			
A \ B		3.0 m		4.5 m		6.0 m		At Max. Reach		Radius	
		Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees	Rating over front	Rating over side or 360 degrees		
6.0 m	ton			*1.57	*1.57			*1.23	*1.23	4.95 m	
4.5 m	ton			*1.82	1.67	1.11	0.95	1.03	0.88	6.22 m	
3.0 m	ton	*2.99	*2.99	1.79	1.53	1.06	0.90	0.81	0.68	6.85 m	
1.5 m	ton	*2.19	*2.19	1.58	1.33	0.98	0.82	0.72	0.60	7.06 m	
G.L.	ton	*2.29	2.19	1.43	1.19	0.91	0.76	0.72	0.60	6.89 m	
-1.5 m	ton	2.74	2.20	1.39	1.15	0.89	0.74	0.83	0.69	6.30 m	
-3.0 m	ton	*1.91	*1.91	*1.35	1.20			*1.01	0.99	5.12 m	

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.
- Bucket lift hook is defined as lift point.
- 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.

STANDARD EQUIPMENT

ENGINE

- Engine, ISUZU AP-4LE2X engine with turbocharger and intercooler
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Batteries (2 x12V – 64 Ah)
- Starting motor (24 V- 3.2 kW), 50 A alternator
- Automatic engine shut-down for low engine oil pressure
- Double element air cleaner

CONTROL

- Working mode selector (H-mode, S-mode and ECO-mode)

SWING SYSTEM & TRAVEL SYSTEM

- Swing rebound prevention system
- Two-speed travel with automatic shift down
- Sealed & lubricated track links
- Grease-type track adjusters
- Automatic swing brake
- Dozer blade

MIRRORS & LIGHTS

- Four rear view mirrors
- Three front working lights (boom, guard)

CAB & CONTROL

- Two control levers, pilot-operated
- Horn, electric
- Integrated left-right slide-type control box
- Cab light (interior)
- Coat hook
- Large cup holder
- Detachable two-piece floor mat
- 7-way adjustable suspension seat
- Mechanical suspension seat
- Retractable seatbelt
- Headrest
- Arm rest
- Handrails
- Heater and defroster
- Intermittent windshield wiper with double-spray washer
- Tinted safety glass
- Pull-type front window and removable lower front window
- Easy-to-read multi-display monitor
- Automatic air conditioner
- Emergency escape hammer
- Radio, AM/FM Stereo with speaker
- Refueling pump
- FOPS guard

OPTIONAL EQUIPMENT

- Various optional arms
- Wide range of shoes
- 2 piece boom
- Narrow crawler specification with mono boom
- Front-guard protective structure (may interfere with bucket action)
- Object Handling Kit (boom safety valve + hook)
- Additional hydraulic circuit
- Additional counterweight (+300 kg)
- Add-on type counterweight (+400 kg)
- Cab additional light
- Extra hydraulic piping
- N&B piping, N&B selector
- Step extension
- Belly pan guard
- Skylight
- Air suspension seat

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.

Kobelco Construction Machinery Europe B.V.

Veluwezoom 15
1327 AE Almere
The Netherlands
www.kobelco-europe.com

Inquiries To: