

SK 220 · SK 220LC



ENGINE

Model:	Mitsubishi 6D15-T
Type:	Direct injection, water-cooled, 4-cycle diesel engine with turbocharger
No. of cylinders:	6
Bore and stroke:	113 mm (4.45") x 115 mm (4.53")
Displacement:	6,919 cc (422 cu in)
Rated power output:	163 HP (122 kW) SAE NET at 2,100 rpm (SAE J 1349) 165 PS (121 kW) DIN NET at 2,100 rpm (DIN 6270)



HYDRAULIC SYSTEM

Pump:	Two axial-piston, variable displacement pumps
Max. discharge flow:	2 x 207 liters/min (2 x 54.7 US gal/min)
Max. discharge pressure:	
Boom, arm and bucket:	350 kg/cm ² (4,980 psi)
Power Boost:	370 kg/cm ² (5,260 psi)
Propel circuit:	365 kg/cm ² (5,190 psi)
Swing circuit:	300 kg/cm ² (4,270 psi)
Control circuit:	50 kg/cm ² (710 psi)
Pilot control pump:	Gear type
Control valves:	6-spool
Oil cooler:	Finned tube, forced ventilation



CAB

All-weather, sound-suppressed steel cab, mounted on five silicon-sealed viscous mounts and fitted with an insulated floor mat. Large, tinted safety-glass windows, with pull-type upper front window and removable lower front window. Seven-way adjustable dual-slide seat with wrist-action levers, electric throttle lever, fail-safe lever-lock, and multi-display monitor positioned near eye level. Five-vent, pressurized air conditioner that brings outside air into cab. Intermittent windshield wiper with two-jet washer, light-action cab door, skylight, ashtray, cigarette lighter, cab light (interior), coat hook, and utility box.



ATTACHMENTS



TRAVEL SYSTEM

Drive motors:	Independent, axial-piston, two-step motor for each side
Brakes:	Independent, disk parking brakes for each side
Track shoes:	45 each side (SK220) 48 each side (SK220LC)
Travel speed:	1.0 to 7.0 km/h (0.6 to 4.3 mph)
Drawbar pulling force:	18,400 kg (40,600 lb)
Gradeability:	35° (70 %)
Ground clearance:	465 mm (18.3")



SWING SYSTEM

Brake:	Hydraulic, locking automatically when the swing control lever is in the neutral position
Parking brake:	Hydraulic disk brake
Swing speed:	11.0/4.0 rpm
Tail swing radius:	2,850 mm (9'-4")
Min. front swing radius:	3,900 mm (12'-10")



BOOM, ARM AND BUCKET

Boom cylinders:	135 mm (5.3") x 1,235 mm (4' 1")
Arm cylinder:	140 mm (5.5") x 1,635 mm (5' 4")
Bucket cylinder:	120 mm (4.7") x 1,200 mm (3' 11")



REFILLING CAPACITIES AND LUBRICATION

Fuel tank:	315 liters (83.2 US gal)
Cooling system:	30 liters (7.9 US gal)
Engine oil:	24 liters (6.3 US gal)
Track drives:	2 x 7.5 liters (2 x 2.0 US gal)
Swing drives:	16 liters (4.2 US gal)
Hydraulic oil:	
Tank (oil level) :	160 liters (42.3 US gal)
Hydraulic system:	280 liters (74.0 US gal)

		Backhoe bucket					Slope finishing bucket	Ripper bucket	Ripper
Uses		Normal digging			Loading	Heavy digging	Slope facing	Hard soil digging	Rock digging
Bucket capacity (SAE heaped)	m ³	0.81	1.04	1.16	1.4	1.04	-	0.68	-
	cu yd	1.06	1.36	1.52	1.83	1.37	-	0.89	-
Bucket capacity (CECE heaped)	m ³	0.7	0.9	1.0	1.2	0.9	0.76	0.6	-
	cu yd	0.92	1.18	1.31	1.57	1.18	0.99	0.78	-
Bucket capacity (struck)	m ³	0.59	0.76	0.84	1.0	0.76	-	0.53	-
	cu yd	0.77	0.99	1.1	1.31	0.99	-	0.69	-
Opening width or X-section	With side cutters	mm	1,060	1,280	1,390	-	-	-	-
	in	41.7	50.4	54.7	-	-	-	-	-
	Without side cutters	mm	950	1,180	1,290	1,490	1,170	2,200 x 1,100	1,000
	in	37.4	46.5	50.8	58.7	46.1	86.6 x 43.3	39.4	-
No. of bucket teeth		4	4	5	6	5	-	3	1
Combinations	2.5m (8' 2") arm	○	○	○	△	○	△	○	○
	2.98m (9' 9") arm	○	○	△	×	○	△	○	○
	3.66m (12' 0") arm	○	△	×	×	×	×	×	×

○ Recommended △ Light material × Not recommended



WORKING RANGES

Unit: m (ft-in)

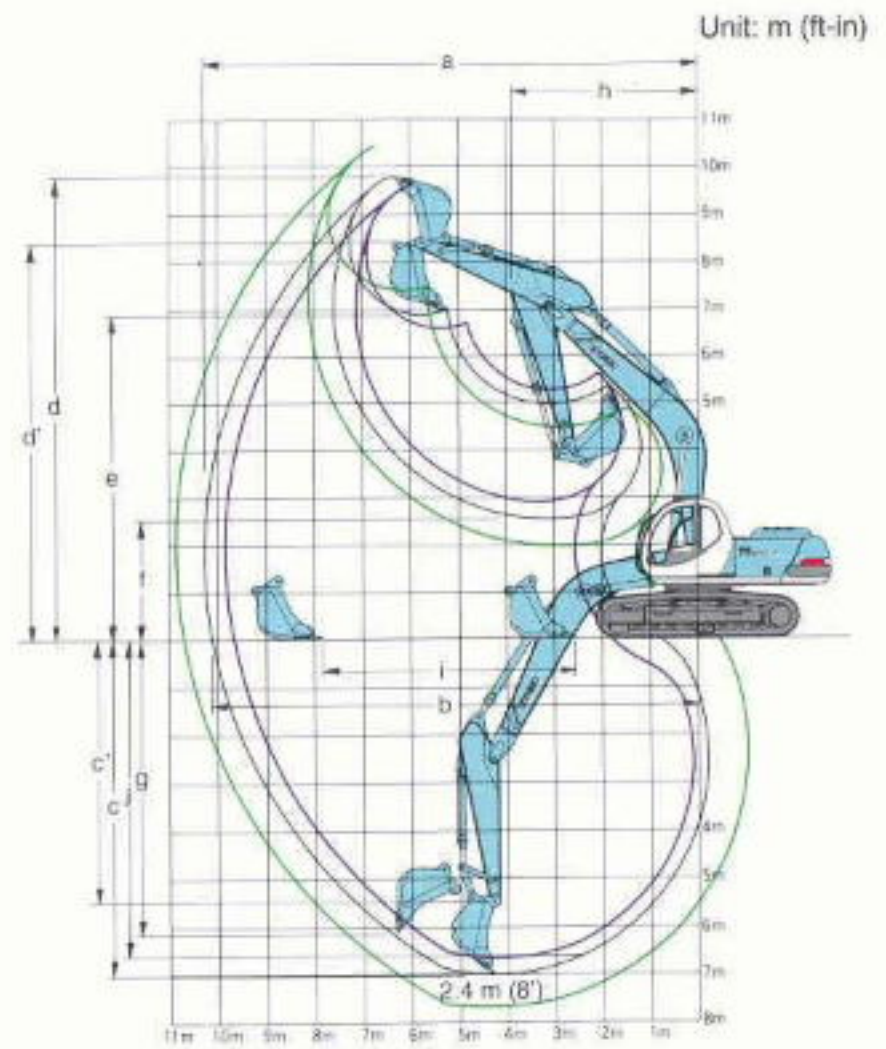
Range	Arm	2.5m (8' 2")	2.98m (9' 9")	3.66m (12' 0")
a - Max. digging reach		9.89(32-5)	10.31(33-10)	10.97(36-0)
b - Max. digging reach at ground level		9.72 (31-11)	10.14 (33-3)	10.81 (35-6)
c - Max. digging depth		6.53(21-5)	7.01(23-0)	7.69(25-3)
c' - Max. depth of bucket hinge pin		5.015 (16-5)	5.495 (18-0)	6.175 (20-3)
d - Max. digging height		9.63(31-7)	9.77(32-1)	10.17(33-4)
d' - Max. height of bucket hinge pin		8.225 (27-0)	8.385 (27-6)	8.765 (28-9)
e - Max. dumping clearance		6.71(22-0)	6.87(22-6)	7.25(23-9)
f - Min. dumping clearance		3.02(9-11)	2.54(8-4)	1.86(6-1)
g - Max. vertical wall digging depth		5.83 (19-2)	6.18 (20-3)	6.79 (22-3)
h - Min. swing radius		3.94(12-11)	3.90(12-10)	4.00(13-1)
i - Horizontal digging stroke at ground level		4.20 (13-9)	5.26 (17-3)	6.58 (21-7)
j - Digging depth for 2.4 m (8') flat bottom		6.33 (20-9)	6.83 (22-5)	7.54 (24-9)
Bucket capacity SAE heaped	m ³ (cu yd)	1.16 (1.52)	1.04 (1.36)	0.81 (1.06)

Digging Force

Unit: kg (lb)

Arm length	2.5m	2.98m	3.66m
Bucket digging force	15,000* (33,100)	15,000* (33,100)	14,200 (31,300)
Arm crowding force	13,700* (30,200)	11,900* (26,200)	9,500 (20,900)

*Power Boost engaged.



Unit: m (ft-in)

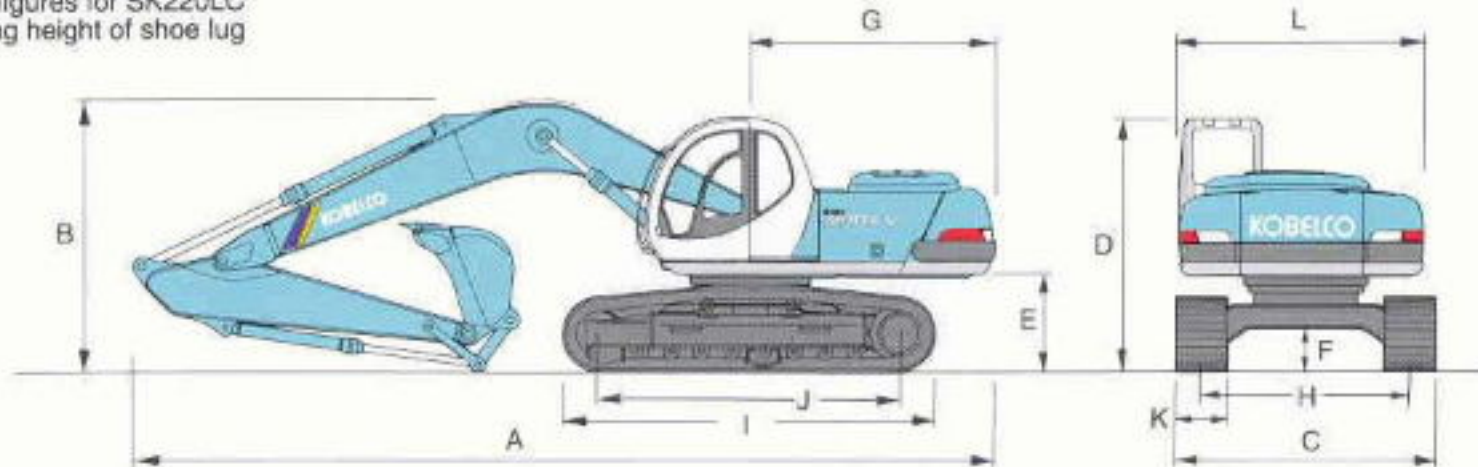


DIMENSIONS

Arm length	2.5m (7' 10")	2.98m (9' 8")	3.66m (12' 10")
A Overall length	10,050(33-0)	9,990(32-9)	9,960(32-8)
B Overall height (to top of boom)	3,245 (10-8)	3,080 (10-1)	3,065 (10-1)

C Overall width	2,990(9-10) 3,190(10-6)*	3,090(10-2) 3,290(10-10)*	3,190(10-6) 3,390(11-1)*
D Overall height (to top of cab)	2,930(9-7)	2,930(9-7)	2,930(9-7)
E Ground clearance** of rear end	1,080(3-7)	1,080(3-7)	1,080(3-7)

*Asterisk shows figures for SK220LC
**Without including height of shoe lug



Unit: m (ft-in)

F Ground clearance**	480(18.9") 465(18.3")*	480(18.9") 465(18.3")*	480(18.9") 465(18.3")*
G Tail swing radius	2,850(9-4)	2,850(9-4)	2,850(9-4)
H Track gauge	2,390(7-10) 2,590(8-6)*	2,200(7-3) 2,590(8-6)*	2,200(7-3) 2,590(8-6)*
I Overall length of crawler	4,350(14-3) 4,650(15-3)*	4,350(14-3) 4,650(15-3)*	4,350(14-3) 4,650(15-3)*
J Tumbler distance	3,500(11-6) 3,800(12-6)*	3,500(11-6) 3,800(12-6)*	3,500(11-6) 3,800(12-6)*
K Shoe width	600(23.6")	700(27.6")	800(31.5")
L Overall width of superstructure	2,840(9-4)	2,840(9-4)	2,840(9-4)

OPERATING WEIGHT AND GROUND PRESSURE

In standard trim, with standard boom, 2.98 m (9' 9") arm, and 1.04 m³ (1.36 cu yd) SAE heaped bucket

Shape	Triple grouser shoe (even height)			Flat shoe	
Shoe width	mm (in)	600 (23.6)	700 (27.6)	800 (31.5)	600 (23.6)
Overall width	mm (ft-in)	SK220 2,990 (9 - 10)	3,090 (10 - 2)	3,190 (10 - 6)	2,990 (9 - 10)
		SK220LC 3,190 (10 - 6)	3,290 (10 - 10)	3,390 (11 - 1)	3,190 (10 - 6)
Ground pressure	kg/cm ² (psi)	SK220 0.50 (7.11)	0.44 (6.26)	0.39 (5.55)	0.51 (7.25)
		SK220LC 0.48 (6.83)	0.42 (5.97)	0.37 (5.26)	0.48 (6.83)
Operating weight	kg (lb)	SK220 23,000 (50,700)	23,500 (51,800)	23,900 (52,700)	23,200 (51,100)
		SK220LC 23,600 (52,000)	24,000 (52,900)	24,500 (54,000)	23,700 (52,200)