

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item		Specification
Model		HYUNDAI D6BT-C
Type		4-cycle turbocharged diesel engine
Cooling method		Water cooling
Number of cylinders and arrangement		6 cylinders, in-line
Firing order		1-5-3-6-2-4
Combustion chamber type		Direct injection type
Cylinder bore × stroke		118 × 115mm(4.65" × 4.53")
Piston displacement		7545cc(460cu in)
Compression ratio		16 : 1
Rated gross horse power(SAE J1349)	R210LC-7H	145Ps at 1950rpm(107kW at 1950rpm)
	R220LC-7H	159Ps at 1950rpm(117kW at 1950rpm)
Maximum torque at 1600rpm		57kgf · m(412lbf · ft)
Engine oil quantity		16.3 l (4.3U.S. gal)
Dry weight		530kg(1168lb)
High idling speed		2150+ 100rpm
Low idling speed		900± 100rpm
Rated fuel consumption		156g/Ps · hr at 1600rpm
Starting motor		24V-5kW
Alternator		24V-70A
Battery		2 × 12V × 100Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 113cc/rev
Maximum pressure	330kgf/cm ² (4694psi) [360kgf/cm ² (5120psi)]
Rated oil flow	2 × 220 l /min (58.1U.S. gpm/ 48.4U.K. gpm)
Rated speed	1950rpm

[] : Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	35kgf/cm ² (500psi)
Rated oil flow	29.3 l /min(7.7U.S. gpm/6.4U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	9 spools mono-block
Operating method	Hydraulic pilot system
Main relief valve pressure	330kgf/cm ² (4695psi) [360kgf/cm ² (5120psi)]
Overload relief valve pressure	390kgf/cm ² (5550psi)

[]: Poer boost

5) SWING MOTOR

Item	Specification
Type	Two fixed displacement axial piston motor
Capacity	148.5cc/rev
Relief pressure	240kgf/cm ² (3414psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	63kgf · m(456lbf · ft)
Brake release pressure	16~23kgf/cm ² (228~327psi)
Reduction gear type	2 - stage planetary
Swing speed	12.5rpm

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	330kgf/cm ² (4695psi)
Reduction gear type	2-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	11kgf/cm ² (156psi)
Braking torque	49.3kgf · m(357lbf · ft)

7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	6.5kgf/cm ² (92psi)
	Maximum	26kgf/cm ² (370psi)
Single operation stroke	Lever	61mm(2.4in)
	Pedal	123mm(4.84in)

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	∅ 120 × ∅ 85 × 1290mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	∅ 140 × ∅ 100 × 1510mm # ∅ 140 × ∅ 95 × 1460mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	∅ 125 × ∅ 85 × 1055mm # ∅ 100 × ∅ 70 × 870mm
	Cushion	Extend only

※ Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.

※ Discoloration does not cause any harmful effect on the cylinder performance.

: LONG REACH

9) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
R210LC-7H R220LC-7H	Standard	600mm(24")	0.46kgf/cm ² (6.54psi)	49	2990mm(9' 10")
	Option	700mm(28")	0.40kgf/cm ² (5.69psi)	49	3090mm(10' 2")
		800mm(32")	0.35kgf/cm ² (4.98psi)	49	3190mm(10' 6")
R210LC-7H R220LC-7H LONG REACH	Standard	800mm(32")	0.42kgf/cm ² (5.97psi)	49	3190mm(10' 6")

10) BUCKET

Item		Capacity		Tooth quantity	Width	
		SAE heaped	CECE heaped		Without side cutter	With side cutter
R210LC-7H R220LC-7H	STD	0.92m ³ (1.20yd ³)	0.80m ³ (1.05yd ³)	5	1150mm(45.3")	1270mm(50.0")
	OPT	0.51m ³ (0.67yd ³)	0.45m ³ (0.59yd ³)	3	700mm(27.6")	820mm(32.3")
		0.80m ³ (1.05yd ³)	0.70m ³ (0.92yd ³)	5	1000mm(39.4")	1120mm(44.1")
		1.10m ³ (1.44yd ³)	0.96m ³ (1.26yd ³)	5	1320mm(52.0")	1440mm(56.7")
		1.20m ³ (1.57yd ³)	1.00m ³ (1.31yd ³)	6	1400mm(55.1")	1520mm(59.8")
		1.34m ³ (1.75yd ³)	1.15m ³ (1.50yd ³)	6	1550mm(61.0")	1670mm(65.7")
		◆0.74m ³ (0.97yd ³)	0.65m ³ (0.85yd ³)	5	985mm(38.8")	-
		◆0.90m ³ (1.18yd ³)	0.80m ³ (1.05yd ³)	5	1070mm(42.0")	-
		◆1.05m ³ (1.37yd ³)	0.92m ³ (1.20yd ³)	5	1290mm(50.8")	-
		⊙0.87m ³ (1.14yd ³)	0.75m ³ (0.98yd ³)	5	1140mm(44.9")	-
		⊙1.20m ³ (1.57yd ³)	1.00m ³ (1.31yd ³)	5	1410mm(55.5")	-
		■0.75m ³ (0.98yd ³)	0.65m ³ (0.85yd ³)	-	1790mm(70.5")	-

◆ : Heavy duty bucket

⊙ : Rock bucket(Heavy)

■ : Slope finishing bucket