

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	HYUNDAI D6AZ-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	130 × 140mm(5.12" × 5.51")
Piston displacement	11149cc(680cu in)
Compression ratio	16 : 1
Rated gross horse power(SAE J1995)	200Hp at 1900rpm(149kW at 1900rpm)
Maximum torque	92.6kgf · m(670lbf · ft) at 1400rpm
Engine oil quantity	27.3 l (7.2U.S. gal)
Dry weight	920kg(2028lb)
High idling speed	2100+20rpm
Low idling speed	575 ± 25rpm
Rated fuel consumption	150.8g/Hp · hr at 1600rpm
Starting motor	Mando(24V-5.5kW)
Alternator	Valeo mando(24V-70A)
Battery	2 × 12V × 160Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 136.8cc/rev
Maximum pressure	330kgf/cm ² (4690psi)[360kgf/cm ² (5120psi)]
Rated oil flow	2 × 260 l /min (68.7U.S. gpm/ 57.2U.K. gpm)
Rated speed	1900rpm

[]: 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	28.5 l /min(7.5U.S. gpm/6.3U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	9 spools
Operating method	Hydraulic pilot system
Main relief valve pressure	330kgf/cm ² (4690psi) [360kgf/cm ² (5120psi)]
Overload relief valve pressure	390kgf/cm ² (5550psi)

[]: Power boost

5) SWING MOTOR

Item	Specification
Type	Two fixed displacement axial piston motor
Capacity	169.4cc/rev
Relief pressure	265kgf/cm ² (3770psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	70kgf · m(506lbf · ft)
Brake release pressure	21~26kgf/cm ² (299~370psi)
Reduction gear type	2 - stage planetary
Swing speed	10.3rpm

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	330kgf/cm ² (4620psi)
Capacity(max / min)	279.1/160cc/rev
Reduction gear type	2-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	15.7kgf/cm ² (223psi)
Braking torque	78.8kgf · m(570lbf · 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	ø 140 × ø 100 × 1465mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	ø 150 × ø 110 × 1765mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 140 × ø 95 × 1185mm
	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.

9) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
R290LC-7H	Standard	600mm(24")	0.55kgf/cm ² (7.82psi)	48	3190mm(10' 6")
	Option	700mm(28")	0.48kgf/cm ² (6.82psi)	48	3290mm(10' 10")
		800mm(32")	0.43kgf/cm ² (6.26psi)	48	3390mm(11' 1")
		900mm(36")	0.38kgf/cm ² (5.40psi)	48	3490mm(11' 5")

10) BUCKET

Item		Capacity		Tooth quantity	Width	
		PCSA heaped	CECE heaped		Without side cutter	With side cutter
R290LC-7H	Standard	1.27m³(1.66yd³)	1.10m³(1.44yd³)	5	1290mm(50.8")	1410mm(55.5")
	Option	0.79m³(1.03yd³)	0.70m³(0.92yd³)	3	890mm(35.0")	1010mm(39.8")
		1.03m³(1.35yd³)	0.90m³(1.18yd³)	4	1090mm(42.9")	1210mm(47.6")
		◆ 1.07m³(1.40yd³)	0.95m³(1.24yd³)	5	1060mm(42.0")	-
		◆ 1.27m³(1.66yd³)	1.10m³(1.44yd³)	5	1220mm(48.0")	-
		◆ 1.46m³(1.91yd³)	1.28m³(1.67yd³)	5	1370mm(54.0")	-
		1.16m³(1.52yd³)	1.00m³(1.05yd³)	5	1305mm(51.4")	-
		1.50m³(1.96yd³)	1.30m³(1.70yd³)	6	1490mm(58.7")	1610mm(63.4")
		1.73m³(2.26yd³)	1.50m³(1.96yd³)	6	1696mm(66.8")	-
		1.85m³(2.42yd³)	1.60m³(2.09yd³)	5	1800mm(70.9")	-

◆ : Heavy duty bucket

 : Rock bucket(ESCO type)