

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins C8.3-C
Type	4-cycle turbocharged charger air cooled 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 x stroke	114 x 135mm(4.49" x 5.32")
Piston displacement	8300cc(505cu in)
Compression ratio	18 : 1
Rated gross horse power(SAE J1995)	259Hp at 1750rpm(193kW at 1750rpm)
Maximum torque	124.3kgf · m(899lbf · ft) at 1300rpm
Engine oil quantity	25.5 (6.7U.S. gal)
Dry weight	588kg(1296lb)
High idling speed	1900 + 50rpm
Low idling speed	850 ± 50rpm
Rated fuel consumption	158.8g/Hp · hr at 1750rpm
Starting motor	Delco Remy 39MT(24V-7.2kW)
Alternator	Delco Remy 24V-50A
Battery	2 x 12V x 160Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 x 148.6cc/rev
Maximum pressure	330kgf/cm ² (4690psi)[360kgf/cm ² (5120psi)]
Rated oil flow	2 x 260 /min (68.7U.S. gpm/ 57.2U.K. gpm)
Rated speed	1750rpm

[]: 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	26.3 l /min(6.9U.S. gpm/6.0U.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	Axial piston motor
Capacity	169.4cc/rev
Relief pressure	265kgf/cm ² (3770psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	70kgf · m(505lbf · ft)
Brake release pressure	26kgf/cm ² (370psi)
Reduction gear type	2 - stage planetary
Swing speed	9.1rpm

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	330kgf/cm ² (4700psi)
Capacity(max / min)	160/279.1cc/rev
Reduction gear type	3-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	15.7kgf/cm ² (225psi)
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	Ø150 × Ø105 × 1480mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	Ø160 × Ø110 × 1685mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	Ø140 × Ø100 × 1285mm
	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
R320LC-7	Standard	600mm(24")	0.62kgf/cm ² (8.82psi)	48	3280mm(10' 9")
	Option	700mm(28")	0.54kgf/cm ² (7.68psi)	48	3380mm(11' 1")
		800mm(32")	0.48kgf/cm ² (6.83psi)	48	3480mm(11' 5")
		900mm(36")	0.43kgf/cm ² (6.11psi)	48	3580mm(11' 9")

10) BUCKET

Item		Capacity		Tooth quantity	Width		
		PCSA heaped	CECE heaped		Without side cutter	With side cutter	
R320LC-7	Standard	1.44m ³ (1.88yd ³)	1.25m ³ (1.63yd ³)	5	1380mm(54.3")	1500mm(59.1")	
	Option		0.9m ³ (1.18yd ³)	0.8m ³ (1.05yd ³)	3	950mm(37.4")	1070mm(42.2")
			1.14m ³ (1.49yd ³)	1.0m ³ (1.31yd ³)	4	1140mm(44.9")	1260mm(49.6")
			1.74m ³ (2.28yd ³)	1.5m ³ (1.96yd ³)	5	1610mm(63.4")	1730mm(68.1")
			2.10m ³ (2.75yd ³)	1.8m ³ (2.35yd ³)	5	1900mm(74.8")	2020mm(79.5")
			1.44m ³ (1.88yd ³)	1.25m ³ (1.63yd ³)	5	1380mm(54.3")	-
			≡ 1.44m ³ (1.88yd ³)	1.25m ³ (1.63yd ³)	5	1380mm(54.3")	-

: Heavy duty bucket

≡ : Rock bucket(Esco type)