

## 8. SPECIFICATIONS FOR MAJOR COMPONENTS

### 1) ENGINE

Item	Specification
Model	Cummins QSC
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 × stroke	114 × 135mm(4.49" × 5.32")
Piston displacement	8300cc(505cu in)
Compression ratio	17.5 : 1
Rated gross horse power(SAE J1995)	258Hp at 1750rpm(193kW at 1750rpm)
Maximum torque	114.8kgf · m(830lb · ft) at 1500rpm
Engine oil quantity	35 l (9.2U.S. gal)
Dry weight	723kg(1594lb)
High idling speed	1750+ 50rpm
Low idling speed	700± 50rpm
Rated fuel consumption	166.7g/Hp · hr at 1750rpm
Starting motor	Denso(24V-7.5kW)
Alternator	Delco Remy 24V-50A
Battery	2 × 12V × 160Ah

### 2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 148.6cc/rev
Maximum pressure	330kgf/cm <sup>2</sup> (4690psi)[360kgf/cm <sup>2</sup> (5120psi)]
Rated oil flow	2 × 260 l /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 <sup>2</sup> (500psi)
Rated oil flow	27 l /min(7.1U.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 <sup>2</sup> (4690psi) [360kgf/cm <sup>2</sup> (5120psi)]
Overload relief valve pressure	390kgf/cm <sup>2</sup> (5550psi)

[ ]: Power boost

### 5) SWING MOTOR

Item	Specification
Type	Axial piston motor
Capacity	169.4cc/rev
Relief pressure	265kgf/cm <sup>2</sup> (3770psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	70kgf · m(505lbf · ft)
Brake release pressure	26kgf/cm <sup>2</sup> (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 <sup>2</sup> (4700psi)
Capacity(max / min)	88.5/154.8cc/rev
Reduction gear type	3-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	9kgf/cm <sup>2</sup> (128psi)
Braking torque	40kgf · m(290lbf · ft)

## 7) REMOTE CONTROL VALVE

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

## 8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	∅ 150 × ∅ 105 × 1480mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	∅ 160 × ∅ 110 × 1685mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	∅ 140 × ∅ 100 × 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-7A	Standard	☆600mm(24")	0.62kgf/cm <sup>2</sup> (8.82psi)	48	3280mm(10' 9")
	Option	☆700mm(28")	0.54kgf/cm <sup>2</sup> (7.68psi)	48	3380mm(11' 1")
		☆800mm(32")	0.48kgf/cm <sup>2</sup> (6.83psi)	48	3480mm(11' 5")
		☆900mm(36")	0.43kgf/cm <sup>2</sup> (6.11psi)	48	3580mm(11' 9")
R320NLC-7A	Standard	☆600mm(24")	0.61kgf/cm <sup>2</sup> (8.67psi)	48	2990mm( 9' 10")
R320LC-7A H/WALKER	Standard	☆600mm(24")	0.67kgf/cm <sup>2</sup> (9.53psi)	48	3470mm(11' 5")
	Option	☆700mm(28")	0.58kgf/cm <sup>2</sup> (8.25psi)	48	3570mm(11' 9")
		☆800mm(32")	0.51kgf/cm <sup>2</sup> (7.25psi)	48	3670mm(12' 0")
		★710mm(28")	0.58kgf/cm <sup>2</sup> (8.25psi)	48	3580mm(11' 9")

☆ : Triple grouser

★ : Double grouser

## 10) BUCKET

Item		Capacity		Tooth quantity	Width	
		PCSA heaped	CECE heaped		Without side cutter	With side cutter
R320LC-7A R320NLC-7A H/WALKER	Standard	1.44m <sup>3</sup> (1.88yd <sup>3</sup> )	1.25m <sup>3</sup> (1.63yd <sup>3</sup> )	5	1380mm(54.3")	1500mm(59.1")
	Option	0.9m <sup>3</sup> (1.18yd <sup>3</sup> )	0.8m <sup>3</sup> (1.05yd <sup>3</sup> )	3	950mm(37.4")	1070mm(42.1")
		1.14m <sup>3</sup> (1.49yd <sup>3</sup> )	1.0m <sup>3</sup> (1.31yd <sup>3</sup> )	4	1110mm(43.7")	1230mm(48.4")
		1.74m <sup>3</sup> (2.28yd <sup>3</sup> )	1.5m <sup>3</sup> (1.96yd <sup>3</sup> )	5	1620mm(63.8")	1740mm(68.5")
		2.10m <sup>3</sup> (2.75yd <sup>3</sup> )	1.8m <sup>3</sup> (2.35yd <sup>3</sup> )	5	1910mm(75.2")	2030mm(79.9")
		◆1.44m <sup>3</sup> (1.88yd <sup>3</sup> )	1.25m <sup>3</sup> (1.63yd <sup>3</sup> )	5	1470mm(57.9")	-
		◎1.44m <sup>3</sup> (1.88yd <sup>3</sup> )	1.25m <sup>3</sup> (1.63yd <sup>3</sup> )	5	1470mm(57.9")	-
		◎1.73m <sup>3</sup> (2.26yd <sup>3</sup> )	1.5m <sup>3</sup> (1.96yd <sup>3</sup> )	5	1710mm(67.3")	-

◆ : Heavy duty bucket

◎ : Rock bucket(Esco type)