

7. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins QSX 15
Type	4-cycle turbocharged charge 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	137 × 169mm(5.39" × 6.65")
Piston displacement	15000cc(915cu in)
Compression ratio	17 : 1
Rated gross horse power(SAE J1995)	497ps at 1800rpm(490Hp / 366kW at 1800rpm)
Maximum torque	241.1kgf · m(1744lbf · ft) at 1400rpm
Engine oil quantity	43.5 l (11.5U.S. gal)
Dry weight	1451kg(3200lb)
High idling speed	1800 ± 50rpm
Low idling speed	800 ± 50rpm
Rated fuel consumption	165.5g/Hp · hr at 1800rpm
Starting motor	Prestolite MS7 (24V-9.0kW)
Alternator	Delco Remy 24V-100A
Battery	4 × 12V × 200Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 280cc/rev
Maximum pressure	330kgf/cm ² (4690psi)[360kgf/cm ² (5120psi)]
Rated oil flow	2 × 504 l /min (133.1U.S. gpm/110.9U.K. gpm)
Rated speed	1800rpm

[]: Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	40kgf/cm ² (569psi)
Rated oil flow	27 l /min(7.1U.S. gpm/5.9U.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	380kgf/cm ² (5400psi)

[]: Power boost

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	250cc/rev
Relief pressure	290kgf/cm ² (4120psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	107kgf · m(774lbf · ft)
Brake release pressure	30~50kgf/cm ² (427~711psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	350kgf/cm ² (4980psi)
Capacity(max / min)	304.1/205.2cc/rev
Reduction gear type	3-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	18kgf/cm ² (256psi)
Braking torque	114kgf · m(825lbf · ft)

7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	6.5kgf/cm ² (92psi)
	Maximum	25kgf/cm ² (360psi)
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 200 × 1415mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	ø 150 × ø 215 × 1490mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 130 × ø 180 × 1250mm
	Cushion	Extend only
Dump cylinder	Bore dia × Rod dia × Stroke	ø 120 × ø 160 × 400mm
	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 (Double grouser)

Item		Width	Ground pressure	Link quantity	Overall width
R800-7A FS LONG CRAWLER	Standard	700mm(28")	1.13kgf/cm ² (16.07psi)	51	4200mm(13' 9")
	Option	800mm(32")	0.99kgf/cm ² (14.08psi)	51	4300mm(14' 1")
		900mm(36")	0.89kgf/cm ² (12.66psi)	51	4400mm(14' 5")
R800-7A FS SHORT CRAWLER	Standard	700mm(28")	1.21kgf/cm ² (17.21psi)	48	4200mm(13' 9")
	Option	800mm(32")	1.07kgf/cm ² (15.22psi)	48	4300mm(14' 1")
		900mm(36")	0.96kgf/cm ² (13.65psi)	48	4400mm(14' 5")

10) BUCKET

Item		Capacity		Tooth quantity	Without side cutter
		SAE heaped	CECE heaped		
R800-7A FS	Standard	4.50m ³ (5.89yd ³)	3.92m ³ (5.13yd ³)	6	2520mm(8' 3")
	Option	5.10m ³ (6.60yd ³)	4.44m ³ (5.81yd ³)	6	