

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins 6BTAA
Type	4-cycle, turbocharged, charge air cooled, diesel engine, low emission
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	102 × 120mm(4.02" × 4.72")
Piston displacement	5880cc(359cu in)
Compression ratio	17.3 : 1
Rated gross horse power(SAE J1995)	150Hp at 1950rpm(112kW at 1950rpm)
Maximum torque at 1500rpm	62.6kgf · m(453lbf · ft)
Engine oil quantity	14.2 l (3.8U.S. gal)
Dry weight	496kg(1094lb)
High idling speed	2180+ 50rpm
Low idling speed	1050 ± 100rpm
Rated fuel consumption	164.8g/Hp · hr at 1950rpm
Starting motor	Nippon denso(24V-4.5kW)
Alternator	Delco Remy (24V-50A)
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)

[]: Pooper boost

5) SWING MOTOR

Item	Specification
Type	Two fixed displacement axial piston motor
Capacity	151cc/rev
Relief pressure	240kgf/cm ² (3414psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	59kgf · m(427lbf · ft)
Brake release pressure	33~50kgf/cm ² (470~711psi)
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	3-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	6kgf/cm ² (85psi)
Braking torque	40.6kgf · m(294lbf · 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 120 × ø 85 × 1290mm	
	Cushion	Extend only	
Arm cylinder	Bore dia × Rod dia × Stroke	ø 140 × ø 100 × 1510mm	
	Cushion	Extend and retract	
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 125 × ø 85 × 1055mm	
	Cushion	Extend only	
Adjust boom cylinder	1st	Bore dia × Rod dia × Stroke	ø 120 × ø 85 × 1290mm
		Cushion	Extend only
	2nd	Bore dia × Rod dia × Stroke	ø 160 × ø 100 × 1040mm
		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
MONO BOOM	Standard	500mm(20")	0.56kgf/cm ² (7.96psi)	49	2500mm(8' 2")
	Option	600mm(24")	0.47kgf/cm ² (6.68psi)	49	2600mm(8' 6")
		700mm(28")	0.41kgf/cm ² (5.83psi)	49	2700mm(8' 10")
ADJUST BOOM	Standard	500mm(20")	0.56kgf/cm ² (7.96psi)	49	2500mm(8' 2")
	Option	600mm(24")	0.48kgf/cm ² (6.83psi)	49	2600mm(8' 6")

10) BUCKET

Item	Capacity		Tooth quantity	Width	
	SAE heaped	CECE heaped		Without side cutter	With side cutter
STD	0.87m ³ (1.14yd ³)	0.75m ³ (0.98yd ³)	5	1000mm(39.4")	1120mm(44.1")
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	1090mm(42.9")	1210mm(47.6")
	0.92m ³ (1.20yd ³)	0.80m ³ (1.05yd ³)	5	1150mm(45.3")	1270mm(50.0")
	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)	5	1400mm(55.1")	-
	1.34m ³ (1.75yd ³)	1.15m ³ (1.50yd ³)	6	1550mm(61.1")	-
	◆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(42.1")	-
	◆1.05m ³ (1.37yd ³)	0.92m ³ (1.20yd ³)	5	1430mm(56.3")	-
	⊙0.87m ³ (1.14yd ³)	0.75m ³ (0.98yd ³)	5	1140mm(44.9")	-
	■0.75m ³ (0.98yd ³)	0.65m ³ (0.85yd ³)	-	1790mm(70.5")	-

◆ : Heavy duty bucket

⊙ : Rock bucket(Heavy)

■ : Slope finishing bucket