

3104

**Standard Technical requirement for
Complete Shell Assembly of WAG-9H/P-7/P-5**

) List of Plant & machinery:

Sl No	Description	Capacity	Remarks
1.	Power shearing M/c	Thickness up to 8mm Bed length = 02metre min	For Shearing of Plates.
2.	Plate Bending m/c	Bed Length-03 metre min Capacity-100T Plate Thickness-20mm	For plate bending.
3.	Rolling Machine	Thickness-16mm max Bed Length-03 metre min	For straightening of plates.
4.	CNC oxy/plasma profile cutting M/c with minimum two torch	Up to 60 mm thickness of steel plate.	For profile cutting of sheets & plates
5.	Plano Milling Machine	Bed size length-7 metre (min) Width-2.5 metre (min) Height-1 metre (min)	For centre under frame machining.
6.	MIG Welding M/c 06 nos	400 amps	For welding
7.	Milling m/c	Standard (Medium)	Edge cutting and bevelling of plates
8.	Radial Drilling M/c	Arm Length-2.5 metre	For drilling holes in different location in shell assembly.
9.	Angle Grinder m/c	4" to 7"	
10	EOT Crane & Under Crane Area	25 Ton (02 nos in same bay) having minimum crane area of 18 x 60 mt	For material handling
11.	Measuring Instruments & Gauges	Vernier Callipers, Scales, Micrometres, Try square etc.	For measurement.
12.	Surface preparation & Spray painting arrangement		For painting/PU painting of different items.
13.	Pipe bending machine		For pipe bending

14.	Pipe cutting machine, Hand tube cutter		For preparation of pipe
16.	Brazing & Swaging facilities		For piping
17.	Air compressor	12 Kg (min)	For cleaning and testing.
18.	Manipulator	Capable of lifting components of min 20mt length and 30T weight.	For welding of complete under frame.

ii) Requirement of qualified Welders:

Welder supervisors should be qualified and certified by approved /recognised welding institute/test houses. The welder must be qualified and certified by approved /recognised welding institute/test houses. System should exist to test the welders as per requirement of IS:7310 and IS:817 and proper record should be maintained.

iii) Laboratory facilities:

- Dye Penetration test (DPT) facilities for checking the Welding Quality
- UT Facility for checking of Welded Joints over 20 thk plates.
- Spirit level etc for checking of surface level.
- Universal testing Machine for conducting tensile tests.
- Direct reading hardness tester machine.
- Facility of magnetic particle testing.
- The firm should have facilities for checking chemical composition of steel by wet method or spectrograph.

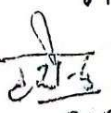

SME/D

DyCEE/Proj/Con 

CEE/loco 

~~CEE/12.5~~   Recommended because

CEE/CLW 


6.5.14