

Pre-Qualification Requirements (PQR) for P91/P92 Header Fabrication

Supplier Name:

Office Address:

Factory Address:

Contact details (Email id & Phone Number):

Prior Experience: The vendor shall provide EVIDENCE of previous successful completion experience in Vendor's SHOP fabricating Headers/piping products applicable to Utility/Industrial boilers in accordance with the Indian boiler regulations (IBR)/American Society of Mechanical Engineers (ASME) / Equivalent international codes.

Evidence of Previous successful completion experience in Alloy Steel (P11, P12, P22, P91, P92) products as per above criteria.

Part-A - (Mandatory)

Sl No	Paramter for evaluation	MINIMUM REQUIRED	Details of facility available with Supplier (Supplier to fill this column)	Actual Observed in Assessment (BHEL use)	Remarks (BHEL Use)	
	LAND DETAILS :					
1	Land area (If land is taken under lease, registered lease deed for 3 yrs period is required)	0.5 Acres				
2	Covered shed area - with concrete flooring	8000 sq.ft				
3	Fencing/compound wall	All around				
	EB POWER					
4	Power capacity	75 to 100 HP				
	HANDLING FACILITIES					
5	Material handling crane capacity with stability certificate (Mobile crane / A frame / EOT)	20 MT in a Bay (Mobile crane may be owned or under lease)				
	SPECIFIC MACHINES :					
6	Auto welding machine (SAW) (800 A)	2 No				
7	Rectifier/inverter welding m/c for SMAW process	10 Nos				
8	TIG welding machines	3 Nos				
9	Tube boring and chamferring machine	2 Nos				
10	PMI (Spectrotesting machine/XRF analyzer with calibration) - portable type	Inhouse/outsourced. Vendor to Specify.				
11	Preheating/post heating - fuel and burner facilities	Required. Details of available facilities to be furnished.				

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12	Heat treatment furnace with IBR approval & with valid calibration	P91/P92 shall be heat treated in house. The furnace should be capable of accommodating and heat treating the given jobs. Vendor to specify the available Furnace size & Fuel. Or In case an in-house furnace heat treatment facility is not presently available, the Vendor shall submit an undertaking along with the offer stating that, if the Vendor is found eligible for Purchase Order Placement, the Vendor shall establish and commission an in-house furnace heat treatment facility within 30 Days of Purchase Order placement.				
13	Mechanical Correction of Bow in a header	Bow correction through mechanical means. Press is Preferred. Vendor to specify the method of mechanical bow correction.				
14	Hydro testing pumps (with calibrated gauges) - min 600 Kg/sq.cm	1 No				
15	Tube to Tube Joint Facility (SS+T92)	Manual / Machine				
16	IBR qualified welders. CS/AS	Personnel qualification mandatory for all welding processes in pressure parts				
17	Firm approval for boiler pressure parts by IBR	A must				
18	Pipe boring and chamferring machine	Facility to edge prepare before and after hydro testing of header (Max Pipe dia 813 mm).				
19	Horizontal boring	In House Facility.				
20	Painting facility	Details of available facilities to be furnished				
21	Stands and supporting stands	Details of available facilities to be furnished				
22	Positioner with V Block	Details of available facilities to be furnished				
23	Compressor for Test facility	1 No				
24	Temperature Control - Pyrometer / Heat spy/ Thermo chalk	1 Set				
25	Tube cutting machine (SAW cutting)	1 No.				
26	Plasma Cutting Machine	1 No. (To cut Gr91 Lug plates upto 80 mm thickness)				
	OVEN:					
27	Flux baking oven	1 Nos				
28	Electrode baking oven	1 No				
29	Electrode holding oven	1 No				
30	Flask Oven	5 Nos				
	INSPECTION FACILITIES					
31	MPI Unit (wet fluorescent with yoke & dry) with calibration block (Prod type - 1000 A)	1 No				

Sl No	Paramter for evaluation	MINIMUM REQUIRED	Details of facility available with Supplier (Supplier to fill this column)	Actual Observed in Assessment (BHEL use)	Remarks (BHEL Use)	
32	LPI Kit	1 Set				
33	Qualified NDE personnel - Level - II for PT, MT, UT & RT	1 person for each category				
34	NDE facility for UT & RT with IBR approval.	Inhouse/outsourced (BHEL approval is mandatory for the testing facility) High energy sources to Radiograph heavy thickness pipes.				
35	Boroscope for inside inspection	1 No.				
	MEASURING INSTRUMENTS					
36	Measuring tape 5m,30m *	1 No each				
37	Vernier caliper - 300 mm	1 No				
38	Paint coating thickness meter	1 No				
39	D meter (for thickness checking)	1 No				
40	Hardness tester	1 No				
41	Video Boroscope for Inside inspection	1 No				
	GRINDING & DRILLING MACHINES:					
42	Grinding M/Cs (AG 7 & AG 5)	10 Nos each				
43	Radial drilling Machine	2 Nos.				
	PAN & GST :					
44	IT Pan Card No	Original to be offered for verification				
45	GST No	Original to be offered for verification				
46	OFFICE ROOM :					
47	Office room with 2 PC/ Laptop, internet facility.					

NOTE_1:

* Tapes upto 5 m - Class II accuracy, above 5 m - Class I accuracy

A. Items in Sl No. 10, 12, 14, 27 to 30, 36-40 (Tapes - one time calibration) must have valid calibration certificate from any NABL accredited lab.

B. For Sl No. 33-34 valid agreement for facility tie-up must be produced.

C. For mobile cranes under lease, valid lease document must be produced at the time of spot assessment.

Part - B (Optional)

1	Tube bending machine - capable of bending 76.1 mm dia tubes	1 No				
2	Standby Generator	--				
3	Stenciling/Engraving/Dot punching facility	--				

Part-C: Final Recommendation (for BHEL use only)

Recommendation after checklist verification:

Date of spot assessment:

Recommendation after spot assessment:

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Assessor.1- TCA (Spot assessment):			Assessor.2- Co-assessor (Spot assessment):			
NOTE_2:						
01	Part-A requirement is a must for qualifying the vendor. Hence, filling up all evaluation parameters is a must and all mandatory facilities shall be available at the time of spot assessment					
02	Part-B is only optional and need not be considered for disqualifying the vendor.					