## <u>Technical requirement for Assembly and Welding of SS liners of Inner Top Cover, Outer Top Cover and Pivot Ring</u>

## Following conditions to be fulfilled by vendor for assembly and welding of SS Liners:

 Vendor must fulfil the requirements mentioned in Table-W/1/MSS and submit suitable evidence against each clause of Table-W/1/MSS.

## OR

In case vendor cannot fulfil requirements of Table-W/1/MSS by itself and requires to get the work of Assembly and Welding to be done by it's sub-vendor then Vendor must submit the following:

- (i) All details of sub-vendor (name, address, facilities etc.) to carry out the work of assembly and welding of SS liners.
- (ii) Consent letter of sub-vendor to carry out the work of assembly and welding of SS liners as per requirements of PO, technical requirements and as per drawing.
- (iii) Vendor to ensure that its sub-vendor fulfils all the requirements mentioned in Table-W/1/MSS and vendor must submit suitable evidence of it's sub-vendor against each clause of Table-W/1/MSS.
- 2. Vendor must submit all details and documentary evidence along with it's offer for BHEL's approval.

## 3. TABLE-W/1/MSS

1.00	Technical Requirement	Documents required
1.01	Experience: Vendor should have experience of welding of Martensitic stainless steel (i.e. 13%Cr-4%Ni) in last 7 years.	Suitable evidence including Unpriced PO copy, drawing/inspection report/test certificates/dispatch documents clearly mentioning the material combination for welding
1.02	Facilities: (i) Vendor must have welding machines for SMAW/GMAW/GTAW process.  (ii) Suitable handling facility – 40Tons for Inner Top Cover and Outer top cover and 12 Tons for Pivot ring.  (iii) Suitable assembly and welding bed with dimensions 7000mmX7000mm for Outer top cover and Pivot ring and 5000mmX5000mm for Inner top cover.  (iv) Vendor must have Welding procedure specification(WPS) with supporting Procedure Qualification Record (PQR) witnessed by third party (i.e. Lloyd's, TUV etc.) by SMAW process or GMAW process for welding of 13%Cr-4%Ni to 13%Cr-4%Ni i.e. P6 to P6 with/without PWHT/SR using welding consumable 309Cb/309L or equivalent.  OR  Vendor must have Welding procedure specification(WPS) with supporting Procedure Qualification Record (PQR) witnessed by	Suitable evidence including list of welding machines, details of handling facility, size of assembly/welding bed and WPS, PQR as per clause 1.02 OR as per clause 1.03
	third party (i.e. Lloyd's, TUV etc.) by SMAW process or GMAW process for welding of 13%Cr-4%Ni to SA516Gr-60/70 or IS 2062 or 300BR i.e. P6 to P1 with/without PWHT/SR using welding consumable 309Cb/309L or equivalent.	
1.03	Vendor must have qualified welders for welding of above mentioned material in clause 1.02 and must have WPQ witnessed by third party (i.e. Lloyd's, TUV etc.).	Suitable evidence including list of qualified welders along with WPQ
1.04	All documents are to be stamped and signed in original by Vendor	Comply with clause 1.04

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