

File No.: 1875/E/E211/2020/0741/N

Item: Forging for Retaining Ring

Drawing: 3-13606-00097, Revision 00

Material Grade/Specification: X8CrMnN1818K / HW19299, Revision 01

Minimum qualification requirement for Forging for Retaining Ring

Following are the mandatory requirements, offers of vendors not meeting these requirements will not be considered.

1. Vendor must have manufactured and supplied at least 3 retaining ring forgings in material grade X8CrMnN1818K by hot forging + cold expansion process. Out of these retaining ring forging, at least one retaining of dimension outer diameter: $\geq 1100\text{mm}$, Inner Diameter: $\geq 900\text{mm}$, Height: $\geq 550\text{mm}$ must have been manufactured and supplied by vendor.

In support of above, the vendor has to furnish details of 3 retaining ring supplies in the following format:

Retaining Ring Forging	Steel Grade: X8CrMnN1818K	Dimension (in mm)			Name of Customer /Year of Supply
		Outer Diameter	Inner Diameter	Height	

From the above experience, at least one test certificate of retaining ring of dimension outer diameter $\geq 1100\text{mm}$, Inner Diameter: $\geq 900\text{mm}$, Height: $\geq 550\text{mm}$ must be submitted with offer. Test certificates shall cover chemical composition, mechanical properties, dimensional report, non-destructive test report etc.

2. (a) Vendor must have in-house forging, heat treatment and cold expansion facility to manufacture retaining ring forging of material grade X8CrMnN1818 of drawing dimension. Retaining ring forging has to be manufactured by forging plus cold expansion process. Details of above in-house manufacturing facilities are to be submitted with offer.

Any other process of manufacturing is not acceptable. Outsourcing of any of the above process is not acceptable.

- (b) **Electro slag re-melted steel shall be used.** Vendor has to provide details of in-house melting including Electro Slag Re-melting facility. At least one mill test certificate of material grade X8CrMnN1818 manufactured in house to be submitted.

In case in-house steel melting facility not available, vendor to provide details of steel supplier with their manufacturing facility and experience for material grade X8CrMnN1818. At least one mill test certificate of steel manufacturer for material grade X8CrMnN1818 is to be submitted in support of experience.

3. Details of all testing facilities (in-house/outsourced from National/International accredited lab) are to be submitted with offer. In case of outsourcing of testing, details of accreditation of the laboratory to be submitted.
4. Vendor to confirm supply shall be as per BHEL enquiry drawing and specification. Deviation from enquiry drawing and specification is not acceptable. Vendor to sign each page of BHEL specification and drawing for compliance and submit with offer.

DGM/MTE
29.7.21

AGM/PPX-EM

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