

**PQR for IVCV Casing U/H:**

SL.No	REQUIREMENT	REMARKS
1.	Only those vendors should quote who have following machine installed & operational at their works for following operations of IVCV Casing U/H drawing no 01132131111/00 & 01132131111/01:-	Vendor to Note
A.	<u>Milling Operation:-</u>	
i.	<p>CNC Horizontal Boring machine with rotary table and suitable to accommodate the job.</p> <ul style="list-style-type: none"> <li>• Rotary table: 3 m X 2.5 m</li> <li>• Table Loading Capacity: 15 T or more</li> </ul> <p>Machine should be capable to carry out all milling operation as per drawing and Technical requirement.</p>	<p>Vendor to confirm &amp; submit machine details.</p> <p>Vendor should also submit positional accuracy and runout of the machine.</p>
B.	<u>Turning Operation:-</u>	
i.	<p><u>CNC Horizontal Boring machine with rotary table and CNC controlled Boring Head:</u></p> <ul style="list-style-type: none"> <li>• Rotary table: 3.5 m X 2.5 m</li> <li>• Table Loading Capacity: 15 T or more</li> <li>• CNC Boring Head suitable to machine Bores at depth 1350 mm</li> </ul> <p>"OR"</p> <p><u>CNC Vertical Turning Lathe:-</u></p> <ul style="list-style-type: none"> <li>• Table size : 4 m or more &amp; Swing 4 m or more</li> <li>• Height : 2.5 m or more</li> <li>• RAM Stroke: 1.5 m or more.</li> <li>• Table Loading Capacity: 15 Ton or more.</li> </ul> <p>Machine should be capable to carry out all Turning operation as per drawing and Technical requirement.</p>	<p>Vendor to confirm &amp; submit positional accuracy of the machine and CNC Head along with basic machine details (X,Y,Z traverse, table size, spindle diameter &amp; runout).</p> <p>Vendor to provide details of CNC Boring Head (Body Diameter, Length, Slide Length)</p>
2.	Vendor to confirm that above machines (A & B ) installed at their works are in good working condition with capability of achieving all the dimensions, surface finish, accuracies & tolerances as per drawing.	Vendor to confirm.
3.	Vendor to confirm that all the dimensions & surface finish of the component shall be met as per drawing. vendor to provide detail of complete manufacturing process for all Horizontal Boring, Vertical Boring & pipe milling operation.	Vendor to confirm & Provide the detail.
4.	Vendor to note that all tools, measuring equipment's, technological items, CNC Programs, Checking Templates etc. required for manufacturing of subjected item shall be arrange by the vendor, in case of order.	Vendor To Confirm
6.	BHEL reserves the right to verify the information provided by vendor. BHEL may also visit vendor works if so desired by BHEL. In case the information provided by vendor is found to be false/ incorrect, their offer shall be rejected.	Vendor to note & agree.

## PQR for IVCV Casing L/H

SL.No	REQUIREMENT	REMARKS
1.	Only those vendors should quote who have following machine installed & operational at their works for following operations of IVCV Casing L/H drawing no 01132131112/00 & 01132131112/01:-	Vendor to Note
A.	<u>Milling Operation: -</u>	
I.	CNC Horizontal Boring machine with rotary table and suitable to accommodate the job. • Rotary table: 3 m X 2.5 m • Table Loading Capacity: 15 T or more Machine should be capable to carry out all milling operation as per drawing and Technical requirement.	Vendor to confirm & submit machine details. Vendor should also submit positional accuracy and runout of the machine.
B.	<u>Turning Operation: -</u>	
i.	CNC Horizontal Boring machine with rotary table and CNC controlled Boring Head: <ul style="list-style-type: none"> <li>• Rotary table: 3.5 m X 2.5 m</li> <li>• Table Loading Capacity: 15 T or more</li> <li>• CNC Boring Head suitable to machine Bores at depth 1420 mm</li> </ul> <p>"OR"</p> CNC Vertical Turning Lathe:- <ul style="list-style-type: none"> <li>• Table size : 4.0 m or more &amp; Swing 4m or more</li> <li>• Height : 3.0 m or more</li> <li>• RAM Stroke: 1.5 m or more.</li> <li>• Table Loading Capacity: 15 Ton or more.</li> <li>• Buttress Thread Machining capability on Vertical Lathe</li> </ul> Machine should be capable to carry out all Turning operation as per drawing and Technical requirement.	Vendor to confirm & submit positional accuracy of the machine and CNC Head along with basic machine details (X,Y,Z traverse, table size, spindle diameter & runout).  Vendor to provide details of CNC Boring Head (Body Diameter, Length, Slide Length)
2.	Vendor to confirm that above machines (A & B ) installed at their works are in good working condition with capability of achieving all the dimensions, surface finish, accuracies & tolerances as per drawing.	Vendor to confirm.
3.	Vendor to confirm that all the dimensions & surface finish of the component shall be met as per drawing. Vendor to provide detail of complete manufacturing process for all Horizontal Boring, Vertical Boring & pipe milling operation including the detail of machining of Buttress Thread.	Vendor to confirm & Provide the detail.
4.	Vendor to note that all tools, measuring equipment's, technological items, CNC Programs, Checking Templates etc. required for manufacturing of subjected item shall be arrange by the vendor, in case of order.	Vendor To Confirm
5.	BHEL reserves the right to verify the information provided by vendor. BHEL may also visit vendor works if so desired by BHEL. In case the information provided by vendor is found to be false/ incorrect, their offer shall be rejected.	Vendor to note & agree.