



**Technical Delivery Condition for
procurement of finish component/
assembly**

TDCF01140418011
REV. No. 00

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Finish machined Casing (IPCV Servomotor) of 250 MW Steam Turbine

IPCV Servomotor Casing, drg.no. 0-11404-18011 & IPCV Servomotor Cover, drg.no. 0-11404-18001 are to be procured in finish machined from same vendor to avoid mismatching of joint plane holes, contours and to facilitate carrying out hydraulic testing of casing along with cover as per drawing requirement. Special care to be exercised w.r.t. the following points and party to confirm adherence to the same point-wise while submitting the offer:-

- 1) The casing is as per the BHEL material specification HW19799 and Finish Drg.no. 0-11404-18011. First rough machined casting shall be manufactured by the supplier leaving $3\pm$ machining allowance and making all holes and grooves solid for ease of ND test. In rough machined condition, the mechanical testing of the test samples (as per HW19799) shall be carried out at the supplier's works and witnessed by BHEL representative or BHEL authorized Third Party Inspection Agency as agreed in QP. Further operation on the casing shall start only after clearance of test results. Keel block as per specification to be sent to BHEL alongwith the casting, duly identified by BHEL/ authorised Third Party Inspection Agency.
- 2) Supplier shall get manufacturing, quality and NDE Scan plan approved from BHEL.
- 3) In case the Casting is procured from sub-vendor, then the sub-vendor must be got approved from BHEL.
- 4) Supplier to seek clarifications, if any, w.r.t. scope of work or drawing dimensions/ technical requirements before submitting technical/ commercial offers.
- 5) Machining operation shall be done only by the vendors approved for the job by BHEL.
- 6) Supplier to confirm that finish machining of the components will be carried out as ensuring the following:
 - Technological requirements mentioned separately
 - Surface finishes (Ra value indicated in microns)
 - Sizes and tolerances
 - Geometrical accuracies, e.g., run-outs, concentricity, parallelity, perpendicularity
 - All other requirements mentioned in the drawings.
- 7) Special care is to be taken to machine oval cavities & joint plane holes in the casing & cover and no mismatching should be allowed.
- 8) No flaws like blow holes, shrinkage, inclusions etc. should open up during machining. However, if any flaw opens up during machining, vendor shall immediately intimate detail and location of flaw and corrective action proposed Further machining will be suspended till BHEL approves corrective action.
- 9) After finish machining, inspection report is to be submitted to BHEL for final clearance. All dimensions including run outs shall be checked and submitted additionally, the referred logsheet shall be filled & submitted.



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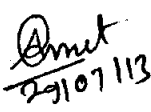
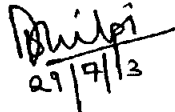
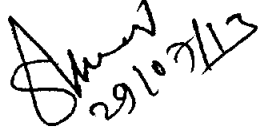
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- 10) Inspection of the job at supplier's works shall be carried out by BHEL/ agency authorized by BHEL for which adequate prior notice (min. 4 weeks) shall be given by the supplier.
- 11) Supplier shall ensure the Hydraulic testing process of servomotor casing along with cover is approved by BHEL.
- 12) Weld repair of the jobs are not allowed.
- 13) All the machined surfaces must be protected against rust/ corrosion by steam washable rust preventive suitable for six months.
- 14) Packing of the finished machined casing should be suitable to protect damage of the job during handling and transportation transit. The packing shall be done in accordance with HW0232899 (by domestic/ Indian vendors) or HW0232898 (by Overseas/ Foreign vendors).
- 15) One complete set of all relevant drawings and product standards shall be furnished to the supplier for submitting the offer. Drawings and documents furnished to vendor should be treated as BHEL property. Strict confidentiality is to be maintained and under no circumstances these documents or copy of these should be transferred to third party without express permission of BHEL on completion of supply these documents must be returned to BHEL

List of cross-referred drawings/ standards

1. Drg.no. 0-11404-18011
2. Logsheet 0-11404-18011 LS
3. Material Spec. HW19799
4. HW0980829
5. HW0980831
6. HW0980832
7. HW0232899
8. HW0232898

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