


Form no:		PRODUCT STANDARD HEAT EXCHANGERS HYDERABAD		HE 5 1170						
				REV NO:07						
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COPY RIGHT AND CONFIDENTIAL The Information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED , It must not be used directly or indirectly in any way detrimental to the interest of the company.	<p align="center"><u>SPECIFICATION FOR H.P. HEATER HEMIHEAD</u> <u>FOR FEED WATER HEATERS</u></p> <p>1. The plate shall confirm in all respects to SA516 Gr.70 of ASME SEC-II part-A, year of edition and addenda as specified in drg./enquiry/P.O. Hemihead shall be formed from a single plate.</p> <p>2.Over & above the specification requirement, the following supplementary requirements are to be met:-</p> <p style="margin-left: 40px;">(a) S1 :- Vacuum treatment</p> <p style="margin-left: 40px;">(b) S5 :- Charpy V-notch impact test.</p> <p style="margin-left: 40px;">(c) S8 :- Ultrasonic test as per SA435 shall be carried out before and after forming.</p> <p>3. The impact testing of the plate as per A370 & the acceptance values shall be as follows:-</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Test temp.</th> <th style="text-align: center;">Average of 3 specimens (J)</th> <th style="text-align: center;">Individual min (J)</th> </tr> </thead> <tbody> <tr> <td style="text-align: left;">0 deg. C</td> <td style="text-align: center;">28.0</td> <td style="text-align: center;">21.0</td> </tr> </tbody> </table> <p>4. Along with each Hemihead, an attested test coupon of size as per drawing from the same cast/heat shall be supplied for proving C-seam at BHEL.</p> <p>5. Hemihead shall be normalized after forming, even if formed, in normalized temperature range. Heat treatment shall be furnished. Supplier shall prove the mechanical properties of the Hemihead on a test coupon which has been subjected to the same heat treatment cycle.</p> <p>6. Limit on ovality & tolerance on inside diameter as per ASME Sec. VIII Div. 1.</p> <p>7. Magnetic particle test shall be carried out on outer surface of Hemihead after forming. Acceptance shall be as per Appx. '6' of ASME VIII Div.1.</p> <p>8. Minimum thickness as specified on the drg. shall be ensured after forming.</p> <p>9. Temporary rust preventive shall be applied for protection during transit & storage.</p> <p>10. Inspection and certification: (a) Certification by CIB in IBR form III C, Lloyds as per product standard HE5-1170 & OA plan HY:HE:009:HH latest revision. Incase of Lloyd's inspection ,where the material is sourced from suppliers other than India, the certification shall be in IBR form III C duly signed by Lloyds Register.</p>				Test temp.	Average of 3 specimens (J)	Individual min (J)	0 deg. C	28.0	21.0
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