

Form no:		PRODUCT STANDARD HEAT EXCHANGERS HYDERABAD		HE 5 1170						
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<u>SPECIFICATION FOR H.P. HEATER HEMIHEAD</u> <u>FOR FEED WATER HEATERS</u> 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. 2. Over & above the specification requirement, the following supplementary requirements are to be met:- (a) S1 :- Vacuum treatment (b) S5 :- Charpy V-notch impact test. (c) S8 :- Ultrasonic test as per SA435 shall be carried out before and after forming. 3. The impact testing of the plate as per A370 & the acceptance values shall be as follows:- <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> 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. 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. 6. Limit on ovality & tolerance on inside diameter as per ASME Sec. VIII Div. 1. 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. 8. Minimum thickness as specified on the drg. shall be ensured after forming. 9. Temporary rust preventive shall be applied for protection during transit & storage. 10. Inspection and certification: a) where the material is sourced from suppliers other than India, the certification shall be in IBR form III I duly signed by BHEL Approved Third Party Inspection Agency (BHEL TPIA). BHEL TPIA shall be authorised by Central Boiler Board for that country. b) Where the material is sourced from Indigenous Suppliers, the certification shall be by Director of Boilers in form III I and also by BHEL Approved Third Party Inspection Agency (BHEL TPIA) as per ASME SEC.II Part A. Edition & Addenda as indicated in the drawing/P. O & enclosed quality plan.					Test temp.	Average of 3 specimens (J)	Individual min (J)	0 deg. C	28.0	21.0
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Ref doc:	Revisions:	Prepared :	Approved:	Date:						
	Refer to Record of revisions	B.U.G.	D.S.	28-01-86						

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