



BHARAT HEAVY ELECTRICALS LIMITED
R.C.PURAM, HYDERABAD

ADDENDA TO VENDOR STANDARD QUALITY PLAN

ITEM DESCRIPTION	HEMI HEAD FORGING		
PO/PR NO :DATE	8000096388 Date 07.01.2021		
BHEL SPEC/DRAWING:	HE51170 REV 08/ 41750103315 REV 00		
PROJECT :	2X660MW THDC KHURJA STPP UNIT-I & UNIT-II HP HEATERS.		
APPLICABLE SVQP:	HYQA/VSQP/2018-19/HE/131 REV 01		
PROJECT SPECIFIC REQUIREMENTS	1.) MATERIAL SHALL BE AS PER ASME SECII PART A, 2019 EDITION. 2.) PLATE MATERIAL SHALL BE PROCURED FROM NTPC AGREED SOURCES. 3.) VENDOR SHALL ENSURE IBR REGULATION AND FURNISH THE IBR CERTIFICATION IN ORIGINAL AS PER IBR CODE 1950 TO NTPC WHEREVER APPLICABLE		
QA REMARK :	 Ch.B.V.Sirisha Sr. Engineer/ QA	18.03.2021	STANDARD QAP TO BE FOLLOWED ALONG WITH PROJECT SPECIFIC REQUIREMENT

		BHARAT HEAVY ELECTRICALS LIMITED R.C.PURAM, HYDERABAD		STANDARD QUALITY PLAN FOR VENDOR ITEMS				QP. NO: HYQA/VSQP/2018-19/HE/131					
				ITEM: SPECIFICATION FOR H.P. HEATER HEMIHEAD FOR FEED WATER HEATERS BHEL SPEC: HE 51170, R08 BHEL DRG : AS PER P.O.				REV. NO. : 01					
								DATE: 18.03.2021					
								VALID UPTO: 17.03.2023					
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SL	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REF DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	* D	AGENCY			REMARKS
										P	W	V	
1.0	AT SUPPLIERSWORKS												
1.1	HEMIHEAD	VERIFICATION OF MILL TC FOR IDENTIFICATION MARKS, CHEM. & MECH. PROPERTIES	CRITICAL	VISUAL TC REVIEW	100%	SA 516 GR.70 WITH S1,S5 & S8 SUPPLIMENTARY REQUIREMENT		MFGR. TC	✓	2		1	
1.2		UT EXAM. BEFORE FORMING	MAJOR	NDE	100%	SA 435	SA 435	SUPPLIER TC	✓	2		1	
1.3		VERIFICATION OF HT CHART AFTER NORMALISING	MAJOR	REVIEW	100 %	SA 516 GR.70, HE 51170	SA 516 GR.70, HE 51170	HT CHART/ REPORT	✓	2		1	NOTE 3
1.4		UT EXAM. AFTER FORMING	MAJOR	NDE	100%	SA 435	SA 435	IR	✓	2	1		
1.5		MT ON OUTER SURFACE AFTER FORMING	MAJOR	NDE	100%	ASME SEC.V ART.7	ASMASME SEC.VIII DIV.I , APPX.6	IR	✓	2	1		
1.6		MECH. PROPERTIES	MAJOR	MECH.	AS PER SPN	SA 516 GR.70	SA 516 GR.70	IR	✓	2	1		NOTE 27
1.7		DIM. CONFORMITY INCLUDING THICKNESS MEASURT. & OVALITY BY UT METHOD	MAJOR	MEASURT.	100 %	DRG.	DRG. & ASME SEC.VIII DIV.I	IR	✓	2	1		
1.8		LIFTING LUG ARRGT AND ORIENTATION	MAJOR	MEASURT.	100 %	DRG.	DRG.	IR	✓	2	1		
1.9		PT ON LIFTING LUG WELDS	MAJOR	NDE	100%	ASME SEC.V ART.6	ASMASME SEC.VIII DIV.I , APPX.8	IR	✓	2	1		

VENDOR TO SUBMIT DRAWING ANDTECH.DATASHEET FFOR BHEL APPROVAL. LEGEND: P: - PERFORM, W: - WITNESS , V: - VERIFICATION, INDICATING 1: - BHEL / BHEL NOMMNATED INSPECTION AGENCY, 2: - VENDOR / SUB VENDOR AS APPROPRIATE AGAINST EACH COMPONENT / CHARACTERISTICS UNDER THE COLUMNS P, W & V. * D: RECORDS IDENTIFIED WITH TICK (✓) SHALL BE ESSENTIALLY INCLUDED IN QA DOCUMENTATION.				PREPARED BY:  CH. B V SIRISHA SR.ENGINEER/QA	REVIEWED BY:  B. ASHOK KUMAR AGM/QA	APPROVED BY:  G BALA AGM /QA
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1.10	HEMIHEAD	VERIFICATION OF TCS, IDENTIFICATION OF AS PER SPECN. A) MATERIAL B) TEST COUPON	MAJOR	VISUAL	100 %	DRG,SPEC. & QP	DRG.,SPEC & QP	SUPPLIER TC/IR	✓	2		1	NOTE 25, 26, 27
1.11		PRESERVATION, PACKING & IDENTIFICATION (MARKING)	MAJOR	VISUAL	100%	P.O., DRG. & SPN.	P.O., DRG. & SPN..	IR	✓	2		1	NOTE 5, 28

NOTES:

1. LATEST REVISIONS OF SPECIFICATION / DRAWINGS AS PER P.O., APPROVED DRAWINGS & BILL OF MATERIALS ARE APPLICABLE.
2. ALL TEST CERTIFICATES/ REPORTS REVIEWED AND CERTIFIED BY BHEL/TPI SHALL BE SUBMITTED TO BHEL AS DOCUMENTATION PACKAGE.
3. REDUCTION RATIO SHALL BE MENTIONED IN TEST REPORT.
4. THIS SQP IS NOT APPLICABLE FOR VENDORS SUPPLYING THIS ITEM FOR THE FIRST TIME TO BHEL.
5. PRE-DESPATCH INSPECTION PHOTOGRAPHS OF THE EQUIPMENT/ITEM SHALL BE INCLUDED IN QUALITY DOCUMENTATION.
6. THIS QP SHOULD BE READ ALONG WITH BHEL SPEC, BHEL DRAWINGS / APPROVED DRAWINGS, DATA SHEET, BOM AND PO.
7. ANY OTHER TESTS/ CHECKS INDICATED IN SPECIFICATION, P.O., OR DRAWING & ANY ADDITIONAL CHECKS ENVISAGED BY BHEL/TPI TO ENSURE WORKMANSHIP, FINISH, AESTHETICS, ETC. SHALL ALSO BE CONDUCTED AND WITNESSED/VERIFIED BY BHEL /TPI / CUSTOMER AS REQUIRED.
8. DRAWING / DATA SHEET SHALL PREVAIL OVER QUALITY PLAN IN CASE OF ANY CONTRADICTION BETWEEN QUALITY PLAN AND DRAWING / DATA SHEET.
9. ANY PROJECT / CUSTOMER SPECIFIC REQUIREMENT, LIKE QP APPROVAL & CUSTOMER/CONSULTANT INSPECTION, WHICH SHALL BE NOTIFIED HAVE TO BE FULFILLED BY THE VENDOR AT THE TIME OF EXECUTION OF ORDER.
10. THIS QP SHALL NOT BE APPLICABLE TO THE ORDERS FOR WHICH QP APPROVAL & INSPECTION BY CUSTOMER/CONSULTANT IS REQUIRED.
11. THIS SQP IS NOT APPLICABLE FOR VENDORS SUPPLYING THIS ITEM FOR THE FIRST TIME TO BHEL.
12. VENDOR SHALL SUBMIT COMPLETE INSPECTION AND TEST AND DOCUMENTATION WHICHEVER IS IDENTIFIED WITH (v) UNDER COLUMN D OF APPROVED QUALITY PLAN SHALL BE ENCLOSED WITH THE INSPECTION REPORT
13. VENDOR SHALL SUBMIT ORIGINAL COPIES OF ALL INSPECTION AND TEST DOCUMENTS AUTHENTICATED BY TPIA
14. LATEST VERSION OF STANDARDS/DRAWINGS/TOLERANCES ETC TO BE MENTIONED IN QUALITY PLAN/DRAWING
15. BHEL RESERVES THE RIGHT FOR CONDUCTING REPEAT TEST, IF REQUIRED

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16. BHEL APPROVED INSPECTION ENGINEERS TO BE DEPLOYED FOR INSPECTION
17. ONLY LEVEL II & ABOVE QUALIFIED PERSON IN RESPECTIVE NDE (AS APPLICABLE AS PER PO) TO VERIFY OR WITNESS THE NDT TEST REPORT/RESULTS
18. VENDOR TO OFFER ORIGINAL TEST CERTIFICATES ISSUED BY THIRD PARTY LABORATORIES OR SUPPLIERS
19. VENDOR TO ENSURE TPIA THAT A NOTE "COMPARED WITH ORIGINAL TEST CERTIFICATE. REVIEWED, VERIFIED AND FOUND IN ORDER" SHALL CONTAIN WITH EVERY INSPECTION REPORT
20. ONLY VALID AND CALIBRATED MEASURING INSTRUMENTS AND EQUIPMENT SHALL BE USED.
21. VENDOR TO ENSURE THAT MATERIAL TEST CERTIFICATE & TRACEABILITY RECORDS ARE AVAILABLE FOR USE OF CORRECT MATERIAL.
22. QUALIFICATION OF EQUIPMENT, PROCESS & PERSONNEL FOR SPECIAL PROCESSES LIKE WELDING, OR PAINTING & METAL COATING ETC.(AS APPLICABLE AS PER PO) SHALL BE ENSURED.
23. VENDOR TO ENSURE THAT ALL CERTIFICATES ARE ENDORSED BY TPIA WITH COMMENTS (WITNESSED OR VERIFIED), AS APPLICABLE PER QUALITY PLAN
24. VENDOR SHALL ENSURE TO OFFER LOG SHEETS CONTAINING ACTUAL MEASURED VALUES INSTEAD OF SAYING OK/NOT OK TO TPIA
25. VALID IBR TCs IN FORM III-I SHALL BE FURNISHED FOR TPIA REVIEW AND RECORD.
26. ALONG WITH EACH HEMIHEAD, AN ATTESTED TEST COUPON OF SIZE AS PER DRAWING FROM THE SAME CAST/HEAT SHALL BE SUPPLIED.
27. SELECTION OF TEST COUPONS SHALL BE WITNESSED BY BHEL/BHEL TPIA
28. TEMPORARY RUST PREVENTIVE SHALL BE APPLIED FOR PROTECTION DURING TRANSIT & STORAGE.

MTC – MILL TEST CERTIFICATE

TC – TEST CERTIFICATE

IR – INSPECTION REPORT

COC – CERTIFICATE OF CONFORMITY

TPIA – THIRD PARTY INSPECTION AGENCY APPOINTED BY BHEL.

PO – PURCHASE ORDER

MPS – MANUFACTURING PROCESS SHEET

HTP - HEAT TREATMENT PROCEDURE

WPS- WELDING PROCESS SPECIFICATION

PQR- PROCESS QUALIFICATION RECORD

WQR- WELDER'S QUALIFICATION RECORD

RP - REPAIR PROCEDURE

SP – STORAGE PROCEDURE OF WELDING CONSUMABLE

FCR – FURNACE CALIBRATION RECORD/REPORT

ICR – MEASURING INSTRUMENT CALIBRATION RECORD/REPORT

NDE - NON DESTRUCTIVE EXAMINATION

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