

BHARAT HEAVY ELECTRICALS LIMITED HEAVY PLATE & VESSELS PLANT

HEAVY PLATE & VESSELS PLANT VISAKHAPATNAM – 530 012, INDIA

MM/PURCHASE (MP-RM) GROUP

Ref: RFQ No. H092500021 Date: 06.09.2025

Sub: SUPPLY OF FLANGES.

Tender is invited with Two-part bids for the SUPPLY OF FLANGES

1. TENDER SUBMISSION:

The Bid shall be submitted in two Parts

- A. Part-I: Techno-Commercial Bid shall be sent by e-mail only to <u>technicalbid-hpvp@bhel.in</u> by mentioning the Tender Enq. No. as Subject along with the following documents:
 - a) Copy of GSTIN Registration Certificate.
 - **b)** Copy of PAN card.
 - c) Valid Udyam / Udyog Aadhaar Registration Certificate (if any)
 - d) Copy of RTGS detail and cancelled cheque
 - e) Signed & Stamped Tender documents
- B. Part-II: Price Bid in the prescribed format shall be sent by email- only to pricebid-hpvp@bhel.in as separate document.

Note: All pages of tender documents and the various supporting documents enclosed by the bidder should be signed on all pages with seal.

C. The tender completed in all respects shall be sent by email only latest by <u>14.00 Hrs. on</u> <u>09.09.2025</u> to following email address only:

Part-I Bid (Technical bid) : <u>technicalbid-hpvp@bhel.in</u>
Part-II Bid (Price bid) : <u>pricebid-hpvp@bhel.in</u>

Note:

- 1) While sending tender documents thru email, Tender enq. No. is to be written as subject
- 2) Please do not mark any CC / BCC in email address. If done so, the system will not receive the offer and liable for rejection.
- 3) Attachment size limited to 20 MB only. Bidder can submit their offer in multiple emails within the due date by splitting the attachments if more than 20 MB.

Last date for receipt of tenders is **09.09.2025 up to 14.00 hrs**. BHEL-HPVP is not responsible for any delays in submission of offers.

Offers received in any other form will not be accepted.

D. OPENING OF TENDERS:

The bid will be opened on 09.09.2025 at 14.00 Hrs. at Customer Cell, Adm. Building, BHEL- HPVP.



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TERMS AND CONDITIONS

Sl. No	Matl. Code	Description	Inspection	UOM	Quantity	Vendor Response (Make & Brand)	
i) TDC All the	al shall be supplied as 0 423 R09. flanges shall be comption: IBR [Applicable						
1	156118170000	CS WN FLANGE 80NBX150# RF SA105 Bore:77.92mm IBR	IBR	NO	5.000		
2	156118600000	CS SW FLANGE 25NBX600# RF SA105 Bore:24.3mm IBR		NO	5.000		
3	156119950153	WN FLNG,20NB,#150,SA105,RF, Bore:15.58mm IBR		NO	5.000		
4	156152400000	CS BLIND FLANGE 20NB x 150 RF SA105 IBR	CS BLIND FLANGE 20NB x 150 RF SA105 IBR NO				
5	925180140000	BLIND RF FLANGE NB25 CL300 SA105 IBR	5.000				
6	925180160000	SW RF FLANGE NB25 CL300 SA105 Bore:24.3 mm IBR	5.000				
7	925180180000	BLIND RF FLANGE NB25 CL600 SA105 IBR		NO	5.000		
8	925186510000	WN FLANGE NB 80 CL600 SA105 Bore:77.92mm IBR	NO 5.				
9	920377000000 SOW FLG 2.5 " CL150 3-42-000-00824 SA105 Bore : NO 74.7 mm. IBR						
i) TDC ii) QP I All the	0 423 R09. No:423-09, Rev:02 flanges shall be comp	per the following documents. lied to ASME B16.5 icable for Package No. 02,03]					
10	920376950100	SW FLG 6"- CL150SA105(CERT) BORE:154.1MM	BHEL-TPI	NO	15.000		
11	VZ7247100516	CS FORGED SPEC BLIND FL 0.5"X150# SA105 Bore:16mm RF		NO	15.000		
12	156118860000	SOW FLANGE, NB 80 CL150 SA105 Bore: 90.7 mm.		NO	2.000		
13	925185810000	SOW FLANGE NB 80 CL150 SA182F22CL3 Bore : 90.7 mm.		NO	1.000		
			GRAND	TOTAL	74.00		

1. PQC [PRE-QUALIFICATION CRITERIA]: ANY VENDOR WHO HAS SUPPLIED SIMILAR MATERIALS IN THE LAST 5 YEARS TO ANY OF BHEL UNITS/REGIONS WILL BE QUALIFIED.

2. DELIVERY PERIOD:

WITHIN 21 DAYS [3 WEEKS] FROM THE DATE OF PO TO THE RECEIPT OF MATERIAL AT BHEL HPVP. BIDDERS TO AGREE THE ABOVE DELIVERY TO MEET THE PROJECT SCHEDULE.

DELIVERY PERIOD QUOTED BEYOND 6 WEEKS WILL BE LIKELY TO BE REJECTED.

LOADING FACTOR:

THE OFFER WHICH DO NOT CONFIRM TO 3 WEEKS OF DELIVERY PERIOD SHALL BE LOADED FOR DELAYED DELIVERY BEYOND 3 WEEKS @ 0.5% PER WEEK OR PART THEREOF ON THE OFFERED BASIC VALUE. IF ANY OTHER DATE (SUCH AS MATERIAL READINESS DATE, MTC DATE, LR DATE, LC DATE ETC) IS QUOTED OFFER SHALL BE LOADED @0.5% PER WEEK FOR THE DIFFERENTIAL PERIOD FOR BRINGING IT TO SPECIFIED DATE

3. PAYMENT TERMS:

PAYMENT OF 100% OF INVOICE VALUE SHALL BE MADE WITHIN THE STIPULATED DAYS AS MENTIONED BELOW FROM THE DATE OF RECEIPT AND ACCEPTANCE OF MATERIALS AT BHEL HPVP.

T	D T
Type of Bidder	Payment Terms
	(Number of Days)



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Micro & Small Enterprises (MSEs)	45 Days
Medium Enterprises	60 Days
Non MSME	90 Days

HOWEVER, GST PORTION OF INVOICE SHALL BE RELEASED ONLY UPON:

- 1) VENDOR DECLARING THE INVOICE IN THEIR GSTR-1.
- 2) RECEIPT OF GOODS AND TAX INVOICE BY BHEL.
- 3) CONFIRMATION OF PAYMENT OF GST THEREON BY VENDOR ON GSTN PORTAL.
- **4. LIQUIDATED DAMAGES (LD):** DELIVERY IS THE ESSENCE OF THIS CONTRACT. IN THE EVENT OF YOUR FAILURE TO SHIP THE MATERIALS WITHIN THE STIPULATED DELIVERY PERIOD, LD @ 0.5% PER WEEK OF DELAY SUBJECT TO A MAX OF 10% ON TOTAL ORDER VALUE WILL BE APPLICABLE. DATE OF LR/INVOICE WHICHEVER IS LATER SHALL BE CONSIDERED FOR LD CALCULATION PURPOSE. IN CASE OF DELAY, THE SUPPLIER SHOULD DEDUCT APPLICABLE L.D AND NEGOTIATE THE DOCUMENTS FOR BALANCE AMOUNT ONLY.

5. INSPECTION BY

FOR BHEL-TPI : BY M/S BHEL/ TPIA AT YOUR WORKS & INSPECTION CHARGES TO BHEL A/C. WHEN MATERIAL IS READY FOR INSPECTION, SUPPLIER NEED TO REGISTER ONLINE FOR OFFERING FOR INSPECTION ON BHEL WEB SITE (WWW.CQIR.BHEL.IN). BHEL AUTHORIZED TPIA WILL ATTEND & CARRY OUT INSPECTION. SUPPLIER SHOULD ALSO INFORM US THRU MAIL REGARDING READINESS OF MATERIAL & INFORMING TO CARRY OUT INSPECTION. BHEL REPRESENTATIVE FROM UNIT OR CQ IS AUTHORIZED TO CARRY OUT AUDIT ALONG WITH TPIA AT VENDORS WORK BEFORE CLEARING ITEM FOR DISPATCH.

VENDOR SUBMIT ALL THE INSPECTION DOCUMENT TO BHEL FOR REVIEW AND OBTAIN DISPATCH CLEARANCE BEFORE DISPATCH OF MATERIAL

FOR IBR : BY IBR ISPECTION CHARGES SHOULD INCLUDED IN OFFERED PRICE BHEL-HPVP, AT STORES. REJECTED MATERIALS, IF ANY, SHALL BE REPLACED BY SUPPLIER ON FREE OF COST.

THE MANUFACTURER OR WELL-KNOWN MAKER SHOULD HAVE A VALID CBB APPROVAL, ALONG WITH THE APPROVED SPECIMEN SIGNATURE OF THE QUALIFIED INSPECTOR WHO SIGNS THE IBR TEST CERTIFICATE (TC). THESE DOCUMENTS MUST BE SUBMITTED WITH THE OFFER.

FOR OTHER MANUFACTURERS WHO UTILIZING AN IBR-AUTHORIZED INSPECTION AGENCY (E.G., TÜV, LLOYD'S REGISTER, ETC.), BOTH THE INSPECTION AGENCY AND THE AUTHORIZED INSPECTOR MUST HOLD VALID CBB APPROVALS, INCLUDING THE APPROVED SPECIMEN SIGNATURE.

DISPATCH CLEARANCE SHALL NOT BE GRANTED IN THE ABSENCE OF ABOVE DOCUMENTS.

6. GST Clauses:

- THE BIDDER TO SPECIFY IN THEIR OFFER (PART 1 BID) THE CATEGORY OF THEIR REGISTRATION UNDER GST LIKE REGISTERED, UNREGISTERED AND COMPOSITE DEALER.
- THE PROVISIONAL GST REGISTRATION NUMBER OF BHARAT HEAVY ELECTRICAL LTD, HEAVY PLATES AND VESSELS PLANT, VISAKHAPATNAM IS "37AAACB4146P7Z8" WITH STATE CODE AS "37" AND STATE NAME AS "ANDHRA PRADESH".
- NO GST WILL BE REIMBURSED TO UNREGISTERED OR COMPOSITE DEALER. IN THE EVENT, ANY GST IS QUOTED BY COMPOSITE DEALER, THE SAME SHALL BE ADDED TO THE COST OF SUPPLY IN EVALUATING THE BID.
- SUPPLIER SHALL MENTION THEIR GSTN REGISTRATION NUMBER(GSTIN) IN ALL THEIR INVOICES AND INVOICES SHALL BE IN THE FORMAT AS SPECIFIED/PRESCRIBED UNDER GST LAWS. INVOICES SHALL NECESSARILY CONTAIN INVOICE NUMBER (IN CASE OF MULTIPLE NUMBERING SYSTEM IS BEING FOLLOWED FOR BILLING LIKE SAP INVOICE NO COMMERCIAL INVOICE NO ETC., THEN THE INVOICE NO WHICH IS LINKED/UPLOADED IN GSTN NETWORK SHALL BE CLEARLY INDICATED), ITEM DESCRIPTION AS PER PO QUANTITY RATE, VALUE, APPLICABLE TAXES WITH NOMENCLATURE (LIKE IGST, SGST, CGST & UTGST) SEPARATELY, HSN/ SAC CODE, ETC.



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- ALL INVOICES SHALL BEAR THE HSN CODE FOR EACH ITEM SEPARATELY (HARMONIZED SYSTEM OF NOMENCLATURE)/ SAC CODE (SERVICES ACCOUNTING CODE).
- THE BIDDER SHALL CLEARLY INDICATE HSN (HARMONIZED SYSTEM NOMENCLATURE) / SAC (SERVICE ACCOUNTING CODE), ITS DESCRIPTION AND APPLICABLE RATE OF GST FOR EACH ITEM IN HIS TECHNO-COMMERCIAL BID.
- IN CASE GST CREDIT IS DELAYED/DENIED TO BHEL DUE TO NON/DELAYED RECEIPT OF GOODS AND/OR TAX INVOICE OR EXPIRY OF TIMELINE PRESCRIBED IN GST LAW FOR AVAILING SUCH ITC, OR ANY OTHER REASONS NOT ATTRIBUTABLE TO BHEL, GST AMOUNT SHALL BE RECOVERABLE FROM BIDDER ALONG WITH INTEREST, PENALTIES LEVIED/LEVIABLE ON BHEL.
- IN CASE BIDDER DELAYS DECLARING SUCH INVOICE IN HIS RETURN AND GST CREDIT AVAILED BY BHEL IS
 DENIED OR REVERSED SUBSEQUENTLY AS PER GST LAW, GST AMOUNT PAID BY BHEL TOWARDS SUCH ITC
 REVERSAL AS PER GST LAW SHALL BE RECOVERABLE FROM BIDDER ALONG WITH INTEREST LEVIED /
 LEVIABLE ON BHEL.
- BIDDERS MUST ENSURE COMPLIANCE OF ALL THE APPLICABLE RULES AND PROCEDURE AS ENVISAGED IN THE GST REGIME. ANY LOSS TO BHEL-HPVP DUE TO FAULT / NONCOMPLIANCE BY THE BIDDER WILL BE TO THE BIDDER'S ACCOUNT.
- GST TDS IS APPLICABLE AS PER RULES.
- 7. RIGHT TO REJECT: THE COMPETENT AUTHORITY RESERVES ALL RIGHTS TO REJECT THE GOODS IF THE SAME ARE NOT FOUND IN ACCORDANCE WITH THE REQUIRED DESCRIPTION / SPECIFICATIONS/QUALITY. REJECTED MATERIALS IF ANY AFTER RECEIPT OF MATERIAL AT OUR END SHALL BE REPLACED BY SUPPLIER AT FREE OF COST (INCLUSIVE OF ALL TESTING, INSPECTION, TPI, SERVICE CHARGES ETC) UP TO DESTINATION IMMEDIATELY WITHOUT ANY EXTRA FREIGHT FROM DEFECT NOTIFICATION DATE.
 - IF ANY MATERIAL IS REJECTED, SUPPLIER TO MAKE FREE OF COST (ON FREIGHT PAID BASIS) REPLACEMENT WITHIN A SPECIFIED PERIOD. REJECTED MATERIALS CAN BE LIFTED BY THE SUPPLIER THEREAFTER. (OR) BHEL SHALL TAKE ALTERNATE PROCUREMENT ACTION FROM ELSEWHERE AND RECOVER THE DIFFERENCE IN COST, IF ANY INCURRED BY BHEL IN THIS REGARD FROM THE SUPPLIER. THE SUPPLIER SHALL NOT BE ENTITLED TO ANY GAIN ON REPURCHASE. (OR) BHEL CAN TERMINATE THE CONTRACT EITHER IN PART OR WHOLLY IN WHICH AT BHEL DISCRETION AND RECOVER LOSS IF ANY FROM THE SUPPLIER.
- 8. BHEL HPVP RESERVES THE RIGHT TO CANCEL THE ENQUIRY / TENDER AT ANY STAGE WITHOUT ASSIGNING ANY REASONS THEREOF. AND BHEL HPVP RESERVES THE RIGHT TO REJECT OR ACCEPT ONE OR ANY OFFER WITHOUT ASSIGNING ANY REASON.
- 9. RISK PURCHASE: THE DELIVERY PERIOD STATED SHALL BE REASONABLE/REALISTIC AND SHALL STRICTLY BE ADHERED TO. IF THE MATERIAL IS NOT SUPPLIED WITHIN THE AGREED DELIVERY PERIOD, IN ORDER TO AVOID LOSS OR DAMAGE BHEL RESERVES THE RIGHT TO CANCEL THE ORDER AND PURCHASE THE MATERIAL (EITHER WHOLLY OR UNDELIVERED PORTION) FROM ALTERNATE SOURCE(S) AT THE RISK AND COST (WITH EXTRA 5 % OVERHEAD) OF THE SUPPLIER. IN SUCH AN EVENT, IT SHALL BE OBLIGATORY ON THE PART OF SUPPLIER TO MAKE GOOD ANY LOSS SUFFERED BY THE BHEL. IN SUCH CASES, BHEL SHALL WITHHOLD BILLS, BANK GUARANTEES, ETC., OF THE SUPPLIER, WHICH ARE PENDING EITHER AT HPVP BHEL OR ANY OTHER UNIT OF BHEL.
- 10. FORCE MAJEURE: THE SUPPLIER SHALL NOT BE CONSIDERED IN DEFAULT IF DELAY OCCURS DUE TO CAUSES BEYOND HIS CONTROL SUCH AS ACTS OF GOD, NATURAL CALAMITIES, FIRE, FROST, FLOOD, CIVIL WAR, STRIKES, CIVIL COMMOTION, RIOT, GOVERNMENT RESTRICTIONS, LOCKOUT THAT ARE NOT IN CONTROL OF SUPPLIER OR ACTS OF UNSURPASSED POWER. ONLY THOSE CAUSES THAT HAVE DURATION OF MORE THAN SEVEN DAYS SHALL BE CONSIDERED CAUSE OF FORCE/ CALENDAR/ MAJEURE. NOTIFICATION TO THIS EFFECT DULY CERTIFIED BY LOCAL CHAMBER OF COMMERCE/ STATUTORY AUTHORITIES SHALL BE GIVEN BY THE SUPPLIER TO BHEL BY REGISTERED LETTER. IN THE EVENT OF DELAY TO SUCH CAUSES THE DELIVERY SCHEDULE SHALL BE EXTENDED FOR A LENGTH OF TIME EQUAL TO THE PERIOD OF FORCE MAJEURE OR AT THE OPTION OF BHEL THE ORDER MAY BE CANCELLED IN MUTUAL CONSENT WITH VENDOR. SUCH CANCELLATION WOULD BE WITHOUT ANY LIABILITY WHATSOEVER ON THE PART OF BHEL. IN THE EVENT OF SUCH CANCELLATION THE SUPPLIER SHALL REFUND ANY AMOUNT ADVANCED OR PAID TO THE SUPPLIER BY BHEL AND DELIVERY BACK ANY MATERIAL ISSUED TO HIM BY BHEL AND RELEASE FACILITIES, IF ANY, PROVIDED BY BHEL.
- 11. ARBITRATION: EXCEPT AS PROVIDED ELSEWHERE IN THIS CONTRACT, IN CASE AMICABLE SETTLEMENT IS NOT REACHED BETWEEN THE PARTIES, IN RESPECT OF ANY DISPUTE OR DIFFERENCE; ARISING OUT OF THE FORMATION, BREACH, TERMINATION, VALIDITY OR EXECUTION OF THE CONTRACT; OR, THE RESPECTIVE RIGHTS



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AND LIABILITIES OF THE PARTIES; OR, IN RELATION TO INTERPRETATION OF ANY PROVISION OF THE CONTRACT; OR, IN ANY MANNER TOUCHING UPON THE CONTRACT, THEN, EITHER PARTY MAY, BY A NOTICE IN WRITING TO THE OTHER PARTY REFER SUCH DISPUTE OR DIFFERENCE TO THE SOLE ARBITRATION OF AN ARBITRATOR APPOINTED BY HEAD OF THE BHEL UNIT/REGION/DIVISION ISSUING THE CONTRACT.

THE ARBITRATOR SHALL PASS A REASONED AWARD AND THE AWARD OF THE ARBITRATOR SHALL BE FINAL AND BINDING UPON THE PARTIES. SUBJECT AS AFORESAID, THE PROVISIONS OF ARBITRATION AND CONCILIATION ACT 1995 (INDIA) OR STATUTORY MODIFICATIONS OR RE-ENACTMENTS THEREOF AND THE RULES MADE THEREUNDER AND FOR THE TIME BEING IN FORCE SHALL APPLY TO THE ARBITRATION PROCEEDINGS UNDER THIS CLAUSE. THE SEAT OF ARBITRATION SHALL BE (THE PLACE FROM WHICH THE CONTRACT IS ISSUED) THE COST OF ARBITRATION SHALL BE BORNE AS PER THE AWARD OF THE ARBITRATOR, SUBJECT TO THE ARBITRATION IN TERMS OF CLAUSE ABOVE, THE COURTS AT (PI INCORPORATE THE NAME OF THE PLACE WHERE THE PRINCIPAL CIVIL COURT HAVING ORDINARY ORIGINAL CIVIL JURISDICTION TO DECIDE QUESTIONS FORMING SUBJECT MATTER OF THE ARBITRATION IS LOCATED) SHALL HAVE EXCLUSIVE JURISDICTION OVER ANY MATTER ARISING OUT OF OR IN CONNECTION WITH THIS CONTRACT. NOTWITHSTANDING THE EXISTENCE OR ANY DISPUTE OR DIFFERENCES AND/OR REFERENCE FOR THE ARBITRATION, THE CONTRACTOR SHALL PROCEED WITH AND CONTINUE WITHOUT HINDRANCE THE PERFORMANCE OF ITS OBLIGATIONS UNDER THIS CONTRACT WITH DUE DILIGENCE AND EXPEDITION IN A PROFESSIONAL MANNER EXCEPT WHERE THE CONTRACT HAS BEEN TERMINATED BY EITHER PARTY IN TERMS OF THIS CONTRACT.

- 12. JURISDICTION: NOTWITHSTANDING ANY OTHER COURT OR COURTS HAVING JURISDICTION TO DECIDE THE QUESTION(S) FORMING THE SUBJECT MATTER OF THE REFERENCE IF THE SAME HAD BEEN THE SUBJECT MATTER OF A SUIT, ANY AND ALL ACTIONS AND PROCEEDINGS ARISING OUT OF OR RELATIVE TO THE CONTRACT (INCLUDING ANY ARBITRATION IN TERMS THEREOF) SHALL LIE ONLY IN THE COURT OF COMPETENT CIVIL/TERRITORIAL JURISDICTION IN THIS BEHALF AT VISAKHAPATNAM AND ONLY THE SAID COURTS(S) SHALL HAVE JURISDICTION TO ENTERTAIN AND TRY ANY SUCH ACTION(S) AND/OR PROCEEDING(S) TO THE EXCLUSION OF ALL OTHER COURTS.
- 13. NO OVERDUE INTEREST, WHATSOEVER THE REASON, WILL BE PAYABLE BY BHEL TO EITHER SUPPLIER OR HIS BANKERS
- 14. TECHNO COMMERCIALLY QUALIFIED VENDORS' CREDENTIALS WILL BE SUBMITTED TO CUSTOMER/CONSULTANT, IF REQUIRED FOR THEIR APPROVAL AND THEIR OFFERS WILL BE CONSIDERED FOR PRICE BID OPENING/ REVERSE AUCTION SUBJECT TO CUSTOMER /CONSULTANT APPROVAL FOR THE TENDER. BIDDER SHALL SUBMIT THEIR CREDENTIALS AND COMPANY DETAILS ALONG WITH TECHNICAL OFFERS.
- 15. FRAUD PREVENTION POLICY: THE BIDDER ALONG WITH ITS ASSOCIATE/ COLLABORATORS/ SUB-CONTRACTORS/ SUB-VENDORS/ CONSULTANTS/ SERVICE PROVIDERS SHALL STRICTLY ADHERE TO BHEL FRAUD PREVENTION POLICY DISPLAYED ON BHEL WEBSITE HTTP://WWW.BHEL.COM AND SHALL IMMEDIATELY BRING TO THE NOTICE OF BHEL MANA GEMENT ABOUT ANY FRAUD OR SUSPECTED FRAUD AS SOON AS IT COMES TO THEIR NOTICE."
- 16. LINKING UP OF OLD ISSUES: IN CASE IF YOU HAVE ANY OUTSTANDING PROBLEM WITH EARLIER SUPPLIES, YOU SHOULD NOT LINK UP AGAINST THIS ENQUIRY OR PO AT LATER STAGES.
- 17. HOLIDAY/SUSPENSION/BANNING LIST/NEGATIVE LIST: OFFERS FROM FOLLOWING TYPES OF BIDDERS WILL NOT BE ACCEPTED.
 - WHO ARE IN THE HOLIDAY/ SUSPENSION /BANNING LIST / NEGATIVE LIST OF ANY PSU/GOVT. AUTHORITY ON
 DUE DATE OF SUBMISSION OF BID / DURING THE PROCESS OF EVALUATION OF THE BIDS, THE OFFERS OF SUCH
 BIDDERS SHALL NOT BE CONSIDERED FOR BID OPENING/EVALUATION/AWARD (PROFORMA OF DECLARATION
 OF BLACK LISTING / HOLIDAY LISTING ATTACHED FOR SUBMISSION BY BIDDER).
 - WHO ARE UNDER LIQUIDATION, COURT RECEIVERSHIP OR SIMILAR PROCEEDINGS, BIDDER SHALL SUBMIT A
 SELF-CERTIFICATE STATING THAT THEY ARE NOT UNDER LIQUIDATION, COURT RECEIVERSHIP OR SIMILAR
 PROCEEDINGS. FAILURE TO DO SO OR THE BIDDER IS UNDER COURT RECEIVERSHIP OR SIMILAR PROCEEDINGS,
 THEIR BIDS SHALL NOT BE CONSIDERED (PROFORMA FOR DECLARATION ON NCLT/NCLAT/DRT/DRAT/COURT
 RECEIVERSHIP/LIQUIDATION ATTACHED FOR SUBMISSION BY BIDDER).
 - 18. TREATMENT OF CASES REGARDING CONFLICT OF INTEREST:

THE BIDDER NOTES THAT A CONFLICT OF INTEREST WOULD SAID TO HAVE OCCURRED IN THE TENDER PROCESS AND EXECUTION OF THE RESULTANT CONTRACT, IN CASE OF ANY OF THE FOLLOWING SITUATIONS

i) IF ITS PERSONNEL HAVE A CLOSE PERSONAL, FINANCIAL, OR BUSINESS RELATIONSHIP WITH ANY PERSONNEL OF BHEL WHO ARE DIRECTLY OR INDIRECTLY RELATED TO THE PROCUREMENT OR



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- EXECUTION PROCESS OF THE CONTRACT, WHICH CAN AFFECT THE DECISION OF BHEL DIRECTLY OR INDIRECTLY:
- ii) THE BIDDER (OR HIS ALLIED FIRM) PROVIDED SERVICES FOR THE NEED ASSESSMENT/ PROCUREMENT PLANNING OF THE TENDER PROCESS IN WHICH IT IS PARTICIPATING;
- iii) PROCUREMENT OF GOODS DIRECTLY FROM THE MANUFACTURERS/ SUPPLIERS SHALL BE PREFERRED. HOWEVER, IF THE OEM/ PRINCIPAL INSISTS ON ENGAGING THE SERVICES OF AN AGENT, SUCH AGENT SHALL NOT BE ALLOWED TO REPRESENT MORE THAN ONE MANUFACTURER/ SUPPLIER IN THE SAME TENDER. MOREOVER, EITHER THE AGENT COULD BID ON BEHALF OF THE MANUFACTURER/ SUPPLIER OR THE MANUFACTURER/ SUPPLIER COULD BID DIRECTLY BUT NOT BOTH. IN CASE BIDS ARE RECEIVED FROM BOTH THE MANUFACTURER/ SUPPLIER AND THE AGENT, BID RECEIVED FROM THE AGENT SHALL BE IGNORED. HOWEVER, THIS SHALL NOT DEBAR MORE THAN ONE AUTHORISED DISTRIBUTOR (WITH/OR WITHOUT THE OEM). FROM QUOTING EQUIPMENT MANUFACTURED BY AN ORIGINAL EQUIPMENT MANUFACTURER (OEM) IN PROCUREMENTS UNDER A PROPRIETARY ARTICLE CERTIFICATE.
- iv) A BIDDER PARTICIPATES IN MORE THAN ONE BID IN THIS TENDER PROCESS. PARTICIPATION IN ANY CAPACITY BY A BIDDER (INCLUDING THE PARTICIPATION OF A BIDDER AS A PARTNER/ JV MEMBER OR SUB-CONTRACTOR IN ANOTHER BID OR VICE-VERSA) IN MORE THAN ONE BID SHALL RESULT IN THE DISQUALIFICATION OF ALL BIDS IN WHICH HE IS A PARTY. HOWEVER, THIS DOES NOT LIMIT THE PARTICIPATION OF AN ENTITY AS A SUB-CONTRACTOR IN MORE THAN ONE BID IF HE IS NOT BIDDING INDEPENDENTLY IN HIS OWN NAME OR AS A MEMBER OF A JV.

THE BIDDER DECLARES THAT THEY HAVE READ AND UNDERSTOOD THE ABOVE ASPECTS, AND THE BIDDER CONFIRMS THAT SUCH CONFLICT OF INTEREST DOES NOT EXIST AND UNDERTAKES THAT THEY WILL NOT ENTER INTO ANY ILLEGAL OR UNDISCLOSED AGREEMENT OR UNDERSTANDING, WHETHER FORMAL OR INFORMAL WITH OTHER BIDDER (S), IN THIS REGARD. THIS APPLIES IN PARTICULAR TO PRICES, SPECIFICATIONS, CERTIFICATIONS, SUBSIDIARY CONTRACTS, SUBMISSION OR NON-SUBMISSION OF BIDS OR ANY OTHER ACTIONS TO RESTRICT COMPETITIVENESS OR TO INTRODUCE CARTELIZATION IN THE BIDDING PROCESS. IN CASE, THE BIDDER IS FOUND HAVING INDULGED IN ABOVE ACTIVITIES, THE SAME WILL BE CONSIDERED AS A VIOLATION OF THE TENDER CONDITIONS, AND SUITABLE ACTION SHALL BE TAKEN BY BHEL AS PER EXTANT POLICIES/GUIDELINES

19. NON-FILER OF INCOME TAX RETURN SHALL BE SUBJECT TO TDS/TCS AT HIGHER RATES (SECTION 206AB AND SECTION 206CCA):

Ø THE FINANCE ACT 2021 INSERTS THESE SECTIONS TO PROVIDE FOR DEDUCTION AND COLLECTION OF TDS AND TCS AT THE HIGHER RATES IN CASE OF NON-FILERS OF THE INCOME TAX RETURN FOR PRECEDING TWO YEARS (PROVIDED TOTAL TDS DEDUCTED / TCS COLLECTED EXCEEDS RS. 50,000 IN EACH OF THE TWO PRECEDING YEARS). THE RATE OF TDS/TCS SHALL BE AT THE DOUBLE OF THE SPECIFIED RATE OR 5%, WHICHEVER IS HIGHER. THESE PROVISIONS SHALL NOT BE APPLICABLE WHERE THE TAX IS REQUIRED TO BE DEDUCTED UNDER SECTIONS 192, 192A,194B, 194BB, 194BB OR 194N OF THE ACT. (W.E.F. 1ST DAY OF JULY 2021) OTHER CLAUSES LIKE TENDER EVALUATION. LD. FIRM PRICE ETC., SHALL BE AS GEM GENERAL TERMS AND CONDITIONS.

20. NEW PROVISION (SECTION 194Q) REGARDING DEDUCTION OF TAX AT SOURCE @ 0.1% ON PURCHASE OF GOODS FROM RESIDENT:

Ø NEW SECTION 194Q IS INSERTED FOR DEDUCTION OF TDS BY A PERSON (WHOSE TURNOVER EXCEEDS RS. 10 CRORES) WHO IS PAYING ANY SUM TO ANY RESIDENT FOR PURCHASE OF ANY GOODS OF THE VALUE EXCEEDING RS. 50 LAKHS IN ANY PREVIOUS YEAR. THIS PROVISION SHALL NOT BE APPLICABLE WHERE TAX IS DEDUCTIBLE UNDER ANY OTHER PROVISION OF I.T ACT OR WHERE TAX IS COLLECTIBLE UNDER THE PROVISIONS OF SECTION 206C OTHER THAN A TRANSACTION TO WHICH SUB-SECTION (1H) OF SECTION 206C APPLIES. THE TAX SHALL BE DEDUCTED AT THE RATE OF 0.1%, WHICH SHALL BE INCREASED TO 5% IF THE SELLER DOES NOT PROVIDE HIS PAN. (W.E.F. 1ST DAY OF JULY 2021).

- **21.** VALIDITY OF OFFER: QUOTATION SHALL BE VALID FOR 60 DAYS FROM THE TECHNICAL (PART-1) BID OPENING. IF REVISED PRICE BID/IMPACT BID IS ASKED BY BHEL, THE VALIDITY OF THE SAME SHALL BE 45 DAYS FROM THE PRICE BID OPENING OR 60 DAYS FROM THE DAY OF PART -1 BID OPENING, WHICHEVER IS LATER.
- 22. PRICE EVALUATION: PRICE SHALL BE CONSIDERED ON LANDED COST BASIS (TOTAL COST TO BHEL). LANDED COST SHALL BE WORKED OUT ON PRICE QUOTED INCLUDING QUANTITY WITH TOLERANCE, P&F CHARGES, TESTING & INSPECTION CHARGES, FREIGHT, TRANSIT INSURANCE, LOADINGS ON DEVIATIONS, CUSTOMS DUTY, LOADING AS PER CUSTOMS NOTIFICATIONS, GST AFTER TAKING OUT INPUT TAX CREDIT AS APPLICABLE. THE PRICE COMPARATIVE STATEMENT SHALL BE WORKED OUT ON OVERALL LANDED COST BASIS (TOTAL COST TO BHEL) FOR TOTAL WISE L1 BASIS.
 - a) THE COMPARATIVE STATEMENT OF THE PRICE PREPARED ON THE REFERENCE DATE SHALL REMAIN FIRM THROUGHOUT THE PERIOD. ANY CHANGE IN DUTY AND TAX STRUCTURE DURING EXECUTION OF THE CONTRACT WILL NOT BE CONSIDERED FOR THE RE-RANKING OF BIDDERS.



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- b) THE LOWEST PRICE RECEIVED AGAINST BHEL, HPVP TENDER NEED NOT BE COMMERCIALLY LOWEST PRICE (L-1). BHEL, HPVP RESERVES THE RIGHT TO NEGOTIATE THE SAME.
- c) BHEL, HPVP RESERVES THE RIGHT/OPTION TO REFLOAT THE TENDER IF L-1 PRICE IS NOT THE LOWEST ACCEPTABLE PRICE TO BHEL, HPVP.
- d) THE PREVAILING EXCHANGE RATES (TT SELLING RATE OF SBI) ON THE DATE OF OPENING OF TECHNICAL BID SHALL BE CONSIDERED FOR PRICE EVALUATION OF IMPORT OFFERS. IF THE DATE OF OPENING OF TECHNICAL BID HAPPENS TO BE A BANK HOLIDAY OR NO FOREX, THEN THE FOREX RATE AS ON PREVIOUS BANK (SBI) WORKING DAY SHALL BE CONSIDERED.
- e) THE EVALUATION CURRENCY OF THIS TENDER SHALL BE INDIAN RUPEE (INR)
- f) IF BHEL DECIDES TO GIVE ANY RELAXATION TO NIT TERMS THE FOLLOWING LOADINGS WILL BE CONSIDERED ACCORDINGLY:
 - 1) LOADING ON PAYMENT TERMS
 - 2) LOADING ON DELIVERY PERIOD
 - 3) LOADING ON LD TERMS & CONDITIONS
 - 4) LOADING ON BANK GUARANTEE.
 - 5) LOADING ON QUANTITY.
- **23.** ANY BIDDER FALLING UNDER MSE CATEGORY SHALL FURNISH THE FOLLOWING DETAILS & SUBMIT DOCUMENTARY EVIDENCE/ GOVT. CERTIFICATE ETC. IN SUPPORT OF THE SAME ALONG WITH THEIR TECHNO-COMMERCIAL OFFER.

Type under MSE	SC/ST Owned	Women Owned	Others (excluding SC/ST & Women Owned)
Micro			
Small			

NOTE: IF THE BIDDER DOES NOT FURNISH THE ABOVE IN THE TENDER, OFFER SHALL BE PROCESSED CONSTRUING THAT THE BIDDER IS NOT FALLING UNDER MSE CATEGORY

----XXXXX-----



M/S

BHARAT HEAVY ELECTRICALS LIMITED HEAVY PLATE & VESSELS PLANT VISAKHAPATNAM – 530 012, INDIA

MM/PURCHASE (MP-RM) GROUP

ANNEXURE-A

UNDERTAKING FOR NO-DEVIATION

"WITH REFERENCE TO RFQ NO. H092500021 DTD 06.09.2025, THIS IS TO CONFIRM THAT, WE HAVE READ THE TENDER DOCUMENTS, GENERAL TERMS AND CONDITIONS AS MENTIONED IN TENDER DOCUMENT AND BID SPECIFIC ADDITIONAL TERMS AND CONDITIONS & NOTED THE JOB CONTENT.

WE HEREBY CONFIRM THAT WE HAVE NOT TAKEN ANY DEVIATION FROM TENDER CLAUSES TOGETHER WITH OTHER REFERENCES AS ENUMERATED IN THE ABOVE REFERRED TENDER. WE HEREBY CONFIRM OUR UNQUALIFIED ACCEPTANCE TO ALL TERMS & CONDITIONS, SPECIFIC CONDITIONS OF CONTRACT, GENERAL CONDITIONS OF CONTRACT, ALL OTHER ANNEXURES, UNQUALIFIED COMPLIANCE TO TECHNICAL SPECIFICATION, CORRIGENDA (IF ANY)."

WE HEREBY DECLARES THAT WE HAVE READ AND UNDERSTOOD THE **CLAUSE NO. 18** [TREATMENT OF CASES REGARDING CONFLICT OF INTEREST], AND CONFIRMS THAT SUCH CONFLICT OF INTEREST DOES NOT EXIST AND UNDERTAKES THAT WE WILL NOT ENTER INTO ANY ILLEGAL OR UNDISCLOSED AGREEMENT OR UNDERSTANDING, WHETHER FORMAL OR INFORMAL WITH OTHER BIDDER(S), IN THIS REGARD. THIS APPLIES IN PARTICULAR TO PRICES, SPECIFICATIONS, CERTIFICATIONS, SUBSIDIARY CONTRACTS, SUBMISSION OR NON-SUBMISSION OF BIDS OR ANY OTHER ACTIONS TO RESTRICT COMPETITIVENESS OR TO INTRODUCE CARTELIZATION IN THE BIDDING PROCESS. IN CASE, THE BIDDER IS FOUND HAVING INDULGED IN ABOVE ACTIVITIES, THE SAME WILL BE CONSIDERED AS A VIOLATION OF THE TENDER CONDITIONS, AND SUITAB1E ACTION SHALL BE TAKEN BY BHEL AS PER EXTANT POLICIES/ GUIDELINES

(VENDOR NAME) IS NOT BE IN HOLDAY/SUSPENSION/PANNING LIST/NEGATIVE LIST BY ANY DSLI/GOVT

NAME OF OFFICIAL		
ADDRESS		
VENDOR TYPE	UDYAM ADHAR	
UNDER MSE	SC/ST OWNED	
	WOMEN OWNED	
	OTHERS (EXCLUDING SC/ST & WOMEN OWNED)	
PAN		
GST NO		
APPLICABLE GST %		
[Included in Offered	d Price]	
HSN CODE		
E-MAIL ID		
PHONE NUMBER		
		<u>, </u>
Ridder signatur	re with Company seal	
nauci signatui	re with company scal	
Date:		

Remarks: Bidder to submit above undertaking in company letter head



BHARAT HEAVY ELECTRICALS LIMITED

HEAVY PLATE & VESSELS PLANT VISAKHAPATNAM - 530 012, INDIA

MM/PURCHASE (MP-RM) GROUP

ANNEXURE B

FORMAT FOR LOCAL CONTENT

/ On Bidder's office letter pad /

Self-Declaration

Enquiry No.	
Enquiry Date	

In line with Government public procurement order Number P-45021/2/2017-B.E-II dated 15.06.2017, and further modified order Number P-45021/2/2017-PP(BE-II) dt. 04.06.2020 issued by Department for Promotion of Industry and Internal Trade (DPIIT),

I / We hereby declare that I / We are a "Local Supplier" meeting the requirement of minimum local content (......%) defined in the above government notification for the goods against above mentioned enquiry Number.

Details of location at which local value addition will be made is as follows:

j
j i

We also understand that the false declarations will be considered as breach of Integrity and liable for action.

For Company Name: Scal: Signature:

Date; Piace:

(Please fill all the yellow color field)



MM/PURCHASE (MP-RM) GROUP

ANNEXURE-C

ACCEPTEANCE FOR ELECTRONIC FUND TRANSFER / RTGS / NEFT TRANSFER

01	NAME & ADDRESS OF THE SUPPLIER / SUBCONTRACT	TOR
02	VENDOR CODE ASSIGNED BY BHEL HPVP	
	DETAILS OF BA	ANK ACCOUNT
03	NAME & ADDRESS OF THE BANK	
04	NAME OF THE BRANCH	
05	BRANCH CODE	
06	MICR CODE	
07	ACCOUNT NUMBER	
08	TYPE OF ACCOUNT	
09	BENEFICIARY'S NAME	
10	IFSC CODE OF THE BRANCH	
11	EMAIL ID	
12	TELEPHONE / MOBILE NUMBER	
13	PAN	
Ltd., H		a valid discharge of the liability of M/s Bharat Heavy Electrical applicable Bank charges for the above mode of transfer. A copy is sent herewith.
		(Authorized Signatories with name & seal)
	BANKER'S CEI	RTIFICATION
of	rized signatory and the MICR and IFSC codes of our branch	FT credits and we further confirm that the account number(name of account holder), the signature of mentioned above are correct.
Place: Date:		Bank Manager / Officer Signature with Bank stamp

FORWARDED TO ACCOUNTS DEPARTMENT / CASH SECTION

We confirm the above details are verified with the records available with us

Signature of BHEL, Visakhapatnam Official with Name & Seal Operating the contract / Services

and name seal



MM/PURCHASE (MP-RM) GROUP

ANNEXURE- D TENDER CHECKLIST

SCOPE DESCRIPTION: SUPPLY OF FLANGES

BHEL ENQUIRY NO: H092500021 DTD 06.09.2025

PROJECT: SO: 8062 & SO 8103

Note: Vendor shall confirm following tender conditions by filling the rows under Supplier Confirmation and specifying supporting document reference at

Rema	Remarks Column. In case of any deviation, vendor may comment at Remarks with proper supporting documents.							
SL NO	TENDER CONDITIONS	REFERANCE DOCUMENTS	SUPPLIER CONFIRMATION/ SUBMISSION	REMARKS				
1	VENDOR TO CONFIRM THAT ALL ITEMS ARE QUOTED AS PER TDC & SPECIFICATIONS PROVIDED IN THE TENDER DOCUMENT.	TDC 0 423 R09 QP No:423-09, Rev:02						
2	VENDOR TO CONFIRM THAT ALL ITEMS ARE QUOTED AS PER QUALITY PLAN PROVIDED IN THE TENDER DOCUMENT. (IF APPLICABLE)	NA						
3	VENDOR TO CONFIRM THAT ALL ITEMS ARE QUOTED AS PER MII CLAUSE. LOCAL CONTENT PERCENTAGE TO BE MENTIONED IN SUPPLIER COLUMN AND SUPPORTING DOCUMENT TO BE PROVIDED.	NA		BIDDER TO SUBMIT THE FILLED IN LOCAL CONTENT AND SUBMIT ALONG WITH OFFER.				
4	VENDOR TO MENTION WHETHER MSME- MICRO/SMALL/MEDIUM OR NON-MSE UNDER SUPPLIER COLUMN. (REQUIRED SUPPORTING DOCUMENT TO BE PROVIDED)	REFER PAGE NO.07 OF ADDITIONAL SCOPE OF WORKS		REQUIRED SUPPORTING DOCUMENT TO BE SUBMITTED ALONG WITH OFFER.				
5	VENDOR TO ACCEPT PAYMENT TERMS AS PER TENDER REQUIREMENT.	REFER CLAUSE NO.03						
6	VENDOR TO ACCEPT DELIVERY PERIOD / LOCATION AS PER TENDER REQUIREMENT.	REFER CLAUSE NO.02						
7	VENDOR TO ACCEPT LD TERMS AS PER TENDER REQUIREMENT.	REFER CLAUSE NO.04						
8	VENDOR TO ACCEPT BID EVALUATION CLAUSE AS PER TENDER REQUIREMENT. (SUPPORTING DOCUMENTS TO BE PROVIDED AS PER BID ELIGIBILITY CRITERIA)	PACKAGE WISE EVALAUTION						
9	VENDOR TO ACCEPT ALL OTHER TERMS AND CONDITIONS SPECIFIED IN GEM BID DOCUMENT.							
10	VENDOR SHALL PROVIDE GSTIN NO. IN THE BOX AND ATTACH DETAILS WITH SUPPORTING DOCUMENTS.	GST CERTIFICATE TO PROVIDE						
11	VENDOR SHALL PROVIDE RTGS FORMAT DULY SIGNED AND STAMPED BY BANK AUTHORITY	REFER ANNEXURE-C						
12	VENDOR SHALL PROVIDE CONTACT DETAILS (PHONE NO'S AND EMAIL ID'S) FOR TECHNICAL AND COMMERCIAL CORRESPONDENCE IN THE SUPPLIER CONFIRMATION BOX							
13	VENDOR SHALL PROVIDE NO DEVIATION CERTIFICATE DULY SIGNED AND STAMPED. IN CASE OF ANY DEVIATIONS (TECHNICAL & COMMERCIAL), VENDOR MAY PROVIDE DEVIATION SHEET WITH REFERENCE AT REMARKS COLUMN Vendor to be submit above Checklist duly signed and stampe.	REFER ANNEXURE-A	all be considered for For	lugáin agus agus				

Note: Vendor to be submit above Checklist duly signed and stamped below. Please note that offer shall be considered for Evaluation only upon submission of this document. Having signed this document, vendor agrees that he has gone through the complete tender document and accepted all the terms as indicated in the check list above.

SIGNATURE OF VENDOR WITH STAMP



MM/PURCHASE (MP-RM) GROUP

ANNEXURE-E

PRICE BID

BHARAT HEAVY ELECTRICALS LIMITED HEAVY PLATES & VESSELS PLANT VISAKHAPATNAM – 530 012

Material Description: SUPPLY OF FLANGES - Reg.

Tender Enquiry No: H092500021 DTD 06.09.2025

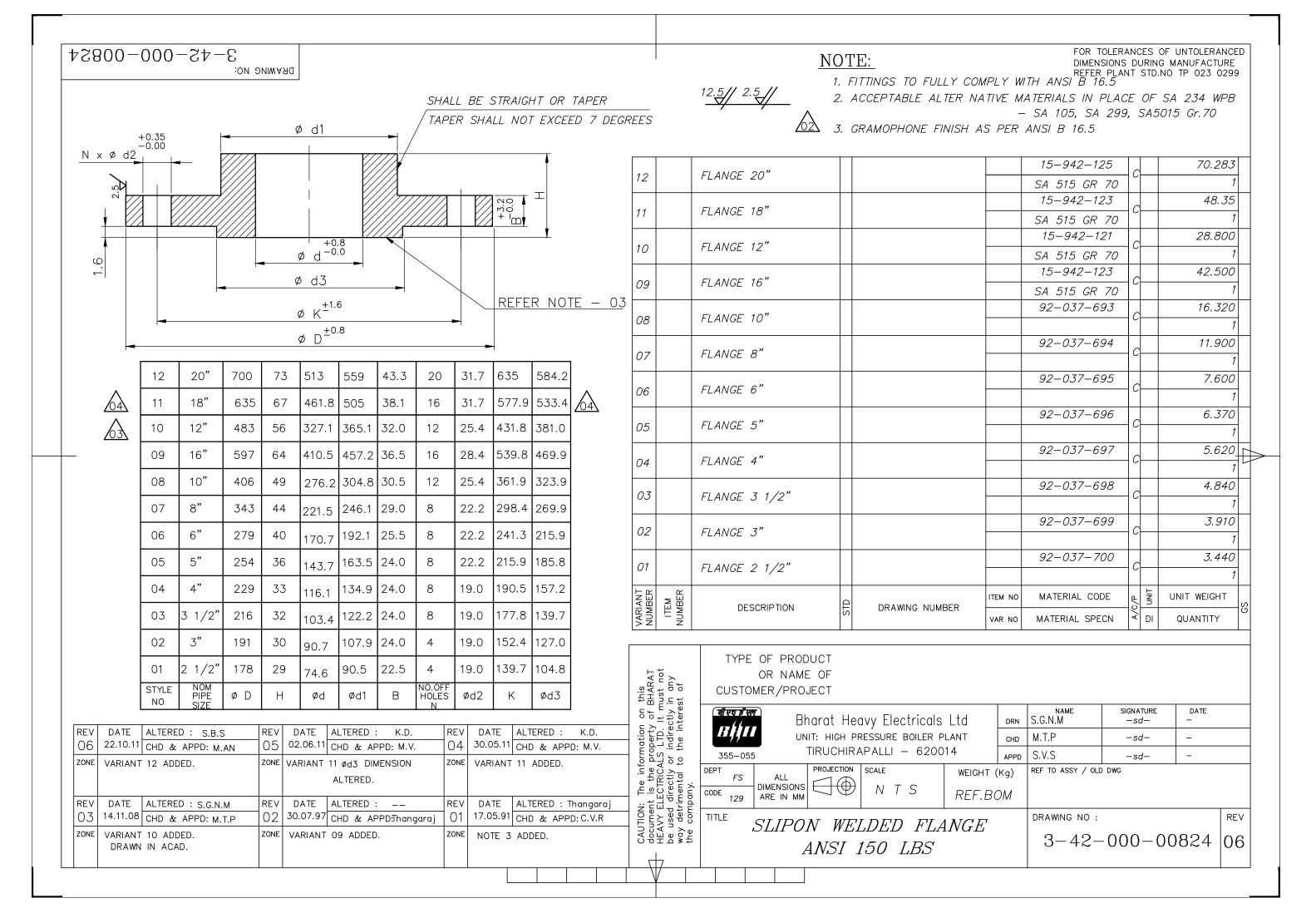
SL. NO.	MATERIAL	QUANTITY (IN NOS)	UNIT PRICE (PER NOS)	NET VALUE (EXCLUDING GST) IN ₹
1	CS WN FLANGE 80NBX150# RF SA105 BORE:77.92MM IBR	5		
2	CS SW FLANGE 25NBX600# RF SA105 BORE:24.3MM IBR	5		
3	WN FLNG,20NB,#150,SA105,RF, BORE:15.58MM IBR	5		
4	CS BLIND FLANGE 20NB X 150 RF SA105 IBR	5		
5	BLIND RF FLANGE NB25 CL300 SA105 IBR	5		
6	SW RF FLANGE NB25 CL300 SA105 BORE:24.3 MM IBR	5		
7	BLIND RF FLANGE NB25 CL600 SA105 IBR	5		
8	WN FLANGE NB 80 CL600 SA105 BORE:77.92MM IBR	5		
9	SOW FLG 2.5 " CL150 3-42-000-00824 SA105 BORE : 74.7 MM. IBR	1		
10	SW FLG 6"- CL150SA105(CERT) BORE:154.1MM	15		
11	CS FORGED SPEC BLIND FL 0.5"X150# SA105 BORE:16MM RF	15		
12	SOW FLANGE, NB 80 CL150 SA105 BORE : 90.7 MM.	2		
13	SOW FLANGE NB 80 CL150 SA182F22CL3 BORE : 90.7 MM.	1		
Α	GRAND TOTAL	74		
В	GST IN PERCENTAGE (IN %)			
С	GST IN VALUE (IN ₹)			
D	TOTAL AMOUNT INCLUDING GST (IN ₹)			

Total Amount in Words:

Note:

- 1) The prices shall remain fixed and firm for the entire period of contract.
- 2) The quoted prices shall be inclusive of all applicable taxes and duties except GST as applicable as on date of tender submission. However, GST as applicable shall be paid by Supplier and same shall be reimbursed on submission of proof of payment.

SIGNATURE OF TENDERER WITH COMPANY SEAL





Doc No: **TDC:0:423** Rev No: *09* Effective Date: *21/11/2017*

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Product: Machined (upto 4"), Formed & Forged Fittings

Revision record:

Rev: 00: Supersedes TDC: 5:019 & can be used wherever the old TDC is specified.

Rev: 01: New materials, IGCsT added. UT, Hardness requirement modified. LPI, MPI requirement added.

Rev: 02: Flatness requirement added in clause no: 5.0

Rev: 03: TDC for, Pipe Fittings for NTPC contracts (TDC 0 427), Pipe fittings indigenous supply (TDC 0 422) has been merged with this TDC and named as Butt Welded formed pipe fittings. Cl. 2.0 General removed, scope limited to IBR only and other clauses renumbered. Limits of carbon modified. Aligned with NTPC requirements.

Rev: 04: Restriction in size below 2 in. removed based on Spares requirement.

Rev: 05: CI: 2.0, 3.0, Revised.

Rev: 06: Product Heading changed. Cl 1.0 Scope and Raw material Sourcing added. Cl.2.0 & 3.0 merged and totally revised. Cl. 4.0, 5.0, 6.0 modified and renumbered.

Rev: 07 Dt: 10/11/2012: Cl 1.0, 2.0 & 5.0 Modified for SS material.

Rev: 08: Dt: 22/09/2017 Title, Clauses 1, 2, 5 & 6 modified; Gr 92 fittings requirements included in Cl 1, 2, 5 & 6; Creep requirements added in Clause 3; Design proof test requirement, if not done earlier, added in general notes... Rev: 09: Dt: 21/11/2017 - Cl. 3 & 6.a (15) modified.

1.0 MATERIAL SPECIFICATIONS:

All the codes, standards, specifications, drawings & procedures, etc., referred in this TDC shall be of latest revision as on the date of Enquiry/Purchase Order, whichever is earlier, unless specified otherwise.

Fittings

: Seamless Fittings only (Fittings made by welding are prohibited).

ASME

: Carbon Steel (CS): SA105, SA234; Alloy Steel(AS): SA 234, SA182,

ASTM A234; Stainless Steel(SS): SA182, SA4039

Additional Requirements

: As listed below (Supplementary to above material specifications/ standards

& grades)

• Grade, Size and Quantity : As per Purchase order &/ Drawing.

2.0 MANUFACTURING & TESTING REQUIREMENTS:

2.1 Machined Fittings (fittings machined from castings are prohibited; Max size permitted 4") – Reducers, Couplings & End caps

9090	a zna saps	
Starting material Rolled or	Heat treatment as per starting material specifications	CS – Normalised AS – Normalised & Tempered SS – Solution Annealed
Forged Bars, Killed steel	NDE – UT ^d	To be done after Heat treatment. For size above 40 mm – to be done as per ASTM A388 Acceptance to - ASME Sec.VIII Div.2 Cl.3.3.4
	Heat Treatment	Not required.
Finished fitting (after machining to required size)	NDE (for all sizes)	 MT (100%)- Procedure - As per ASTM E709. No linear indications (surface NDE indication whose length is ≥ three times its width) are acceptable. For WP91/F91 & WP92/F92 Wet MPI shall be done. LPI - SS: Shall be done as per ASTM E165. No linear indications are acceptable. SS: Finished fittings shall be checked for radioactive contamination and reported. Survey meter shall be used to measure at 5 cm near the surface. Acceptance limits: Shall be less than 0.1 milli Rontgen (MR) per hr or 1 micro Sievert per hr.
	Hardness	WP5 - 217 HBW max. SA105 - 137 HBW to 187 HBW. WPB, WPC, WP11/F11, WP12/F12, WP22/F22 - 197 HBW max. WP91/F91 - 195 HBW to 248 HBW - 100% to be checked WP92/F92 - 191 HBW to 269 HBW - 100% to be checked.
	Dimension	ASME B16.9 & ASME B16.11, As per Engineering Drawing
	Bend Test (for IBR items)	Specimen: 19mm. Thickness (t) x 25.4mm width - cold bent 180 deg. over thin section without fracture, mandrel radius: CS:<=6.35 mm.



BHEL - Tiruchirappalli - 620014, India. Quality Assurance Department

TECHNICAL DELIVERY CONDITIONS Product: Machined (upto 4"), Formed & Forged Fittings

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	AS,	SS:	<=1.	5	times	specimen	thick.
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Seamless Formed Fittings – Elbows, Tees, Reducers, Dished End (End Cover/ Cap) 2.2

Starting material:	Heat treatment as per starting material specifications	CS – Normalised AS – Normalised & Tempered SS – Solution Annealed Shall be done as per - ASTM E213 with longitudinal notch of 5% wall thickness								
1)Tube & Pipe	NDE – UT ^d	with min. 0.3 mm and max specified in Test Certificat	c.1.5 mm. Actua	ongitudinal r al measured	notch of 5% wal notch depth to	I thickness be				
2)Forged blank (For end covers)	NDE – UT ^d	For size above 40 mm UT shall be done as per - In acceptance to - ASME		CI.3.3.4						
3) Plate	NDE – UT ^d	For size above 10mm SA 578, Acceptance Leve	l - B							
		Shall be done as per SA2 When Heat Treatment is r Material	equired it shall Heat Treatm	be done as	per the below to Soaking ti	able values:				
		Iviaterial	Normalising	Tempering		Tempering				
		CS-WPB & WPC	870-900	-	1/2	_				
		AS-WP11, WP12	920-950	655+- 15	1/2	1				
	Heat treatment	AS-WP5, WP22	920-950	695+- 15	1/2	1				
	after forming	AS-WP91	1040-1080	750-780	1/2	1				
		AS-ASTM A234 WP 92	1040-1080	750-780	1/2	1				
Finished fitting (cold/hot forming)	NDE (for all sizes) – Except for Plate formed Dished end	 acceptable. For WP91 & WP92 Wet MPI shall be done. LPI – SS: Shall be done as per ASTM E165. No linear indications are acceptable. SS: Finished fittings shall be checked for radioactive contamination and reported. Survey meter shall be used to measure at 5cm near the surface. Acceptance limits: Shall be less than 0.1 milli Rontgen (MR) per hr or 1 micro Sievert per hr. late 								
	NDE–for Plate formed Dished end									
	NDE – UT ^d For OD >	If made from Pipe & Tube – Shall be done as per - ASTM E213 with longitudinal notch of 5% wall thickness with max 1.5mm and min. 0.3mm. Actual measured notch depth to be specified in Test Certificate.								
	or=219mm & W.T >or= 6mm	If made from Forging Sha In acceptance to - ASME If made form Plate shall be	Sec.VIII Div.2	CI.3.3.4						
	Hardness	WP5 – 217 HBW max. WPB, WPC, WP11, WP1 WP91 - 195 HBW to 248 WP92 – 191-269 HBW m	2, WP22 – 197 HBW – 100% to	HBW max. to be checke be checked.						
	Dimension	ASME B16.9 & ASME B1				1:				
	Bend Test	Specimen: 25.4 mm x 19 without fracture, internal AS, SS: <=1.5 times specimens	radius of bend:	d bent 180 c CS :<=6.35	neg. over thin somm.	ection				



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Product: Machined (upto 4"), Fo	ormed & Forged Fittings
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(if starting	
material is	
forged blank)	
(for IBR items)	

2.3 Forged Fittings – Elbows, Tees, Reducers, Couplings, Flanges & Dished End (End Cover / Cap)

Shall be forged to the shape with a minimum forge reduction ratio of 1:4. Fitting shall not be machined from a forged block.

Starting material: Rolled or forged Bars, blooms, billets and Killed steel	Heat treatment as per starting material specifications	CS – Normalised AS – Normalised & Tempe SS – Solution Annealed	ered							
1)Tube & Pipe, forged pipe/hollow	NDE – UTd	Shall be done as per - AS with min. 0.3 mm and max specified in Test Certificat	c.1.5 mm. Actua	ongitudinal r al measured	notch of 5% wa notch depth to	II thickness be				
2)Forged blank (For end covers)	NDE – UTd	For size above 40 mm UT shall be done as per - In acceptance to - ASME:		CI.3.3.4						
3) Plate	NDE – UTd	For size above 10mm SA 578, Acceptance Leve Shall be done as per SA1								
		When Heat Treatment is r			per the below to Soaking to Normalising					
After forging (cold/hot forging)	Heat	CS- SA105 AS- SA182 F11 & F12	870-900 920-950	655+- 15	1/2 1/2	1				
	treatment	AS- SA182 F5 & F22 AS- SA182 F91 & F92	920-950 1040-1080	695+- 15 750-780	1/2 1/2	1				
	NDE – UT ^d	Stainless Steel: All grades - Solution Annealed: 1050-1100 Deg C Soaking time: ½ hr per inch with minimum 15 minutes. Note 1. Normalising shall be done for a minimum time of 30 min while tempering to be done for a minimum time of 60 min for all above materials except SS. UT shall be done as per - ASTM A388								
	For OD > or = 219mm	In Acceptance to - ASME		Cl.3.3.4						
Finished fitting	NDE (for all sizes)	 MT-(100%) Shall be done as per ASTM E709. No linear indications are acceptable. For F91 & F92 Wet MPI shall be done. LPI – SS: Shall be done as per ASTM E165. No linear indications are acceptable. SS: Finished fittings shall be checked for radioactive contamination and 								
		 SS: Finished fittings shall be checked for radioactive contamination and reported. Survey meter shall be used to measure at 5cm near the surface. Acceptance limits: Shall be less than 0.1 milli Rontgen (MR) per hr or 1 micro Sievert per hr. 								
	Hardness SA105 – 137 HBW to 187 HBW. F5 – 143-217 HBW; F9 – 179-217 HBW max. F11, F12 – 143 HBW to 207 HBW, F22 – 156-207 HBW max. F91 - 195 HBW to 248 HBW – 100% to be checked SA182 F92 – 191- 269 HBW max. – 100% to be checked.									
	Dimension	ASME B16.5 & ASME B1	o. 11, As per el	ignicering di	avvirig.					



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Product: Machined (upto 4"), Formed & Forged Fittings

Bend Test	Specimen: 19mm. Thickness (t) x 25.4mm width - cold bent 180 deg. over thin
(for IBR	section without fracture, mandrel radius: CS:<=6.35 mm.
items)	AS, SS: <=1.5 times specimen thick.

General requirements:

- a. Product analysis as per S50 of ASTM A960 is required.
- **b.** Carbon < or = 0.25% for WPB (all thickness), WPC and SA105 (thickness < or = 20mm)
- c. Carbon < or = 0.30% for WPC and SA105 (thickness > 20mm)
- d. If UT not done on the starting material, the same shall be done by the fitting manufacturers before forming / fabrication.
- e. Mechanical Testing including hardness testing: Quantum of testing as per IBR (except for hardness testing of Gr 91 & 92) Test samples shall be tested in the Heat treatment of fitting delivered condition. For Gr 91 & 92 fittings, hardness testing shall be done on 100% of fittings being supplied (either on ends or surface).
- f. Pipe made from plate as a starting material and long seam welded should not be used.
- **g.** All raw materials used in steel making including incoming scrap shall be checked by supplier to ensure freedom from radioactivity (applicable for SS material only).
- h. Design proof test as per ASME B16.9 should be carried out for the geometric shape and size ordered if already not done.
- 3.0 Creep testing shall be carried out as per SIP:RM:01 (latest revision) whenever indicated in the Enquiry/Purchase Order/Engineering Drawing.

4.0 REPAIRS AND FINISH:

The products shall be free from injurious defects like crack, seam etc. with workman like finish. Repairs involving fusion welding is prohibited. Surface defects can be removed by mechanical means and the defective areas shall be merged with adjacent surface. Minimum thickness after repair shall meet the drawing / specification requirements. Flatness on curved surfaces of fittings shall be limited to 6% of nominal OD. Thickness: Outer Diameter and Transition: Variation shall be merged smooth to min 1:4 taper.

5.0 MARKING, PRESERVATION AND PACKING:

<u>The following details to be neccessarily hot stamped</u> 1. Heat number, 2. Inspecting Authority Seal 3. Specification Grade, code case (if applicable) and Size, 4. Company Seal and "B16"(for ANSI fittings). The rest to be marked as per Specification.

Adittionally The following to be painted:

for OD > 108mm : PO No., Sl. No., Specification, "BHEL-Tiruchirappalli", Drawing.No. & Weight for OD <= 108mm : Sl. No., Specification

CS & AS fittings to be rust preventive coated after shot blasting inside & out side & packed to avoid damage. SS fittings to be surface treated (Pickling, Passivation) as per ASTM A380 both inside and outside.

6.0 INSPECTION AND CERTIFICATION:

a. Products must be inspected at works and the test certificates must be countersigned by the Inspecting Authority as indicated below:

<u>Imported items</u>: Inspecting Authority approved by IBR for the country of origin with Form III-C (for all fittings except dished ends), Form III-I (for dished ends) as per IBR and additional MTC as given below.

Indigenously supplied IBR items: Director of Boilers/Chief Inspector of Boilers/Inspecting Authority approved by IBR, for the respective state in India with Form III-C (for all fittings except dished ends), Form III-I (for dished ends) as per IBR and additional MTC as given below.

Separate Manufacturer's Test certificate (MTC) in English language with following details, shall accompany all products:

- 1. Purchase Order No.(BHEL),TDC No. & Test certificate number
- 2. Specification, Grade with applicable year of code & code case (if applicable), Heat Number, Drawing No., Quantity & Size
- 3. Supplier of the steel used in making the finished product
- 4. Forming process, Chemistry including incidental elements Heat wise.
- 5. Heat treatment details: temperature, soaking time, cooling medium (for quenching).
- 6. Mechanical test results, Hardness, NDE test results with reference & acceptance standard.



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Product: Machined (upto 4"), Formed & Forged Fittings

7. Detailed NDE reports for MT, LPI and UT shall be submitted along with MTC.

- 8. Photomicrograph at 400X magnification for F91, WP91, F92 & WP92 in final Heat treated condition of fittings.
- 9. PMI certification for all Alloy steels fittings.
- 10. Print of the stamp of Inspecting Authority, which is used in the fitting.
- 11. Dimensional reports for each product
- 12. Repair details if any.
- 13. Certified copy of TC for starting material.
- 14. Guarantee certificate for retainability of hydrostatic test pressure corresponding to that of matching pipe of equivalent material or Hydro static test report as applicable.
- 15. Creep test report as per SIP:RM:01 (latest revision) whenever indicated in the Enquiry/Purchase Order/Engineering Drawing.
- 1. For CE-marking items the TCs with details specified above shall be submitted as per EN-10204 (latest) For pressure parts test certificates of type 3.1 or 3.2 is acceptable.
- Type 3.1 Suppliers shall have ISO 9001-2008/2015 (with validity as applicable) certification certified by Notified Body recognized by European community and test certificate certified by suppliers authorized inspection representative.
 - Type 3.2 Components inspected and test certificates certified by both the supplier's authorized inspection representative and Notified Body recognized by European community.
 - For non pressure parts test certificates of type 2.2 is acceptable.
 Type 2.2 suppliers test certificates signed by suppliers authorized inspection representative with test results as required by this TDC.
- b. For SS: Measured Radioactivity levels at 5cm from the surface of the fitting shall be reported in the Mill Test Certificate (not to be recorded in IBR Form).

Alne 21.11.2017	Tatul7	M-1_1/17	fdhmm 21/11/17	umfaish!	anna julia
Abdur Rahman	G. Panneer Selvam	M. Nadanakumar	R. Dharmar	N. Kirubakaran	Amit Roy
Sr.Engineer/QA	DGM/QA	AGM/MM	AGM/QC	SDGM/PE/FB	AGM/QA&BE
Prepared By		Reviewed By			Approved By

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OUALITY PLAN FOR PIPE FITTINGS SEC II PART A LATEST EDITION

OP NO: 0:423-09 Rev No: 02

DATE: 01.12.2023

PROJECT:

BHEL HPVP SO NO .:

MAIN-SUPPLIER: M/s BHEL

TDC: 0:423 Rev 09

Heavy Plates & Vessels Plant, Visakhapatnam,

SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK (M & T)	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMA RECO		M	GENO	В	REMARKS
							0	0	D*	**	10.	1	11
1.	2.	3.	4.	5.	6.	7.	8.	9.	D		10.		1.1.

- 1. Pipes fittings shall be confirmed to SEC II PART A-Latest Edition & TDC: 0:423 Rev 09 (To be Confirmed in TC)
- 2. Pipe Fittings shall be seamless and free from loose scales and shall have workman like finish (To be confirmed in TC)
- 3. SS pipes fittings shall be Pickled and passivated as per ASMT A 380 (To be reported in TC)

1.0	Raw Materials	Chemical & Physical properties & Hydro/NDT	Major	Verification of RMTC	100 %	As per TDC and specification	RMTC	1	P	V	R	
2.0	Product analysis	Chemical	Major	Spectro	Per Heat/ Lot	As per TDC and specification	TR	V	P	W	R	
3.0	Heat Treatment	Heat Treatment	Major	Verification of charts	100 %	As per TDC and specification	TC	V	Р	V	R	V = 2
4.0	Mechanical Properties	Tensile, Yield, EL, Hardness, Impact, Bend, IGC and etc.	Major	Destructive	Per Heat/ Lot/ Size	As per TDC and specification	TR	V	P	W	R	IGC for SS if required by PO & TDC
5.0	Non-destructive testing	Defects	Major	MPT/UT/DP	100%	As per TDC and specification	Report	٧	P	W	R	
6.0	Surface, Marking & Dimensions & PMI	Surface, Physical Identity & Size & PMI	Major	Visual & Measurement, PMI	100%	As per TDC and specification	DR	1	P	W	R	Repair by welding is not permitted. PMI for AS & SS
9.0	Certification	All in process reports	Major	Verify	100 %	As per TDC and specification	TC	1	P	V	R	

- 1. Dispatch clearance shall be obtained from BHEL-HPVP QC by submitting the colour scan of inspection documents as per the PO & QAP
- 2. All the requirements of BHEL Specifications shall be carried and ensured by TPIA & Report in TC. Testing shall be at NABL Accredited lab.

3. Specification & Grade as per Indent

LEGEND: M: MANUFACTURER/SUB-SUPPLIER; T: TPIA; B: BHEL-HPVP; P: PERFORM; W: WITNESS; V: VERIFICATION; R: REVIEW; IR-INSPECTION REPORT, TC: TEST CERTIFICATE; TR: TEST REPORT; TDC: TECHNICAL DELIVERY CONDITIONS; RMTC: RAW MATERIALS CERTIFICATE; DR: DIMENSIONAL REPORT; Stage reports defined with √ mark shall be included in the

documentation Prepared by P. (on 12 3 P Srinu/Dy. Manage/QC

Reviewed by

Approved by

Supplier Name, Stamp & date

BHEL-VISAKHPATNAM

वरिष्ठ उप महा प्रबन्धक (गुणवत्ता)

Sr. DGM (Quality)

बीएचईएल, एचपीवीपी, विशाखपट्टणम-530012

BHEL, HPVP, VISAKHAPATNAM-530 012