

Item Details**Supply of ENiCrFe3 SMAW Electrodes**

SI No	Material	Quantity
1	ENiCrFe3 SMAW Electrode Dia 2.5 mm X 300 mm	1,000 kg
2	ENiCrFe3 SMAW Electrode Dia 3.2 mm X 300 mm	1,500 kg
3	ENiCrFe3 SMAW Electrode Dia 4.0 mm X 350 mm	12,000 kg
4	ENiCrFe3 SMAW Electrode Dia 5.0 mm X 400 mm	13,500 kg

Note:

1. Technical delivery conditions as per ATMW-TDC-ENiCrFe3 rev 03 and Special instructions.
2. Before start of manufacturing, the supplier shall prepare a QAP of manufacturing activities as per the suggestive QAP given in TDC and submit to BHEL for approval.
3. The manufacturing of consumable shall start only after approval of QAP.
4. Manufacturing of the welding electrodes as per ASME section III NB, ASME Section II C and TDC (Lot class C3 classification).
5. Clearance to be obtained from BHEL before despatch.
6. Vendor shall obtain BHEL approval on documents needed for lot qualification testing, such as WPS, MSTP, heat treatment plan, NDE procedures, etc.

BHARAT HEAVY ELECTRICALS LIMITED
PURCHASE / ATP
BHEL / TRICHY-620 014.

ANNEXURE-A Rev 00
ENQ.No. 2612300008

Dt.16-05-2023

Enquiry Terms & Conditions for Supply of SMAW ENiCrFe3 Electrodes

Note: This Annexure has to be mandatorily filled & signed by the manufacturer (or) mill (or) principal and submitted along with Technical bid.

Any deviation to the below mentioned terms shall be stated specifically in the comments column for each term and also in case of acceptance to our terms, it will be construed that the whole term is understood and agreed in totality without any deviation. (If otherwise mentioned).

Sl No	BHEL Requirements	Supplier Comments																		
01	<p>Material specification: Supply of SMAW ENiCrFe3 Electrodes shall be made strictly as per technical specification ATMW-TDC-ENiCrFe3 Rev 03 and in compliance to the requirements of the documents listed below. Item details as below.</p> <p>a. Special instructions/ conditions along with Annexure-P (Packing)</p> <table border="1"> <thead> <tr> <th>Sl No</th><th>Material</th><th>Quantity (in Kg)</th></tr> </thead> <tbody> <tr> <td>1</td><td>ENiCrFe3 SMAW Electrode Dia 2.5 mm X 350 mm</td><td>1,000</td></tr> <tr> <td>2</td><td>ENiCrFe3 SMAW Electrode Dia 3.2 mm X 350 mm</td><td>1,500</td></tr> <tr> <td>3</td><td>ENiCrFe3 SMAW Electrode Dia 4.0 mm X 350 mm</td><td>12,000</td></tr> <tr> <td>4</td><td>ENiCrFe3 SMAW Electrode Dia 5.0 mm X 350 mm</td><td>13,500</td></tr> <tr> <td></td><td>TOTAL</td><td>28,000</td></tr> </tbody> </table> <p>Note: Quantity tolerance for supply is +0/-5%, excluding quantum of materials for testing at supplier's works.</p>	Sl No	Material	Quantity (in Kg)	1	ENiCrFe3 SMAW Electrode Dia 2.5 mm X 350 mm	1,000	2	ENiCrFe3 SMAW Electrode Dia 3.2 mm X 350 mm	1,500	3	ENiCrFe3 SMAW Electrode Dia 4.0 mm X 350 mm	12,000	4	ENiCrFe3 SMAW Electrode Dia 5.0 mm X 350 mm	13,500		TOTAL	28,000	
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02	<p>Specification, Size & Quantity:</p> <p>a) All the SMAW ENiCrFe3 Electrodes are to be supplied fully meeting the technical specification and other conditions as stipulated in the documents listed in the clause above. If there is any deviation, the same should be mentioned clearly in the offer itself.</p> <p>b) Supply quantity tolerance - Quantity tolerance for supply is +0/-5%, excluding quantum of materials for testing at supplier's works.</p> <p>c) Offer will be evaluated on package basis (Offers for partial quantities of a given item or some (not all) of the tendered items are not acceptable to BHEL. Such partial offer would not be considered in the enquiry). Supplier shall quote accordingly.</p> <p>d) Inspection agency for Indigenous suppliers – BHEL & NPCIL.</p> <p>e) Inspection agency for import suppliers - BHEL & NPCIL or NPCIL appointed third party inspection (TPI) agency.</p> <p>f) Point wise confirmation for ATMW-TDC-ENiCrFe3 Rev 03 and other listed documents are to be mandatorily filled & signed by the bidder and to be uploaded in NIC portal (https://eprocurebhel.co.in) along with Technical Bid (Part 1 bid).</p> <p>g) Suppliers shall submit the in-house manufacturing and testing facility along with offer in Part-I bid.</p> <p>h) In addition to the technical specification requirements, suppliers shall meet the PQR - Pre-Qualification Requirements (refer Pre Qualifying Requirement and Special Conditions Annexure-CF) for the above procurement enclosed herewith. Please submit all the required documents in line with the respective PQR. The offers of the suppliers who fail to do so will be liable for rejection</p>																			

	<p>i) Review, Witness and Hold Points in Quality Plan would mean,</p> <p>Review – All relevant records pertaining to the process/ activity should be produced to BHEL & NPCIL, as the case may be, for verification.</p> <p>Witness – Witness points are critical steps in manufacturing and examination/ inspection / testing, where the supplier is obliged to notify BHEL & NPCIL, as the case may be, sufficiently in advance of the start of the operation / test so that the same could be witnessed. The supplier may proceed with the work past a witness point, provided BHEL / BHEL & NPCIL, as the case may be, had waived the same or notified to the supplier of the inability to attend it at the scheduled date / even at a later date. However, surprise visit could be made to verify such activity and retest may be demanded in case of any discrepancy. Parallel processing, notwithstanding the waiver of inspection for the current stage of manufacturing/ testing, is not permitted normally, however with written permission of BHEL / BHEL & NPCIL further processing/ activity could be done.</p> <p>Hold – BHEL & NPCIL witness & clearance is mandatory before proceeding with further activity. Under no circumstances further activities should proceed without formal clearance from BHEL & NPCIL for the current stage.</p>	
03	<p><u>Offer Submission:</u></p> <p>a. This Tender is hosted in EPS portal & offer to be submitted through EPS portal only. You are requested to submit your 2 parts offer before due date & time of the enquiry through NIC (https://eprocurebhel.co.in) only.</p> <p>b. Offer is to be submitted in TWO part bids system (Technical bid + Price bid) in the E-Procurement NIC PORTAL (https://eprocurebhel.co.in) ONLY.</p> <p>c. Scanned copy of the filled Annexure A- (this document), Tender documents etc., shall be uploaded in the EPS portal.</p> <p>d. Sealed cover Bids/ E-Mails / Fax / Manual Offers will not be accepted.</p> <p>e. At its option, BHEL may consider extending the due date/s for the tender openings. Sufficient notice would be given by BHEL for such extensions and it will be published as corrigendum in following websites, https://eprocurebhel.co.in http://www.bhel.com/tender/</p> <p>f. Acceptance of offer will be subject to existing customer approval.</p> <p>g. <u>Quoted Currency.</u></p> <ul style="list-style-type: none"> ➤ Supplier Shall indicate the quoted currency. ➤ If there is any discrepancy in the terms quoted in techno-commercial bid and price bid, the terms as per the techno commercial bid (part-1) shall hold good and the commercial term quoted in Price bid (Part-II) shall not be considered. ➤ Price Variation Clause (PVC) is not acceptable and offer shall be rejected 	
04	<p><u>Reverse Auction</u></p> <p>BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. RA shall be conducted among the techno-commercially qualified bidders. Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered for RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.</p>	
05	<p><u>Authorization for participation in EPS portal through DSC: E-Tender. Participation requirements:</u></p> <p>Either Principal or authorized agent shall register their Digital Signature Certificate (DSC) (Class 3- SHA2- 2048 BIT- SIGNING & ENCRYPTION). Suppliers are advised to go through the FAQ available in the web portal (https://eprocurebhel.co.in). DSC shall be registered for the authorized person and all transaction done using that DSC against our tenders shall be taken as valid communication and shall be binding on principal/agent and is valid legally.</p> <p><u>For foreign Principal</u></p> <p>In case of Principal (being foreigner), they may apply for DSC through Indian embassy at their country and can register with us for participating in E-tenders. Details of the applicable procedure is available in the webpage http://www.cca.gov.in/cca/.</p> <p><u>For Indian agent</u></p> <p>In case of agents participating/registering their DSC (of authorized person), it will be at the sole authorization of principal to their agents to participate on their behalf and all transactions done using that DSC against our tenders shall be known as valid communication and shall binding on principal and is legally valid.</p>	
06	<p><u>Validity:</u></p> <p>The offers shall be kept open for acceptance for 120 days from the date of Tender opening. Once the tenders are submitted, rates cannot be changed on any grounds.</p>	

07	<p><u>Delivery:</u></p> <p>The offer shall clearly indicate delivery period in fixed number of weeks/Months from the date of approval of QP & related documents against the Purchase Order. Our delivery requirement is within 120 days from the date of final document approval/ manufacturing clearance from BHEL.</p> <p>Post ordering the entire ordered quantity shall be manufactured by the supplier with the approved QAP.</p> <p>Based on successful qualification meeting all requirements of TDC, dispatch clearances for the bulk quantity of the consumable will be given.</p> <p>The supplier shall preserve the bulk quantity of the consumable Lot at his work in good condition till dispatch Clearance.</p> <p>The quoted delivery period shall include time for manufacturing, testing, inspection at vendor works and dispatch. In case of rejection of material, remanufacturing and inspection at vendor works would also be within the quoted delivery period. Please note for any delay by BHEL, delivery period would be extended for the delayed period.</p> <p>Notwithstanding anything contained in contrary, including but not limited to the provisions relating to extension of time and Liquidated Damages, time shall be the essence of the Contract.</p>	
08	<p><u>Goods and Service Tax (GST)</u></p> <p><u>Indigenous suppliers:</u></p> <ul style="list-style-type: none"> • Response to Tenders for Indigenous supplier will be entertained only if the vendor has a valid GST registration Number (GSTIN) which should be clearly mentioned in the offer. If the dealer is exempted from GST registration, a declaration with due supporting documents need to be furnished for considering the offer. Dealers under composition scheme should declare that he is a composition dealer supported by the screen shot taken from GSTN portal. The unregistered dealer as well as the composition dealer has to submit an undertaking stating that they will not claim GST during the execution of the contract even if their status under GST changes to regular tax payer. The dealer has to submit necessary documents if there is any change in status under GST. • Supplier shall mention their GSTIN in all their invoices (incl. credit Notes, Debit Notes) 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), Billed to party (with GSTIN) & Shipped to party details, item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN/ SAC Code, Place of Supply etc. Wherever E-Invoice is applicable, the tax invoice/ CN / DN submitted by the vendor must contain the QR code generated in E-Invoice Portal & IRN. • All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code). • Invoices will be processed only upon completion of statutory requirement and further subject to following: <ul style="list-style-type: none"> o Vendor declaring such invoice in their GSTR-1 Return/ IFF o Receipt of Goods or Services and Tax invoice by BHEL • As the continuous uploading of tax invoices in GSTN portal (in GSTR-1/ IFF) is available for all (i.e. both Small & Large) tax payers under proposed new GST Return System, all invoices raised on BHEL may be uploaded immediately in GST portal on despatch of material /rendering of services. The supplier shall ensure availability of Invoice in GST portal before submission of invoice to BHEL. Invoices will be admitted by BHEL only if the invoices are available in GSTN portal (in BHEL's GSTR-2A/ GSTR-2B). • In case of discrepancy in the data uploaded by the supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note or debit note (details also to be uploaded in GSTN portal) for the shortages or rejections in the supplies or additional claims, within the calendar month informed by BHEL. • In cases where invoice details have been uploaded by the vendor but failed to remit the GST amount to GST Department (Form PMT-08 or Form GST RET-01 to be submitted) within stipulated time, then GST paid on the invoices pertaining to the month for which GST return not filed by the vendor will be recovered from the vendor along with the applicable interest (currently 24% p.a) and all subsequent bills of the vendor will not be processed till filing of the GST return by the vendor • In case GST credit is denied to BHEL due to non-receipt or 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 claimed in the invoice shall be disallowed to the vendor. 	

	<ul style="list-style-type: none"> Where any GST liability arising on BHEL under Reverse Charge (RCM), the vendor has to submit the invoices to BHEL well within the timeline prescribed in GST Law, to enable BHEL to discharge the GST liability. If there is a delay in submission of invoice by the vendor resulting in delayed payment of GST by BHEL along with Interest, then such Interest payable or paid shall be recovered from the vendor. GST TDS will be deducted as per Section 51 of CGST Act 2017 and in line with Notification 50/2018 – Central Tax dated 13.09.2018. GST TDS certificate which will be generated in GST portal subsequent to vendor accepting the TDS deduction in the GST portal, will be issued to the vendor. GST CREDIT: Suppliers are advised to get registered to GSTN portal. Tenderer under "GST credit" shall be preferred. <p><u>Import Suppliers:</u></p> <p>Supplier shall mention the HSN code of each item quoted by them in the offer. The HSN shall be mentioned in the Invoice also for each item without fail.</p> <p>Since GST is implemented, the taxes & duties will prevail as per the government notification/ guidelines. Our Provisional GST registration no. is 33AAACB4146P2ZL. However, it will be mandatory to confirm from BHEL for this mentioned GST no. Suppliers may quote their GST no with valid proof in the quotation. Also before quoting of tender it is suggested to consider all the factors in line with GST guidelines for input tax credit to arrive ranking of quoted suppliers.</p> <p>Note for all suppliers: Any change in applicable rates of Tax or any other statutory levies (Direct / Indirect) or any new introduction of any levy by means of statute and its corresponding liability for the deliveries beyond the agreed delivery date for reasons not attributable to BHEL will be to vendor's account. BHEL will not reimburse the same and any subsequent claim in this respect will be summarily rejected.</p>	
09	<p><u>Indigenous vendors – Terms of delivery:</u></p> <ul style="list-style-type: none"> Bidders should submit their offer on FOR Destination -BHEL Stores, Trichy basis. The quote should be inclusive of all charges, including testing, packing & forwarding, inspection, Insurance etc. (Ex-Works offers will not be considered). The soft copies of the Invoice, LR copy, E-waybill, Warrantee Certificate & Test certificates shall be forwarded to BHEL immediately after dispatch. 	
10	<p><u>IMPORT Vendors - Terms of Delivery:</u></p> <ol style="list-style-type: none"> Import vendors to submit offers on CFR (Cost & Freight), Chennai port (LILO – Liner in Liner Out) basis. Port of loading should be indicated without fail. Port of discharge should be Chennai. The preferred shipment mode “Containerized Cargo or Break Bulk” shall be specified clearly in the offer. <p><u>FOR CFR INCO TERMS – CONTAINERIZED CARGO</u></p> <ol style="list-style-type: none"> For CFR terms, moved through CONTAINERS (Suppliers should clearly specify this in their offer) it would be presumed by BHEL that the freight charges quoted is on LILO (LINER IN LINER OUT) basis including extra charges, if any, like Container Imbalance Charges, Trade Imbalance charges or any other charges payable to the Liner. No other charges other than the quoted Freight rate will be paid by BHEL excepting applicable Terminal Handling Charges, Container cleaning Charges, DO charges to Shipping Liner at Discharge Port. 14 FREE DAYS FOR Container detention shall be provided. In case of shipment through Containers on CFR basis, the BL should bear the endorsement that “14 free days for Container Detention is applicable”. If there is no free day or less than 14 free days provided by the supplier, then the actual cost incurred towards detention charges due to non-availability of above said free days will be recovered from the supplier Invoice. <p><u>BREAKBULK CARGO:</u></p> <ol style="list-style-type: none"> For CFR terms, moved through BREAK BULK BASIS (Suppliers should clearly specify this in their offer) it would be presumed by BHEL that the freight charges quoted is on LILO (LINER IN LINER OUT) basis. The materials will be Custom cleared from Port itself. <p><u>INFORMATION TO IMPORT SUPPLIERS:</u></p> <ol style="list-style-type: none"> For import consignments Insurance (sea voyage) for will be arranged by BHEL, Trichy Exchange rate for converting such offers to INR will as SBI TT selling rate as on the date of Technical/Un-priced bid opening date in case of two part (technical + price bid) bid and price bid opening date in case of single part bid (only price bid). In case the day of bid opening happens to be bank holiday in India, then exchange rate as on previous bank working day will be considered for evaluation. Multiple PO may also be placed considering the applicable duty structure of the respective requirement/ Quantity. 	

	<p>d) Indian Customs imposed a penalty on late filing of Bill of Entries (Air/Sea Shipments) by the importer. Bill of Entry is Required to be Filed Latest by the End of Day Preceding the Day (including Holidays) of Arrival of the Vessel for sea shipments and by the end of same day on arrival of air shipment. Penalty for not filing Bill of Entry within the specified time period is Rs.5000/- per day (for Initial 03 days) & Rs.10000/- per day (thereafter).</p> <p>e) The vendor should furnish the Non-Negotiable Documents (Air Way Bill/Bill of Lading, Commercial Invoice, Packing List, and Certificate of Origin) either by email or post/courier to BHEL well before the landing of cargo at final port of discharge.</p> <p>f) Vendor will be held responsible for the penalty arises against the late filing of Bill of entry due to and penalty/ additional expenses due to this would be recovered from the bills of supplier. Non availability of Non-Negotiable Documents (NNDs) before the cargo arrival Discrepancy in documents Short landing of Consignments (For shipments on CFR/CPT/CIF/CIP – Chennai Port)</p> <p>g) All the shipments for the contracts (POs) finalized on CFR -Chennai Port basis</p> <p>(i) Delivery Orders involving multiple agencies like liners/freight forwarders are not allowed. There must be a single agency office at the final discharge Port (Chennai) for issuing the Delivery Order to BHEL.</p> <p>(ii) The detention/demurrage charges arising due to the nomination of containers under single BL to different/ multiple CFS by the liner will be deducted from Vendor's bills only.</p> <p>(iii) The detention/demurrage charges arise due to the delay in collection of Delivery Orders from multiple agencies of liner/freight forwarder also whose offices are not at available Chennai, the same amount will be deducted from Vendor's bills only.</p> <p>(iv) Apart from the normal charges like Terminal Handling Charges, Container cleaning Charges, Delivery Order Charges at final port of discharge no other charges will be borne by BHEL.</p> <p>(v) The liner/freight forwarders should be properly communicated by the Vendor for not to claim such charges for issuing Delivery Order. If the liner/freight forwarder claims such charges in their invoices, the same amount will be deducted from the Vendor bills without any prior intimation in order to avoid the delay in Customs clearance. The likely additional/hidden costs or charges are:</p> <ol style="list-style-type: none"> CIC - Container Imbalance Charges/Surcharges EIC - Equipment Imbalance Charge/Surcharges CAF - Container/Currency Adjustment Factor BAF - Bunker adjustment Factor RDS - Rupee Depreciation Surcharge CDS - Currency Depreciation Surcharge PCS - Port Congestion Surcharge LSS - Low Sulphur Surcharge Devanning Charges 	
11	<p><u>Transport Conditions for Import:</u></p> <p>The Original Documents (Bill of Lading, Invoice, Packing List, Certificate of Origin & Test Certificate) shall reach BHEL well in advance before the vessel arrival. The soft copies of the above shall be forwarded to BHEL immediately after shipment.</p> <p>a) 14 FREE DAYS for Container detention at final port of destination shall be provided and the same to be endorsed in the Bill of Lading. If there is no free day or less than 14 free days provided by the supplier, the actual cost incurred towards detention charges due to non-availability of above said free days will be recovered from the supplier Invoice.</p> <p>b) In the event of delayed submission of documents/ non-submission of documents by the supplier as per the mutually agreed terms, an amount up to 5% of the invoice value will be retained towards detention/ demurrage & other charges and the difference if any between actual charges and recovery will be settled separately through supplementary invoice.</p> <p>c) In such cases, the Supplier shall authorize the Steamer / Shipping agent / transporter to freely release the consignment to BHEL by providing a "Surrender Bill of Lading".</p> <p>d) Otherwise, No-objection Certificate shall be issued to the Liner, authorizing BHEL to get the Delivery Order without producing the Original Bill of Lading.</p> <p>e) This is required to ensure avoidance of detention/ demurrage at Chennai Sea-port that may arise in case of delayed presentation of documents by the Seller.</p>	
12	<p><u>Acceptance of materials supplied:</u></p> <p>a) The supply shall strictly be as per the specifications in the tender /purchase order.</p> <p>b) Delivery of the ordered items as per the delivery terms in the Purchase Order does not automatically constitute acceptance of the delivered items.</p>	

	<p>c) In case of rejection of the pilot lot, the supplier shall replace the rejected items as per the specification in the Purchase order/tender at their cost within the specified delivery period.</p> <p>d) In case of rejection of the pilot lot, either part or full, if the supplier fails to replace the rejected items with the items meeting the TDC as per the tender, the same shall be treated as failure to execute the contract and actions as per the extant Guidelines of the company would be taken against such supplier.</p> <p>e) In case of rejection of any of the delivered lots, either part or full, during the warrantee period, if the supplier fails to replace the rejected items within the specified days/months of communication of the rejection, the same shall be treated as failure to execute the contract and actions as per the extant Guidelines of the company would be taken against such supplier.</p> <p>f) In case of rejection of any of the delivered lots either part or full during the warrantee period, the cost of testing would be recovered from the supplier.</p>	
13	<p><u>Payment terms:</u></p> <p><u>Indigenous:</u> For Micro & Small Enterprises vendors, BHEL Payment term is 100% direct EFT payment within 45 days from the date of receipt and acceptance of materials.</p> <p>For Medium Enterprises vendors, BHEL Payment term is 100% direct EFT payment within 60 days from the date of receipt and acceptance of materials.</p> <p>For Non MSME vendors, BHEL Payment term is 100% direct EFT payment after 90 days from the date of receipt and acceptance of materials</p> <p><u>Import:</u> BHEL Payment term is 100% payment on CAD basis after 90 days from the date of receipt of documents, specified in PO, at BHEL bank. Respective bank charges to respective account.</p> <p>If supplier insists for Usance LC with 90 days' credit, the same will be opened one month prior to material readiness, further loading @ 1.5% on the offered value will be considered for evaluation. Hence supplier shall intimate the material readiness accordingly for opening of L.C. LC validity period will be 90 days and for any extension, applicable charges will be to supplier's account:-</p> <p>Marginal cost lending rate (MCLR) of SBI (as applicable on the date of bid opening, Techno commercial bid opening in case of two part bids) + 6%, shall be considered for loading for the period of relaxation sought by bidders.</p> <p>As a process, LC extensions will be avoided. Expiry of LC will deem any subsequent bill to be cleared against CAD. Also, based on shipment, LC can be opened in splits instead of blocking the whole chain.</p> <p>Offers with payment terms as Advance Payment & LC at Sight are liable for rejection.</p>	
14	<p><u>Liquidated Damage (Indigenous & Imports):</u></p> <ol style="list-style-type: none"> 1. Time is the essence of the contract. 2. The ordered items shall be delivered as per the delivery period mentioned in the Purchase Order. 3. In case the supplier supplies the ordered items beyond the delivery period specified, Liquidated Damages - LD - as detailed below shall be will be levied from the supplier without prejudice to any other relief /compensation available to BHEL, Tiruchirappalli under any other condition of the contract/applicable legal provisions. 4. LD shall be 0.5% of the undelivered portion per week or part thereof subject to a maximum of 10% of the total order value. 5. Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value). <p>Indigenous: For "FOR Delivery terms", Lorry way bill date will be taken for LD calculation for cases where E way bill is not mandatory. Wherever E Way Bill is involved, the date of commencement of movement of vehicle as reflected in E way Bill [the 'Valid from' date in the E way Bill] will be taken for LD calculation. If the goods are delivered through trans-shipment, the delivery documents of the 1st shipment from the factory works, will be considered for calculation of LD.</p> <p>Import: For CFR terms, BL date will be considered for LD calculation.</p>	
15	<p><u>Risk Purchase clause:</u></p> <p>a) In the event of any successful Tenderer's failure to fulfil any of the tender / Contract obligations including supply of whole or any part of the ordered items as per Contract / Agreement, BHEL has the right to terminate the contract and purchase from elsewhere ,at the risk and cost of the defaulted supplier, either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated in the contract or if the same were not available, the best and nearest available substitute thereof. The supplier shall be liable for the additional expenditure/difference in Cost, if any, including consequential</p>	

	<p>losses which BHEL may sustain by reason of risk purchase in addition to the applicable LD as per the Purchase order/contract.</p> <p>b) The decision of BHEL with regard to the additional expenditure / difference in cost and consequential losses incurred by BHEL shall be final and binding on the supplier.</p> <p>c) The amount recoverable under risk purchase shall be recovered from the defaulted supplier in all or any of the following manners:</p> <ul style="list-style-type: none"> i) from dues available in the form of Bills payable to defaulted supplier, SD, BGs against the same contract. ii) from the dues payable to defaulted supplier against other contracts in the same Region/Unit /any other region/unit iii) In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against defaulted supplier. <p>d) GST will be applicable for the amount recoverable under Risk Purchase Clause.</p>	
16	<p><u>Warranty:</u> Supplier shall give warranty against mentioned scope of warranty such as design & manufacturing defects for the items supplied, for 24 months from the date of supply in line with TDC.</p> <p><u>Repair & replacements:</u> Within the warranty period, vendor has to replace / rectify the defective/ damaged items on free of cost (inclusive of all Testing, Inspection, TPI, Service charges etc.) within two months from defect notification date. All incidental charges like freight, insurance and customs duty are to supplier's account only. The defective parts and components shall be collected by your Indian agent or / authorized person, only after completing the replacement / repairs. If the supplier fails to replace / rectify the defective/ damaged items on free of cost within two months of reporting from our end, the same shall be treated as failure to execute the contract and actions as per the Guidelines for Suspension of Business Dealings with Suppliers /Contractors available in the webpage: http://www.bhel.com/vender_registration/vender.php. would be taken against such supplier without prejudice to the other remedies available to BHEL under the contract and law in this regard.</p>	
17	<p><u>Non-Disclosure Agreement (NDA):</u> The bidders shall enter into the non-disclosure agreement totally voluntarily, with full knowledge of its meaning and without duress. (Format attached).</p>	
18	<p><u>Intellectual Property Right</u> The supplier shall, at all times, indemnify and keep indemnified the purchaser, free of cost, against all claims which may arise in respect of goods & services to be provided by the supplier under the contract for infringement of any intellectual property rights or any other right protected by patent, registration of designs or trademarks. In the event of any such claim in respect of alleged breach of patent, registered designs, trademarks etc. being made against the purchaser, the purchaser shall notify the supplier of the same and the supplier shall, at his own expenses take care of the same for settlement without any liability to the purchaser.</p>	
19	<p>PARTICULARS TO BE FURNISHED BY FOREIGN VENDORS FOR EVALUATION OF BIDS WITH CUSTOMS DUTY BENEFIT</p> <p>A. In case PTA/ CEPA or any other agreement/treaty between respective Governments/Countries exists for the enquired Items/tender, which entails concessional custom duty or any other benefits for importing the same in India, supplier shall declare/ mention it in their offer. Please confirm whether any such concessional duty for importing in India is applicable or not.</p> <p>B. If yes, please mention the Concessional Customs Duty (% of Basic custom duty) for the offered item/s. Please mention in percentage only.</p> <p>C. Documentary proof for the applicable Concessional Customs Duty (eg. PTA/ CEPA or other agreement) shall be submitted along with the Part-1 bid.</p> <p>D. Relevant documents and details to avail the above concessional duty benefits by BHEL shall be submitted by the supplier along with dispatch documents</p> <p>E. In the event of seller failing to provide appropriate documents along with dispatch documents for purchasers to avail disclosed concessional duty benefits in India, financial loss, so incurred, will be to the seller's account.</p> <p>Note: Evaluation of the Price bids will be based on the above details only and unless mentioned/furnished by the vendor, Customs Duty benefit will not be applied for evaluation purposes.</p>	<p>VENDOR COMMENTS</p> <p>YES / NO</p> <p>%</p> <p>SUBMITTED/ NOT SUBMITTED</p> <p>CONFIRMED/ NOT CONFIRMED</p> <p>CONFIRMED/ NOT CONFIRMED</p>
20	<p><u>Role of Agents</u></p> <p>a) BHEL will deal directly with manufacturers only. Offers from Traders & Stockist will not be considered.</p>	

	<p>b) BHEL strongly discourages the engagement of Agents in India by foreign principals, to deal with BHEL, in BHEL's tenders.</p> <p>c) In case of foreign suppliers representing through their Indian/foreign agents, agency agreement should be submitted, else offer is liable for rejection. Agency agreement requirements attached as separate file and full compliance to it shall be ensured while submitting the same.</p> <p>d) BHEL, due to business reasons would ban, would have banned Indian agents from dealing with BHEL. Any foreign principal who engages such a banned agent, or an employee of the banned agency, or any other person connected with the banned agency, at any time during the tender proceedings, would be disqualified from the tender proceedings. The decision of BHEL in this regard shall be final and be binding on the OEM. Hence in their own interests, prospective tenderers may check with BHEL, the status of their proposed agent vis-à-vis BHEL.</p> <p>e) In view of the requirement of BHEL, it is strongly suggested that in their own interest, foreign principals may desist from engaging any Indian agent and deal with BHEL directly and it is stressed that any Main producer proposing to deal with BHEL by engaging and through an Indian Agent does so at their own risk. BHEL shall in no way be responsible for any consequences that may arise to the foreign principal on account of the antecedents / actions of their Indian Agent.</p> <p>f) In case of participation through Indian Agent, PAN, IT returns & Incorporation certificate to be submitted.</p>	
21	<p><u>Agency Commission:</u></p> <p>a) If overseas principal has any tie-up with any third party/ agents, it should be declared while submitting offers.</p> <p>b) In respect of offers from overseas suppliers, agency commission, if any, payable to their agents in India, shall invariably be shown separately in the Performa invoice and this will be paid by BHEL in India, in Indian rupees, on satisfactory completion of the contract.</p> <p>c) Copies of current agency agreement / authorization letter in respect of agency commission shall be furnished along with offer.</p> <p>d) For calculation of rupee equivalent agency commission, exchange rate as prevailing on the date of order will be taken.</p>	
22	<p><u>Evaluation Criteria:</u></p> <p>The Evaluation Currency for this tender shall be "INR". The offers of vendors will be evaluated on total landed cost to BHEL, Trichy. The evaluation process is as detailed below:</p> <p><u>Indigenous:</u></p> <p>Total Landed cost = FOR Rate in INR (A) + Applicable Taxes (B) + Loading for payment term & LD (C) + Loading for any other aspects (D)- Applicable input tax credit (E)</p> <p>A. Indigenous vendors submit offers on Free on Road (FOR), Trichy in INR.</p> <p>B. GST and any other charges quoted by indigenous vendors will be added to the base price.</p> <p>C. Loading for payment terms & non-acceptance of Liquidated Damages (LD) will be added to the FOR value for arriving the landed rate.</p> <p>D. Loading for any other aspects as mentioned in the Terms & Conditions.</p> <p>E. However, input credit is availed for GST (SGST, CGST/IGST), hence the same is excluded for arriving at the landed cost.</p> <p><u>Import:</u></p> <p>Total Landed cost = CFR Rate in INR (A) + Applicable Duties (B) + Incidental Charges (C) + Loading for payment term & LD (D) + Loading for any other aspects (E)</p> <p>A. Import vendors to submit offers on CFR (Cost & Freight), Chennai port (LILO – Liner In Liner Out) basis in foreign currency, which will be converted to INR by multiplying with the Exchange rate (SBI TT Selling rate) as on the technical bid opening date.</p> <p>B. Customs duty, Safe guard duty and antidumping duty as applicable will be added to the INR price.</p> <p>C. Incidental charges of 2.26% will be added to the CFR Value. The incidental charge is inclusive of Insurance, port handling charges, & freight charges for movement from Chennai port to BHEL, Trichy.</p> <p>D. Loading for payment terms & Non-acceptance of Liquidated Damages (LD) will be added to the CFR value for arriving at the landed cost.</p> <p>E. Loading for any other aspects as mentioned in the Terms & Conditions.</p> <p>Note: "In the course of evaluation, if more than one bidder happens to occupy L1 status, effective L1 will be decided by soliciting discounts from the respective L1 bidders. In case more than one bidder happens to occupy the L1 status even after soliciting discounts, the L1 bidder shall be decided by a toss/draw of lots, in the presence of the respective L1 bidders or their representatives. Ranking will be done accordingly. BHEL decision in such situations shall be final and binding".</p>	

	<p><u>Loading for Inspection (For both Import and Indigenous):</u> BHEL Personnel will be at vendor works for Reviewing / Witnessing of stage wise testing, subsequent to notification from supplier on readiness of the respective stages. Presence of two BHEL inspectors at vendor works is required (tentatively) for a duration of 65 man-days for Non-ASME-QSC holders & 47 man-days for ASME QSC holders.</p> <p>Expense to BHEL for inspection as mentioned above will be loaded to the quoted rate.</p>	
23	<p><u>General condition:</u></p> <ol style="list-style-type: none"> Bids including all enclosures and supporting documents like catalogues, pamphlets, etc., shall be submitted / uploaded in ENGLISH language only. If the documents submitted have other than English language, translation of the same shall be provided for evaluation. Three sets of documents containing Test certificates, Copies of the approved quality documents and test procedures, DCR and Drawings, etc. must be provided along with the supply of Raw materials. Dispatch clearance for material shall be given after acceptance of TC's by BHEL & NPCIL. Supplier has to submit Quality documents and related test procedures for approval. For Indigenous supply, chemical composition and mechanical test are to be carried out in NABL accredited laboratory only. Bidders are requested to submit their best competitive prices at the first instant itself and no revision of prices will be allowed after the tenders are opened. For the evaluation purposes, exchange rate (TT selling rate of SBI) as on schedule date of tender opening (Part I, i.e. technical bid, in case of two part bid) shall be considered. BHEL will consider the ranking after the loading is applied wherever deviations are observed. BHEL reserves the right to negotiate L1 rate or re-float the tender opened if L1 price is not the lowest acceptable price to them inter-alia other reasons. In the event of our customer order covering this tender being cancelled / placed on hold / otherwise modified, BHEL would be constrained to accordingly cancel / hold / modify the tender / your purchase order at any stage of execution. Offer will be evaluated based on Landed cost to BHEL- Trichy. Vendor should physically weigh the materials before stuffing them into container and incorporate the same in BL and packing slip. Offers for partial quantities of a given item or some (not all) of the tendered items are not acceptable to BHEL. Such partial offer would not be considered in the enquiry. Offers for partial quantities of a given item are not acceptable to BHEL. While tenderers can quote for some or all the tendered items, no supplier shall quote for partial quantity of any given enquiry item. Such partial offer would not be considered in the enquiry for that item. No payment will be made for the excess quantity. Offer should be submitted only as per the Unit of Measurement (UOM) specified in the enquiry. Documents not signed and stamped by the authorized signatory of the bidder shall not be accepted and considered for registration / evaluation of the bid etc. Any additional documents submitted by supplier / bidder, during processing of registration application / tender or after placement of order, shall not be accepted unless it is submitted with forwarding letter and duly signed and stamped as mentioned above. All documents submitted with the offer shall be signed and stamped in each page by authorized representative of the bidder. In exceptional cases, the tenderers may be requested by the purchaser to extend the validity of their tenders up to a specified period. Such request(s) and responses thereto shall be conveyed by EPS / e- 	

	<p>Mail message. The tenderers, who agree to extend the tender validity, are to extend the same without any change or modification of their original offer.</p> <p>s) Foreign suppliers have to submit the Non-Negotiable Document to bank/directly to BHEL as per the relevant payment term, well before the shipment reaches the port or else the demurrage and detention charges due to the delay in submission by supplier will be deducted from supplier's invoice.</p> <p>t) One Indian agent can represent one foreign principal only and submit one offer for these tender items. In order to maintain sanctity of the tender system it is mandatory that one agent cannot represent two suppliers or quote on their behalf in a particular tender enquiry. If any agent represents more than one supplier, all such offers will be rejected.</p> <p>u) This Tender is hosted in EPS portal & offer to be submitted through EPS portal only. You are requested to submit your 2 parts offer before due date & time of the enquiry through NIC (https://eprocurebhel.co.in) only. SEALED COVER BIDS / E-MAILS / FAX / MANUAL OFFERS WILL NOT BE ACCEPTED.</p> <p>For any clarification you can contact to ijohn@bhel.in, Contact no. 0431 2577849.</p>	
24	<p><u>Conflict of Interest among Bidders/Agents</u></p> <p>A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:</p> <p>a) They have controlling partner (s) in common; or</p> <p>b) They receive or have received any direct or indirect subsidy/ financial stake from any of them; or</p> <p>c) They have the same legal representative/ agent for purposes of this bid; or</p> <p>d) They have relationship with each other, directly or through common third parties, <u>that puts them in a position to have access to information about or influence on the bid of another Bidder</u>; or</p> <p>e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. <u>However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid</u>; or</p> <p>f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/ dealer. There can be only one bid from the following:</p> <ol style="list-style-type: none"> 1) The principal manufacturer directly or through one Indian agent on his behalf; and 2) Indian/ foreign agent on behalf of only one principal; <p style="text-align: center;">or</p> <p>g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or</p> <p>h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/ management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business in the format given in Annexure – B.</p>	
25	<p><u>Fraud Prevention Policy</u></p> <p>"The bidder along with its associate/collaborators/sub-contractors /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 Management about fraud or suspected fraud as soon as it comes to their notice."</p>	
26	<p><u>Suspension of Business Dealings with Suppliers/Contractors:</u></p> <p>The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms /principal/agents, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.</p> <p>Integrity commitment, performance of the contract and punitive action thereof: Commitment by BHEL</p> <p>BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in a transparent and fair manner, and with equity.</p> <p>Commitment by Bidder/ Supplier/ Contractor</p> <ul style="list-style-type: none"> • The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any 	

	<p>manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.</p> <ul style="list-style-type: none">• The bidder/ supplier/ contractor will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL.• The bidder/ supplier/ contractor will perform/ execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL. <p>If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in any act, including but not limited to, mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or tampers the tendering process or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India or does anything which is actionable under the Guidelines for suspension of business dealing, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on www. bhel.com and/or under applicable legal provisions. Guidelines for suspension of business dealings_is available in the webpage: https://www.bhel.com/supplier-registration.</p>																			
27	<p><u>Cartel Formation:</u></p> <p>The Bidder declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). 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, suitable action shall be taken by BHEL as per extant policies/ guidelines.</p>																			
28	<p><u>Integrity Pact (IP):</u> Signed Integrity pact (IP) should be furnished along with offer. IP would be signed by authorized official of the bidder/vendor/contractor. Offer without signed Integrity Pact (IP) shall be rejected. Copy of IP should be enclosed. This tender will be monitored by Independent external monitor (IEM). For information only.</p> <p>(a) IP is a tool to ensure that activities and transactions between the Company and its Bidders/ Contractors are handled in a fair, transparent and corruption free manner. Following Independent External Monitors (IEMs) on the present panel have been appointed by BHEL with the approval of CVC to oversee implementation of IP in BHEL.</p> <table><tr><th>IEM</th><th>Email</th></tr><tr><td>Shri Otem Dai, IAS (Retd.)</td><td>iem1@bhel.in</td></tr><tr><td>Shri Bishwamitra Pandey, IRAS (Retd.)</td><td>iem2@bhel.in</td></tr><tr><td>Shri Mukesh Mittal, IRS (Retd.)</td><td>iem3@bhel.in</td></tr></table> <p>(b) The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-I, in case of two/ three part bid). Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification.</p> <p>(c) Please refer Section-8 of IP for Role and Responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to any of the above IEM(s). All correspondence with the IEMs shall be done through email only.</p> <p>Note: No routine correspondence shall be addressed to the IEM (phone/ post/ email) regarding the clarifications, time extensions or any other administrative queries, etc on the tender issued. All such clarification/ issues shall be addressed directly to the tender issuing (procurement) department's officials whose contact details are provided below: Details of contact person(s):</p> <table><tr><td>Name: Jibu Jacob John / Manager</td><td>Name: R. Meganathan / Manager</td></tr><tr><td>Dept: ATP/Purchase</td><td>Dept: ATP/Purchase</td></tr><tr><td>Address: 4th Floor, 24 Building HPBP, BHEL, Trichy- 620014</td><td>Address: 4th Floor, 24 Building HPBP, BHEL, Trichy-620014</td></tr><tr><td>Email: jjjohn@bhel.in</td><td>Email: rmega@bhel.in</td></tr><tr><td>Phone: 0431-257-7849</td><td>Phone: 0431-257-5458</td></tr></table>	IEM	Email	Shri Otem Dai, IAS (Retd.)	iem1@bhel.in	Shri Bishwamitra Pandey, IRAS (Retd.)	iem2@bhel.in	Shri Mukesh Mittal, IRS (Retd.)	iem3@bhel.in	Name: Jibu Jacob John / Manager	Name: R. Meganathan / Manager	Dept: ATP/Purchase	Dept: ATP/Purchase	Address: 4th Floor, 24 Building HPBP, BHEL, Trichy- 620014	Address: 4th Floor, 24 Building HPBP, BHEL, Trichy-620014	Email: jjjohn@bhel.in	Email: rmega@bhel.in	Phone: 0431-257-7849	Phone: 0431-257-5458	
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Email: jjjohn@bhel.in	Email: rmega@bhel.in																			
Phone: 0431-257-7849	Phone: 0431-257-5458																			
29	<p><u>Resolution of Disputes:</u></p> <p>The Parties agree that if at any time (whether before, during or after the arbitral or judicial proceedings), any Disputes (which term shall mean and include any dispute, difference, question or disagreement arising in connection with construction, meaning, operation, effect, interpretation or breach of the contract/tender which the Parties are unable to settle mutually), arise inter-se the Parties, the same may, be referred by either</p>																			

	<p>party to Conciliation to be conducted through Independent Experts Committee to be appointed by competent authority of BHEL from the BHEL Panel of Conciliators.</p> <p>Notes:</p> <ol style="list-style-type: none"> 1. No serving or a retired employee of BHEL/Administrative Ministry of BHEL shall be included in the BHEL Panel of Conciliators. 2. Any other person(s) can be appointed as Conciliator(s) who is/are mutually agreeable to both the parties from outside the BHEL Panel of Conciliators. <p>The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided in Annexure X to this Enquiry Conditions.</p> <p>The Annexure together with its appendices will be treated as if the same is part and parcel hereof and shall be as effectual as if set out herein in these Enquiry Conditions.</p> <p>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 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 other Party refer such dispute or difference to sole arbitration of an arbitrator appointed as per the Arbitration and Conciliation Act, 1996 (India) or statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force .</p> <p>This contract shall be governed, construed and interpreted in accordance with the laws of India.</p> <p>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 provision of Arbitration & Conciliation Act 1996 (India) or statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.</p> <p>The seat of arbitration shall be Trichy, Tamil Nadu, India. The cost of arbitration shall be borne as per the award of the Arbitrator. Subject to arbitration in terms of clause above, the Courts at Trichy, Tamil Nadu, India shall have exclusive jurisdiction over any matter arising out of or in connection with this Contract.</p> <p>Notwithstanding the existence or any dispute or difference and/or reference for the arbitration, the vendor shall proceed with and continue without hindrance the performance of its obligation 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.</p> <p><u>In Case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable:</u></p> <p>In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/Port Trusts inter se and also between CPSEs and Government Departments/Organizations (Excluding disputes concerning Railways, Income Tax, Customs & Excise Departments, such dispute or difference shall be taken up by either party for its resolution through AMRCD as mentioned in DPE OM No. 05/003/2019-FTS-10937 dtd. 14th December, 2022 and the decision of AMRCD on the said dispute will be binding on both the parties.</p>	
30	<p><u>In the event of Force Majeure:</u></p> <ol style="list-style-type: none"> a. Notwithstanding the provisions contained in other clauses, the supplier shall not be liable for imposition of any such sanction so long the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure. For purposes of this clause, Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable and not brought about at the instance of the party claiming to be affected by such event and which has caused the non – performance or delay in performance. Such events may include, but are not restricted to, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes excluding by its employees, lockouts excluding by its management, freight embargoes and Acts of GOD. b. If a Force Majeure situation arises, the supplier shall promptly notify the Purchaser/Consignee in writing of such conditions and the cause thereof within twenty-one days of occurrence of such event. Unless otherwise directed by the Purchaser/Consignee in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. 	

	<p>c. If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.</p> <p>d. In case due to a Force Majeure event the Purchaser/Consignee is unable to fulfil its contractual commitment and responsibility, the Purchaser/Consignee will notify the supplier accordingly and subsequent actions taken on similar lines described in above sub-paragraphs.</p>	
31	<p><u>Execution of the order:</u></p> <p>a. BHEL will have the option to pre-inspect the materials at Supplier's works by BHEL's own inspector or by third party agency appointed by BHEL or BHEL's end customer/s.</p> <p>b. If the inspection fails, the vendor shall offer the material again as per ordered terms and specifications for further inspection.</p> <p>c. The mere act of the pre-dispatch inspection (PDI) does not absolve the Supplier from giving the specifications as agreed upon in the Purchase Order.</p> <p>d. In the case of overseas suppliers Inspection call for carrying out the inspection shall be given 30 days before the scheduled contract delivery date. The Inspection date/s given by the Supplier shall be on firm basis. For local Suppliers the Notice period of Inspection shall be 10 working days.</p> <p>e. In the event of any short supply, it shall be the responsibility of the supplier to deliver such short supplied/ missing items on Free-of-Cost basis at BHEL stores, including customs clearances at Indian Ports in the case of foreign suppliers.</p>	
32	<p><u>Evaluation of offer:</u></p> <p>a. The price bids including the impact price (if any) of the technically acceptable offers alone shall be opened.</p> <p>b. Offers with pre-conditions (like conditional discounts) for price are liable to be not considered / rejected. For evaluation such conditions would be removed and only the base offer would be considered for evaluation and comparison.</p> <p>c. BHEL reserves the right to conduct negotiations on the "Price" and "Other Commercial Terms and Conditions" with the lowest ranked offerer at any time after the bid opening but before the release of the Purchase Order.</p> <p>d. In case of more than one bidder happens to occupy L-1 status, effective L-1 will be decided by soliciting discounts from respective L-1 bidders. Incase more than one bidder happens to occupy the L-1 status even after soliciting discounts, the L-1 bidder shall be decided by a toss/draw of lots, in the presence of the respective L-1 bidder(s) or their representative(s). Ranking will be done accordingly, BHEL's decision in such situations shall be final and binding.</p> <p>e. In the event of any change in scope / quantity arising out of the discussions, offerer would be given a chance to submit their revised offer / Impact bids. The option for the revised offer / impact offer will be triggered by BHEL. The Supplier then will have the facility to feed-in the revised price / impact price as per the provision given by BHEL. The impact price can be positive or negative (or nil). The impact price option shall contain only the price addition / deletion for such change in the scope / quantities, over and above the original scope and price quoted. The original price quoted would remain unchanged. The total price would then be computed by the arithmetic addition of the original price and the impact price. Where BHEL gives the option of submitting the revised offer, the impact would be computed as the arithmetic difference of the revised price and the original price.</p>	
33	<p><u>Set-off Clause:</u></p> <p>BHEL shall have the right to recover any money which in the sole opinion of BHEL is due from the Contractor from any money due to the Contractor under this Contract or any other contract or from the Security Deposit furnished by the Contractor under this Contract or any other contract.</p>	
34	<p><u>Caution:</u></p> <p>a) The suppliers are severely cautioned to note that the price bid document accepts the price in figures only. It does not allow the supplier to write the value by words. Therefore, all care shall be exercised by the supplier while filling in the figures. Once the price bid is opened no option is available for the supplier to retract the offer under any grounds. If a supplier, for any reason whatsoever approaches BHEL with a request for change in the price, it would be treated as going back on the offer submitted. In such cases, action would be initiated by BHEL for suspending further business dealings with such suppliers as per policy of BHEL which prevails at that point of time.</p> <p>b) The language in the tender documents downloaded by the Bidders shall at no point of time be changed, altered or modified in any manner by the Tenderer. If such changes are made by any tenderer, it shall be considered as tampering with BHEL's terms and the offer shall be summarily rejected, whenever it is noticed by BHEL. Such Bidders would be disqualified from the Bidding Process and their offers would be forfeited / Bank Guarantees invoked. They would also not be allowed to participate in future tenders of BHEL.</p>	
35	<p><u>Special Provisions for Micro and Small Enterprises (MSE) bidders registered as per MSME act:</u> (Subject to participating MSE vendors meeting the tender requirements of BHEL)</p>	

	<p>a. As per Gazette Notification no. S.O. 2119(E) dated 26.06.2020 issued by Ministry of MSME applicable/existing Micro and small suppliers are requested to get registered with Udyam Registration portal and share us the Udyam registration no along with Udyam registration certificate.</p> <p>b. 25% of the tendered quantity is earmarked for MSE suppliers in this tender, subject to participating MSE Vendors should meet the tender requirements of BHEL. In case MSE vendor participating in the tender quotes within the price band of L1 + 15%, they will be allowed to supply the portion of the requirement subject to acceptance of L1 price by MSE vendor. In case of more than one such MSE vendor within the "L1+15% price band", the supply shall be shared proportionately.</p> <p>c. In the event of Non MSE supplier becoming L1 and MSE supplier quotes within the price band of L1+15% and it is not possible to split the tendered quantity on account of reasons like customer contract requirement/technical requirements, then 100% of the quantity will be offered to MSE suppliers subject to acceptance of L1 price by MSE supplier.</p> <p>d. Counter offering of L1 rate will not be made with any MSE vendor whose quoted rate is more than the price band of L1+15%.</p> <p>e. Payment to MSE vendor will be as per the applicable provisions of the MSMED Act 2006.</p> <p>f. If L1 offer is from a Micro / Small enterprise, the 25% earmarking provision is not applicable.</p> <p>g. Out of the 25% tendered quantity reserved for MSE suppliers, 6.25% shall be earmarked for procurement from MSE owned by SC/ST entrepreneurs. Apart from this 3% shall be earmarked for procurement from MSE owned by Women entrepreneurs.</p> <p>h. In case of any change in the MSE status of the bidder, it shall be the responsibility of the bidder to notify the change as a part of the bid document. If at a later date it comes to the knowledge of BHEL, that the change in the status has not been intimated by the bidder and the order is obtained under the premise of an MSE then BHEL would cancel the pending order against this tender and take necessary steps for suspension of the business dealing with the bidder as per the procurement policy of BHEL.</p> <p>i. MSE suppliers can avail the intended benefits by submission of documents as per the latest notification of Ministry of Micro, Small and Medium Enterprises. Non-submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents are not submitted before price bid opening. Documents should be notarized or attested by a Gazetted officer. However, credentials of all MSE suppliers will be verified before considering the intended benefits for MSE suppliers at the time of tender evaluation.</p>	
36	<p><u>Preference to Make in India:</u></p> <p>For this procurement, the local content to categorize a supplier as a class I local supplier/class II local supplier /Non-local supplier and purchase preference to class I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 04.06.2020 issued by DPIIT. In case of subsequent Orders issued by the respective Nodal Ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of part II bids against this NIT.</p> <p>The clause pertaining to procurement of goods which are not divisible in nature will be applicable for this enquiry.</p>	
37	<p><u>Restrictions for Procurement from a country sharing its land border with India</u></p> <p>For this procurement, Public procurement order dated 23.07.2020 regarding restrictions under rule 144 (xi) of general financial rules 2017 and clarification dt 08.02.2021 from DoE is applicable. In case of subsequent Orders issued, the same shall be applicable even if issued after issue of this NIT.</p>	
38	<p><u>Enclosures:</u></p> <ol style="list-style-type: none"> 1. List of items 2. Enquiry terms and conditions (Annexure-A) 3. Pre-Qualification Requirement/ Criteria (PQR) along with special condition Annexure-CF 4. Technical Delivery Conditions (TDC): ATMW-TDC-ENiCrFe3 Rev 03 5. Special instructions/ conditions along with Annexure-P (Packing) 6. Non-Disclosure Agreement 7. Declaration of sister / common business / management units in same /similar line of business for the quoted items in this tender (Annexure-B) 	

	8. Vendor Details (Annexure-C) 9. Agency Agreement Requirement 10. Annexure on Conciliation 11. Integrity Pact
(On behalf of BHEL)	<u>SIGNED BY MANUFACTURER / MILL</u> Name of the mill / Principal: Signature: (Affix Seal) (All conditions were read & clearly understood and agreed in totality with the mentioned deviations only)

Pre- Qualification Criteria

Sl. No.	Descriptions	Bidder remarks
1	Bidder shall be a manufacturer of the Quoted Shielded Metal Arc Welding electrode, or an authorized agent of the same. If the offer is quoted by agent, letter of authorization and agreement duly signed by the manufacturer is required to consider the offer.	(Supporting Document)
2	Bidder shall have successful experience for supplying SMAW ENiCrFe3 Inconel electrode as Per ASME Sec.II.C to any govt. Organizations/ PSUs/ Public Ltd./ Company/Reputed Industries. Below documents to be submitted along with offer to consider the offer. Documents required: a. Purchase orders copies b. Test certificate corresponding to the attached Purchase order (preferably signed by customer) c. Way bill & invoice correlating order d. End customer contact details for attached Purchase orders. Note: Successful experience means – supplied and accepted.	(Supporting Document)
3	Quoted Welding Consumables brand name and its data sheet shall be provided along with offer.	(Supporting Document)
4	Total no. of lots/Batch offered against each size of electrode.	Bidder to mention
5	Mill (Manufacturing plant) address shall be provided along with offer.	(Supporting Document)
6	Mill (Manufacturing plant) capacity shall be provided along with offer.	(Supporting Document)
7	i. Dry Mix capacity of each mixing vessel. ii. Wet Mix capacity of each mixing vessel. iii. No. of Dry Mix and Wet Mix required for manufacturing the offered quantity for each size.	Bidder to specify
8	The core wire of one lot of electrodes shall be from single Heat only. [Ref: ASME Section III NB- 2420]	Bidder shall confirm to carry out this activity.
9	a. The lot Class C3 classification has to be followed during the manufacturing of this electrode as per ASME Section-II Part- C and ASME Section III NB. b. Methodology and steps to achieve and confirm Lot class C3 classification have to be attached. Acceptance is subjected to acceptance by BHEL and NPCIL.	Bidder shall confirm to carry out this activity with supporting documents.

P. K. R.

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Deputy Manager
Methods Welding / ATP
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UJO JOHNSON
Manager / Methods Welding
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11/4/23

Sumesh S Anand
Addl. General Manager
ATP Fabrication Shop
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10	Manufacturer shall submit Quality System Certificates (QSC) issued by ASME (if available), valid ISO:9001 certificate and Quality management system manual along with the offer. Note : QMS and its supporting documents shall contain manufacturing of welding consumable as per ASME Section III-NB and Lot classification as mentioned in the Technical delivery condition.	(Supporting Document)
11	Supplier shall submit pictorial flow chart for manufacturing process (Raw material to finished product) along with offer. Flow chart should include the Testing stages also. Flow chart shall clearly explain the manufacturing process of welding consumable as per ASME Section III NB and Lot Class C3 Classification as per ASME Section-II Part-C.	(Supporting Document)
12	Bidder shall confirm to meet Technical delivery conditions as per the ATMW-TDC-ENiCrFe3 Rev03. Any Deviations shall be specified with offer and acceptance of such offer is subjected to acceptance by BHEL and NPCIL.	Bidder to confirm
13	Three copies of Manufactures Test Certificate and Guarantee certificate to be provided along with the supplies.	Bidder to confirm
14	Before start of manufacturing the supplier shall prepare a QAP of manufacturing activities and submit to BHEL for approval. The manufacturing of consumable shall start only after approval of that QAP.	Bidder to confirm
15	BHEL / End customer reserve the right to inspect at the Supplier's works for compliance of QMS with respect to ASME Section III-NB, before the start of production activities. BHEL has a right to access supplier's facility and records for this inspection.	Bidder to confirm

Sign and seal of authorized person

[Signature]

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Deputy Manager
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SPECIAL CONDITION ANNEXURE – CF

Requirements of Financial Soundness:

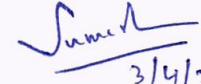
1. Import suppliers shall submit latest report from any reputed third party business rating agency like Dun & Bradstreet, credit reform etc.
2. Indigenous supplier shall submit audited copies of annual reports (Balance sheet), Profit & Loss statement for the last three years (or from the date of incorporation whichever is less) and GST Certificate.

This Special condition annexure – CF (Financial soundness) along with technical qualification requirements together will form the Pre-Qualification requirements for this PR.


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BHARAT HEAVY ELECTRICALS LIMITED – TRICHY

Advanced Technology Products

Technical Delivery Conditions (TDC)

for

Nickel Alloy SMAW electrode

(Fleet Mode Project, PO NO: CMM/FTP/00-33-1-1197/e-PO/47497)

Document Number and revision	ATM W-TDC-ENiCrFe3 rev 03
Document Date	20.04.2023
Prepared (Dy Manager/ATP/MW)	<i>C. Goutham</i> 20/04/23 C. GOUTHAM Dy. Manager / Methods Welding Advanced Technology Products BHEL, Tiruchirappalli - 620 014.
Reviewed (Manager/ATP/MW)	<i>Jijo John</i> 20/4/23 JIJO JOHNSEN Manager / Methods Welding Advanced Technology Products Bhel, Tiruchirappalli - 620014
Reviewed (Manager/QA)	<i>M. Shyam Sundar</i> 20/4/23 (M. SHYAM SUNDAR) (QA/ATP)
Approved (Head/ATP/MW)	<i>K. Devakumar</i> K. K. DEVAKUMARAN
Reviewed (NPCIL)	<div style="border: 1px solid black; padding: 5px;"> <p>न्यूक्लियर पावर कॉर्पोरेशन ऑफ इंडिया लिमिटेड NUCLEAR POWER CORPORATION OF INDIA LTD.</p> <p><input checked="" type="checkbox"/> अनुमोदित / APPROVED</p> <p><input checked="" type="checkbox"/> टिप्पणी के अनुसार अनुमोदित / APPROVED AS NOTED</p> <p><input checked="" type="checkbox"/> सविस्तर को आगे बढ़ाएं / रोके ।</p> <p>PROCEED WITH / HOLD FABRICATION</p> <p><input checked="" type="checkbox"/> अंतिम दस्तावेज़ों की एवं प्रतियाँ भेजें ।</p> <p>SEND FINAL TRANSPARENCIES & PRINTS</p> <p><input checked="" type="checkbox"/> सशोधन करें एवं अनुमोदन के लिए पुनः प्रस्तुत करें।</p> <p>REVISE AND RESUBMIT FOR APPROVAL</p> </div>
Approved (NPCIL)	

Revision status:

Revision 00: Initial issue.

Revision 01: Approved as noted comments incorporated, annexures added.

Revision 02: Approved as noted comments incorporated (2.5, 2.7 and annexure II: 3.4.5).

Revision 03: Clause 2.1 to 2.8, 3.0, 3.1, 3.5.1, 3.7.1, 3.8.2, 3.9.1, 3.10 modified; 2.11, 3.10.3,

3.10.4 added. Annexures renamed and Annexure-V to IX added.

जॉचकर्ता CHECKED BY <i>Anil</i> 8.5.23	समीक्षाकर्ता REVIEWED BY <i>K. K. Devakumar</i> 8/5/23	अनुमोदन कर्ता APPROVED BY <i>Anil</i> 11/5/23
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- 1.0 Scope
- 1.1. This specification prescribes the requirements for nickel alloy covered welding electrodes for clad over lay welding by shielded metal arc welding.
- 2.0 General Requirements
- 2.1. The electrode shall meet the requirements of DIN EN ISO 14172 classification with chemical symbol **NiCr20Mn3Nb** and numerical symbol **Ni 6082**. The electrode shall be manufactured and controlled according to ASME Section III NB and Section II Part C. However, the Material Organization Certification of the supplier, as envisaged by NB 2600 of Section III NB is not mandatory. Additional, modified requirements if any, specified in this specification ATMW-TDC-ENiCrFe3 shall be adhered to.
- 2.2. The supplier shall submit the QMS manual under the ambit of which the supply is intended to be made, along with the offer. The acceptance of such offers is subject to acceptance of supplier's QMS by BHEL, and BHEL's customer NPCIL. However, QMS review is not applicable for ASME Material Organization Certificate holder. Instead, Material Organization Certificate shall be furnished to BHEL.
- 2.3. BHEL will visit the supplier's manufacturing plant, testing centre for conducting a QA systems audit prior to ordering/ actual execution of work. However, QA systems audit not applicable for ASME Material Organization Certificate holder.
- 2.4. The entire quantity of electrode shall be from a maximum of **two lots (Two lots per size of electrode)**. Vendor shall specify number of lots in offer. Lot classification shall be C3, as per ASME Sec III NB 2420.
- 2.5. The supplier shall provide along with the supply a Certified Material Test Report (CMTR) containing the results of actual testing performed on the sample taken from the manufactured lot. All mandatory tests indicated in DIN EN ISO 14172, ASME Section III NB, and this specification shall be included. **ASME Section II C**
- 2.6. The CMTR shall include quantity, lot number, NDE result, chemical and mechanical testing results, test temperatures, Lot Class C3, and Schedule of testing K.
- 2.7. Post ordering, detailed QAP shall be prepared by supplier and approved by BHEL and NPCIL. Manufacturing of the ordered quantity shall be started by the supplier only after obtaining approval on the QAP. Refer Annexure-I for suggestive QAP. Lot qualification testing shall be carried out from the manufactured lot, at supplier works in presence of BHEL and NPCIL inspectors.
- 2.8. Based on the successful qualification meeting all requirements of this TDC, dispatch clearance for the welding consumable will be given. The supplier shall preserve the consumable lot at his works in good condition till dispatch clearance.
- 2.9. The Lot Qualification shall be done for each lot of electrode.
- 2.10. If the supplier engages sub-contractor(s) for any portion of consumable manufacturing work, the same shall be informed to BHEL, and concurrence obtained.
- 2.11. The supplier shall provide recommendations with respect to shelf life, handling, storage, drying and re-usage of electrodes.
- 2.12. Refer Annexure-IX for core wire and covering dimensions.

3.0 Testing Requirements

A cladding test coupon with 20MnMoNi55 base material (supplied by BHEL) shall be prepared. Base material thickness shall be minimum of 75mm. To avoid distortion, necessary stiffening arrangements shall be done to the satisfaction of BHEL inspector. Refer Annexure-II for welding parameters. The test coupon shall be subjected to all tests given in para 3.1 to 3.9 in this specification. Refer Annexure-III for Material Sampling and Testing Plan (for cladding test coupon).

3.1. Chemical Analysis of Weld Metal

The chemical composition of the weld metal after machining at 5 mm and 6 mm above the base metal, when deposited as weld cladding, shall meet the following:

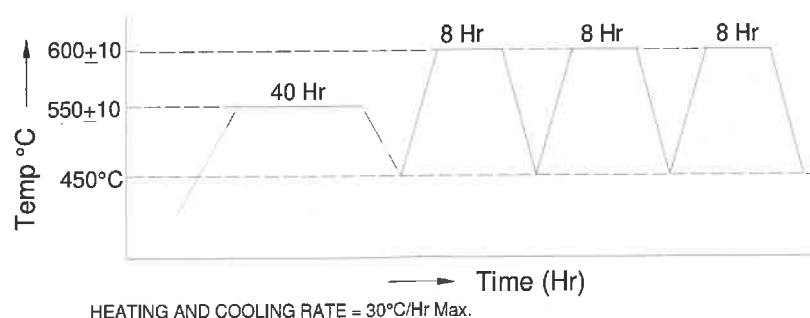
C	0.04% max.	Mn	2-6%
Si	0.50% max.	S	0.015 max.
Nb	2.00 - 2.5%	Ti	0.50 max.
Co	0.03 max.	Cu	0.50 max.
Co+Ta	0.08 max.	Fe	4.0 max.
P	0.015 max.	Mo	2.0 max.
Cr	18.0-22.0	N	To be reported
Ni	67 min.	Al	To be reported

Sum total of all other residual elements including N and Al shall not exceed 0.5%. In addition to the above, chemistry analysis shall be done at 1 mm, 2 mm, 3 mm and 4 mm *for information*, and at least for the following elements: Carbon, Silicon, chromium, nickel & niobium.

Thickness of the inconel cladding after final machining shall be measured from the surface of base metal, without taking into consideration the depth of fusion. This can be arrived at as the difference between the total thickness of the test plate before cladding and after cladding and machining.

3.2. Post Weld Heat Treatment:

The welded test coupon shall be subjected to the post weld heat treatment cycle given below. The maximum rate of heating and rate of cooling shall be 30°C/ h. All mechanical testing shall be carried out after this PWHT only.



3.3. Non-destructive testing

The test coupon for lot qualification shall be subjected to ultrasonic examination and dye-penetrant examination, both before and after PWHT. The PT and UT shall be carried out as per Annexure-V & VI by certified NDE personnel as per IS 13805 / ISO 9712-3.

3.4. Tensile properties

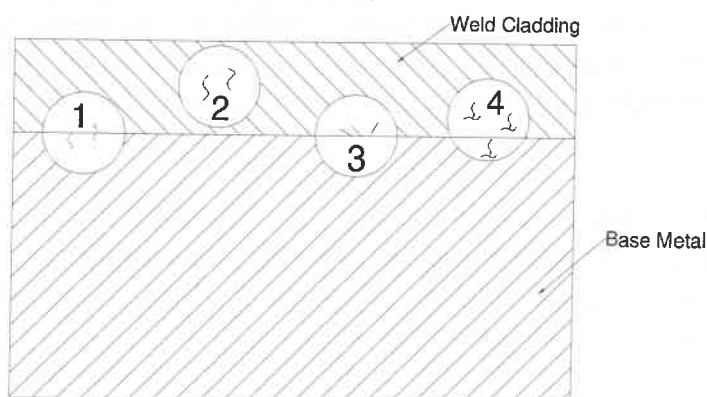
The Inconel cladding weld metal shall have the following mechanical properties in the simulated heat treated condition. Two transverse strip tensile test specimens covering the top and bottom regions of the cladding shall be tested and the tensile properties shall meet the following requirements:

Tensile strength min. (at Room Temperature)	550 N/mm ²
Yield strength (0.2 % proof stress at RT)	290 N/mm ² min.
% Elongation (L=5.65S ⁰) S ⁰ -cross section area within gauge length	25 % min <i>30% (min)</i>

3.5. Bend Test

The bend test for cladding shall be carried out as follows. Four transverse side bend test specimens of size 10mm thick X 30 mm wide and min. 200 mm long shall be bent through 180° around a mandrel of 40 mm diameter and shall successfully pass the test. Two transverse face bend specimens of 30 mm wide, 30 mm thick and 300 mm long shall be bent through 180 around a mandrel of 120 mm diameter such that the cladding is in tension.

3.5.1. Acceptance Criteria for Side Bend Test is as follows –



- Defect Type 1: Cracks extending into the base metal are not acceptable.
- Defect Type 2: Cracks in weld cladding which do not touch the fusion line are not acceptable.
- Defect Type 3: Isolated cracks in the cladding which form at an angle to and start from the fusion line are allowed provided they do not exceed 1.6 mm in length.
- Defect Type 4: Discontinuities which are due to allowable structural discontinuities already existing in the unbent condition will not be rejected.

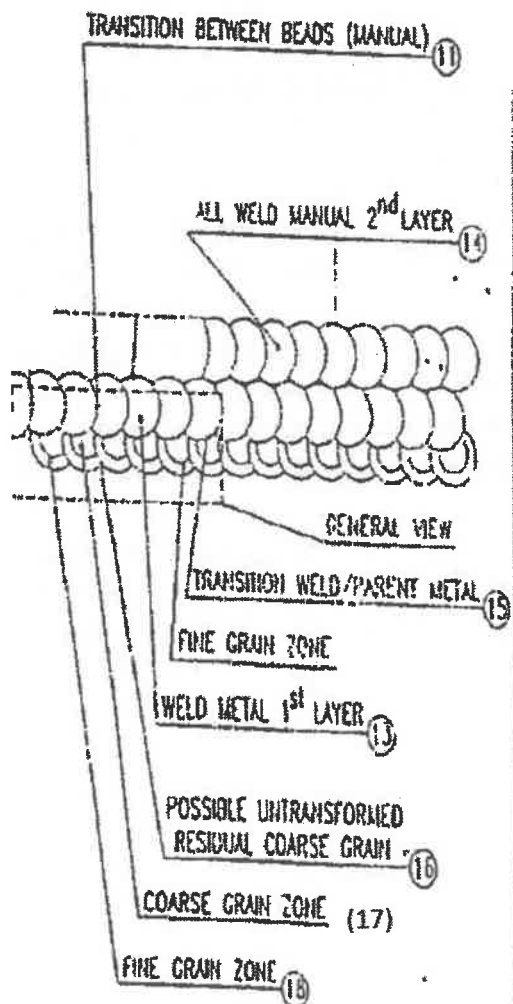
3.5.2. Acceptance Criteria for Face Bend Test is as follows - The bend sample when evaluated with an unaided eye, shall be free from any opening/ fissure that are attributed to welding. Openings due to pre-existing acceptable defects like slag, gas pores shall be carefully examined and analysed. Openings attributable to discontinuities which existed before the specimen was bent are not cause for rejection provided these discontinuities do not exceed 1.6 mm

3.6. Thomas Schaeffler's Test

3.6.1. The electrodes shall be subjected to hot crack test as per Thomas Shaeffler as described in Annexure VII. For this test, PWHT is not applicable. The tests shall indicate absence of sensitivity to hot cracking.

3.7. Macro and Micro Examination

3.7.1. A section taken after PWHT, and transverse to the welding direction, shall be examined for macro and microstructure at suitable magnification. The examination shall be as per ASTM E340-15 and E 407-07 for macro and micro examination respectively, and shall cover the following locations. Refer figure below.



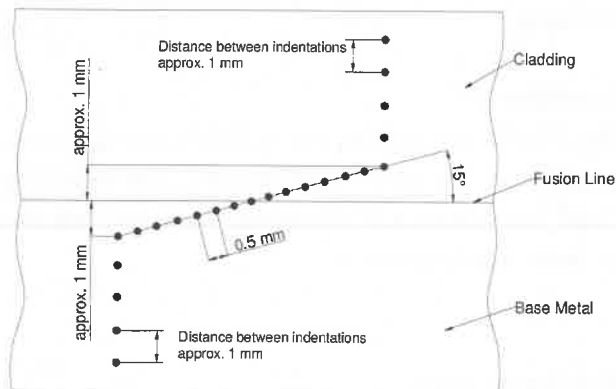
1. Transition between beads (11),
2. All weld 1st layer (13),
3. All weld 2nd layer (14),
4. Transition weld-base metal (15),
5. Possible untransformed residual coarse grain (16),
6. Coarse grain zone (17) &
7. Fine grain zone (18).

3.7.2. The specimen shall be free of cracks. Isolated small pores and slag inclusion shall not be cause of rejection. Systematic defects are unacceptable.

3.8. Hardness

3.8.1. Hardness shall be measured on the specimen used for metallographic examination, by Vickers pyramid method using 1 kg load. The hardness check shall cover transition, overlap of beads & layers, heat affected zone of base material and typical cladding.

3.8.2. Approximately 15 indentations spaced at 0.5mm, apart shall be taken in interface region (oblique line) and indentations spaced approximately at 1 mm shall be taken in base material & overlay sections, as shown in the figure below-



Expected values are : For base metal 200-220, Fusion line 210-250 & Cladding 240-250. (These values are suggestive only).

3.9. Hot Crack Test

3.9.1: Resistance to hot crack shall be checked by depositing a sequence of cross welded stringer beads on the cladding *after* simulated heat treatment. Refer Annexure-VIII for Welding parameters.

3.9.2. The beads shall be approximately 25mm spaced, and shall be both along and transverse to the welding direction. The bead shall be deposited using the other available size of coated Inconel electrodes and a single fusion pass using GTAW process. The welding parameter shall be same as used in the cladding of the test assembly. No preheat shall be applied for this welding.

3.9.3. After grinding to the cladding surface the weld shall be examined by Liquid penetrant examination. Then the cladding shall be further ground in steps each of 0.5mm such that the underlying layer is reached. Every step shall be subjected to penetrant examination. The acceptability conditions are given below-

- Round indications shall show no material separation visible to unaided eye.
- Linear indications shall not be longer than 2mm
- The spacing between indications shall not be less than 50 mm.
- There shall not be more than 5 indications in an area of 100 sq. cm.
- The arrangement of indications shall not indicate systematic nature.
- Metallographic investigations of the indications specified further shall be satisfactory.
- Metallographic investigations shall be performed in all cases where there is reason to suspect the presence of cracks or the presence of systematic defects. Particular

attention shall be paid to possible discontinuities in the heat affected zone of the stringer beads within the underlying cladding.

3.10. Butt Weld Test coupon

3.10.1. In addition to the above, two butt weld coupons shall be prepared in accordance with DIN ISO 15792-1 for each lot of electrode. One of these coupons shall be subjected to PWHT given in para 3.2 above and other shall be in as welded condition. Both shall be subjected to RT (coupon welded in 3G position) and mechanical testing.

3.10.2. The testing of these coupons shall be:

1. Chemical composition of undiluted weld metal (acceptance criteria as per para 3.1 above),
2. Tensile test

Property	At Room temperature	At 350°C
Tensile strength min. (at Room Temperature)	600 N/mm ²	335 N/mm ²
Yield strength min. (0.2 % proof stress at RT)	360 N/mm ²	130 N/mm ²
% Elongation (L=5d)	30 % min	To be reported

3. Impact testing (minimum absorbed energy shall be 79 Joules at +20°C).
4. Bend test (3 transverse side bend specimens)

3.10.3. In addition to the above tests, one longitudinal all weld hot tensile test (at 350°C) and IGCT (ASTM A262 practice A) shall be done for Ø 3.15mm and Ø4.00 mm electrodes.

3.10.4. Refer Annexure-IV for Material Sampling and Testing Plan (for butt weld test coupon).

Annexure-I (Quality Assurance Plan) - One for each Lot of electrodes

Sl No.	COM PONENT / OPERATION	CHARACTERISTICS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTA NCE NORM S	FORM AT OF RECORD	AGENCY				REMARKS	NAME &		
								P	W	R	H		3	2	1
1	2	3	5	6	7	8	9	10				11	12		
1	System audit	Review of procedures	Physical	100%	TDC ASME Sec II.C ASME Sec III NB		Review report			2		Review supplier's procedures at random as per QMS. Verify compliance to reference specifications.			
2	Preparation of documentation for doing lot qualification	Approval of documents	Review	100%			QAP, MSTP, WPS, HTP, NDE procedures	3		1,2		Verify that BHEL approved pocedures are available with supplier for following: 1. Quality assurance plan 2. MSTP for all coupons (suggestive MSTP given with enquiry) 3. NDE procedures (PT & UT for cladding) 4. WPS for all coupons 5. Heat treatment plan			
3	Incoming Raw material for electrodes (core wire and flux)	Properties and Quantity	Physical	100%			Test Certificate / Report	3			1,2	Lot class C3 shall be maintained as per ASME Sec III NB 2420 and ASME Sec II C SFA 5.01. Single heat of wire as per Cl. 3.4 of SFA 5.01 and ASME Sec III NB 2420. Following points shall be recorded with respect to flux (shall meet NB 2420 & Cl. 4.3.3 of SFA 5.01). 1. Total weight of flux required. 2. Total number of dry mixes required. 3. Weight of each dry mix. 4. Total number of wet mixes required. 5. Weight of each wet mix.			
4	Manufacturing of electrodes	Witness of manufacturing	Physical	100%			Manufacturing Log	3			1,2	6. Proportion of dry mix and binder in wet mix. 7. Traceability of baked electrodes to dry mix and wet mix.			
5	Selection of electrodes for lot qualification	Random selection	Physical	Random				2	1		2	Electrodes shall be selected from bulk quantity for lot qualification			
(i) Cladding Test Coupon with PWHT															
6	Welding of test coupons	Witness of welding	Physical	100%	TDC ASME Sec II.C ASME Sec III NB		Weld data sheet	3			1,2	1. Verification of identification on base plate issued by BHEL. 2. Record actually used parameters in a report. 3. Verify that the parameters are same as BHEL suggested parameters.			
7	Readiness for NDE	Thickness machining/Backing plate removal	Physical	100%			Report	3			1,2	Record actually obtained cladding thickness after machining for cladding coupons.			
8	NDE	PT & UT	Physical	100%			Report	3			1,2	1. Record the findings. 2. Acceptance criteria as per BHEL approved NDE procedures.			
9	PWHT	Witness start and end of cycle					Report	3			1,2	1. Loading witness and signing of heat treatment chart at start and end of cycle. 2. Evaluation of chart. 3. Calibration certificates of furnace, controller, recorder and thermocouple shall be submitted.			

Annexure-I (Quality Assurance Plan) - One for each Lot of electrodes

Sl No.	COM PONENT / OPERATION	CHARACTERISTICS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORM AT OF RECORD	AGENCY				REMARKS	NAME &		
								P	W	R	H		3	2	1
1	2	3	5	6	7	8	9	10				11	12		
10	NDE	PT/UT	Physical	100%			Report	3			1,2	1. Record the findings. 2. Acceptance criteria as per BHEL approved NDE procedures.			
11	Identification of samples and Sample preparation	Specimen sizes & stamping of specimen	Physical	100%			Report	3			1,2	1. Verify as per reference specifications and record specimen sizes. 2. Stamping by BHEL & NPCIL			
12	Testing	Witness of testing Test results	Physical	100%			Report	3			1,2	1. Witness testing as per MSTP. 2. Record test results in report. Verify compliance with reference specifications.			
(ii) Butt weld Test Coupon with PWHT															
13	Welding of test coupons	Witness of welding	Physical	100%	TDC ASME Sec II.C ASME Sec III NB		Weld data sheet	3			1,2	1. Base material selection and verification. 2. Record actually used parameters in a report. 3. Verify that the parameters are same as BHEL suggested parameters.			
14	Readiness for NDE	Thickness machining/ Backing plate removal	Physical	100%			Report	3			1,2	Visual examination and thickness measurement.			
15	NDE	RT	Physical	100%			Report	3			1,2	1. Record the findings. 2. Acceptance criteria as per ASME Sec II Part C.			
16	PWHT	Witness start and end of cycle					Report	3			1,2	1. Loading witness and signing of heat treatment chart at start and end of cycle. 2. Evaluation of chart. 3. Calibration certificates of furnace, controller, recorder and thermocouple shall be submitted.			
17	NDE	RT	Physical	100%			Report	3			1,2	1. Record the findings. 2. Acceptance criteria as per BHEL approved NDE procedures.			
18	Identification of samples and Sample preparation	Specimen sizes & stamping of specimen	Physical	100%			Report	3			1,2	1. Verify as per reference specifications and record specimen sizes. 2. Stamping by BHEL & NPCIL			
19	Testing	Witness of testing Test results	Physical	100%			Report	3			1,2	1. Witness testing as per MSTP. 2. Record test results in report. Verify compliance with reference specifications.			

Annexure-I (Quality Assurance Plan) - One for each Lot of electrodes

Sl No.	COM PONENT / OPERATION	CHARACTERISTICS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY				REMARKS	NAME &		
								P	W	R	H		3	2	1
1	2	3	5	6	7	8	9	10				11	12		
(iii) Butt weld Test Coupon without PWHT															
20	Welding of test coupons	Witness of welding	Physical	100%	TDC ASME Sec II.C ASME Sec III NB	Weld data sheet	3				1,2	1. Base material selection and verification. 2. Record actually used parameters in a report. 3. Verify that the parameters are same as BHEL suggested parameters.			
21	Readiness for NDE	Thickness machining/ Backing plate removal	Physical	100%		Report	3				1,2	Visual examination and thickness measurement.			
22	NDE	RT	Physical	100%		Report	3				1,2	1. Record the findings. 2. Acceptance criteria as per ASME Sec II Part C.			
23	Identification of samples and Sample preparation	Specimen sizes & stamping of specimen	Physical	100%		Report	3				1,2	1. Verify as per reference specifications and record specimen sizes. 2. Stamping by BHEL & NPCIL			
24	Testing	Witness of testing Test results	Physical	100%		Report	3				1,2	1. Witness testing as per MSTP. 2. Record test results in report. Verify compliance with reference specifications.			
For Bulk quantity															
25	Stamping of Bulk quantity	Stamping	Physical	100%	TDC ASME Sec II.C ASME Sec III NB	Stamping	3				1,2	Stamping by BHEL & NPCIL of entire bulk quantity			
26	Compilation of Documents	Preparation of CMTR	Review	100%		Report	3			1,2		Verification of CMTR based on closure of above stages			
27	Dispatch clearance	Shipping release	Physical	100%		Shipping Release	1,2				1,2	Shipping release / Dispatch clearance shall be issued			
MANUFACTURER / SUB-VENDOR			Sign												
SEAL & SIGNATURE WITH DATE															
Notes: 1. Sl no. 1 is not applicable for ASME certified 'Material Organizations'. 2. Sl.no. 3 & 4 are not applicable for ASME certified 'Material Organizations'. In Lieu of that, the corresponding records shall be submitted for verification by BHEL & NPCIL inspectors. 3. Under column 10, '1' indicates NPCIL, '2' indicates BHEL, '3' indicates supplier. 4. Chemical & mechanical tests shall be carried out in labs certified as per ISO 17025 / NPCIL approved NABL labs. 5. Stagewise inspection documents shall be completed/ concluded with signature of all agencies including NPCIL/ TPI before taking up or presenting the next stage for inspection.															

Annexure – II

Parameters for cladding test coupons

Consumable	Dia (in mm)	Current (Amp)	Voltage (V)	Polarity	Preheat temperature (°C)	Inter pass temperature (°C)
ENiCrFe-3	2.5/3.2	70-110	18-24	DCRP	150	200
ENiCrFe-3	4.0	120-140	24-26	DCRP	150	200
ENiCrFe-3	5.0	140-180	26-28	DCRP	150	200

Post Heating: 280 +/- 20 (°C) for 6 hrs.


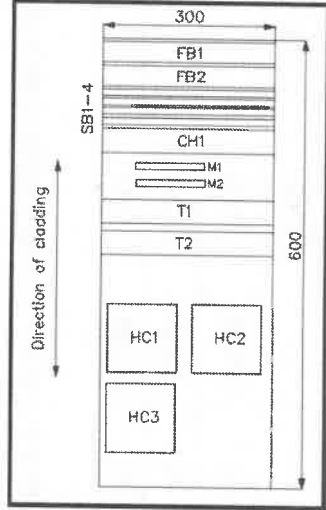
During any interruption in welding, post heating shall be done before cooling below the preheat temperature.


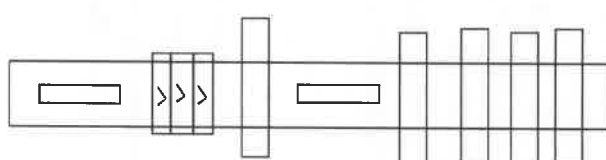
Note 1: 3rd layer onwards, cladding deposited using SMAW electrode, preheat is not required. Bead to bead overlap shall be 50%.

Note 2: Any change in parameters shall be informed to BHEL, and approval obtained beforehand.

Parameters for butt welding test coupons

Preheat and post heating stated above are not required. Other parameters remain same.

		TEST SPECIFICATION ATMW-TDC-ENiCrFe3		ANNEXURE-III MATERIAL SAMPLING AND TESTING PLAN			MSTP NO: 1
		Consumable Qualification for Covered Inconel Welding Electrodes for Cladding					
Sl. no.	Specimen details			Position	Temp °C	Identification	Base Material designation and Size are as per ATMW-TDC-ENiCrFe3 (Size of Plate to be cladded = 75T x 300W x 600L) 
	Description	Size w x t	Length				
1.	Face Bend	30x30	300	Tr	RT	FB1-2	
2.	Side Bend	10x30	300	Tr	RT	SB1-4	
3.	Chemical	30x≈30	300	Tr	RT	CH1	
4.	Micro	10x≈30	100	Tr	RT	M1	
5.	Macro	10x≈30	100	Tr	RT	M2	
6.	Hardness	10x≈30	100	Tr	RT	M1	
7.	Strip Tensile	19x3	300	Tr	RT	T1-2	
8.	Hot Crack Test	125xT	125	Tr	RT	HC1-3	
9.	Thomas Schaefflers Test #	90x25	90	Tr	RT	#	
Note: 1) Testing and acceptance shall be as per ATMW-TDC-ENiCrFe3. 2) Bend diameter 4t for 180°. For Side bend, two specimens the bead overlap in the first layer and for two others specimens the bead overlap in the second layer will be at the point of maximum bending. For Face bend, bead overlap shall be at the point of maximum bending 3) Micro: 200 X magnification with photograph. Macro:10X with photograph. 4) HV-1kg load (Refer clause: 3.8 of ATMW-TDC-ENiCrFe3. 5) Tensile: Two transverse strip tensile specimens covering the top and bottom regions of the cladding. (T1- Top, T2-Bottom) # 6) Thomas Schaefflers test shall be done as per ATMW-TDC-ENiCrFe3.							

		TEST SPECIFICATION		Annexure IV : MATERIAL SAMPLING AND TESTING PLAN (ATP)			MSTP NO:2
		ATMW-TDC-ENiCrFe3		Consumable Qualification for Covered Inconel Welding Electrodes for Butt Welding			
Sl. no.	Specimen details			Position	Temp (°c)	Identification	Base Material designation and Size are as per ISO 15792-1:2000 (Thickness (T) of Plate to be welded = 20 mm)  T1 IP1-3 CH1 T2 IC1 SB1-3
	Description	Size w x t	Length				
1.	Tensile	10	150	L	RT	T1	
2.	Impact (V notch at Weld)	10x10	55	Tr	+20	IP1-3	
3.	Chemical	25xT	300	Tr	RT	CH1	
4.	Tensile	Dia 10	150	L	350	T2	
5.	IGCT	10 x ≈ t	75	Tr	RT	IC1	
6.	Side bend	10 x t	200	Tr	RT	SB1-3	
Note: 1) Tensile test: As per ATMW-TDC-ENiCrFe3 2) Impact test: As per ATMW-TDC-ENiCrFe3. 3) Side bend test: Bend dia 4t for 180° 4) IGCT – Practice A							

Annexure V: Liquid Penetrant Examination of Cladding

1. Scope
 - 1.1. This specification covers procedure for liquid penetrant examination of cladding deposited with Inconel consumable. Requirements of ASME Sec V shall be met. LPT shall be performed as per ASTM E165 and ASTM E1220.
2. Surface Condition
 - 2.1. The surfaces to be examined shall be free from dirt, lint, grease, scales, weld spatters, welding flux, oil and other extraneous matters that can interfere with the examination. The surface finish for machined surface shall be better than 6.3 microns.
 - 2.2. The surface to be examined shall be cleaned with detergents, organic solvents, descaling solutions or paint removers. Degreasing and ultrasonic may be employed to increase cleaning efficiency.
3. General remarks
 - 3.1. Liquid penetrant examination shall be carried out using approved penetrants, cleaners and developers. LPT materials shall be from same family (brand). Intermixing of family is not permitted. Suitability of the employed media, if not already established, shall be determined using ASME Comparator Block. Medium used for Liquid Penetrant Examination shall not contain halogen and sulphur more than 25 ppm each.
4. Procedure
 - 4.1. Application of Penetrant
 - 4.1.1. Penetrant shall be applied by means of brushing or spraying. In case, compressed air type apparatus is used for spraying the penetrant, filters shall be placed on the upstream side near the air inlet to preclude contamination of the penetrant by oil, water or dirt sediments that may have collected in the lines. The entire surface shall be covered by the penetrant.
 - 4.2. Penetration Time and Temperature
 - 4.2.1. Duration of penetration and test temperature shall be in accordance with ASTM E165. Sufficient penetrant shall be applied during the period of the test to prevent drying of penetrant upon the surface.
 - 4.3. Removal of excess penetrant
 - 4.3.1. After the penetration time specified in the procedure has elapsed, any penetrant remaining on the surface shall be removed, taking care to minimize removal of penetrant from discontinuities.
 - 4.3.2. When chemical solvent is being used as the cleaner, care should be taken to ensure that the penetrant is not removed from the flaws.
 - 4.4. Application of the Developer
 - 4.4.1. The developer shall be applied with spray nozzle of a spray gun. The developer shall be sprayed on the entire test surface in such a way that a uniform thin layer is deposited.

4.5. Cleaning of the tested object

4.5.1. All the residual media of the liquid penetrant test shall be removed before subsequent welding operation.

5. Interpretation of Test results

5.1. When using the Liquid Penetrant Inspection, the interpretation shall be restricted to, citing the absence or presence of flaws, their general nature, magnitude and location. Evaluation of the Inconel cladding shall be performed after following durations.

- a. First time after drying of developer
- b. After ½ hour
- c. After 1 hour

All results shall be recorded.

6. Lighting conditions

6.1. When conducting an examination under white lighting conditions, the inspector shall ensure that the level of lighting is adequate at the surface of the part (recommended minimum 100 foot candles or 1000 lux).

6.2. Examination under ultra violet should have a background white light level of less than 20 lux and an ultra violet intensity at the test surface of not less than 1000 micro W/cm².

6.3. The inspector shall allow at least 5 minutes for dark adaptation before beginning the inspection.

6.4. If the examiner wears glasses or lenses, they shall not be photosensitive.

7. Acceptance Standards

Surface indications of any nature and type are not acceptable. Non-systematic individual minor indications may be dressed up by light grinding and re-examined.

Broad areas of pigmentation which could mask indications of discontinuities are unacceptable and the areas should be cleaned and re-examined.

8. Procedure Qualification

8.1. Before application of the procedure, the supplier shall demonstrate that the procedure strictly conforms to the stipulation laid down in the preceding paragraphs.

9. Personnel Qualification

9.1. The examination shall be performed and the results evaluated by qualified personnel only. The personnel shall be qualified to comparable levels of competency by subjection to examination on the particular method adopted.

10. Report

11. Final report, describing the details of the technique adopted together with the analysis of the results shall be submitted by the vendor.

Annexure VI: Ultrasonic Examination of Cladding

- 1.0 Scope
 - 1.1 This specification provides the technical requirements for the straight beam and angle beam ultrasonic examination of weld deposited cladding. Requirements of ASME Sec V shall be met.
 - 1.2 This specification is intended to detect defects parallel to surface and also perpendicular to surface.
- 2.0 Time of Examination
 - 2.1 The final acceptance examination shall be carried out after the cladding has been subjected to heat treatment.
- 3.0 Surface Condition
 - 3.1 The surface of the cladding shall be smooth, plane, free of notches and machined to a finish to ensure acoustical contact of the search unit. Waviness of surface shall be such that distance between surface and probe does not exceed 0.5 mm.
- 4.0 Scanning Zones
 - 4.1 Scanning shall be done over 100% of the surface with at least 10% overlap.
- 5.0 Examination
 - 5.1 Equipment
 - 5.1.1 Pulse Echo type of equipment generating frequencies over the range of 1 to 5 MHz shall be used.
 - 5.1.2 Equipment calibration procedure shall be submitted by the manufacturer for approval by the purchaser.
 - 5.1.3 The equipment shall have proven accuracy and stability.
 - 5.2 Search Units
 - 5.2.1 The transducer dimensions shall not exceed 12 mm x 25 mm. Transmitter receiver probes (SE probes) of test frequency 2 to 4 MHz shall be used for straight beam examination.
 - 5.2.2 Angle beam search units type SEL MHz "System BAM" or equivalent shall be used for angle beam examination.
 - 5.2.3 The use of the search units requires Purchaser's approval. The search units shall have their maximum sensitivity at the clad/base metal interface.
 - 5.3 Calibration
 - 5.3.1 The adjustment of the pulse energy and gain shall be carried out using a standard calibration block. The calibration block shall be made by cladding on a similar base material as that of test assembly overlaid with the same technique as on the test assembly. A Side Drilled Hole 1.5 mm in diameter by 38 mm minimum depth shall be drilled into the block at the clad interface as shown in sketch I for straight beam cladding. For angle beam cladding, 2 mm FBH is used as shown in sketch II. The probe shall be placed over the cladded surface and directed towards

the hole. The settings of the unit shall be adjusted so that the amplification of the peak is 80% of the screen height.

5.3.2 Calibration of the equipment shall be done at every half an hour of the testing. When significant deviations occur, all areas which are examined after the last calibration control shall be reexamined.

5.3.3 After calibration of the equipment as above, the component shall be examined. Contact method and manual scanning shall be used.

5.4 The couplant (glycerin or SAE 30 or equivalent) shall not have halogens and sulphur exceeding 25 ppm each. The same couplant shall be used for calibration and examination.

5.5 The maximum speed of testing shall be 150 mm/sec.

5.6 As far as possible, scanning shall be done at twice the amplitude setting of the calibration of defect standard.

6.0 Recording and acceptance criteria

6.1 All indications having an amplitude equal to or greater than 50% of the reference level shall be recorded. If the signal: noise ratio is less than 6DB, this is to be recorded and further activities have to be agreed upon.

6.2 All indications with a signal amplitude equal to or greater than the reference level are unacceptable.

6.3 For straight beam scanning, 30 recordable indications with a maximum continuous length of 10 mm subject to a total length of 250 mm/meter length of the scanned area are acceptable.

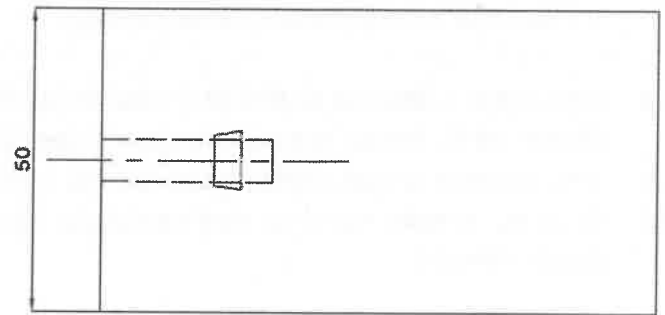
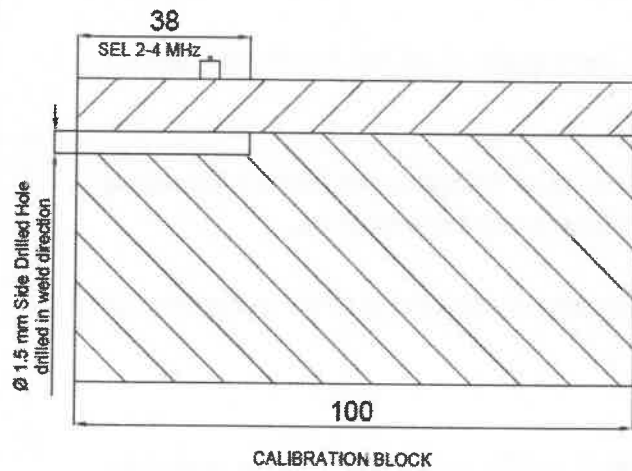
6.4 Whenever the indications are interpreted as cracks, under-bead cracks and bonding defects, they are unacceptable regardless of the length and amplitude.

7.0 Final Cleaning

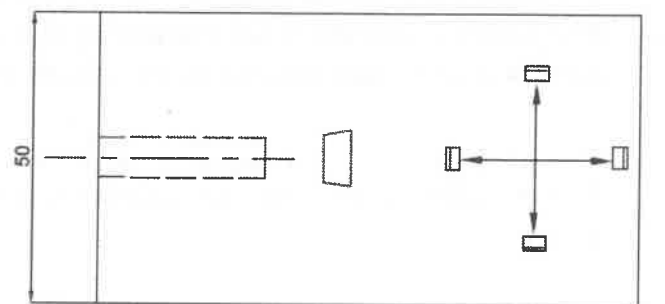
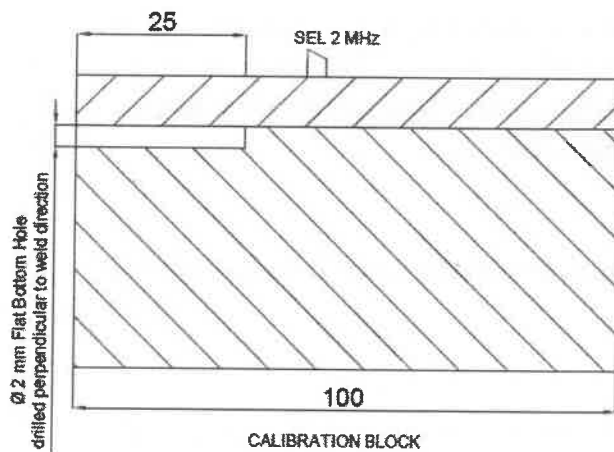
7.1 After the examination is over, the couplant shall be thoroughly cleaned and removed from the surface.

8.0 Report

8.1 Final report describing the details of the technique adopted together with the analysis of results shall be submitted by the manufacturer. All essential parameters as per ASME Section V shall be reported.



Sketch I



Sketch II

Annexure VII

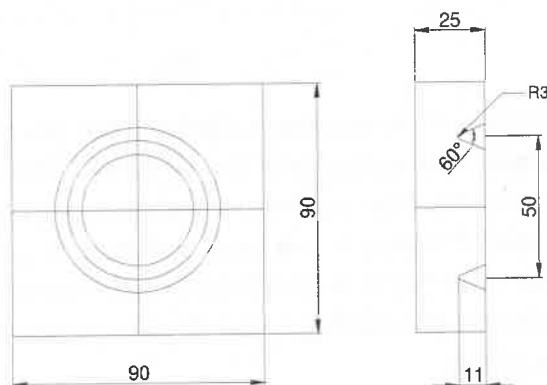
Thomas Shaeffler's Test

1. Scope

- 1.1. This test method is applicable for austenitic stick electrodes and coated electrodes with dia. more than 3.25 mm and drawn wires with dia. more than 1.2 mm.

2. Specimen Form

- 2.1. Base material shall be TYPE 347 or any austenitic stainless steel, of dimensions as shown below -

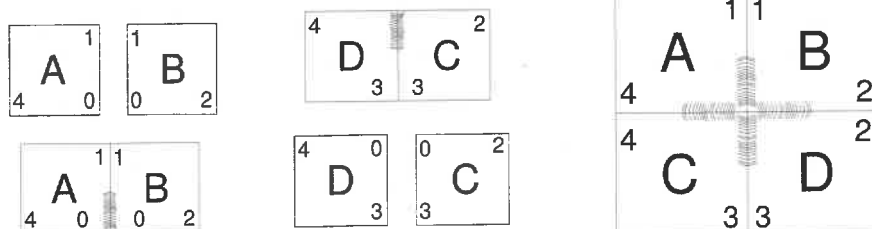


3. Procedure

- 3.1. Four equal quadrant parts of 25 mm thick and 45 mm square length have to be taken.

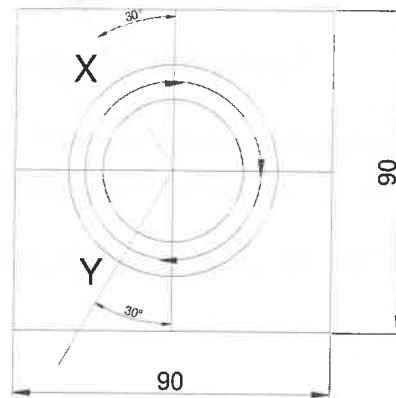
The rolling surface can be maintained. Preparation of test specimen is as follows-

- Surface 1-0 of part A & B and Surface 3-0 of part C & D shall be ground.
- Part A & B and Part C & D shall be clamped together.
- Part A & B and Part C & D shall be joined by tack welding both sides (25 mm long).
- Surface 4-0-2 of tack welded parts A-B and C-D shall be ground.
- Tack welded part A-B and C-D shall be clamped together.
- Tack welded parts A-B and C-D shall be joined by tack welding both sides (50 mm long).
- In the specimen turn a groove as shown in Fig 5.



4. Method of welding

- Consumables: Inconel covered SMAW electrode as ordered.
- Weld data: Welding current/polarity as used for butt welding test coupon.
- Welding position: Horizontal 1G



- 4.4. From point X to point Y has to be welded without any oscillation and interruption. The speed of welding shall be around 150 mm/min which corresponds to the welding time of about 42 seconds. After cooling the test specimens and cleaning (removing of weld slag and spattered metal) of the bead surface and groove, the point Y to X shall be welded as before in the clockwise direction without any oscillation and interruption in about 21 seconds. The welding speed of 150 mm per minute is indicate for a 4.0 mm diameter electrode.
5. Testing
- 5.1. The testing of the surface shall be done by means of Dye penetrant test. The performance and assessment shall be same as that for main cladding test assembly described in this TDC. During assessment, crater cracks are not considered for rejection.

Annexure-VIII

[illegible]

Annexure-IX

1. Size of Electrode

- a. Electrode shall be supplied in diameters and length as specified in the purchase Order.
- b. The length shall not vary more than ± 6.4 mm from that specified.

2. Core wires and Coverings

- a. Core wires and coverings shall be free of defects which would interfere with uniform performance of the electrodes.
- b. The covering on the electrode shall be concentric to the extent that the maximum core-plus-one covering dimension shall not exceed the minimum core plus one covering dimensions by more than 7% of the mean dimension in size 2 mm and 2.4 mm, 5% of the mean dimension in sizes 3.2 mm and 4 mm and 4 % of the mean dimension in sizes 4.8 mm and larger. The concentricity may be measured by any suitable means.
- c. The diameter of core wire shall not vary more than ± 0.05 mm from size specified.

3. Exposed Core

- a. One end of each electrode shall be bare for a distance of 20 mm but not more than 30 mm to provide for electrical contact with the holder.
- b. The other end of each electrode shall be sufficiently bare and the covering tapered to permit easy striking of the arc. The length of the bare portion of the arc end of electrode shall not exceed 1.6 mm or one half of the diameters of the core wire whichever is less.

4. Electrode Identification

All electrodes shall be identified in accordance with the following:

- a. At least one legible imprint of the electrode classification and trade name shall be applied to the electrode covering as near as practical to the grip end of the electrode and within 2-1/2 in [65 mm] of the grip end.
- b. The numbers and letters of the imprint shall be of bold block type of a sufficient size to be easily readable.
- c. The ink used for imprinting shall provide sufficient contrast with the electrode covering in order that the numbers and letters shall be readable before and after baking at user's work and after normal welding applications.

5. Packaging

- a. Vacuum Package: High density plastic pouches laminated with a suitable foil vapor barrier shall be heat sealed after filling and evacuating. The pouches shall be over packed with an outer container to protect it from damage that will cause loss of vacuum. Packages which show the contents to be loose within the pouch do not meet the requirements of this specification.

- b. The number of electrodes per container shall be such that the Net weight of each container does not exceed 5Kg. Containers shall be further packed in cartons and encapsulated carton in polythene covers and sealed. Net Weight of each encapsulated carton shall not exceed 20 Kg. Each carton shall contain Electrode containers from one size and Batch only.
- c. The Cartons shall be packed in waterproof boxes with crate so as to ensure no damage during shipment and the package shall withstand storage under tropical conditions for at least a period of 2 years from the date of delivery.
- d. Net weight of each crate shall not exceed 1000 Kg.

6. Marking of packages:

The following product information shall be legibly marked/ labeled on the outer side of each packet.

- a. Electrode specification and classification numbers.
- b. Supplier Name, Purchase Order No. and Brand/Trade name of the electrode.
- c. Electrode Size, Quantity of electrodes and Net weight.
- d. Lot, control, heat, Batch No. and Date of manufacture.

The appropriate precautionary information, as given in ANSI Z49.1, latest edition, (as a minimum) or its equivalent shall be prominently displayed in legible print on all packages enclosed within a larger package as per SFA5.02 clause-3.6.2.

SPECIAL INSTRUCTIONS (PR 0133658829)

1. Once Purchase Order is released, the Supplier have to make detailed Quality Assurance Plan (QAP) and submit it to BHEL for getting approval from NPCIL. Only after QAP approval, the production activities to be started. BHEL & NPCIL inspectors will witness the stages based on the QAP only.
2. Supplier shall prepare detailed QAP in line with the TDC ATMW-TDC-ENiCrFe3.
3. All lot/batch qualification tests will be carried out at vendor works in witness of BHEL and NPCIL inspectors. Supplier has to carry out the tests as mentioned in MSTPs and TDC – ATMW-TDC-ENiCrFe3 (PWHT as per clause 3.2).

The following test coupons shall be made;

- a. For Cladding (with PWHT)
 - b. For butt weld test (As welded)
 - c. For butt weld test (with PWHT)
4. The Supply tolerance can be +0/-5% of the indented quantity.
 5. The core wire of one lot of electrodes shall be from single Heat only.
 6. Additional Points in PQC
 - a. Annexure - CF
 7. In case the vendor offers two lots instead of one lot, an additional testing cost may be added to bring equitable evaluation among vendors.
 - a. Cost of 20MnMoNi55 plate : 1.6 lakhs per lot per size
 8. Based on the successful qualification meeting all the requirements as per the ATMW-TDC-ENiCrFe3 rev03, dispatch clearance for the bulk quantity of the consumable will be given. Hence the vendor shall preserve the bulk quantity of the consumable Lot at his works in good condition till dispatch clearance.
 9. Wherever ASME is mentioned, the latest edition of the standard at the time of floating the tender is applicable.
 10. 20MnMoNi55 plate for testing will be supplied to vendor for testing at free of cost for one time only. A test coupon shall be prepared using each lot of the ordered SMAW electrode, Separately for each sizes. In the test coupon, clad over lay shall be deposited on 20MnMoNi55 grade material using the parameters given TDC. 20MnMoNi55 material to be used for Cladding test coupon only.

For Butt weld test coupon, a test coupon shall be made in accordance with TDC and ASME III NB. Test plate to be arranged by the supplier himself.

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11. Chemical and mechanical tests shall be carried out in In-house labs or Labs meeting the requirements as per National / International standards like ISO/IEC 17025 or NPCIL approved NABL accredited labs.

12. Additional details as per Annexure-P

13. The original unopened supplied items shall withstand a period of 2 years without affecting its welding characteristics or weld properties when stored under tropical conditions. Hence a warrantee of 2 years from the supply date can be sought.

14. Offers received will be evaluated by BHEL and NPCIL. Final acceptance of the offers will be based on NPCIL approval.

Enclosures:

1. Annexure- CF
2. Annexure- P



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11/4/23.

Sumesh S Anand
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SPECIAL CONDITION ANNEXURE – CF

Requirements of Financial Soundness:


1. Import suppliers shall submit latest report from any reputed third party business rating agency like Dun & Bradstreet, credit reform etc.
2. Indigenous supplier shall submit audited copies of annual reports (Balance sheet), Profit & Loss statement for the last three years (or from the date of incorporation whichever is less) and GST Certificate.

This Special condition annexure – CF (Financial soundness) along with technical qualification requirements together will form the Pre-Qualification requirements for this PR.


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Annexure-P

Additional details:

1. Size of Electrode

- a. Electrode shall be supplied in diameters and length as specified in the purchase Order.
- b. The length shall not vary more than ± 6.4 mm from that specified.

2. Core wires and Coverings

- a. Core wires and coverings shall be free of defects which would interfere with uniform performance of the electrodes.
- b. The covering on the electrode shall be concentric to the extent that the maximum core-plus-one covering dimension shall not exceed the minimum core plus one covering dimensions by more than 7% of the mean dimension in size 2 mm and 2.4 mm, 5% of the mean dimension in sizes 3.2 mm and 4 mm and 4 % of the mean dimension in sizes 4.8 mm and larger. The concentricity may be measured by any suitable means.
- c. The diameter of core wire shall not vary more than ± 0.05 mm from size specified.

3. Exposed Core

- a. One end of each electrode shall be bare for a distance of 20 mm but not more than 30 mm to provide for electrical contact with the holder.
- b. The other end of each electrode shall be sufficiently bare and the covering tapered to permit easy striking of the arc. The length of the bare portion of the arc end of electrode shall not exceed 1.6 mm or one half of the diameters of the core wire whichever is less.

4. Electrode Identification

All electrodes shall be identified in accordance with the following:

- a. At least one legible imprint of the electrode classification and trade name shall be applied to the electrode covering as near as practical to the grip end of the electrode and within 2-1/2 in [65 mm] of the grip end.
- b. The numbers and letters of the imprint shall be of bold block type of a sufficient size to be easily readable.
- c. The ink used for imprinting shall provide sufficient contrast with the electrode covering in order that the numbers and letters shall be readable before and after baking at user's work and after normal welding applications.

5. Packaging

- a. Vacuum Package: High density plastic pouches laminated with a suitable foil vapor barrier shall be heat sealed after filling and evacuating. The pouches shall be over packed with an outer container

to protect it from damage that will cause loss of vacuum. Packages which show the contents to be loose within the pouch do not meet the requirements of this specification.

- b. The number of electrodes per container shall be such that the Net weight of each container does not exceed 5Kg. Containers shall be further packed in cartons and encapsulated carton in polythene covers and sealed. Net Weight of each encapsulated carton shall not exceed 20 Kg. Each carton shall contain Electrode containers from one size and Batch only.
- c. The Cartons shall be packed in waterproof boxes with crate so as to ensure no damage during shipment and the package shall withstand storage under tropical conditions for at least a period of 2 years from the date of delivery.
- d. Net weight of each crate shall not exceed 1000 Kg.

6. Marking of packages:

The following product information shall be legibly marked/ labeled on the outer side of each packet.


- a. Electrode specification and classification numbers.
- b. Supplier Name, Purchase Order No. and Brand/Trade name of the electrode.
- c. Electrode Size, Quantity of electrodes and Net weight.
- d. Lot, control, heat, Batch No. and Date of manufacture.

The appropriate precautionary information, as given in ANSI Z49.1, latest edition, (as a minimum) or its equivalent shall be prominently displayed in legible print on all packages enclosed within a larger package as per SFA5.02 clause-3.6.2.

Signature
ESH KUMAR
Deputy Manager / ATP
Welding - 620 014
TRICHY - 620 014
Signature
JIJO JOHNSON
Manager / Methods Welding
Advanced Technology Products
Bhel, Tiruchirappalli - 620014

Signature
Dr. K. DEVAKUMARAN
Manager / Methods Welding
Advanced Technology Products
BHEL, Tiruchirappalli - 620 014

Signature
3/4/23.
Sumesh S Anand
Addl. General Manager
ATP Fabrication Shop
BHEL, TRICHY - 620 014

 BHEL - TRICHY	THIRD PARTY NON-DISCLOSURE AGREEMENT		Doc.No. : ISMS-04/TP/011
			Ver. No: 3.0 Rev. No: 00
	Date : 27 - 10 - 14		

THIRD PARTY NON-DISCLOSURE AGREEMENT

I, _____, on behalf of the _____ (Name of Company), acknowledge that the information received or generated, directly or indirectly, while working with BHEL, Trichy on contract is confidential and that the nature of the business of the BHEL, Trichy is such that the following conditions are reasonable, and therefore:

I warrant and agree as follows:

I, or any other personnel employed or engaged by our company, agree not to disclose, directly or indirectly, any information related to the BHEL, Trichy Without restricting the generality of the foregoing, it is agreed that we will not disclose such information consisting but not necessarily limited to:

- Technical information: Methods, drawings, processes, formulae, compositions, systems, techniques, inventions, computer programs/data/configuration and research projects.
- Business information: Customer lists, project schedules, pricing data, estimates, financial or marketing data,

On conclusion of contract, I, or any other personnel employed or engaged by our company shall return to BHEL, Trichy all documents and property of BHEL, Trichy, including: drawings, blueprints, reports, manuals, computer programs/data/configuration, and all other materials and all copies thereof relating in any way to BHEL, Trichy 's business, or in any way obtained by me during the course of contract. I further agree that I, or any others employed or engaged by our company shall not retain copies, notes or abstracts of the foregoing.

This obligation of confidence shall continue after the conclusion of the contract also.

I acknowledge that the aforesaid restrictions are necessary and fundamental to the business of the BHEL, Trichy and are reasonable given the nature of the business carried on by the BHEL, Trichy I agree that this agreement shall be governed by and construed in accordance with the laws of country.

I enter into this agreement totally voluntarily, with full knowledge of its meaning, and without duress.

Dated at _____, this ____ day of _____, 20__.

Name

Company

Signature

Annexure – B

Declaration of sister / common business / management units in same / similar line of business for the quoted items in this tender.

Bidder details:

NIT Reference:

Sl. No	Name of Sister / Common business / Management Units	Nature of the business with BHEL

Bidder signature and Seal:

Annexure C

VENDOR DETAILS

SL NO	DESCRIPTION	To be filled by bidder
1	VENDOR NAME	
2	QUOTATION REFERENCE	
3	QUOTATION DATE	
4	TELE, MOBILE NO	
5	FIRM MAIL ID	
6	CONTACT PERSON	
7	OFFICE ADDRESS	
8	ORDER TO BE PLACED ON	
9	COUNTRY OF ORIGIN	
10	QUOTED CURRENCY	
11	PORT OF LOADING	
12	PORT OF DISCHARGE	

Vendor Seal & Sign

BHEL recently received guidelines from Govt. Of India and Central Vigilance Commission and we have been asked to comply with the guidelines with regard to dealings with Indian Agent/Foreign Agent of Foreign Suppliers.

1. Mandatory submission of an Agency Agreement

- 1.1 It shall be incumbent on the Indian agent and the foreign principal to adhere to the relevant guidelines of Government of India, issued from time to time.
- 1.2 The Agency Agreement should specify the precise relationship between the foreign OEM/foreign principal and their Indian agent and their mutual interest in the business. All services to be rendered by agent/associate, whether of general nature or in relation to the particular contract, must be clearly stated by the foreign supplier/Indian agent. Any payment, which the agent or associate receives in India or abroad from the OEM, whether as commission or as a general retainer fee should be brought on record in the Agreement and be made explicit in order to ensure compliance to laws of the country.
- 1.3 In the absence of any agency agreement, BHEL shall not deal with any Indian agent (authorized representatives / associate / consultant, or by whatever name called) and shall deal directly with the foreign principal only for all correspondence and business purposes.
- 1.4 Agents will file an authenticated Photostat copy duly attested by a Notary Public / Original certificate of the Principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission / remuneration / salary / retainer ship being paid by the principal to the agent.
- 1.5 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the Foreign Principal.

2. Disclosure of particulars of agents / representatives in India

2.1 Tenderers of Foreign nationality shall furnish the following details:

- 2.1.1 The Bidder(s) / Contractor(s) of foreign origin shall disclose the name and address of the agents / representatives in India if any and the extent of authorization and authority given to commit the Principals. In case the agent / representative be a foreign Company, it shall be confirmed whether it is existing Company and details of the same shall be furnished.
- 2.1.2 The amount of commission / remuneration included in the quoted price(s) for such agents / representatives in India.
- 2.1.3 Confirmation of the Tenderer that the commission / remuneration, if any, payable to his agents / representatives in India, paid in Indian Rupees only.

2.2 Tenderers of Indian Nationality shall furnish the following details:

2.2.1 The Bidder(s) / Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any, indicating their nationality as well as their status, i.e. whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents / representatives.

2.2.2 The amount of commission / remuneration included in the price(s) quoted by the Tenderer for himself.

2.2.3 Confirmation of the foreign principals of the Tenderer that the commission / remuneration, if any, reserved for the Tenderer in the quoted price(s), paid in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items.

2.3 Failure to furnish correct and detailed information as called for in paragraph 2.1 & 2.2 above will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by BHEL Besides this there would be a penalty of banning business dealings with BHEL or damage or payment of a named sum.

Please furnish the above information immediately

Annexure-1 to Enquiry terms and conditions

BRIEF PROCEDURE FOR CONDUCT OF CONCILIATION PROCEEDINGS

1. The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided herein:
2. The party desirous of resorting to Conciliation shall send an invitation/notice in writing to the other party to conciliate specifying all points of Disputes with details of the amount claimed. The party concerned shall not raise any new issue thereafter. Parties shall also not claim any interest on claims/counterclaims from the date of notice invoking Conciliation till the conclusion of the Conciliation proceedings.
3. The party receiving the invitation/notice for Conciliation shall within 30 days of receipt of the notice of Conciliation intimate its consent for Conciliation along with its counter-claims, if any.
4. The Conciliation in a matter involving claim or counter-claim (whichever is higher) up to Rs 5 crores shall be carried out by sole Conciliator nominated by BHEL while in a matter involving claim or counter-claim (whichever is higher) of more than Rs 5 crores. Conciliation shall be carried out by 3 Conciliators nominated by BHEL.
5. The Parties shall be represented by only their duly authorized in-house executives/officers and neither Party shall be represented by a Lawyer.
6. The first meeting of the IEC shall be convened by the IEC by sending appropriate communication/notice to both the parties as soon as possible but not later than 30 days from the date of his/their appointment. The hearings in the Conciliation proceeding shall ordinarily be concluded within two (2) months and, in exceptional cases where parties have expressed willingness to settle the matter or there exists possibility of settlement in the matter, the proceedings may be extended by the IEC by a maximum of further 2 months with the consent of the Parties subject to cogent reasons being recorded in writing.
7. The IEC shall thereafter formulate recommendations for settlement of the Disputes supported by reasons at the earliest but in any case within 15 days from the date of conclusion of the last hearing. The recommendations so formulated along with the reasons shall be furnished by the IEC to both the

Parties at the earliest but in any case within 1 month from the date of conclusion of the last hearing.

8. Response/modifications/suggestions of the Parties on the recommendations of the IEC are to be submitted to the IEC within time limit stipulated by the IEC but not more than 15 days from the date of receipt of the recommendations from the IEC.
9. In the event, upon consideration, further review of the recommendations is considered necessary, whether by BHEL or by the other Party, then, the matter can be remitted back to the IEC with request to reconsider the same in light of the issues projected by either/both the Parties and to submit its recommendations thereon within the following 15 days from the date of remitting of the case by either of the Parties.
10. Upon the recommendations by the Parties, with or without modifications, as considered necessary, the IEC shall be called upon to draw up the Draft Settlement Agreement in terms of the recommendations.
11. When a consensus can be arrived at between the parties only in regard to any one or some of the issues referred for Conciliation the draft Settlement Agreement shall be accordingly formulated in regard to the said Issue(s), and the said Settlement Agreement, if signed, by the parties, shall be valid only for the said issues. As regards the balance issues not settled, the parties may seek to resolve them further as per terms and conditions provided in the contract.
12. In case no settlement can be reached between the parties, the IEC shall by a written declaration, pronounce that the Conciliation between the parties has failed and is accordingly terminated.
13. Unless the Conciliation proceedings are terminated in terms of para 22 (b), (c) & (d) herein below, the IEC shall forward his/its recommendations as to possible terms of settlement within one (1) month from the date of last hearing. The date of first hearing of Conciliation shall be the starting date for calculating the period of 2 months.
14. In case of 3 members IEC, 2 members of IEC present will constitute a valid quorum for IEC and meeting can take place to proceed in the matter after seeking consent from the member who is not available. If necessary, videoconferencing may be arranged for facilitating participation of the

members. However, the IEC recommendations will be signed by all members. Where there is more than one (1) Conciliator, as a general rule they shall act

jointly. In the event of differences between the Members of IEC, the decision/recommendations of the majority of the Members of IEC shall prevail and be construed as the recommendation of the IEC.

15. The Draft Settlement Agreement prepared by the IEC in terms of the consensus arrived at during the Conciliation proceedings between the Parties shall be given by the IEC to both the parties for putting up for approval of their respective Competent Authority.
16. Before submitting the draft settlement agreement to BHEL's Competent Authority viz. the Board Level Committee on Alternative Dispute Resolution (BLCADR) for approval, concurrence of the other party's Competent Authority to the draft settlement agreement shall be obtained by the other party and informed to BHEL within 15 days of receipt of the final draft settlement agreement by it. Upon approval by the Competent Authority, the Settlement Agreement would thereafter be signed by the authorized representatives of both the Parties and authenticated by the members of the IEC.
17. In case the Draft Settlement Agreement is rejected by the Competent Authority of BHEL or the other Party, the Conciliation proceedings would stand terminated.
18. A Settlement Agreement shall contain a statement to the effect that each of the person(s) signing thereto (i) is fully authorized by the respective Party(ies) he/she represents, (ii) has fully understood the contents of the same and (iii) is signing on the same out of complete freewill and consent, without any pressure, undue influence.
19. The Settlement Agreement shall thereafter have the same legal status and effect as an arbitration award on agreed terms on the substance of the dispute rendered by an arbitral tribunal passed under section 30 of the Arbitration and Conciliation Act, 1996.
20. Acceptance of the Draft Settlement Agreement/recommendations of the Conciliator and/or signing of the Settlement Agreement by BHEL shall however, be subject to withdrawal/closure of any arbitral and/or judicial proceedings initiated by the concerned Party in regard to such settled issues.

21. Unless otherwise provided for in the agreement, contract or the Memorandum of Understanding, as the case may be, in the event of likelihood of prolonged absence of the Conciliator or any member of IEC, for any reason/incapacity, the Competent Authority/Head of Unit/Division/Region/Business Group of BHEL may substitute the Conciliator or such member at any stage of the proceedings. Upon appointment of the substitute Conciliator(s), such reconstituted IEC may, with the consent of the Parties, proceed with further Conciliation into the matter either de-novo or from the stage already reached by the previous IEC before the substitution.
22. The proceedings of Conciliation under this Scheme may be terminated as follows:
- On the date of signing of the Settlement agreement by the Parties; or,
 - By a written declaration of the IEC, after consultation with the parties, to the effect that further efforts at conciliation are no longer justified, on the date of the declaration; or,
 - By a written declaration of the Parties addressed to the IEC to the effect that the Conciliation proceedings are terminated, on the date of the declaration; or,
 - By a written declaration of a Party to the other Party and the IEC, if appointed, to the effect that the Conciliation proceedings are terminated, on the date of the declaration.
 - On rejection of the Draft Settlement Agreement by the Competent Authority of BHEL or the other Party.
23. The Conciliator(s) shall be entitled to following fees and facilities:

Sl No	Particulars	Amount
1	Sitting fees	Each Member shall be paid a Lump Sum fee of Rs 75,000/- for the whole case payable in terms of paragraph No. 27 herein below.
2	Towards drafting of settlement agreement	In cases involving claim and/or counterclaim of up to Rs 5crores. Rs 50,000/- (Sole Conciliator)

Sl No	Particulars	Amount
-------	-------------	--------

		<p>In cases involving claim and/or counterclaim of exceeding Rs 5 crores but less than Rs 10 crores. Rs 75,000 (per Conciliator) In cases involving claim and/or counter-claim of more than Rs 10 crores.</p> <p>Rs 1,00,000/- (per Conciliator) Note: The aforesaid fees for the drafting of the Settlement Agreement shall be paid on Signing of the Settlement Agreement after approval of the Competent Authority or Rejection of the proposed Settlement Agreement by the Competent Authority of BHEL.</p>
3	Secretarial expenses	<p>Rs 10,000/- (one time) for the whole case for Conciliation by a Sole Member IEC.</p> <p>Where Conciliation is by multi member Conciliators Rs 30,000/- (one time)- to be paid to the IEC</p>
4	<p>Travel and transportation and stay at outstation</p> <p>i) Retired Senior Officials of other Public Sector Undertakings (pay scale wise equivalent to or more than E-8 level of BHEL)</p>	<p>As per entitlement of the equivalent officer (pay scale wise) in BHEL.</p>

	Others	As per the extant entitlement of whole time Functional Directors in BHEL.
Sl No	Particulars	Amount
		Ordinarily, the IEC Member(s) would be entitled to travel by air Economy Class.
5	Venue for meeting	Unless otherwise agreed in the agreement, contract or the Memorandum of Understanding, as the case may be, the venue/seat of proceedings shall be the location of the concerned Unit / Division / Region / Business Group of BHEL. Without prejudice to the seat/venue of the Conciliation being at the location of concerned BHEL Unit / Division / Region / Business Group, the IEC after consulting the Parties may decide to hold the proceedings at any other place/venue to facilitate the proceedings. Unless, Parties agree to conduct Conciliation at BHEL premises, the venue is to be arranged by either Party alternately.

24. The parties will bear their own costs including cost of presenting their cases/evidence/witness(es)/expert(s) on their behalf. The parties agree to rely upon documentary evidence in support of their claims and not to bring any oral evidence in IEC proceedings.
25. If any witness(es) or expert(s) is/are, with the consent of the parties, called upon to appear at the instance of the IEC in connection with the matter, then, the costs towards such witness(es)/expert(s) shall be determined by the IEC with the consent of the Parties and the cost so determined shall be borne equally by the Parties.

26. The other expenditures/costs in connection with the Conciliation proceedings as well as the IEC's fees and expenses shall be shared by the Parties equally.
27. Out of the lump sum fees of Rs 75,000/- for Sitting Fees, 50% shall be payable after the first meeting of the IEC and the remaining 50% of the Sitting Fees shall be payable only after termination of the conciliation proceedings in terms of para 22 hereinabove.
28. The travelling, transportation and stay at outstation shall be arranged by concerned Unit as per entitlements as per Serial No. 3 of the Table at para 23 above, and in case such arrangements are not made by the BHEL Unit, the same shall be reimbursed to the IEC on actuals limited to their entitlement as per Serial No. 4 of the Table at Para 23 above against supporting documents. The IEC Member(s) shall submit necessary invoice for claiming the fees/reimbursements.
29. The Parties shall keep confidential all matters relating to the conciliation proceedings. Confidentiality shall extend also to the settlement agreement, except where its disclosure is necessary for purposes of its implementation and enforcement or as required by or under a law or as per directions of a Court/Governmental authority/ regulatory body, as the case may be.
30. The Parties shall not rely upon or introduce as evidence in any further arbitral or judicial proceedings, whether or not such proceedings relate to the Disputes that is the subject of the Conciliation proceedings:
- a. Views expressed or suggestions made by the other party in respect of a possible settlement of the Disputes;
 - b. admissions made by the other party in the course of the Conciliator proceedings;
 - c. proposals made by the Conciliator;
 - d. The fact that the other Party had indicated his willingness to accept a proposal for settlement made by the Conciliator.
31. The Parties shall not present the Conciliator(s) as witness in any Alternative Dispute Resolution or Judicial proceedings in respect of a Disputes that is/was the subject of that particular Conciliation proceeding.
32. None of the Conciliators shall act as an arbitrator or as a representative or counsel of a Party in any arbitral or judicial proceeding in respect of a Disputes that is/was the subject of that particular Conciliation proceeding.

33. The Parties shall not initiate, during the Conciliation proceedings, any arbitral or judicial proceedings in respect of a Disputes that is the subject matter of the Conciliation proceedings except that a Party may initiate arbitral or judicial proceedings where, in his opinion, such proceedings are necessary for preserving his rights including for preventing expiry of period of limitation. Unless terminated as per the provisions of this Scheme, the Conciliation proceedings shall continue notwithstanding the commencement of the arbitral or judicial proceedings and the arbitral or judicial proceedings shall be primarily for the purpose of preserving rights including preventing expiry of period of limitation.
34. The official language of Conciliation proceedings under this Scheme shall be English unless the Parties agree to some other language.

**FORMAT FOR SEEKING CONSENT FOR REFERRING THE DISPUTES
TO CONCILIATION THROUGH IEC**

To,

M/s. (Stakeholder's name)

**Sub: Resolution of the Disputes through conciliation by Independent
Expert Committee (IEC).**

Ref: Contract No/MoU/Agreement/LOI/LOA& date _____.

Sir,

With reference to above referred Contract/MoU/Agreement/LOI/LOA, you have raised certain Disputes/claims. Vide your letter dated____ you have requested BHEL to refer the Disputes/claims to IEC for Conciliation.

We are enclosing herewith Format (3) for giving consent and the terms and conditions of BHEL Conciliation Scheme, 2018 governing conciliation through IEC. You are requested to give your unconditional consent to the said terms and conditions of the Scheme by returning the same duly sealed and signed on each page. On receipt of your consent, matter will be put to the Competent Authority for consideration and decision.

Please note that BHEL has also certain claims against you (if applicable). BHEL reserves its right to agree or not to agree conciliation of the said disputes through BHEL and this letter is being issued without prejudice to BHEL's rights and contentions available under the contract and law.

Yours faithfully,

Representative of BHEL
Appendix II

**FORMAT FOR GIVING CONSENT BY
CONTRACTOR/VENDOR/CUSTOMER/COLLABORATOR/CONSORTIUM PARTNERS FOR REFERRING THE DISPUTES TO CONCILIATION
THROUGH IEC**

To,

BHEL

.....

Sub: Resolution of Disputes through Conciliation by Independent Expert Committee (IEC).

Ref: Contract/MoU/Agreement/LOI/LOA No & date____

With reference to above referred contract, our following bills/invoices/claims submitted to BHEL are still unpaid giving rise to Disputes:

SL. no.	Claim Description	Bill submitted to BHEL (no. and date)	Amount of the bill/claim	Amount received from BHEL	Outstanding Amount

Accordingly we request you to kindly refer the Disputes in respect of above claims to IEC for Conciliation.

We hereby agree and give our unconditional consent to the terms and conditions of BHEL Conciliation Scheme, 2018 governing conciliation through IEC. We have signed the same on each page and enclosed it for your consideration.

Yours faithfully,

(Signature with stamp)

**Authorized Representative of Contractor
Name, with designation
Date**

**STATEMENT OF CLAIMS/COUNTER CLAIMS TO BE SUBMITTED TO
THE IEC BY BOTH THE PARTIES**

1. Chronology of the Disputes
2. Brief of the Contract/MoU/Agreement/LOI/LOA
3. Brief history of the Disputes:
4. Issues:
5. Details of Claim(s)/Counter Claim(s):

Sl. No.	Description of claim(s)/Counter Claim	Amount (in INR)Or currency applicable in the contract	Relevant contract clause

6. Basis/Ground of claim(s)/counter claim(s) (along with relevant clause of contract)

Note– *The Statement of Claims/Counter Claims may ideally be restricted to maximum limit of 20 pages. Relevant documents may be compiled and submitted along with the statement of Claims/Counter Claims. The statement of Claims/Counter Claims is to be submitted to all IEC members and to the other party by post as well as by email.*

INTEGRITY PACT**Between**

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi - 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

and

_____, (description of the party along with address), hereinafter referred to as "The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for _____

_____ (hereinafter referred to as "Contract"). The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint panel of Independent External Monitor(s) (IEMs), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the Principal

- 1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -
 - 1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - 1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
 - 1.1.3 The Principal will exclude from the process all known prejudiced persons.
- 1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/ Contractor(s)

- 2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. The Bidder(s)/ Contractor(s) commits himself to observe the following principles during participation in the tender process and during the contract execution.

- 2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- 2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. 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.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant Indian Penal Code (IPC) and Prevention of Corruption Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.1.4 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- 2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and shall await their decision in the matter.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process, terminate the contract, if already awarded, exclude from future business dealings and/ or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

Section 4 - Compensation for Damages

- 4.1 If the Principal has disqualified the Bidder (s) from the tender process before award / order acceptance according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal is entitled to terminate the Contract according to Section 3, or terminates the Contract in application of Section 3 above, the Bidder(s)/ Contractor (s) transgression through a violation of Section 2 above shall be construed breach of contract and the Principal shall be entitled to demand and recover from the Contractor an amount equal to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee, whichever is higher, as damages, in addition to and without prejudice to its right to demand and recover compensation for any other loss or damages specified elsewhere in the contract.

Section 5 - Previous Transgression

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 (three) years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason or action can be taken as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

Section 6 - Equal treatment of all Bidder (s)/ Contractor (s) / Sub-contractor (s)

- 6.1 The Principal will enter into Integrity Pacts with identical conditions as this Integrity Pact with all Bidders and Contractors.
- 6.2 In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor(s) and ensure that all Sub-contractors also sign the Integrity Pact.
- 6.3 The Principal will disqualify from the tender process all Bidders who do not sign this Integrity Pact or violate its provisions.

Section 7 - Criminal Charges against violating Bidders/ Contractors /Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 -Independent External Monitor(s)

- 8.1 The Principal appoints competent and credible panel of Independent External Monitor (s) (IEMs) for this Integrity Pact. The task of the IEMs is to review independently and objectively, whether and to what extent the parties comply with the obligations under this Integrity Pact.
- 8.2 The IEMs are not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The IEMs shall be provided access to all documents/ records pertaining to the Contract, for which a complaint or issue is raised before them as and when warranted. However, the documents/records/information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed.
- 8.4 The Principal will provide to the IEMs sufficient information about all meetings among the parties related to the Contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the IEMs the option to participate in such meetings.

- 8.5 The advisory role of IEMs is envisaged as that of a friend, philosopher and guide. The advice of IEMs would not be legally binding and it is restricted to resolving issues raised by a Bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some Bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization.
- 8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process or during execution of Contract, the matter should be examined by the full panel of IEMs jointly, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.
- 8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to the CMD, BHEL at the earliest. They may also send their report directly to the CVO, in case of suspicion of serious irregularities requiring legal/ administrative action. Only in case of very serious issue having a specific, verifiable Vigilance angle, the matter should be reported directly to the Commission. IEMs will tender their advice on the complaints within 30 days.
- 8.8 The CMD, BHEL shall decide the compensation to be paid to the IEMs and its terms and conditions.
- 8.9 IEMs should examine the process integrity, they are not expected to concern themselves with fixing of responsibility of officers. Complaints alleging mala fide on the part of any officer of the Principal should be looked into by the CVO of the Principal.
- 8.10 If the IEMs have reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant Indian Penal Code / Prevention of Corruption Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the IEMs may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.11 After award of work, the IEMs shall look into any issue relating to execution of Contract, if specifically raised before them. As an illustrative example, if a Contractor who has been awarded the Contract, during the execution of Contract, raises issue of delayed payment etc. before the IEMs, the same shall be examined by the panel of IEMs. Issues like warranty/ guarantee etc. shall be outside the purview of IEMs.
- 8.12 However, the IEMs may suggest systemic improvements to the management of the Principal, if considered necessary, to bring about transparency, equity and fairness in the system of procurement.
- 8.13 The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

- 9.1 This Integrity Pact shall be operative from the date this Integrity Pact is signed by both the parties till the final completion of contract for successful Bidder, and for all other Bidders 6 months after the Contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.
- 9.2 If any claim is made/ lodged during currency of this Integrity Pact, the same shall be binding and continue to be valid despite the lapse of this Pact as specified above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 - Other Provisions

- 10.1 This Integrity Pact is subject to Indian Laws and exclusive jurisdiction shall be of the competent Courts as indicated in the Tender or Contract, as the case may be.
- 10.2 Changes and supplements as well as termination notices need to be made in writing.
- 10.3 If the Bidder(s)/ Contractor(s) is a partnership or a consortium or a joint venture, this Integrity Pact shall be signed by all partners of the partnership or joint venture or all consortium members.
- 10.4 Should one or several provisions of this Integrity Pact turn out to be invalid, the remainder of this Integrity Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 10.5 Only those bidders / contractors who have entered into this Integrity Pact with the Principal would be competent to participate in the bidding. In other words, entering into this Integrity Pact would be a preliminary qualification.
- 10.6 In the event of any dispute between the Principal and Bidder(s)/ Contractor(s) relating to the Contract, in case, both the parties are agreeable, they may try to settle dispute through Mediation before the panel of IEMs in a time bound manner. In case, the dispute remains unresolved even after mediation by the panel of IEMs, either party may take further action as the terms & conditions of the Contract. The fees/expenses on dispute resolution through mediation shall be shared by both the parties. Further, the mediation proceedings shall be confidential in nature and the parties shall keep confidential all matters relating to the mediation proceedings including any settlement agreement arrived at between the parties as outcome of mediation. Any views expressed, suggestions, admissions or proposals etc. made by either party in the course of mediation shall not be relied upon or introduced as evidence in any further arbitral or judicial proceedings, whether or not such proceedings relate to the dispute that is the subject of mediation proceedings. Neither of the parties shall present IEMs as witness in any Alternative Dispute Resolution or judicial proceedings in respect of the dispute that was subject of mediation.

For & On behalf of the Principal
(Office Seal)

Place _____
Date _____

JIBU JACOB
JOHN

Digitally signed by
JIBU JACOB JOHN
Date: 2022.10.07
11:20:17 +05'30'

For & On behalf of the Bidder/ Contractor
(Office Seal)

Witness: _____
(Name & Address) _____

MEGAN
ATHAN R

Digitally signed by
MEGANATHAN R
Date: 2022.10.07
11:26:07 +05'30'

Witness: _____
(Name & Address) _____

Clause on IP in the tender

“Integrity Pact (IP)”

- (a) IP is a tool to ensure that activities and transactions between the Company and its Bidders/ Contractors are handled in a fair, transparent and corruption free manner. Following Independent External Monitors (IEMs) on the present panel have been appointed by BHEL with the approval of CVC to oversee implementation of IP in BHEL.

SI	IEM	Email
1.	Shri Otem Dai, IAS (Retd.)	iem1@bhel.in
2.	Shri Bhiswamitra Pandey, IRAS (Retd.)	iem2@bhel.in
3	Shri Mukesh Mittal, IRS (Retd)	iem3@bhel.in

- (b) The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-I, in case of two/ three part bid). Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification.
- (c) Please refer Section-8 of IP for Role and Responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to any of the above IEM(s). All correspondence with the IEMs shall be done through email only.

Note:

No routine correspondence shall be addressed to the IEM (phone/ post/ email) regarding the clarifications, time extensions or any other administrative queries, etc on the tender issued. All such clarification/ issues shall be addressed directly to the tender issuing (procurement) department's officials whose contact details are provided below:

Details of contact person(s):

(1)

Name: Jibu Jacob John
Deptt: MM/ ATP
Address: 24 Building, BHEL Trichy
Phone: (Landline/ Mobile)
0431 2577849 / 9442548984
Email: jjjohn@bhel.in

(2)

Name: R Meganathan
Deptt: MM/ATP
Address: 24 Building, BHEL Trichy
Phone: (Landline/ Mobile)
0431 2575458 / 9488823129
Email: rmega@bhel.in