



Bharat Heavy Electricals Limited Sub-Contracting (Turbine) HEEP,
BHEL, Ranipur, Haridwar-249403 (Uttarakhand) Ph. No.: 01334-285166
E-mail: nadeem@bhel.in; arnabh@bhel.in

NIT-NOTICE INVITING TENDER (OPEN TENDER IN TWO PART BID) THROUGH BHEL E-PROCUREMENT PORTAL

Salient Details of Notice Inviting Tender (NIT)		
Sl. No.	Issue	Description
1	Item Details (Description/Drawing no./Qty. etc.)	As per enclosed Unpriced Bid Format (Annexure – A)
2	Issue of Tender documents	From BHEL eProcurement website https://eprocurebhel.co.in/nicgep/app (Tender documents will be available for downloading from BHEL e-Procurement website till due date of submission)
3	Due date of offer submission	Date: 27-05-2025 Time: 13:45 Hrs. https://eprocurebhel.co.in/nicgep/app Offer to be submitted in online only through e-procurement Portal. (Bidders are requested to visit website to view corrigendum / addenda / amendments / extension / modification etc. before submitting offer).
4	Opening of Tender (Techno-Commercial Bid)	Date: 27-05-2025 Time: 16.00 Hrs. Note: <i>This tender being an e-tender, it shall be opened online only through the E-Procurement Portal. Participating bidders may witness the opening online only.</i>
5	EMD (Earnest money deposit)	Rs. Nil
6	Latest updates	Latest updates on the important dates, Amendments, Correspondences, Corrigenda, Clarifications, Changes, Errata, Modifications, Revisions, etc. to Tender Specifications will be hosted in BHEL e-tender portal https://eprocurebhel.co.in/nicgep/app and not in the newspapers. Bidders to keep themselves updated with all such information.

Please submit your offer only for the above requirement subject to compliance of all **Buyer Added Bid Specific Additional Terms & Conditions, Special Terms and Conditions, Technical specifications and requirements, Latest Version of GENERAL INSTRUCTIONS AND STANDARD TERMS & CONDITIONS (GISTC)**. Please visit our site <https://hwr.bhel.com/bhelweb/CodeFiles/gistc.jsp> for latest revision of General Instructions and Standard Terms & Conditions (GISTC) for Tender Enquiries.

A Valid MSE certificate such as Udyam Registration issued from Competent Authority shall be submitted in support of Micro & Small Enterprises (MSEs). As per the OM No. F. No. 1(2)(1)/2016-MA dated. 09.02.2017 issued from the Office of Development Commissioner (Micro, Small Enterprises), "Traders and agents should not be allowed to avail the benefits extended under the PP Policy."

Drawings of Tender items and other documents will be provided only after receipt of Non-Disclosure Agreement (Duly filled, signed and stamped, on each pages) by the vendor. Vendor can provide scanned copy of Non-Disclosure Agreement through e-mail and ask for drawings & documents well before opening date and time of enquiry. BHEL Haridwar registered vendors are exempted for submission of Non-Disclosure Agreement. Format of Non-Disclosure Agreement is attached with tender document.

Please submit your lowest quotation / offer for the above requirement subject to our terms and conditions.

E-Procurement Portal Inputs

Procedure for Submission of Offer for E-Tender procedure for Submission of Tender is available in the “Bidder Manual for BHEL Bidders” at E-tender portal <https://eprocurebhel.co.in/nicgep/app>.

Terms and conditions mentioned therein shall form integral part of the NIT and bidders shall abide by the same.

Hardware and Software requirements for participating in e-tender

Please refer the website for the minimum system requirements and setting document for Bidders under the link: <https://eprocurebhel.co.in/nicgep/app>

Digital Signature

Bidders against tender will necessarily have to obtain class – III DSCs. Procedure for application available on www.bhel.com. To know the procedure for obtaining Digital Signature Certificate (DSC), suppliers who are not having the DSC are advised to visit our website [http://www.bhel.com/home.php/Tender Notifications/Sample Checklist](http://www.bhel.com/home.php/Tender%20Notifications/Sample%20Checklist).

NIC portal Helpdesk Contacts

For any technical related queries please call at 24 x 7 Help Desk Number

0120-4001 002

0120-4200 462

0120-4001 005

0120-6277 787

International bidders are requested to prefix 91 as country code

Email Support

A) For any Issues or Clarifications relating to the published tenders, bidders are requested to contact the respective Tender Inviting Authority.

B) For Technical support: eproc@nic.in

Note: Offers/tenders submitted in the E-tender portal shall only be considered for further evaluation. Offers sent by FAX / E-mail / any mode other than E-tender would not be entertained.

SPECIAL NOTE: All documents to be submitted should be uploaded in respective places in the E-Tender portal as per the list mentioned given in this NIT. BHEL shall not be responsible for incomplete documents.

KINDLY READ “**ESSENTIAL INSTRUCTIONS FOR BID SUBMISSION**” THOROUGHLY. QUOTATION NOT IN ACCORDANCE WITH THE ABOVE INSTRUCTION ARE LIABLE TO BE DISQUALIFIED AND IGNORED.

ESSENTIAL INSTRUCTIONS FOR BID SUBMISSION

Clause 1.0 – Tender submission and opening

The tenders shall be submitted in **TWO PARTS** as described below on or before the due date and time of tender opening:

- a) Part-I (Cover I) : 1. Pre-Qualifying Requirement (PQR) duly filled and required documents as asked in PQR.
2. Techno-Commercial Bid: Techno-Commercial Terms & Conditions as per special terms and conditions, Buyer Added Bid Specific Additional Terms & Conditions (ATC) along with various applicable annexures should be filled by vendor and submitted along with part-1 of tender enquiry.
3. Replica of price bid (Un-priced Bid/Annexure-A) must be enclosed with part-1 of tender enquiry.
4. Valid MSE certificate applicable for Micro and small Enterprises as mentioned in Tender Enquiry.
5. Any other related documents.
- b) Part-II (Cover II): The Price Bid in BOQ format shall comprise of the price bid only (with price) as per Tender Enquiry.

Part II containing Price Bid will be opened on a separate date for those vendors who have qualified in the Part I. The opening date of Part II will be intimated in advance to the vendors qualified in Part-I.

If replica of price bid (un-priced) is not submitted along with Part-I bid, the offer is liable to be rejected.

- Any corrections / amendments shall be properly & fully authenticated with signature.

The bidders will have to submit signed offer / bid through BHEL NIC portal only. Each page of quotation should be signed and stamped by authorized representative of vendor, else the offer is liable to be rejected. Unsigned bids are liable to be ignored.

Terms and conditions agreed by vendor in techno-commercial bid shall be finalized before price bid opening and any terms mentioned by vendor in price bid shall not be considered.

Clause No. 2.0:

As per directives of CENTRAL VIGILANCE COMMISSION, GOVERNMENT OF INDIA, one agent cannot represent two or more suppliers or quote on their behalf in a particular tender. If so found at any stage, BHEL Hardwar is likely to cancel Enquiries / POs to such suppliers. Further, such Indian Agent is likely to be de-listed (Black listed for business from BHEL)

Clause No. 3.0:

The offers of the bidders who are on the debarred list and also the offer of the bidders, who engage the services of the debarred firm, shall be rejected. The list of debarred firms is available on BHEL website www.bhel.com.

Special Terms & conditions of Tender Enquiry:

1. Loading Criteria:

- a) BHEL may load maximum penalty under LD clause, to the extent the same is not agreed by the vendor, for the purpose of comparative statement. Where deliveries quoted by the vendors are not suiting, BHEL may also ignore the offer of the vendor.
 - b) Prices should be quoted on F.O.R. Destination basis. The offers quoted on other than F.O.R destination basis may result in non-consideration of such bids. In case BHEL accepts the EX-Works, prices such offers will be loaded with actual freight charges as per BHEL freight rate contract.
 - c) Please quote your rates on FOR destination basis. However, the insurance will be arranged by BHEL. You can dispatch goods through any Indian Bank Association approved transporters having their branch at Haridwar/destination. For your convenience the names and addresses of transporters approved by IBA & BHEL are posted at <https://hwr.bhel.com/bhelweb/Home.jsp>." If any bidder still quotes on other than FOR destination basis, then his offer will be loaded by the maximum freight, packing & forwarding charges quoted by any other bidder from the same or nearby station, against the enquiry/freight rate available with BHEL.
 - d) Loading of any deviation in the payment terms w.r.t. NIT terms shall be referenced as follows:
 - (a) Loading will be done @ Base rate of SBI + 6% (per annum) of basic cost of the items as per table mentioned under the clause 'Payment Terms' in GISTC.
 - (b) The base rate of SBI shall be considered as applicable on 31st March of preceding year from tender due date
- 2.** Material should come back within one year positively from the date of challan against which material was sent to sub-contractor. In case material is not returned within 12 months period, applicable GST with interest from the date of challan shall become payable on expiry of one-year period and the applicable GST with interest will be debited from sub-contractor account.
- 3.** In case quantity is non-divisible in nature, the contract for such quantity will be awarded to L1 bidder. In such cases quantity shall not be counter offered to MSE bidders.

4. Treatment of offers submitted by agents:

- a) Either the agent could bid on behalf of the manufacturer/ supplier or the manufacturer/ supplier could bid directly but not both.
- b) In case bids are received from both the manufacturer/ supplier and the agent, bid received from the agent shall be ignored.
- c) The agent shall not be allowed to represent more than one manufacturer/ supplier in the same tender.
- d) The authorization letter from the manufacturer, clearly indicating contact details like Name, E-mail & address of manufacturer and relationship with agent and its validity to be submitted with bid. The authorization letter should be tender specific. In case order is to be placed and executed by the agent, the following aspects should be followed:
 - i) The manufacturer should meet the PQR requirement as defined in the tender.
 - ii) Manufacturer and bidder should Jointly confirm Guarantee for the Quality of product and timely delivery as stipulated in the NIT.
- e) BHEL will deal directly with the manufacturers / principal vendors and no correspondence with the agents will be entertained. The agents will not be permitted to visit / interact with BHEL on behalf of their principals. Subsequently also, no correspondence of any type will be made with any agent. (All individuals / companies - representing / Advisor / retainer ship basis or claimed to be part time employees for many OEMs / claiming to be channel or business partner for BHEL work / stockiest not registered specifically etc. are Agents). Communications with only those agents who have submitted agency agreement with their respective principal may be done.

5. Without explicit written permission from BHEL, Haridwar:

- a) Vendors shall not pass on any Drawings/Documents or its contents/copy in any form which are being supplied by BHEL Haridwar with the Enquiry/Sub-Contract Order to any other party.
 - b) Vendors shall not Sub-Contract the work or part of it to any sub-vendor.
 - c) The Vendors shall not use BHEL Haridwar Drawings/documents (supplied by BHEL Haridwar) for supplying the item to any other party.
 - d) It shall be ensured that the material is procured (in case of party material) from BHEL approved supplier along with correlated test certificates. No waiver shall be acceptable in this. In case the repeat testing is required, it should be done at NABL accredited labs only. Failing above, BHEL Haridwar shall have the right to take necessary action (including legal action also) and/or impose the penalty, as deemed fit.
6. BHEL reserves the right to open the price bid (part-II) along with the opening of techno-commercial offer at its option and in that case, vendor will be informed accordingly.
7. Prices shall be furnished all items of package as per tender terms & conditions. ***Else, the bid is liable for rejection.*** Quotation must be clearly legible.
8. In the course of Evaluation, if more than one bidder happens to occupy L-1 status, effective L-1 will be decided by soliciting discounts from respective L-1 bidders. In case 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 respective L-1 bidder(s) or their representative(s). Ranking will be done accordingly. BHEL decision in such situations shall be final and binding.
9. Any item not included in this tender quoted above and shown separately will not be taken cognizance of and shall be ignored while evaluation.
10. BHEL will evaluate the technical bids against essential criteria/requirements. BHEL may seek clarifications, if required, from the bidders. These clarifications will be communicated to the vendors through e-mail. The bidders will be given sufficient time to respond the clarifications.
The offers of those bidders, who are unable to respond in this time frame, are likely to be ignored.
11. All the bidders whose offers have been accepted by BHEL will be given notice for opening of their original price bid and supplementary impact bid (if applicable).
12. The quantity may undergo change at the time of ordering.
13. No standard gauges up to M42 shall be provided by BHEL.
14. All enclosures must be sent with the quotation with seal and signature.
15. In case of rejection, total material cost along with other commercial overheads will be recovered from Vendor.
16. For each supply, vendors are requested to raise separate Invoice along with Running Tally sheet (RTS), GST compliance Certificate, Copy of BHEL GST challan, Material receiving (Material sent by BHEL at vendor's work) document at vendor's works & Guarantee certificate. In case vendor will not submit material receiving document, then GST challan date mentioned in GST challan shall be considered as material receiving date at vendor's work. All invoices must be submitted in AIX-Turbine, BHEL Haridwar for further payment processing.
17. Mandatory e-invoice if turnover of vendor / contractor is more than Rs. 5 crores in any preceding financial year from 2017-18 onwards as per notification no. 10/2023-central tax w.e.f. 01.08.2023). also, invoice must include INR and QR code on tax invoice or declaration by vendor/contractor if turnover in any preceding financial year from 2017-18 onwards is less than Rs. 5 crores.

18. In case the vendor/contractor delays or fails to provide all the documents as per the purchase order/ work order at the time of submitting tax invoice to BHEL, any subsequent financial loss to BHEL on account of vendor/ contractor shall be to vendor's / contractor's account. BHEL has further right to take necessary steps to protect its interest at the time of release of payment.
19. Material shall be sent to sub-contractor against Bank Guarantee and Indemnity Bond. In case of rejection/non-delivery of material, material cost shall be recovered from sub-contractor by BHEL.
20. Where Bank Guarantee and Indemnity Bond clause not accepted by vendor, BHEL may ignore the offer of vendors.
21. Prices quoted should not be more than the prices quoted to any other BHEL units/offices/ divisions.
22. In the event of BHEL calling for supplementary bid, the part-II price Bid along with supplementary priced bid (if necessary) will be opened at a later date of only those bidders who have qualified in the Part I. The opening date of Part II along with supplementary price bid (if necessary) will be intimated in advance to the vendors qualified in Part-I.
23. Bid should be free from correction, overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else bid shall be liable for rejection.
24. The material issued to sub-contractor as free issue material for machining/machining & assembly/ coating operations shall remain the property of BHEL, Haridwar. The sub-contractor shall use the materials only for BHEL contract and for no other purpose whatsoever. The sub-contractor shall be liable for the loss or damage to above material from whatsoever cause happening while such material is in the possession or under the control of the sub-contractor. All the materials of BHEL, Haridwar shall under no circumstances be hypothecated to any Bank or to any lending institution or to any Party whatsoever. It should not also be shown as the sub-contractor's assets in any of the statements of sub-contractor to any party. The sub-contractor shall produce document for the free issue material supplied to them to BHEL officials visiting the sub-contractor's unit for verifications/inspection purposes at any time. If sub-contractor fails to produce or properly account for the material so issued, BHEL Haridwar will take further action as deemed fit including the recovery of the value of material as per BHEL norms from the sub-contractor's running bills/ encash sub-contractor's Bank Guarantee/ Indemnity Bond (IB).
25. Action against Bidders / vendor / supplier / contractor in case of default:

In order to protect the commercial interests of BHEL, BHEL shall act against supplies / contractors by way of suspension of business dealings, who either fail to perform or are in default without any reasonable cause, cause loss of business/ money/ reputation, indulge in malpractices, cheating, bribery, fraud or any other misconduct or formation of cartels so as to influence the bidding process or influence the price etc.

Suspension of Business Dealings could be in the form of "Hold" or "Banning" a supplier/ contractor or a bidder and shall be as per "Guidelines for Suspension of Business Dealings with Suppliers/ Contractors" available at BHEL's website "<https://www.bhel.com/guidelines-suspension-business-dealings-supplierscontractors>".

26. "The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the firms debarred across BHEL, shall be rejected. The list of firms debarred across BHEL is available on BHEL web site www.bhel.com.

1.0 Integrity commitment, performance of the contract and punitive action thereof:

1.1. Commitment by BHEL:

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.

1.2. Commitment by Bidder/ Supplier/ Contractor:

- 1.2.1. The bidder/ supplier/ contractor commits 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 manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.
- 1.2.2. 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.
- 1.2.3. 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.

If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in malpractices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price 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, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on [www. bhel.com](http://www.bhel.com) and/or under applicable legal provisions”.

Date :

Signature :

Name :

Designation :

Department :

M/s

TENDER REFERENCE NO.: X/3391/2025/0009/O/1
UN-PRICE BID (ANNEXURE – A)

Quotation No.: Dated:

Sl. No.	Item Description	Drawing No.	Qty. (Nos.)	Material By	Quoted/Not Quoted (To be filled by vendor)
1	MOVING BLADE LP 3L	0103075600200	54	BHEL	
2	MOVING BLADE LP 3R	0103075600400	54	BHEL	

Notes:

1. APPLICABLE SPEC: HW19466.
2. ENQUIRY IS FOR INLET EDGE LASER HARDENING OF LP 3L AND 3R FIR TREE BLADES VIDE DRAWING NUMBER 0103075600200 AND 0103075600400 AND STANDARD HW0993005.
3. LASER HARDENING OF BOTH THE ITEMS (SL. NO. 1 & 2 – LP 3L AND 3R) IS TO BE DONE BY SAME SOURCE, i.e., ORDER OF BOTH THE ITEMS TO BE PLACED ON SAME VENDOR. ACCORDINGLY, L1 WILL BE DECIDED BASED ON LANDED COST TO BHEL FOR BOTH THE ITEMS COMBINED.
4. LASER HARDENING PROCESS TO BE DONE ON X5CRNICUNB16-4 (DIN 1.4542) MATERIAL TURBINE BLADES.
5. IDENTIFICATION MARKING, PACKING, INSURANCE & TRANSPORT OF BLADES FROM BHEL, HARIDWAR TO VENDOR WORKS AFTER PLACEMENT OF PO WILL BE UNDER SCOPE OF BHEL.
6. THE TENDER INCLUDES 2 PHASE TRIALS AS PER TENDER SPECIFICATION.
7. DOCUMENTS AND STANDARDS ARE TO BE COLLECTED BY VENDORS AGAINST NDA WITH BHEL BEFORE SUBMISSION OF TENDER.
8. COLLECTION OF TEST PIECE AND PROCESS QUALIFICATION BLADES WILL BE UNDER SCOPE OF VENDORS AS PER CLAUSE NUMBERS 3.1 AND 3.2 OF TENDER SPECIFICATION.
9. SUITABLE PACKING OF BLADES (E.G. BUBBLE WRAP PACKING ON INDIVIDUAL BLADES IN HONEY COMB WOODEN BOXES) TO BE DONE BY VENDOR DURING DELIVERY TO PROTECT THE BLADES FROM ANY PHYSICAL DAMAGE DURING TRANSIT. CLAUSE NUMBER 14 OF STANDARD HW0993005 IS TO BE REFERRED.
10. INSPECTION WILL BE AS PER QP.
11. THE SUPPLIED BLADES WILL BE IN ROOT MACHINED CONDITION WITH UN-MACHINED PROFILE TIP AS PER DRAWING 01030756999 VAR 01 & 02 (LEFT HAND AND RIGHT HAND).
12. EXTRA BLADES OF BOTH LEFT HAND AND RIGHT HAND SHALL BE PROVIDED BY BHEL AND TO BE USED BY VENDOR FOR PROCESS QUALIFICATION AND WILL BE PROVIDED AS PER CLAUSE 3.2 AND SUB CLAUSES AGAINST BANK GUARANTEE AFTER PLACEMENT OF PO FOR PROCESS QUALIFICATION. THE PROCESS QUALIFICATION WILL BE INCLUDED IN COMPREHENSIVE SCOPE OF PO ONLY.
13. VISUAL CONTROL, SURFACE HARDNESS MEASUREMENT AND DOCUMENTATION SHOULD BE AS PER POINT 9 AND 11 OF STANDARD HW0993005.
14. TEST CERTIFICATES ARE REQUIRED TO BE PROVIDED BY VENDOR AT THE TIME OF DELIVERY.
15. BEFORE DISPATCH OF FINISHED BLADES, VENDOR MUST APPLY SUITABLE ANTIRUST AND DUST PREVENTIVE OIL.
16. SCOPE OF WORK AS PER TDC TBM/SC/2025/TDC/3B20250002 AND PQR TBM/SC/2025/PQR/3B20250002 IS APPLICABLE.
17. Please also refer clause no. 02 (Scope of Supply/Work) of ATC.

Seal and Signature of Supplier

**BHARAT HEAVY ELECTRICALS LIMITED
HARIDWAR-249403.****Buyer Added Bid Specific Additional Terms & Conditions (ATC)**

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

Any deviation to the below mentioned terms shall be stated specifically in the comment's 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).

SI No	BHEL Requirements	Supplier Acceptance/ Comments
01	Pre-Qualification Criteria: 1.1 Technical/ PQR (attached) 1.2 Integrity Pact- Not Applicable 1.3 Bidder must not be admitted under Corporate Insolvency Resolution Process or Liquidation as on date, by NCLT or any adjudicating authority/authorities, and shall submit undertaking (Annexure-4) to this effect. Explanatory Notes for the PQR (Pre-Qualifying Requirements): i. Credentials furnished by the bidder against "PRE-QUALIFYING CRITERIA" shall be verified from the issuing authority for its authenticity. In case, any credential (s) is/are found to be spurious, offer of the bidder is liable to be rejected. BHEL reserves the right to initiate any further action as per extant guidelines for Suspension of Business Dealings as applicable in BHEL. ii. Price Bids of only those bidders shall be opened who stand qualified after compliance of PQR.	
02	Scope of Supply/Work: 1. LASER HARDENING OF ITEMS WITH BHEL MATERAIL IS TO BE CARRIED OUT AS PER DRAWINGS/STANDARDS, TECHNICAL REQUIREMENTS AND QUALITY PLAN REQUIREMENTS. 2. APPLICABLE SPEC: HW19466. 3. ENQUIRY IS FOR INLET EDGE LASER HARDENING OF LP 3L AND 3R FIR TREE BLADES VIDE DRAWING NUMBER 0103075600200 AND 0103075600400 AND STANDARD HW0993005. 4. LASER HARDENING OF BOTH THE ITEMS (SL. NO. 1 & 2 – LP 3L AND 3R) IS TO BE DONE BY SAME SOURCE, i.e., ORDER OF BOTH THE ITEMS TO BE PLACED ON SAME VENDOR. ACCORDINGLY, L1 WILL BE DECIDED BASED ON LANDED COST TO BHEL FOR BOTH THE ITEMS COMBINED. 5. LASER HARDENING PROCESS TO BE DONE ON X5CRNICUNB16-4 (DIN 1.4542) MATERIAL TURBINE BLADES. 6. IDENTIFICATION MARKING, PACKING, INSURANCE & TRANSPORT OF BLADES FROM BHEL, HARIDWAR TO VENDOR WORKS AFTER PLACEMENT OF PO WILL BE UNDER SCOPE OF BHEL. 7. THE TENDER INCLUDES 2 PHASE TRIALS AS PER TENDER SPECIFICATION. 8. DOCUMENTS AND STANDARDS ARE TO BE COLLECTED BY VENDORS AGAINST NDA WITH BHEL BEFORE SUBMISSION OF TENDER. 9. COLLECTION OF TEST PIECE AND PROCESS QUALIFICATION BLADES WILL BE UNDER SCOPE OF VENDORS AS PER CLAUSE NUMBERS 3.1 AND 3.2 OF TENDER SPECIFICATION. 10. SUITABLE PACKING OF BLADES (E.G. BUBBLE WRAP PACKING ON INDIVIDUAL BLADES IN HONEY COMB WOODEN BOXES) TO BE DONE BY VENDOR DURING DELIVERY TO PROTECT THE BLADES FROM ANY PHYSICAL DAMAGE DURING TRANSIT. CLAUSE NUMBER 14 OF STANDARD HW0993005 IS TO BE REFERRED. 11. INSPECTION WILL BE AS PER QP. 12. THE SUPPLIED BLADES WILL BE IN ROOT MACHINED CONDITION WITH UN-MACHINED PROFILE TIP AS PER DRAWING 01030756999 VAR 01 & 02 (LEFT HAND AND RIGHT HAND). 13. EXTRA BLADES OF BOTH LEFT HAND AND RIGHT HAND SHALL BE PROVIDED BY BHEL AND TO BE USED BY VENDOR FOR PROCESS QUALIFICATION AND WILL BE PROVIDED AS PER CLAUSE 3.2 AND SUB CLAUSES AGAINST BANK GUARANTEE AFTER PLACEMENT OF PO FOR PROCESS QUALIFICATION. THE PROCESS QUALIFICATION WILL BE INCLUDED IN COMPREHENSIVE SCOPE OF PO ONLY.	

	14. VISUAL CONTROL, SURFACE HARDNESS MEASUREMENT AND DOCUMENTATION SHOULD BE AS PER POINT 9 AND 11 OF STANDARD HW0993005. 15. TEST CERTIFICATES ARE REQUIRED TO BE PROVIDED BY VENDOR AT THE TIME OF DELIVERY. 16. BEFORE DISPATCH OF FINISHED BLADES, VENDOR MUST APPLY SUITABLE ANTIRUST AND DUST PREVENTIVE OIL. 17. SCOPE OF WORK AS PER TDC TBM/SC/2025/TDC/3B20250002 AND PQR TBM/SC/2025/PQR/3B20250002 IS APPLICABLE. 18. FOR ITEM DETAILS (DESCRIPTION/DRG. NO./APPLICABLE SPEC./STANDARD/QTY. ETC.), PLEASE REFER ENCLOSED UNPRICED BID FORMAT (ANNEXURE-A).	
03	PRICE BASIS: Price in INR should be quoted for F.O.R. DESTINATION delivery to BHEL Haridwar GSTIN: 05AAACB4146P1ZL	
04	TAXES & DUTIES: 4.1 The Supplier/Vendor shall pay all (save the specific exclusions as enumerated in this clause) taxes, fees, license, charges, deposits, duties, tools, royalty, commissions, other charges, etc. which may be levied on the input goods & services consumed and output goods & services delivered in course of his operations in executing the contract. In case BHEL is forced to pay any of such taxes/duties, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit along with the applicable overheads @5% and interest on the total value (i.e. amount paid by BHEL + overhead). However, provisions regarding GST on output supply (goods/service) and TDS/TCS as per Income Tax Act shall be as per following clauses. 4.2 GST (Goods and Services Tax) 4.2.1 GST as applicable on output supply (goods/services) are excluded from Supplier/Vendor's scope; therefore, contractor's price/rates shall be exclusive of GST. Reimbursement of GST is subject to compliance of following terms and conditions. BHEL shall have the right to deny payment of GST and to recover any loss to BHEL on account of tax, interest, penalty etc. for non-compliance of any of the following condition. 4.2.2 The admissibility of GST, taxes and duties referred in this chapter or elsewhere in the contract shall be limited to direct transactions between BHEL & its Supplier/Vendor. BHEL shall not consider GST on any transaction other than the direct transaction between BHEL & its Supplier/Vendor. 4.2.3 Supplier/Vendor shall obtain prior written consent of BHEL before billing the amount towards such taxes. Where the GST laws permit more than one option or methodology for discharging the liability of tax/levy/duty, BHEL shall have the right to adopt the appropriate one considering the amount of tax liability on BHEL/Client as well as procedural simplicity with regard to assessment of the liability. The option chosen by BHEL shall be binding on the Contractor for discharging the obligation of BHEL in respect of the tax liability to the Supplier/Vendor. 4.2.4 Supplier/Vendor has to submit GST registration certificate of the concerned state. Supplier/Vendor also needs to ensure that the submitted GST registration certificate should be in active status during the entire contract period. 4.2.5 Supplier/Vendor has to issue Invoice/Debit Note/Credit Note indicating HSN/SAC code, Description, Value, Rate, applicable tax and other particulars in compliance with the provisions of relevant GST Act and Rules made thereunder. 4.2.6 Supplier/Vendor has to submit GST compliant invoice within the due date of invoice as per GST Law. In case of delay, BHEL reserves the right of denial of GST payment if there occurs any hardship to BHEL in claiming the input thereof. In case of goods, Supplier/Vendor has to provide scan copy of invoice & GR/LR/RR to BHEL before movement of goods starts to enable BHEL to meet its GST related compliances. Special care should be taken in case of month end transactions. 4.2.7 Supplier/Vendor has to ensure that invoice in respect of such services which have been provided/completed on or before end of the month should not bear the date later than last working day of the month in which services are performed. 4.2.8 Subject to other provisions of the contract, GST amount claimed in the invoice shall be released on fulfilment of all the following conditions by the Supplier/Vendor: - - Supply of goods and/or services have been received by BHEL. - Original Tax Invoice has been submitted to BHEL.	

	c) Supplier/Vendor has submitted all the documents required for processing of bill as per contract/purchase order/ work order. d) In cases where e-invoicing provision is applicable, Supplier/Vendor is required to submit invoice in compliance with e-invoicing provisions of GST Act and Rules made thereunder. e) Supplier/Vendor has filed all the relevant GST return (e.g. GSTR-1, GSTR-3B, etc.) pertaining to the invoice submitted and submit the proof of such return along with immediate subsequent invoice. In case of final invoice/ bill, contractor has to submit proof of such return within fifteen days from the due date of relevant return. f) Respective invoice has appeared in BHEL's GSTR - 2A for the month corresponding to the month of invoice and in GSTR-2B of the month in which such invoices has been reported by the contractor along with status of ITC availability as "YES" in GSTR-2B. Alternatively, BG of appropriate value may be furnished which shall be valid at least one month beyond the due date of confirmation of relevant payment of GST on GSTN portal or sufficient security is available to adjust the financial impact in case of any default by the Supplier/Vendor. g) Supplier/Vendor has to submit an undertaking confirming the payment of all due GST in respect of invoices pertaining to BHEL. 4.2.9 Any financial loss arises to BHEL on account of failure or delay in submission of any document as per contract/purchase order/work order at the time of submission of Tax invoice to BHEL, shall be deducted from Supplier/Vendor's bill or otherwise as deemed fit. 4.2.10 TDS as applicable under GST law shall be deducted from Supplier/Vendor's bill. 4.2.11 Supplier/Vendor shall comply with the provisions of e-way bill wherever applicable. Further wherever provisions of GST Act permits, all the e-way bills, road permits etc. required for transportation of goods needs to be arranged by the contractor. 4.2.12 Supplier/Vendor shall be solely responsible for discharging his GST liability according to the provisions of GST Law and BHEL will not entertain any claim of GST/interest/penalty or any other liability on account of failure of Supplier/Vendor in complying the provisions of GST Law or discharging the GST liability in a manner laid down thereunder. 4.2.13 In case declaration of any invoice is delayed by the vendor in his GST return or any invoice is subsequently amended/alterd/deleted on GSTN portal which results in any adverse financial implication on BHEL, the financial impact thereof including interest/penalty shall be recovered from the Supplier/Vendor's due payment. 4.2.14 Any denial of input credit to BHEL or arising of any tax liability on BHEL due to non-compliance of GST Law by the Supplier/Vendor in any manner, will be recovered along with liability on account of interest and penalty (if any) from the payments due to the Supplier/Vendor. 4.2.15 In the event of any ambiguity in GST law with respect to availability of input credit of GST charged on the invoice raised by the contractor or with respect to any other matter having impact on BHEL, BHEL's decision shall be final and binding on the Supplier/Vendor. 4.2.16 Variation in Taxes & Duties: Any upward variation in GST shall be considered for reimbursement provided supply of goods and services are made within schedule date stipulated in the contract or approved extended schedule for the reason solely attributable to BHEL. However downward variation shall be subject to adjustment as per actual GST applicability. In case the Government imposes any new levy/tax on the output service/goods after price bid opening, the same shall be reimbursed by BHEL at actual. The reimbursement under this clause is restricted to the direct transaction between BHEL and its Supplier/Vendor only and within the contractual delivery period only. In case any new tax/levy/duty etc. becomes applicable after the date of Bidder's offer but before opening of the price Bid, the Bidder/ Supplier/Vendor must convey its impact on his price duly substantiated by documentary evidence in support of the same before opening of price bid. Claim for any such impact after opening the price bid will not be considered by BHEL for reimbursement of tax or reassessment of offer. 4.3 Income Tax: TDS/TCS as applicable under Income Tax Act, 1961 or rules made thereunder shall be deducted/collected from Supplier/Vendor's bill. 4.4 Supplier HSN Code & Applicable GST % (To be filled by Supplier) _____	
05	MATERIAL DISPATCH CLEARANCE CERTIFICATE (MDCC): Not Applicable	

06	INSPECTION / INSPECTION & TESTING AT SUPPLIERS WORKS: BHEL reserves the right to inspect the material during manufacturing and also to get tested the material under dispatch from third party. The test results of third party test shall be final and binding on the Supplier/Vendor. BHEL will reserve the right to inspect/test the material during/after manufacturing at suppliers' works, and/or at BHEL Site. In case of rejection at any stage, Supplier/Vendor shall be liable to replace the materials at his own cost. Vendor should raise inspection call for BHEL / TPI inspection at least 4 days in advance to the planned date of inspection. if customer inspection is envisaged at vendor's works, vendor should give inspection call at least 7 days in advance to the planned date of inspection.									
07	DELIVERY: Within 60 days of receipt of materials from BHEL Haridwar at vendor's works. NOTE: If the delivery of supply as detailed above gets delayed beyond the delivery period, the Supplier/Vendor shall request for a delivery extension and BHEL at its discretion may extend the Contract. However, if any 'Delivery extension' is granted to the Supplier/Vendor for completion of supply, due to backlog attributable to the Supplier/Vendor, then it shall be without prejudice to the rights of BHEL to impose LD for the delays attributable to the Supplier/Vendor.									
08	TRANSIT INSURANCE & FREIGHT: Transit Insurance of material is in BHEL scope. A. Transportation of BHEL Material: By BHEL at vendor works on freight paid basis. B. Delivery basis: Delivery of finished item must essentially be FOR BHEL Haridwar basis. Freight for sending finished components from vendor works to BHEL Haridwar shall be borne by vendor at its own cost & responsibility.									
09	PAYMENT TERMS: a) Payment: 90% payment will be done after receipt and acceptance of items in HEEP, BHEL, Haridwar and balance 10% payment will be done after final accountal of materials (i.e. Scrap Accountal). Currency of payment will be Indian Rupees (₹). Quotation containing payment term other than above, is liable to be rejected. The payment shall be made within no. of days as defined in the below table from appointed day <table><tr><td>Type of Bidder</td><td>Within Number of Days</td></tr><tr><td>Micro & Small Enterprises (MSEs)</td><td>45 Days</td></tr><tr><td>Medium Enterprises</td><td>60 Days</td></tr><tr><td>Non MSME</td><td>90 Days</td></tr></table> Appointed day means • The day of delivery of material i.e. C-Note Date, subject to submission of non-discrepant documents by vendor as per Purchase Order. or • Where there is any objection regarding acceptance of goods, the same shall be informed to supplier within fifteen days from the day of the delivery of good. Appointed day will be the day on which such objection is removed by the supplier. However, GST amount shall be reimbursed in line with compliance to Cl. No. 4 (Taxes & Duties) above. b) NO INTEREST PAYABLE TO CONTRACTOR No interest shall be payable on the security deposit or any other money due to the Supplier.	Type of Bidder	Within Number of Days	Micro & Small Enterprises (MSEs)	45 Days	Medium Enterprises	60 Days	Non MSME	90 Days	
Type of Bidder	Within Number of Days									
Micro & Small Enterprises (MSEs)	45 Days									
Medium Enterprises	60 Days									
Non MSME	90 Days									
10	DOCUMENTS REQUIRED FOR BILL PROCESSING: The following documents are required to be sent with Material Dispatch/Billing Documents: • Original Tax Invoice in TRIPLICATE (As per Cl. No. 4 above). • Guarantee Certificate • Inspection Report • GST compliance certificate in BHEL Prescribed Format • Running Tally Sheet (RTS) in BHEL Prescribed Format									

11	BANK DETAILS FOR EMD, PERFORMANCE SECURITY SUBMISSION AND OTHER PURPOSE: For Electronic Fund Transfer the details are as below: a) Name of the Beneficiary: Bharat Heavy Electricals Limited b) Bank Particulars: Name of the Company - BHARAT HEAVY ELECTRICALS LTD. Address of the company – HEEP Haridwar 249403 Name of the bank - STATE BANK OF INDIA Bank branch - RANIPUR BRANCH City HARIDWAR Branch code - 000586 Account Number – 10667995458 Account type - CC IFSC code - SBIN0000586 MICR code – 249002005	
12	EARNEST MONEY DEPOSIT: Not Applicable	
13	PERFORMANCE SECURITY: Not Applicable	
14	BREACH OF CONTRACT, REMEDIES AND TERMINATION: 14.1 The following shall amount to breach of contract: I. Non-supply of material/ non-completion of work by the Supplier/Vendor within scheduled delivery/ completion period as per contract or as extended from time to time. II. The Supplier/Vendor fails to perform as per the activity schedule and there are sufficient reasons even before expiry of the delivery/ completion period to justify that supplies shall be inordinately delayed beyond contractual delivery/ completion period III. The Supplier/Vendor delivers equipment/ material not of the contracted quality. IV. The Supplier/Vendor fails to replace the defective equipment/ material/ component as per guarantee clause. V. Withdrawal from or abandonment of the work by the Supplier/Vendor before completion as per contract. VI. Assignment, transfer, subletting of Contract by the Supplier/Vendor without BHEL's written permission resulting in termination of Contract or part thereof by BHEL. VII. Non-compliance to any contractual condition or any other default attributable to Supplier/Vendor. VIII. Any other reason(s) attributable to Vendor towards failure of performance of contract. In case of breach of contract, BHEL shall have the right to terminate the Purchase Order/ Contract either in whole or in part thereof without any compensation to the Supplier/Vendor. IX. Any of the declarations furnished by the contractor at the time of bidding and/ or entering into the contract for supply are found untruthful and such declarations were of a nature that could have resulted in non-award of contract to the contractor or could expose BHEL and/ or Owner to adverse consequences, financial or otherwise. X. Supplier/Vendor is convicted of any offence involving corrupt business practices, antinational activities or any such offence that compromises the business ethics of BHEL, in violation of the Integrity Pact entered into with BHEL has the potential to harm the overall business of BHEL/ Owner. Note- Once BHEL considers that a breach of contract has occurred on the part of Supplier/Vendor, BHEL shall notify the Supplier/Vendor by way of notice in this regard. Contractor shall be given an opportunity to rectify the reasons causing the breach of contract within a period of 14 days. In case the contractor fails to remedy the breach, as mentioned in the notice, to the satisfaction of BHEL, BHEL shall have the right to take recourse to any of the remedial actions available to it under the relevant provisions of contract. 14.2 Remedies in case of Breach of Contract.	

	i. Wherein the period as stipulated in the notice issued under clause 14.1 has expired and Supplier/Vendor has failed to remedy the breach, BHEL will have the right to terminate the contract on the ground of "Breach of Contract" without any further notice to contractor. ii. Upon termination of contract, BHEL shall be entitled to recover an amount equivalent to 10% of the Contract Value for the damages on account of breach of contract committed by the Supplier/Vendor. This amount shall be recovered by way of encashing the security instruments like performance bank guarantee etc available with BHEL against the said contract. In case the value of the security instruments available is less than 10% of the contract value, the balance amount shall be recovered from other financial remedies (i.e. available bills of the Supplier/Vendor, retention amount, from the money due to the Supplier/Vendor etc. with BHEL) or the other legal remedies shall be pursued. iii. wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is 10% of the contract value or more, such security instruments to the extent of 10% contract value will be encashed. In case no security instruments are available or the value of the security instruments available is less than 10% of the contract value, the 10% of the contract value or the balance amount, as the case may be, will be recovered in all or any of the following manners: iv. In case the amount recovered under sub clause (a) above is not sufficient to fulfil the amount recoverable then; a demand notice to deposit the balance amount within 30 days shall be issued to Supplier/Vendor. v. If Supplier/Vendor fails to deposit the balance amount within the period as prescribed in demand notice, following action shall be taken for recovery of the balance amount: a) from dues available in the form of Bills payable to defaulted Supplier/Vendor against the same contract. b) If it is not possible to recover the dues available from the same contract or dues are insufficient to meet the recoverable amount, balance amount shall be recovered from any money(s) payable to Supplier/Vendor under any contract with other Units of BHEL including recovery from security deposits or any other deposit available in the form of security instruments of any kind against Security deposit or EMD. vi. In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against defaulted supplier/Vendor. vii. It is an agreed term of contract that this amount shall be a genuine pre-estimate of damages that BHEL would incur in completion of balance contractual obligation of the contract through any other agency and BHEL will not be required to furnish any other evidence to the Supplier/Vendor for the purpose of estimation of damages. viii. In addition to the above, imposition of liquidated damages, debarment, termination, de-scoping, short-closure, etc., shall be applied as per provisions of the contract. Note: The defaulting Supplier/Vendor shall not be eligible for participation in any of the future enquiries floated by BHEL to complete the balance work. The defaulting contractor shall mean and include: (a) In case defaulted Supplier/Vendor is the Sole Proprietorship Firm, any Sole Proprietorship Firm owned by same Sole Proprietor. (b) In case defaulted Supplier/Vendor is The Partnership Firm, any firm comprising of same partners/ some of the same partners; or sole proprietorship firm owned by any partner(s) as a sole proprietor. LD against delay in executed supply in case of Termination of Contract: LD against delay in executed supply shall be calculated in line with LD clause no. 18.0 below, for the delay attributable to Supplier/Vendor. For limiting the maximum value of LD, contract value shall be taken as Executed Value of supply till termination of contract. Method for calculation of "LD against delay in executed supply in case of termination of contract" is given below. i. Let the time period from scheduled date of start of supply till termination of contract excluding the period of Hold (if any) not attributable to contractor = T1 ii. Let the value of executed supply till the time of termination of contract= X iii. Let the Total Executable Value of supply for which inputs/fronTS were made available to Supplier/Vendor and were planned for execution till termination of contract = Y iv. Delay in executed supply attributable to Supplier/Vendor i.e. $T2 = [1 - (X/Y)] \times T1$	
--	---	--

	v. LD shall be calculated in line with LD clause (clause 18.0) of the Contract for the delay attributable to Supplier/Vendor taking "X" as Contract Value and "T2" as period of delay attributable to Supplier/Vendor.																			
15	BILL TO ADDRESS: To Manager (AIX-Turbine) HEEP Haridwar Uttrakhand-249403		SHIP TO ADDRESS: To Manager Store (CSX) HEEP Haridwar Uttrakhand-249403																	
16	GUARANTEE/WARRANTY: Guarantee period for Supply of material shall be 18 calendar months from the date of last dispatch. Vendor should submit Guarantee Certificate along with each supply of components. Components shall warrant for requirements as per BHEL drawings and other technical conditions. If the same are found defective owing to faulty workmanship/incomplete work within a period of 18 Months from the date of receipt, the supplier shall make good of it / replace/ repair/ complete the same free of cost. If rework/ repairing/Completion etc. is done by BHEL, the charges for same shall be deducted from the Sub-Contractor account.																			
17	MICRO AND SMALL ENTERPRISES (MSE): Any Bidder falling under MSE category shall furnish the following details & submit documentary evidence/ Govt. Certificate etc. in support of the same along with their techno-commercial offer. <table border="1"><thead><tr><th>Type under MSE</th><th>UDYAM No</th><th>SC/ST Owned</th><th>Women Owned</th><th>Others (Excluding SC/ST/Women)</th></tr></thead><tbody><tr><td>Micro</td><td></td><td></td><td></td><td></td></tr><tr><td>Small</td><td></td><td></td><td></td><td></td></tr></tbody></table> Note: If the bidder does not furnish the above, offer shall be processed construing that the bidder is not falling under MSE category. MSE suppliers can avail the intended benefits in respect of the procurements related to the Goods and Services only (Definition of Goods and Services as enumerated by Govt. of India vide Office Memorandum F. No. 21(8)/2011-MA dtd. 09/11/2016 office of AS & DC, MSME) only if they submit along with the offer, attested copies of either Udyam Registration. Date to be reckoned for determining the deemed validity will be the last date of Technical Bid submission. Non-submission of supporting document in NIC portal will lead to consideration of their bids at par with other bidders. No benefits shall be applicable for this enquiry if the above required documents are not uploaded at the time of bid submission. Documents submitted by the bidder shall be verified by BHEL for rendering the applicable benefits.				Type under MSE	UDYAM No	SC/ST Owned	Women Owned	Others (Excluding SC/ST/Women)	Micro					Small					
Type under MSE	UDYAM No	SC/ST Owned	Women Owned	Others (Excluding SC/ST/Women)																
Micro																				
Small																				
18	LIQUIDATED DAMAGE: Liquidated Damages, wherever referred under this Tender/Agreement, shall mean and refer to the damages, not in the nature of penalty, which the contractor agrees to pay in the event of delay in delivery of supplies, breach of contract etc. as the case may be. Liquidated Damages leviable upon the Supplier/Vendor is a sum which is agreed by the parties as a reasonable and genuine pre-estimate of damages which will be suffered by BHEL on account of delay/breach on the part of the Supplier/Vendor. If the Seller/Service Provider fails to deliver any or all of the Goods/Services within the original/re-fixed delivery period(s) specified in the contract/PO, the Buyer/BHEL will be entitled to deduct/recover the Liquidated Damages for the delay, unless covered under Force Majeure conditions aforesaid, @ 0.5% of the contract value of delayed quantity per week or part of the week of delayed period as pre-estimated damages not exceeding 10% of the contract value of delayed quantity without any controversy/dispute of any sort whatsoever.																			
19	INTEGRITY PACT (IP): Not Applicable																			
20	PREFERENCE TO MAKE IN INDIA: For this procurement, the local content to categorize a Supplier/Vendor as a Class I local supplier/ Class II local Supplier/Non-Local Supplier and purchase preferences to Class I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 19.07.2024 issued by DPIIT. In case of																			

subsequent orders issued by the nodal ministry, changing the definition of local content for the items of the Bid, the same shall be applicable even if issued after issue of this Bid, but before opening of Part-II bids against this Bid.

For contracts valuing more than Rs 10 Crores, local content (in cases of self-certification submitted by bidders at the time of tendering) will be re-verified during execution of contract by Cost/ Chartered Accountant, and in case of defaults, penalty upto 10% of the contract value shall be imposed.

20.1 Compliance to Restrictions under Rule 144 (xi) of GFR 2017:

I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. The Competent Authority for the purpose of this Clause shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "Bidder from a country which shares a land border with India" for the purpose of this Clause means: -

- An entity incorporated established or registered in such a country; or
- A subsidiary of an entity incorporated established or registered in such a country; or
- An entity substantially controlled through entities incorporated, established or registered in such a country; or
- An entity whose beneficial owner is situated in such a country; or
- An Indian (or other) agent of such an entity; or
- A natural person who is a citizen of such a country; or
- A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

IV. The beneficial owner for the purpose of (III) above will be as under:

- In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation

- "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company.
 - "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.
- In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership.
 - In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person has ownership of or entitlement to more than fifteen percent of the property or capital or profits of the such association or body of individuals.
 - Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
 - In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
 - The bidder shall provide undertaking for their compliance to this Clause, in the format provided in Annexure-13.
 - Registration of the bidder with Competent Authority should be valid at the time of submission of bids and at the time of acceptance of the bids

21	Settlement of Dispute: If any dispute or difference of any kind whatsoever shall arise between BHEL and the Supplier/Vendor, arising out of the contract for the performance of the work whether during the progress of contract termination, abandonment or breach of the contract, it shall in the first place referred to Designated Engineer for amicable resolution by the parties. Designated Engineer (to be nominated by BHEL for settlement of disputes arising out of the contract) who within 60 days after being requested shall give written notice of his decision to the contractor. Save as hereinafter provided, such decision in respect of every matter so referred shall forthwith be given effect to by the Supplier/Vendor who shall proceed with the work with all due diligence, whether he or BHEL desires to resolve the dispute as hereinafter provided or not. If after the Designated Engineer has given written notice of this decision to the party and no intention to pursue the dispute has been communicated to him by the affected party within 30 days from the receipt of such notice, the said decision shall become final and binding on the parties. In the event the Supplier/Vendor being dissatisfied with any such decision or if amicable settlement cannot be reached then all such disputed issues shall be resolved through conciliation in terms of the BHEL Conciliation Scheme 2018 as per Clause 21.1 21.1 Conciliation: Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "Dispute") shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure as per BHEL Conciliation Scheme 2018. 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 - "Procedure for conduct of conciliation proceedings" (as available in www.bhel.com)). Note: Ministry of Finance has issued OM reference No. 1/2/24 dated 03.06.2024 regarding "Guidelines for Arbitration and Mediation in Contracts of Domestic Public Procurement. In the said OM it has been recommended that Government departments/ Entities/agencies are to encourage mediation under the Mediation Act. 2023. The said Act has not yet been notified by the Government. Therefore, the clause "Settlement of Disputes" shall be modified accordingly as and when the Mediation Act 2023 gets notified. 21.2 ARBITRATION: 21.2.1 Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided in Clause 21.1 herein above or otherwise) 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 (hereinafter referred to as the 'Dispute'), then, either Party may, refer the disputes to Delhi International Arbitration Centre (DIAC) and such dispute to be adjudicated by Sole Arbitrator appointed in accordance with the Rules of said Arbitral Institution. 21.2.2 A party willing to commence arbitration proceeding shall invoke Arbitration Clause by giving notice to the other party in terms of section 21 of the Arbitration & Conciliation Act, 1996 (hereinafter referred to as the 'Notice') before referring the matter to arbitral institution. The Notice shall be addressed to the Head of the Unit, BHEL, executing the Contract and shall contain the particulars of all claims to be referred to arbitration with sufficient detail and shall also indicate the monetary amount of such claim including interest, if any. 21.2.3 After expiry of 30 days from the date of receipt of aforesaid notice, the party invoking the Arbitration shall submit that dispute to the Arbitral Institution- Delhi International Arbitration Centre (DIAC)- and that dispute shall be adjudicated in accordance with their respective Arbitration Rules. The matter shall be adjudicated by a Sole Arbitrator who shall necessarily be a Retd. Judge having considerable experience in commercial matters to be appointed/nominated by the respective institution. The cost/expenses pertaining to the said Arbitration shall also be governed in accordance with the Rules of the respective Arbitral Institution. The decision of the party invoking the Arbitration for reference of dispute to Delhi International Arbitration Centre (DIAC)-for adjudication of that dispute shall be final and binding on both the parties and shall not be subject to any change thereafter. The institution once selected at the time of invocation of dispute shall remain unchanged. 21.2.4 The fee and expenses shall be borne by the parties as per the Arbitral Institutional rules.	
----	--	--

	21.2.5 The Arbitration proceedings shall be in English language and the seat of Arbitration shall be Haridwar. 21.2.6 Subject to the above, the provisions of Arbitration & Conciliation Act 1996 and any amendment thereof shall be applicable. All matters relating to this Contract and arising out of invocation of Arbitration clause are subject to the exclusive jurisdiction of the Court(s) situated at Haridwar. 21.2.7 Notwithstanding any reference to the Designated Engineer or Conciliation or Arbitration herein, a. the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree. Settlement of Dispute clause cannot be invoked by the Contractor, if the Contract has been mutually closed or 'No Demand Certificate' has been furnished by the Contractor or any Settlement Agreement has been signed between the Employer and the Contractor. 21.2.8 It is agreed that Mechanism of resolution of disputes through arbitration shall be available only in the cases where the value of the dispute is less than Rs. 10 Crores. 21.2.9 In case the disputed amount Claim, Counter claim including interest is Rs. 10 crores and above, the parties shall be within their rights to take recourse to remedies other than Arbitration, as may be available to them under the applicable laws after prior intimation to the other party. Subject to the aforesaid conditions, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof as amended from time to time, shall apply to the arbitration proceedings under this clause. 21.2.10 In case, multiple arbitrations are invoked (whether sub-judice or arbitral award passed) by any party to under this contract, then the cumulative value of claims (including interest claimed or awarded) in all such arbitrations shall be taken in account while arriving at the total claim in dispute for the subject contract for the purpose of clause 14.2.9. Disputes having cumulative value of less than 10 crores shall be resolved through arbitration and any additional dispute shall be adjudicated by the court of competent jurisdiction. 21.3 In case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable: 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 resolution through AMRCD (Administrative Mechanism for Resolution	
22	JURISDICTION Subject to clause 21 of this contract, the Civil Court having original Civil Jurisdiction at Haridwar, Uttarakhand shall alone have exclusive jurisdiction in regard to all matters in respect of the Contract. GOVERNING LAWS `1 The contract shall be governed by the Law for the time being in force in the Republic of India.	
23	FORCE MAJEURE 23.1 "Force Majeure" shall mean circumstance which is: - beyond control of either of the parties to contract, - either of the parties could not reasonably have provided against the event before entering into the contract, - having arisen, either of the parties could not reasonably have avoided or overcome, and - not substantially attributable to either of the parties and Prevents the performance of the contract, such circumstances include but shall not be limited to: - War, hostilities, invasion, act of foreign enemies. - Rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war. - Riot, commotion or disorder by persons other than the contractor's personnel and other employees of the contractor and sub-contractors. - Strike or lockout not solely involving the contractor's personnel and other employees of the contractor and sub-contractors. - Encountering munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the contractor's use of such munitions, explosives, radiation or radio- activity. - Natural catastrophes such as earthquake, tsunami, volcanic activity, hurricane or typhoon, flood, fire, cyclones etc. - Epidemic, pandemic etc.	

	23.2 The following events are explicitly excluded from Force Majeure and are solely the responsibilities of the non-performing party: a) any strike, work-to-rule action, go-slow or similar labour difficulty (b) late delivery of equipment or material (unless caused by Force Majeure event) and (c) economic hardship. 23.3 If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within 15 (fifteen) days after the occurrence of such event. 23.4 The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered or delayed. The Time for Completion shall be extended by a period of time equal to period of delay caused due to such Force Majeure event. 23.5 Delay or non-performance by either party hereto caused by the occurrence of any event of Force Majeure shall not i) Constitute a default or breach of the Contract. ii) Give rise to any claim for damages or additional cost expense occasioned thereby, if and to the extent that such delay or non-performance is caused by the occurrence of an event of Force Majeure. 23.6 BHEL at its discretion may consider short closure of contract after 1 year of imposition of Force Majeure in line with extant guidelines. In any case, Supplier/Vendor cannot consider deemed short-closure after 1 year of imposition of Force Majeure.									
24	Non-Disclosure Agreement: The bidders shall enter into the Non-disclosure agreement separately.									
25	Cartel Formation 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.									
26	Fraud Prevention Policy Bidder along with its associate /collaborators /sub-contractors /sub-vendors / consultants / service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website http://www.bhel.com and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice.									
27	Suspension of Business Dealings with Suppliers / Contractors: 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 website www.bhel.com . 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(Bhartiya Nyaya Samhita 2023) or any other law in force in India, or does anything which is actionable under the Guidelines for Suspension of Business dealings, 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: http://www.bhel.com/vender_registration/vender.php .									
28	Bid should be free from correction, overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else bid shall be liable for rejection. In the event of any Technical or Commercial queries, the same may please be addressed to the following BHEL concerned before Part I opening- <table><tr><td>Arnabh Chakraborty/Engineer (AIX-T)</td><td>Nadeem Ali/Dy. Manager (AIX-T)</td></tr><tr><td>Email ID: arnabh@bhel.in</td><td>Email ID: nadeem@bhel.in</td></tr><tr><td>Landline: 01334-285623</td><td>Landline: 01334-285623</td></tr><tr><td>Mobile: 9818570819</td><td>Mobile: 9627371380</td></tr></table>	Arnabh Chakraborty/Engineer (AIX-T)	Nadeem Ali/Dy. Manager (AIX-T)	Email ID: arnabh@bhel.in	Email ID: nadeem@bhel.in	Landline: 01334-285623	Landline: 01334-285623	Mobile: 9818570819	Mobile: 9627371380	
Arnabh Chakraborty/Engineer (AIX-T)	Nadeem Ali/Dy. Manager (AIX-T)									
Email ID: arnabh@bhel.in	Email ID: nadeem@bhel.in									
Landline: 01334-285623	Landline: 01334-285623									
Mobile: 9818570819	Mobile: 9627371380									

29	Order of Precedence: In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below: a. Amendments/Clarifications/Corrigenda/Errata etc. issued in respect of the tender documents by BHEL. b. Buyer Added Bid Specific ATC c. Special conditions of the contract c. Technical Conditions of Contract (TCC) d. GISTC	
30	Quality Requirements: • Ordering shall be done on BHEL Haridwar accepted sub-contractors only. • Inspection by BHEL as per drawing /Standard/TDC and quality plan requirements. • Sub-contractor to provide a summary sheet of documents/TCs for correlation. • Sub-contractor to mention relevant QP clauses on all TCs/reports for every lot. • Applicable Quality plan: QP/QA/20250009 rev 01 Dated 13.05.2025 (as enclosed).	
31	Scrap: Scrap generated during the machining operation is to be retained by the vendor free of cost (Treated as Deemed Sales) and vendor must adjust/pass on the benefit to BHEL while quoting the rates. Scrap generated during the machining operation is non-chargeable, only GST and applicable taxes on scrap value will be recovered from vendor's end. The scrap rate will be calculated based on the monthly market scrap price Published in MSTC Bulletin/any other document under category of scrap. The difference between raw material weight and finalized weight shall be considered for the calculation of scrap generation.	
32	Validity: Validity of the offer should be minimum 120 days from tender opening date.	
33	Order Acknowledgement (If order awarded): In case order acknowledgement is not received within 7 days, purchase order will be deemed to be accepted by vendor.	
34	Submission of Bank Guarantee and Indemnity bond for free issue material: Bank Guarantee (BG) of value ₹ 8.34 Lacs and Indemnity Bond (IB) of value ₹ 158.52 Lacs in BHEL prescribed format should be submitted. Without submission of Bank Guarantee and Indemnity Bond, materials shall not be handed over to vendor. (The value of Bank Guarantee and Indemnity Bond is for complete quantities of all items of the enquiry. The vendor has to submit the Bank Guarantee and Indemnity Bond for the value of item quantities issued/ordered on him, which will be communicated to vendor separately after placement of order). BHEL reserves the right to ask for the Bank Guarantee and Indemnity Bond for increased amount depending upon the material availability with the SUB-CONTRACTOR from time to time.	

35	Conflict of interest: 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: a) they have controlling partner (s) in common; or b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or c) they have the same legal representative/agent for purposes of this bid; or 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; or</u> 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/ subassembly/ Assemblies from. one bidding manufacturer in more than one bid; or</u> 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: 1. The principal manufacturer directly or through one Indian agent on his behalf; and 2. Indian/foreign agent on behalf of only one principal; or 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 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. "	
36	Compliances of GISTC: Bidder/Vendor has to ensure the submission of their offer for Tender Enquiry only after the compliances of BHEL Haridwar's Buyer Added Bid Specific Additional Terms & Conditions, Special terms and conditions, Technical specifications and requirements, Latest Version of GENERAL INSTRUCTIONS AND STANDARD TERMS & CONDITIONS (GISTC). Please visit our site https://hwr.bhel.com/bhelweb/CodeFiles/gistc.jsp for Latest Version of General Instructions and Standard Terms & Conditions (GISTC) for Tender Enquiries	
37	Reverse Auction: BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on https://www.bhel.com/sites/default/files/Guidelines%20for%20Reverse%20Auction%20-%202024.pdf) for this tender. RA shall be conducted among the techno-commercially qualified bidders. Price bids of all techno-commercially qualified bidders shall be opened 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.	
38	Details of Contact Person Name, Designation, Department complete postal, E-mail address & Fax no, phone, Mobile no. to be mentioned.	
39	Method of Evaluation: Package-wise as defined in clause sl. no. 2 (Scope of Supply/Work).	
40	Note: 1. 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 at any stage of execution. 2. BHEL may negotiate the L1 rate, if not meeting our budget / estimated cost. BHEL may re-float the tender opened, if L1 price is not acceptable to BHEL even after negotiation. Any deviation from the conditions specified in TECHNO-COMMERCIAL TERMS AND CONDITIONS - Buyer Added Bid Specific Additional Terms & Conditions (ATC), Special terms and conditions, Technical specifications and requirements, Latest Version of GENERAL INSTRUCTIONS AND STANDARD TERMS & CONDITIONS (GISTC) will lead to rejection of offer. 3. 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 vendors account. BHEL will not reimburse the same and any subsequent claim in this respect will be summarily rejected. 4. BHEL reserves its right to reject an offer due to unsatisfactory past performance by the respective Vendor in the execution of any contract to any BHEL project / Unit.	

	5. The offers of the bidders who are under suspension and 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. 6. Recovery / deduction as applicable as per Direct and Indirect taxes as notified by Govt. Of India from time to time will be made and information/certificate for such deduction/recoveries shall be provided by BHEL to the vendor.	
41	Enclosures: Annexure-1: Check List. Annexure-2: Offer forwarding letter / tender submission letter Annexure-3: No Deviation Certificate Annexure-4: Declaration regarding Insolvency/ Liquidation/ Bankruptcy Proceedings Annexure-5: Declaration by Authorized Signatory Annexure-6: Declaration by Authorized Signatory regarding Authenticity of submitted Documents Annexure-10: Declaration reg. Related Firms & their areas of Activities Annexure-11: Declaration for relation in BHEL Annexure- 12: Declaration reg. minimum local content in line with revised public procurement Annexure- 13: Declaration regarding compliance to Restrictions under Rule 144 (xi) of GFR 2017 Annexure-15: Power of Attorney for submission of tender.	
Vendor's Signature and seal		

1.1.1 ANNEXURE- 1

CHECK LIST

TENDER REFERENCE NO.: X/3391/2025/0009/O/1

NOTE: - Suppliers are required to fill in the following details in their Letterhead and no column should be left blank

A	Name and Address of the Supplier		
B	GSTN No. of the Supplier (Place of Execution of Contract / Purchase Order)		
C	Details of Contact person for this Tender	Name: Mr./ Ms. Designation: Telephone No: Mobile No: Email ID:	
D	EMD DETAILS	Not Applicable	
E	DESCRIPTION	APPLICABILITY (BY BHEL)	ENCLOSED BY BIDDER
i.	Whether Pre - Qualification Criteria is understood and provided proper supporting documents.	Applicable/ Not Applicable	YES / NO
ii.	Whether all pages of the Tender documents including annexures, appendices etc are read and understood	Applicable/ Not Applicable	YES / NO
iv.	Copy of PAN Card & GST registration	Applicable/ Not Applicable	YES / NO
v.	Submission of MSE certificate as specified in Tender	Applicable/ Not Applicable	YES / NO
vi.	Offer forwarding letter / tender submission letter as per Annexure – 2	Applicable/ Not Applicable	YES / NO
vii.	Submission of Certificate of No Deviation as per Annexure – 3	Applicable/ Not Applicable	YES / NO
viii.	Declaration regarding Insolvency/ Liquidation/ Bankruptcy Proceedings as per Annexure – 4	Applicable/ Not Applicable	YES / NO
ix.	Declaration by Authorized Signatory as per Annexure – 5	Applicable/ Not Applicable	YES / NO
x.	Declaration by Authorized Signatory regarding Authenticity of submitted Documents Annexure – 6	Applicable/ Not Applicable	YES / NO

xii.	Submission of Integrity Pact as specified in Tender as per Annexure – 8	Applicable / Not Applicable	YES / NO
xiv.	Declaration reg. Related Firms & their areas of Activities as per Annexure – 10	Applicable / Not Applicable	YES / NO
xv.	Declaration for relation in BHEL as per Annexure – 11	Applicable / Not Applicable	YES / NO
xvi.	Declaration reg. minimum local content in line with revised public procurement as per Annexure – 12	Applicable / Not Applicable	YES / NO
xvii.	Declaration regarding compliance to Restrictions under Rule 144 (xi) of GFR 2017 as per Annexure – 13	Applicable / Not Applicable	YES / NO
xviii.	Bank Account Details for E-Payment as per Annexure – 14	Applicable / Not Applicable	YES / NO
xix.	Power of Attorney for submission of tender as per Annexure – 15	Applicable / Not Applicable	YES / NO
xx.	Proforma of Bank Guarantee for Earnest Money as per Annexure – 16	Applicable / Not Applicable	YES / NO
xxi.	Bank Guarantee for security deposit- As per Annexure-17	Applicable / Not Applicable	YES / NO
xxii.	List of Consortium Bank- As per Annexure-18	Applicable / Not Applicable	YES / NO

NOTE: Strike off ‘YES’ or ‘NO’, as applicable. Tender not accompanied by the prescribed above applicable documents are liable to be summarily rejected.

DATE:

Sign. of the AUTHORISED SIGNATORY
(With Name, Designation and Company seal)

ANNEXURE - 2

OFFER FORWARDING LETTER / TENDER SUBMISSION LETTER

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

Offer Reference No:

Date:

To,
Manager / AIX-T
3rd Floor, Main Admin building HEEP Haridwar-249403
Uttarakhand. Phone: 01334-285623,
Email: arnabh@bhel.in

Dear Sir,

Sub: Submission of Offer against Tender Reference No: **X/3391/2025/0009/O/1**

Having examined the tender documents against your Tender Reference No.dt..... and having understood the provisions of the said tender documents and having thoroughly studied the requirements of BHEL related to the work tendered for, in connection with, we hereby submit our offer for the proposed work in accordance with terms and conditions mentioned in the tender documents, at the prices quoted by us and as per the indicated delivery schedule.

Should our Offer be accepted by BHEL for Award, I/we further agree to furnish 'Security Deposit' for the work as provided for in the Tender Conditions within the stipulated time as may be indicated by BHEL.

I/We further agree to execute all the works referred to in the said Tender documents upon the terms and conditions contained or referred to therein and as detailed in the appendices annexed thereto.

I/We have deposited herewith the requisite Earnest Money Deposit (EMD) as per details furnished in the Check List.

Authorized Representative of Bidder

Signature:

Name:

Address:

Place:

Date:

ANNEXURE- 3

CERTIFICATE OF NO DEVIATION

(To be Typed & submitted in the Letter Head of the Company/Firm of Bidder)

To,

Manager / AIX-T
3rd Floor, Main Admin building HEEP Haridwar-249403
Uttarakhand. Phone: 01334-285623,
Email: arnabh@bhel.in

Dear Sir,

Subject: No Deviation Certificate

Ref:

- 1) Tender Reference No: **X/3391/2025/0009/O/1**
- 2) All other pertinent issues till date

We hereby confirm that we have not changed/ modified/materially altered any of the tender documents as downloaded from the website/ issued by BHEL and in case of such observance at any stage, it shall be treated as null and void.

We also hereby confirm that we have neither set any Terms and Conditions and nor have we taken any deviation from the Tender conditions together with other references applicable for the above referred Bid.

We further confirm our unqualified acceptance to all Terms and Conditions, unqualified compliance to Tender Conditions.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.
Thanking you,

Yours faithfully,

(Signature, date & seal of authorized representative of the bidder)

Date:

Place:

ANNEXURE- 4

UNDERTAKING

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

Manager / AIX-T
3rd Floor, Main Admin building HEEP Haridwar-249403
Uttarakhand. Phone: 01334-285623,
Email: arnabh@bhel.in

Dear Sir/Madam,

Sub: DECLARATION REGARDING INSOLVENCY/ LIQUIDATION/ BANKRUPTCY
PROCEEDINGS

Ref: Tender Reference No: **X/3391/2025/0009/0/1**

I/We, declare that, I/We am/are not under insolvency resolution process or liquidation or Bankruptcy Code Proceedings (IBC) as on date, by NCLT or any adjudicating authority/authorities, which will render us ineligible for participation in this tender.

Sign. of the AUTHORISED SIGNATORY (With Name, Designation and Company seal)

Place:

Date:

DECLARATION BY AUTHORISED SIGNATORY OF BIDDER
(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

Manager / AIX-T
3rd Floor, Main Admin building HEEP Haridwar-249403
Uttarakhand. Phone: 01334-285623, Email: arnabh@bhel.in

Dear Sir,

Sub: Declaration by Authorized Signatory

Ref:

- 1) Tender Reference No: **X/3391/2025/0009/O/1**
- 2) All other pertinent issues till date

I/We, hereby certify that all the information and data furnished by me with regard to the above Tender Specification are true and complete to the best of my knowledge. I have gone through the specifications, conditions, stipulations and all other pertinent issues till date, and agree to comply with the requirements and Intent of the specification.

I further certify that I am authorized to represent on behalf of my Company/Firm for the above-mentioned tender and a valid Power of Attorney to this effect is also enclosed.

Yours faithfully,

(Signature, Date & Seal of Authorized
Signatory of the Bidder) Date:

Enclosed: Power of Attorney

DECLARATION BY AUTHORISED SIGNATORY OF BIDDER

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

Manager / AIX-T
3rd Floor, Main Admin building HEEP Haridwar-249403
Uttarakhand. Phone: 01334-285623,
Email: arnabh@bhel.in

Dear Sir,

Sub : Declaration by Authorized Signatory regarding Authenticity of submitted documents.

Ref :

1) **Tender Reference No: X/3391/2025/0009/O/1**

2) All other pertinent issues till date

I/We, hereby certify that all the documents submitted by us in support of possession of “Qualifying Requirements” are true copies of the original and are fully compliant required for qualifying / applying in the bid and shall produce the original of same as and when required by Bharat Heavy Electricals Limited.

I / We hereby further confirm that no tampering is done with documents submitted in support of our qualification as bidder. I / We understand that at any stage (during bidding process or while executing the awarded contract) if it is found that fake / false / forged bid qualifying / supporting documents / certificates were submitted, it would lead to summarily rejection of our bid / termination of contract. BHEL shall be at liberty to initiate other appropriate actions as per the terms of the Bid / Contract and other extant policies of Bharat Heavy Electricals Limited.

Yours faithfully,

(Signature, Date & Seal of Authorized
Signatory of the Bidder)

Date:

DECLARATION

Date:

To,

Manager / AIX-T
 3rd Floor, Main Admin building HEEP Haridwar-249403
 Uttarakhand. Phone: 01334-285623,
 Email: arnabh@bhel.in

Dear Sir/ Madam,

Sub: Details of related firms and their area of activities

Please find below details of firms owned by our family members that are doing business/ registered for same item with BHEL, (NA, if not applicable)

1	Material Category/ Work Description	
	Name of Firm	
	Address of Firm	
	Nature of Business	
	Name of Family Member	
	Relationship	
2	Material Category/ Work Description	
	Name of Firm	
	Address of Firm	
	Nature of Business	
	Name of Family Member	
	Relationship	
3		

Note: I certify that the above information is true and I agree for penal action from BHEL in case any of the above information furnished is found to be false.

Regards, (_)
 From: M/s

Supplier Code:
 Address:

DECLARATION FOR RELATION IN BHEL

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder failing which the offer of Bidder is liable to be summarily rejected)

To,

Manager / AIX-T
3rd Floor, Main Admin building HEEP Haridwar-249403
Uttarakhand. Phone: 01334-285623,
Email: arnabh@bhel.in

Dear Sir,

Sub: Declaration for relation in BHEL

Ref:

1) **Tender Reference No: X/3391/2025/0009/O/1**

I/We hereby submit the following information pertaining to relation/relatives of Proprietor/Partner(s)/ Director(s) employed in BHEL

Tick (✓) any one as applicable:

1. The Proprietor, Partner(s), Director(s) of our Company/Firm DO NOT have any relation or relatives employed in BHEL

OR

2. The Proprietor, Partner(s), or Director(s) of our Company/Firm HAVE relation/relatives employed in BHEL and their particulars are as below:

i.

ii.

(Signature, Date & Seal of Authorized
Signatory of the Bidder)

Note:

1. Attach separate sheet, if necessary.
2. If BHEL Management comes to know at a later date that the information furnished by the Bidder is false, BHEL reserves the right to take suitable against the Bidder/Contractor.

**DECLARATION REGARDING MINIMUM LOCAL CONTENT IN LINE WITH REVISED
PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA), ORDER 2017 DATED 19TH
JULY, 2024 AND SUBSEQUENT ORDER(S)**

(To be typed and submitted in the Letter Head of the Entity/Firm providing certificate as applicable)

To,
Manager / AIX-T
3rd Floor, Main Admin building HEEP Haridwar-249403
Uttarakhand. Phone: 01334-285623,
Email: arnabh@bhel.in

Dear Sir,
Sub: Declaration reg. minimum local content in line with Public Procurement (Preference to Make in India),
Order 2017-Revision, dated 04th June, 2020 and subsequent order(s).

Ref:

- 1) Tender Reference No: X/3391/2025/0009/O/1
- 2) All other pertinent issues till date

We hereby certify that the items/works/services offered by -----

(supplier name) has a local content of% and this meets the local content requirement for ‘Class-I local supplier’ / ‘Class II local supplier’ ** as defined in Public Procurement (Preference to Make in India), Order 2017-Revision dated 19.07.2024 issued by DPIIT and subsequent order(s).

The details of the location(s) at which the local value addition is made are as follows:

- | | |
|------|------|
| 1. _ | 2. _ |
| 3. _ | 4. _ |

Thanking you, Yours faithfully,

(Signature, Date & Seal of
Authorized Signatory of the Bidder)

** - Strike out whichever is not applicable.

Note:

1. Bidders to note that above format, duly filled & signed by authorized signatory, shall be submitted along with the techno-commercial offer.
2. In case the bidder's quoted value is in excess of Rs. 10 crores, the authorized signatory for this declaration shall necessarily be the statutory auditor or cost auditor of the company (in the case of companies) or a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies).
3. In the event of false declaration, actions as per the above order and as per BHEL Guidelines shall be initiated against the bidder.

**DECLARATION REGARDING COMPLIANCE TO RESTRICTIONS UNDER RULE 144 (xi)
OF GFR 2017**

(To be typed and submitted in the Letter Head of the Entity/ Firm providing certificate as applicable)

To,

Manager / AIX-T
3rd Floor, Main Admin building HEEP Haridwar-249403
Uttarakhand. Phone: 01334-285623,
Email: arnabh@bhel.in

Dear Sir,

Sub: Declaration regarding compliance to Restrictions under Rule 144 (xi) of GFR 2017

Ref:

- 1) Tender Reference No: **X/3391/2025/0009/O/1**
- 2) All other pertinent issues till date

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I certify that (SPECIFY THE NAME OF THE ORGANIZATION HERE), is not from such a country/ has been registered with the Competent Authority (attach valid registration by the Competent Authority, i.e., the Registration Committee constituted by the Dept. for Promotion of Industry and Internal Trade (DPIIT)).

I hereby certify that we fulfil all requirements in this regard and is eligible to be considered.

Thanking you,
Yours faithfully,

(Signature, Date & Seal of
Authorized Signatory of the Bidder)

Note: Bidders to note that in case above certification given by a bidder, whose bid is accepted, is found to be false, then this would be a ground for immediate termination and for taking further action in accordance with law and as per BHEL guidelines.

POWER OF ATTORNEY for SUBMISSION OF TENDER

(To be typed on non-judicial stamp paper of minimum Rs. 100/- and Notarized)

KNOW ALL MEN BY THESE PRESENTS, that I/We do hereby make, nominate, constitute and appoint Mr.

....., whose signature given below herewith to be true and lawful Attorney of M/s..... hereinafter called 'Company', for submitting Tender/entering into Contract and inter alia, sign, execute all papers and to do necessary lawful acts on behalf of Company with M/s Bharat Heavy Electricals Ltd, Works Contracts Management (WCM), in connection withvide.....

And the Company do hereby agree to ratify and confirm all acts, deeds, things or proceedings as may be lawfully done by the said attorney and by or on behalf of the company and in the name of the company, by virtue of the powers conferred herein and the same shall be binding on the company and shall have full force and effect.

IN WITNESS WHEREOF, the common seal of the company has been hereunto affixed in the manner hereinafter appearing on the document.

Dated at, this, day of.....

Director/CMD/Partner/Proprietor

Signature of Mr. (Attorney)

Attested by: Director/CMD/Partner/Proprietor

Witness

Notary Public

PQR FOR LASER HARDENING PROCESS ON INLET EDGE OF FREE STANDING FIR TREE ROOT TURBINE BLADES OF MATERIAL X5CrNiCuNb 16-4
 (Note: bidder to fill the 'offered', 'deviation', 'remarks' columns and provide all related documents along with the offer.)

PROCESS QUALIFICATION REQUIREMENT:

CLAUSE NO.	DESCRIPTION FOR BHEL REQUIREMENT	REQUIRED	OFFERED	DEVIATIONS	REMARKS
1.0	PRE QUALIFICATION REQUIREMENTS				
1.1	Bidder must have experience of carrying out controlled laser hardening of metal components having curved/ profile surfaces OR turbine blades in last 7 years from the enquiry issue date. Bidder must have in-house facility of laser hardening as per requirement mentioned in technical requirements. The bidder to provide details (Make, specifications) of available facilities of laser hardening system (Along with details of laser head, power of laser, laser generator, type of beam collimation optics, beam control systems, job handling systems, payload of articulating robot.)	Bidder to comply and provide details of machineries and facilities.			
1.2	For establishment of bidder's credentials as per clause 1.1, bidder to provide at least 2 purchase order copies as proof of their experience. Price may be concealed in suitable manner. Purchase orders should not be more than 7 years old from the date of enquiry issue date.	Bidder to comply and provide details.			
1.3	Bidder to provide name, postal address, email IDs and phone number of the customer(s) as per clause 1.1, 1.2.	Bidder to comply and provide details.			
1.4	Bidder to provide performance certificate/ copy of MOM/ acceptance certificate from the referred customer for at least one of the orders executed as detailed against clause number 1.2 regarding satisfactory performance of their laser hardening services.	Bidder to comply and provide details.			
1.5	Bidder should be ISO 9000 certified. Copy of certificate to be submitted along with the offer.	Bidder to submit.			
1.6	BHEL may verify feedback of referred customer.	Bidder to accept.			
1.7	BHEL reserves the right to verify the information provided by bidder. In case the information provided by bidder is found to be false/ incorrect, the offer will be liable to be rejected.	Bidder to accept.			
1.8	Any sub contracting of laser hardening activity by bidder is not permitted during trial, process qualification or continuous production. Testing activities should be out sourced only from NABL accredited laboratories if required.	Bidder to accept and comply.			

8/14/2025
 Sandip Chatterbary
 E3 TSM & NSS - Tech.

14/03/2025
 SANKU 100MPT
 DGM BNS

14.3.25

CLAUSE NO.	DESCRIPTION FOR BHEL REQUIREMENT	REQUIRED	OFFERED	DEVIATIONS	REMARKS
TDC FOR LASER HARDENING PROCESS ON INLET EDGE OF FREE STANDING FIR TREE ROOT TURBINE BLADES OF MATERIAL X5CrNiCuNb 16-4					
Note: bidder to fill the 'offered', 'deviation', 'remarks' columns and provide all related documents along with the offer.					
TECHNICAL REQUIREMENT:					
1.0	PURPOSE, WORKPIECE MATERIAL & PROCESS				
1.1	Inlet edge hardening of LP steam turbine blades with fir tree roots and twisted aerofoil profile having material grade X5CrNiCuNb16-4 (DIN 1.4542) (tensile strength up to 1130 N/mm ² and hardness up to 335 HBW) is required. The aerofoil of the blades are manufactured by milling and grinding of envelop forged raw materials. Inlet edge of the blades are to be laser hardened for corrosion resistance (Hardness to be achieved after laser hardening : At surface: ≥430 HV5 and at depth of 2 mm from the surface: ≥400 HV 0.1)	Bidder to comply.			
1.2	Controlled laser hardening is required to be done on the inlet edge and suction side of the blade as per the drawing 01030756002 00: Left hand blade; 01030756004 00: Right hand blade) of the blade. Applicable standard: HW0993005. The length of the hardened region is 465 mm +/-5 mm and width of 28 mm -0/+ 3 mm on suction side. The hardening process should ensure that no tensile residual stresses occur in the hardened area as a result of laser treatment. The process should also ensure that no cracks occur in the hardened region as a result of laser hardening. After laser hardening, an immediate post heat treatment is required without exposing the blades in moisture. Formation of dew on the blade before post heat treatment should be avoided. Following is an example for reference, in which blades are hardened by established bidders of BHEL: Laser hardening by 2 nos. 6 KW diode lasers with simultaneous running. Precipitation hardening at 445 °C Dwell time 8 Hrs Heating rate ≤ 100 °C/Hr Cooling rate ≤ 100 °C/Hr.	Bidder to comply and provide details of their available resources.			
1.3	Bidder to provide the process plan and inspection plans along with the offer.	Bidder to comply and provide details.			
1.4	Bidder will sign a non-disclosure agreement before receiving the drawings and documents.	Bidder to accept.			
2.0	BLADE DETAILS				
2.1	Blade drawings: Left hand blade: 01030756002 00; Right hand blade: 01030756004 00	Bidder to accept.			
2.2	Blade material: X5CrNiCuNb16-4 (DIN 1.4542) (Mechanical and chemical properties are at Annexure 1 for reference).	Bidder to accept.			
3.0	TECHNICAL EVALUATION OF BID (TRIAL OF LASER HARDENING CAPABILITY AT BIDDER'S WORKS)				
	The bidder who meets the requirement of PQR will have to complete trial as per clause 3.1. Technical evaluation of the bid shall be done based on successful trials in line with clause 3.1.	Bidder to accept and comply.			

12/03/25

Sandeep Chakraborty
E3, TBM & MRS-TECH

14/03/2025
TBM/SC/2025
Sandeep Chakraborty
E3, TBM & MRS-TECH
Sandeep Chakraborty
E3, TBM & MRS-TECH
Sandeep Chakraborty
E3, TBM & MRS-TECH

14/03/25
TBM/SC/2025
Sandeep Chakraborty
E3, TBM & MRS-TECH

CLAUSE NO.	DESCRIPTION FOR BHEL REQUIREMENT	REQUIRED	OFFERED	DEVIATIONS	REMARKS
3.1	Bidders who qualify PQR, will be provided a test piece (sample piece of length approx. 200 mm from inlet edge of blade) of the material X5CrNiCuNb16-4 (DIN 1.4542) for trial purposes. The trial will be considered successful only if the bidder achieves required surface hardness, residual stress requirement, width & depth of hardness, depth profile, microstructure as per standard HW0993005 in middle section of the test sample piece. bidder to arrange to collect the sample piece from HEEP, Haridwar within 15 days of first intimation from BHEL on their own and submit the achieved results within 2 months from the date of collection without any financial implication on BHEL. Failing to comply this, the offer of the bidder will be liable for rejection. The testing of samples shall be witnessed by BHEL team.	Bidder to accept and comply.			
3.2	PROCESS QUALIFICATION Upon placement of PO, bidder has to carry out process qualification/ first article inspection of blades.	Bidder to accept and comply.			
3.2.1		Bidder to accept and comply.			
3.2.2	Number of blades for process qualification: 3 number of LH and 3 number of RH blades. These blades for process qualification will be exclusive of PO quantity.	Bidder to accept and comply.			
3.2.3	Blades will be handed over to bidder against bank guarantee (against damage of the blades except from laser hardening trials as per this tender) as per BHEL norms. Bank guarantee will be released only after return of material & test pieces to BHEL after completion of process qualification as per clause 3.2 and its sub clauses by bidder.	Bidder to accept and comply.			
3.2.4	Bidder will be responsible for transportation to and fro bidder's and BHEL works.	Bidder to accept and comply.			
3.2.5	Bidder to perform the laser hardening and testing activities required for process qualification. Representatives of BHEL will visit bidder's works for witnessing laser hardening process and tests. For arranging scheduled technical visit of BHEL representatives to bidder's works, bidder will inform BHEL at least 7 days before scheduled visits.	Bidder to accept and comply.			
3.2.6	Area of laser hardening and tolerance: As per attached drawings and clause number 1.2 above.	Bidder to accept and comply.			
3.2.7	Measurement of results will be as under per clause 6 of specification HW0993005. Samples will be taken from 1 number of laser hardened blade from each hand of a row. Refer standard HW0993005.	Bidder to accept and comply.			
3.2.8	Visual control: Undercuts or melting spots are not acceptable. In order to avoid undercuts or melting spots, the laser will be run on extra length in the region of blade tip for stabilization of the temperature.	Bidder to accept and comply.			
3.2.9	Surface hardness measurement: Surface hardness to be measured (HV5 in accordance with ISO 6507-1) at 3 positions i.e. at positions 1, 2, 3. The values of surface hardness will be as below (Ref clause 6.2 of standard HW0993005) : Position 1: ≥400 HV5, Position 2: ≥430 HV5, Position 3: ≥430 HV5.	Bidder to accept and comply.			
3.2.10	Root to aerofoil position: Upon laser hardening, profile orientation w.r.t blade root should be within tolerance as per drawing. bidder to arrange to check the same at check sections of hardened blade. (Ref clause 6.3 of standard HW0993005).	Bidder to accept and comply.			
3.2.11	Residual Stress Evaluation: Residual stress values are to be measured at the points and distances as per clause 6.4 of standard HW0993005 and to be submitted in tabular format. There should not be any tensile residual stresses in the measured values. The material will be regarded as hardened in the transition between hardened and unhardened state if hardness is >360 HV5.	Bidder to accept and comply.			
3.2.12	Microscopic pictures showing hardness width and depth: Microscopic pictures of 11 sections in the hardened profile are to be taken from test blade at 0 mm, 50 mm, 100 mm, 150 mm, 200 mm, 250 mm, 300 mm, 350 mm, 400 mm, 440 mm, 465 mm from the top of hardened zone as per clause 6.5 of standard HW0993005. Corresponding hardness width and depth will be shown as shown in example picture in annexure 1. Microstructures at penultimate cross sections (before the end and start of the hardened region) should be provided. Microstructures should possess uniform structure.	Bidder to accept and comply.			

14/13/25
 T. D. Singh
 AGM (MTE)

14/13/25
 Sandip Chatterjee

14/13/25
 K. K. Singh
 AGM (MTE)

CLAUSE NO.	DESCRIPTION FOR BHEL REQUIREMENT	REQUIRED	OFFERED	DEVIATIONS	REMARKS
3.2.13	Hardness profile mapping: 3 numbers of profile section photographs with positions of hardness lines and hardness depth profile graphs are to be shown for test blade at 50 mm, 250 mm, 440 mm from the top of hardened zone as per clause 6.5 of standard HW0993005. Hardness to be measured at 10 equal distances for each mm length from the surface. No hardness value should be less than 400 HV 0.1 within 2 mm depth from the surface.	Bidder to accept and comply.			
3.2.14	SCC test: SCC test to be done for 7000 Hrs. as per clause 6.1 of standard HW0993005.	Bidder to accept and comply.			
3.2.15	Based on the successful process qualification, bidder to provide final MPP before start of regular production.	Bidder to accept and comply.			
4.0	CONTINUOUS PRODUCTION				
4.1	Bidder will be eligible for regular production only after completion of process qualification as mentioned in above clauses. For regular production of blades, visual control and measurement of surface hardness of 10% blade will be as per clause 9 of standard HW0993005.	Bidder to accept and comply.			
5.0	GENERAL INSTRUCTIONS				
5.1	Bidder to confirm that they have reviewed enquiry drawing, specifications and QP with all cross-referred specifications referred therein and confirm that they will be able to supply as per BHEL enquiry drawing, QP and specification in case of order.	Bidder to accept and comply.			
5.2	Laser hardening, testing, documentation will be as per HW0993005 and BHEL approved QP.	Bidder to accept and comply.			
5.3	Bidder to accept and comply all clauses and sub clauses of standard HW0993005.	Bidder to accept and comply.			
5.4	Suitable packing of blades (e.g. bubble wrap packing on individual blades in honey comb wooden boxes) to be done by bidder during delivery to protect the blades from any physical damage during transport as per clause 14 of standard HW0993005.	Bidder to accept and comply.			
5.5	BHEL may ask additional clarification related to the above points and reserves the right to verify the information provided by bidder. BHEL may also visit works of bidder to establish/ verify bidder's credentials. In case the information provided by bidder is found to be false/ incorrect, the offer will be rejected.	Bidder to accept and comply.			
5.6	BHEL shall furnish clarifications regarding scope of work, technical requirements and drawings if required.	Bidder to note.			

8/10/2016
Sandeep Choudhary

X
Sandeep Choudhary
8/10/2016
Sandeep Choudhary

8/10/2016
T Dany
AGM (MTR)

ANNEXURE: 1

POSITION AND VALUES OF SURFACE HARDNESS MEASUREMENT:

	HV5		
Material	Position 1	Position 2	Position 3
X5CrNiCuNb16-4	≥ 400	≥ 430	≥ 430

L= Length of the hardened area

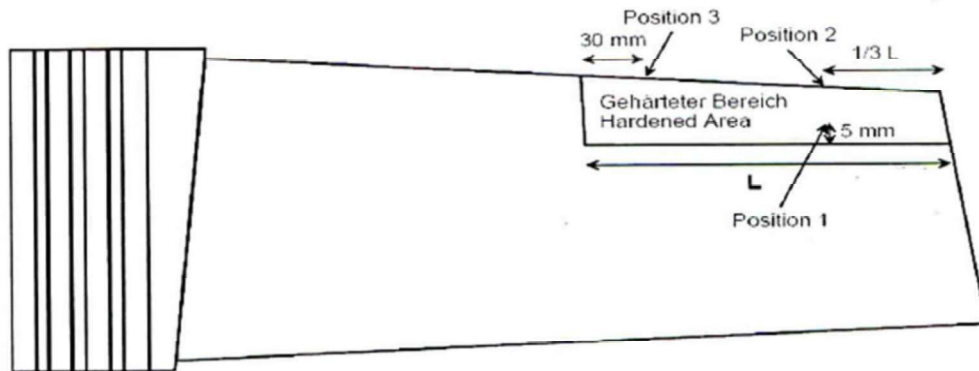
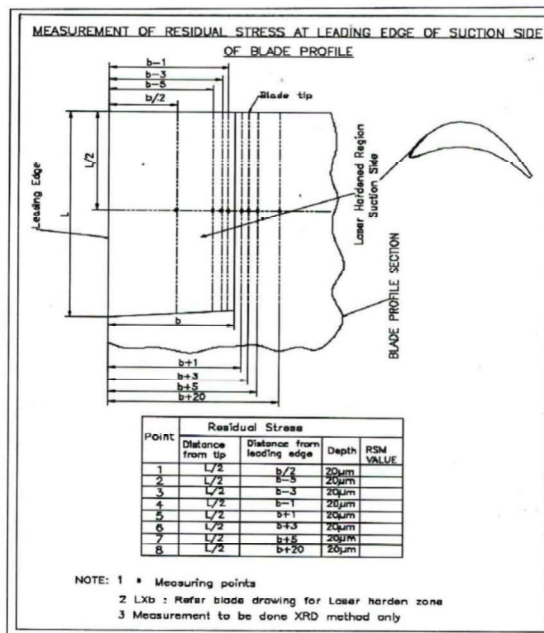


FIG .1: Positions for measuring the hardness on the surface

RESIDUAL STRESS EVALUATION

- The manufacturing process has to assure that no Tensile residual stresses occur in the Hardened area.



MICROSCOPIC PICTURES SHOWING HARDNESS WIDTH AND DEPTH:

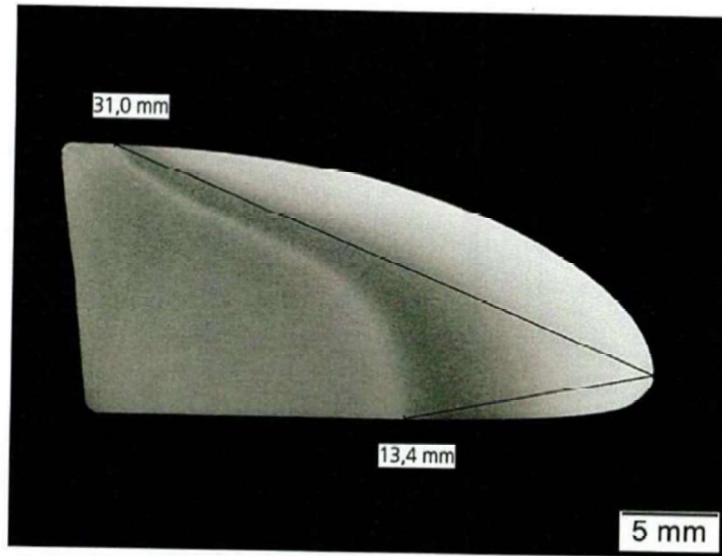


fig. 7: Cross section of a leading edge, hardened by laser assisted solution annealing followed by age hardening
sample: CB-27-2.07; X=300

Example

HARDNESS PROFILE MAPPING

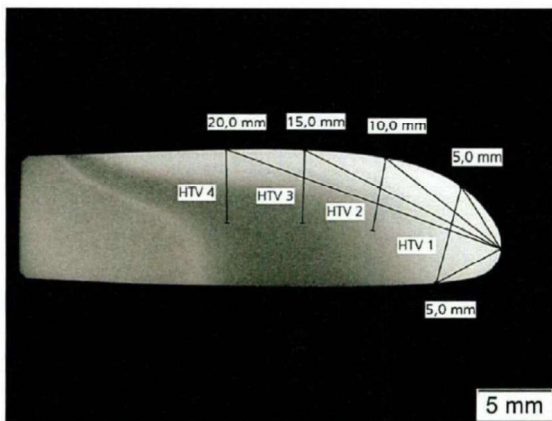


fig. 15: Position of the hardness lines
sample: CB-27-2.02; X=50

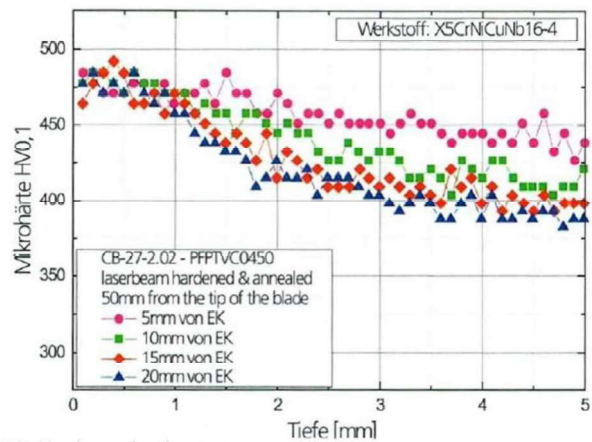


fig. 12: Hardness-depth-curve
sample: CB-27-2.02; X=50

Example

THE CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF THE MATERIAL IS AS UNDER:

Chemical Composition

Heat analysis in weight % (modified compared to EN10088-3) shall be as follows:

C	≤ 0.05	Si	0.10 – 0.35	Mn	0.30 – 0.60
P	≤ 0.025	S	≤ 0.005	Cr	15.0 – 16.0
Ni	4.2 – 5.0	Cu	3.0- 3.7	Nb	0.20-0.35

Mechanical properties:

0.2% Proof stress	930-1000 N/mm ²
Tensile strength	≤ 1040 N/mm ²
% Elongation	13 min.
% Reduction in area	50 min.
Impact values	100 J min.*
Brinell hardness HBW	295-335

Manufacturer Name and Address		MANUFACTURING QUALITY PLAN				APPLICABILITIES TO	
BHEL Haridwar accepted sub contractors	ITEM/EQUIPMENTS	Laser Hardening of Turbine Blades of material X5CrNiCuNb16-4	Q.P. NO	QP/QA/20250009	PROJECT	Bhusawal Spare	
	WORK ORDER.		DATE	13.05.2025			
			REV. NO.	01	CONTRACTOR	BHEL (HEEP) HWR	
			PAGE NO.	Page 1 of 3	Indent	20250009 Rev 00	

S. No.	COMPONENT OPERATION	CHARACTERISTIC CHECKED	CATEGORY	TYPE/ METHOD OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY				REMARK
									D	M	B	C	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.0	Material Receiving Inspection at sub-contractor's work	Verification of identification of material	Major	Visual inspection	100 %	As per Drg./ Standard		PPMIV/ Q.no.	✓	P	V	-	Material will be supplied by BHEL. Transfer of identification to be ensured.
		Visual inspection of surface condition of blades (Free from deposits, grease, burrs)	Major	Visual inspection	100 %	As per Drg./ Standard		Report	✓	P	V	-	
2.0	<u>INPROCESS-INSPECTION</u>												
2.1	Sample Trial - on test blade piece												
2.1 a	Visual (check for damage & uniformity of hardening)		Major	Visual	100%	BHEL specification/ TDC		Test certificate	✓	P	W	-	BHEL witness by Team (TBM, QA, MTE) for first time trial and verification in case of already performed
2.1b	Surface hardness		Major	Measurement	100%	BHEL specification/ TDC		Test certificate	✓	P	W	-	
2.1c	Residual stress		Major	Measurement	100%	BHEL specification/ TDC		Test certificate	✓	P	W	-	
2.2d	Metallographic examination for (Mid-section along height) i) Microscopic picture ii) Evaluation of micro structure iii) Hardness width iv) Hardness depth v) Hardness profile		Major	Metallographic investigation	100%	BHEL specification/ TDC		Test certificate	✓	P	W	-	

Manufacturer/Subcontractor	Legends:	For BHEL Use	
		Worked by:  Sunil Panday, QAX	Approved by:  P K Bansal, QAX

Manufacturer Name and Address		MANUFACTURING QUALITY PLAN				APPLICABILITIES TO	
BHEL Haridwar accepted sub contractors	ITEM/EQUIPMENTS	Laser Hardening of Turbine Blades of material X5CrNiCuNb16-4	Q.P. NO	QP/QA/20250009	PROJECT	Bhusawal Spare	
	WORK ORDER.		DATE	13.05.2025			
			REV. NO.	01	CONTRACTOR	BHEL (HEEP) HWR	
			PAGE NO.	Page 2 of 3	Indent	20250009 Rev 00	

2.2	Process Qualification – on 06 no.Test Blades (03 nos. – 3LH & 03 nos. – 3RH) – After placement of PO										
2.2 a	Visual (check for damage & uniformity of hardening)	Major	Visual	100%	BHEL specification/ TDC	Test certificate	✓	P	W	-	BHEL witness by Team (TBM, QA, MTE)
2.2b	Surface hardness	Major	Measurement	100%	BHEL specification/ TDC	Test certificate	✓	P	W	-	
2.2c	Surface roughness	Major	Measurement	100%	BHEL specification/ TDC	Test certificate	✓	P	W	-	
2.2d	Root to aerofoil position	Major	Measurement	1 blade per hand	BHEL specification/ TDC	Test certificate	✓	P	W	-	
2.2e	Residual stress by X-ray method	Major	Measurement	1 blade per hand	BHEL specification/ TDC	Test certificate	✓	P	W	-	
2.2 f	Metallographic examination for i)Microscopic picture (11 sections at 0 mm, 50 mm, 100 mm, 150 mm, 200 mm, 250 mm, 300 mm, 350 mm, 400 mm, 440 mm, 465 mm height from top of hardened zone) ii) Hardness width (-Do-) iii) Hardness depth (-Do-) iv) Evaluation of micro structure (3 sections at 50 mm, 250 mm, 440 mm from top of hardened zone) v) Hardness profile (-Do-), mapping	Major	Metallographic investigation	1 blade per hand	BHEL specification/ TDC	Test certificate	✓	P	W	-	
2.2g	Stress Corrosion Cracking investigation	Major	Measurement	2 hardened samples	BHEL specification/ TDC	Test certificate	✓	P	V	-	

Manufacturer/Subcontractor		Legends:		For BHEL Use	
		P Perform by; W Witness by; V Record review; C - Customer; B - BHEL Team; M - Manufacturer/ sub-contractor; D: documents with tick mark shall be submitted by vendor to BHEL.		Worked by:  Sunil Panday, QAX	Approved by:  P K Bansal, QAX

Manufacturer Name and Address		MANUFACTURING QUALITY PLAN				APPLICABILITIES TO	
BHEL Haridwar accepted sub contractors	ITEM/EQUIPMENTS	Laser Hardening of Turbine Blades of material X5CrNiCuNb16-4	Q.P. NO	QP/QA/20250009	PROJECT	Bhusawal Spare	
	WORK ORDER.		DATE	13.05.2025			
			REV. NO.	01	CONTRACTOR	BHEL (HEEP) HWR	
			PAGE NO.	Page 3 of 3	Indent	20250009 Rev 00	

				and 2 unhardened samples									
2.3	Mass production 1. Shall be carried out only after successful process qualification (phase – II), establishment of process qualification parameters approved by BHEL and BHEL approved manufacturing process plan 2. Test results of process qualification and manufacturing process plan shall be submitted to BHEL for acceptance												
2.3 a	Visual (check for damage & uniformity of hardening)	Major	Visual	100%	BHEL specification/ TDC	Test certificate	✓	P	W	-			
2.2b	Surface hardness	Major	Measurement	10% of blade row	BHEL specification/ TDC	Test certificate	✓	P	W	-			
2.3c	Preservation	Major	Visual	100%	BHEL specification/ TDC	COC	✓	P	V	-			
2.3d	Packing	Major	Visual	100%	BHEL specification/ TDC	COC & Photo of Packed blades	✓	P	V	-			
3.0	<u>FINAL-INSPECTION</u>												
3.1		Check for Cleanliness, Completeness of Job and Documentation	Major	Visual	100%	As per drg./ Standard	As per drg./ Standard	Record	✓	P	V	-	Item shall be dispatched to BHEL after acceptance by BHEL/ BHEL nominated agency after duly identifying by P.O. No., drg no. Plant Order No. and I.R.No

- Notes: 1. All requirements of P.O., standard and drawing shall be fulfilled.
2. BHEL reserves the right for conducting repeat test, if required.
3. Packing and preservation as per TDC/ indent requirement.

Manufacturer/Subcontractor		Legends:		For BHEL Use	
		P Perform by; W Witness by; V Record review; C - Customer; B - BHEL Team; M - Manufacturer/ sub-contractor; D: documents with tick mark shall be submitted by vendor to BHEL.		Worked by:  Sunil Panday, QAX	Approved by:  P K Bansal, QAX