

PPX-T DEPARTMENT BHARAT HEAVY ELECTRICALS LIMITED HEEP: HARDWAR-249 403

(Uttarakhand) TEL: +91 1334 28 1183 EOI REF. NO.: EOI/LP_BLADES_FINISH MACHINED/2025 ITEM: LP Turbine Last Stage Finish Machined Forged Blade

DATE OF ISSUE OF ENQUIRY: 06/12/2025

ENQUIRY DUE DATE: 27/12/2025 (BY 14:30 HRS IST)

EOI ref. No.: EOI/LP_BLADES_FINISH MACHINED/2025

Expression of Interest (EOI) for empanelment of New Vendors

The Heavy Electrical Equipment Plant (HEEP) located in Haridwar, is one of the major manufacturing plants of BHEL. The core business of HEEP includes design and manufacture of large size steam and gas turbines, turbo generators, heat exchangers, condensers and auxiliaries.

We are looking for qualified and experienced manufacturers to submit an expression of interest (EOI) for the manufacturing & supply of finish machined Low-Pressure (LP) Turbine Last Stages Blades (LP 2L/2R & LP 3L/3R) manufactured from closed die forging in material grade X20Cr13 or X10CrNiMoV12-2-2.

Prospective suppliers may submit their offers for the EOI.

Contact persons:

Mr. Surendra Pal

Designation: Manager (PPX-T)

Email: su-pal@bhel.in

Phone No: +91 1334-281183 Mobile: +91 9410395422 Mr. Tuhin Dey

Designation: Sr. Manager (PPX-T)

Email: tuhindey@bhel.in
Phone No: +91 1334-281183
Mobile: +91 9491633893

Vendor eligibility criteria, manufacturing and testing facilities, submission requirements, evaluation process and other information regarding EOI shall be as per **Annexure-EOI Detail**.

Based on the information provided under this EOI, the prospective vendors shall be technically shortlisted and will be invited for further technical discussion. The evaluation process shall be as per **Annexure-EOI Detail.**

Only Technical BID along with the documents mentioned in **Annexure-EOI Detail** should be sent and the envelope containing the offer shall be duly sealed and super scribed as "**Technical Bid for the manufacturing & supply of finish machined Low-Pressure (LP) Turbine Last Stages Blades (LP 2L/2R & LP 3L/3R) manufactured from closed die forging in material grade X20Cr13 or X10CrNiMoV12-2-2 EOI ref. No.:**

EOI/LP_BLADES_FINISH MACHINED/2025 Due Date - 27.12.2025, submitted by (Name of company)".

- This notification shall be published on <u>www.hwr.bhel.com</u>, <u>www.bhel.com</u> & www.eprocurebhel.co.in
- Last date for downloading tender documents shall be 27.12.2025 till 13:30 Hrs. (IST). EOI received up to 14:30 Hrs. (IST) on 27.12.2025 will be considered and opened on the same day at 16:00 Hrs. (IST).
- Technical Offers complete in all respect must be addressed to "Sr. DGM (PPX-T)".
- EMD & Tender fee are not applicable.
- BHEL will not be responsible for any type of postal delay / incomplete information from vendor.
- Amendments / Corrigendum, if any, will be hosted on above mentioned web sites only.
- Specifications attached herewith.
- Vendors submitting their bids through e-mail may be advised to have following clear subject line:



PPX-T DEPARTMENT BHARAT HEAVY ELECTRICALS LIMITED HEEP: HARDWAR-249 403 (Uttarakhand)

TEL: +91 1334 28 1183

EOI REF. NO.: EOI/LP_BLADES_FINISH MACHINED/2025 ITEM: LP Turbine Last Stage Finish Machined Forged Blade DATE OF ISSUE OF ENQUIRY: 06/12/2025 ENQUIRY DUE DATE: 27/12/2025 (BY 14:30 HRS IST)

1.	EOI/ Tender Enquiry Reference No	
2.	Bid opening Date (Techno-commercial)	

Vendor to submit their bids as attachment (pdf format) with password protection and share the password through mail (tendercell.heep@bhel.in) after 13:45 Hrs. (IST) on the day of bid opening, however, if no password is received up to 16:00 Hrs. (IST) bids will not be opened and will be ignored. Submission of bids through email shall be considered as consent to open the bid without physically witnessing the event.

For any further details, please log on to www.hwr.bhel.com, www.bhel.com & www.eprocurebhel.co.in.



PPX-T DEPARTMENT BHARAT HEAVY ELECTRICALS LIMITED HEEP: HARDWAR-249 403

(Uttarakhand) TEL: +91 1334 28 1183 EOI REF. NO.: EOI/LP_BLADES_FINISH MACHINED/2025 ITEM: LP Turbine Last Stage Finish Machined Forged Blade

DATE OF ISSUE OF ENQUIRY: 06/12/2025

ENQUIRY DUE DATE: 27/12/2025 (BY 14:30 HRS IST)

Annexure-EOI Detail

For: Manufacturing of LP Turbine Last Stage Finish Machined Forged Blade Issued By: HEAVY ELECTRICALS EQUIPMENT PLANT, HARIDWAR EOI Reference No.: EOI/LP_BLADES_FINISH MACHINED/2025

1. Introduction

HEEP, Haridwar invites qualified and experienced manufacturers to submit an Expression of Interest (EOI) for the manufacturing and supply of finish machined Low-Pressure (LP) Turbine Last Stages blades (LP 2L/2R & LP3L/3R) manufactured from closed die forging. This EOI aims to identify technically competent vendors.

2. Overview

The selected vendor will be responsible for the forging, machining, testing & inspection, and delivery of finish machined LP last stage blades meeting all drawing and specification requirements.

3. Item description:

EOI is being invited for finish machined LP turbine last stage blades (typical blades in shown in Sketch-1). These blades are used in low pressure turbines of power plants. Details of blades are as table below:

Stage	LP 2L/2R	LP 3L/3R
Material	X20Cr13	X10CrNiMoV12-2-2
Typical Blade Height (mm)	500-700	650-1150
Typical weight (kg.)	5-15	10-43

4. Annual procurement:

The annual procurement will be around INR 25-35 Cr.

5. Vendor Eligibility Criteria

(a) Vendor must have in house facility for closed die forging & heat treatment to manufacture twisted profile forged blades with inhouse / outsourced finish machining facility.

OR

- (b) Vendor must have in house facility for machining of profile and root of the blade with closed die forged blade (inhouse / outsourced).
- 6. Vendor must have either in house or access to following testing facilities.
 - i. Metallurgical testing facility including NDT
 - ii. Dimensional checking facilities etc.3D CMM facility for dimensional checking of finish machined blades (in house)
 - iii. Moment weighing facility
 - iv. Frequency measuring facility
 - v. Flame hardening/laser hardening facility
 - vi. Residual Stress Measurement (RSM) facility.
 - vii. Profile Hardness testing, surface roughness checking facilities.

7. Submission Requirements

Participating vendors must submit the following documents:

7.1 Company Profile

- I. Legal name, address, ownership, and contact details
- II. Organizational structure
- III. Factory location(s)

7.2 Relevant Experience

- 1. Previous experience of closed die forging, if available.
- 2. Previous experience of machining blade profile & blade root. (or 5 axis machining)



PPX-T DEPARTMENT BHARAT HEAVY ELECTRICALS LIMITED HEEP: HARDWAR-249 403 (Uttarakhand)

TEL: +91 1334 28 1183

EOI REF. NO.: EOI/LP_BLADES_FINISH MACHINED/2025 ITEM: LP Turbine Last Stage Finish Machined Forged Blade

DATE OF ISSUE OF ENQUIRY: 06/12/2025

ENQUIRY DUE DATE: 27/12/2025 (BY 14:30 HRS IST)

7.3 Technical Capabilities

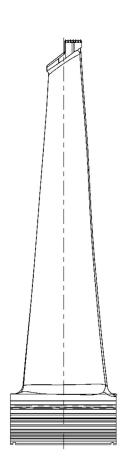
List and details of major manufacturing facilities (inhouse / outsourced) as per clause 5 & testing facilities (inhouse / outsourced) as per clause 6.

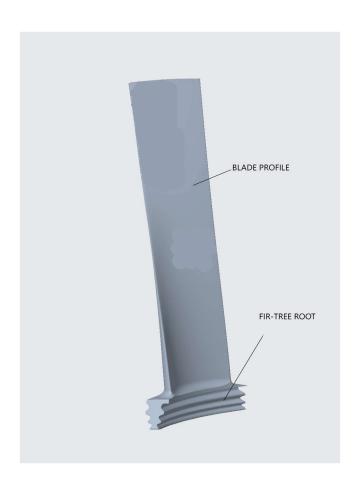
8. Evaluation Process

Based on the information provided under this EOI, the prospective vendors shall be technically shortlisted and will be invited for further technical discussion. BHEL team will carry out physical assessment of vendor's works. If vendor found technically capable for manufacturing blades as per BHEL requirements, developmental activity shall be initiated.

9. Disclaimer

This EOI is not a commitment or contract. BHEL reserves the right to accept or reject any or all responses, to modify the EOI, or to cancel the process entirely without assigning any reason.





LP 2L/2R LP 3L/3R



PPX-T DEPARTMENT BHARAT HEAVY ELECTRICALS LIMITED HEEP: HARDWAR-249 403 (Uttarakhand)

TEL: +91 1334 28 1183

EOI REF. NO.: EOI/LP_BLADES_FINISH MACHINED/2025 ITEM: LP Turbine Last Stage Finish Machined Forged Blade

DATE OF ISSUE OF ENQUIRY: 06/12/2025

ENQUIRY DUE DATE: 27/12/2025 (BY 14:30 HRS IST)

DISCLAIMER

This EOI is not a commitment or contract. BHEL reserve the right to accept or reject any or all responses, to modify the EOI, or to cancel the process entirely without assigning any reason.

All information contained in this EOI provided / clarified are in good interest and faith. The information contained in this Expression of Interest document or subsequently provided to Applicant(s), whether verbally or in documentary or any other form, by or on behalf of BHEL, is provided on the terms and conditions set out in this EOI and such other terms and conditions subject to which such information is provided.

The purpose of this EOI is to provide interested parties with information that may be useful for development of experienced vendors for the manufacturing & supply of finish machined Low-Pressure (LP) Turbine Last Stages Blades (LP 2L/2R & LP 3L/3R) manufactured from closed die forging. This EOI is not an offer by BHEL to the prospective Applicant(s) or any other person. This EOI is neither intended nor shall it be construed as creating or requiring any ongoing or continuing relationship or commitment with any party or person. This is not an offer or invitation to enter into an agreement of any kind with any party.

Though adequate care has been taken in the preparation of this EOI document, the interested firms shall satisfy itself that the document is complete in all respects. The information is not intended to be exhaustive. Interested Agencies are required to make their own enquiries and assumptions wherever required. Intimation of discrepancy, if any, should be given to the specified office immediately. If no intimation is received by this office by the date mentioned in the document, it shall be deemed that the EOI document is complete in all respects and firms submitting their interest are satisfied with the EOI Document in all respects.

The issue of this EOI does not imply that BHEL is bound to select and shortlist Applicant(s) for next stage or to enter into any agreement(s) with any Applicant(s). BHEL reserves all right to reject any applications submitted in response to this EOI document at any stage without assigning any reasons thereof. BHEL also reserves the right to withhold or withdraw the process at any stage. Neither BHEL nor its employees and associates will have any liability any loss, expense or damage which may arise from or be incurred or suffered in connection with anything contained in this EOI document or any matter deemed to form part of this EOI document, the information and any other information supplied by or on behalf of BHEL. BHEL accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance/use of any statements/information contained in this EOI by the Applicant. BHEL is not making any representation or warranty, express or implied, as to the accuracy or completeness of any information/statements made in this EOI.

The Applicant shall bear all its costs associated with or relating to the preparation and submission of its Application including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by BHEL or any other costs incurred in connection with or relating to its Application. All such costs and expenses will remain with the Applicant and BHEL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Application, regardless of the conduct or outcome of the EOI.