



BHARAT HEAVY ELECTRICALS LIMITED
BHEL, HEEP: HARDWAR-249403 (UK)
Fax: 01334-226462, Phone: 01334-281143
E-mail: deepakkumar1@bhel.in; kaushal@bhel.in

EOI No.: PPX-BHEL/HYDRAULIC TURNING MOTOR ASSEMBLY/STE-TE/EOI/21-22
Due Date: 12.04.2022

Notice for Expression of Interest 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 reputed vendors having capability to manufacture & supply of Hydraulic Turning Motor Assembly for Steam Turbine.

Prospective suppliers may submit their offers for the above mentioned EOI.

Contact persons:

Mr. Kaushal Meena
Designation: Sr. Engr. (PPX-T)
Email: kaushal@bhel.in
Phone No: +91 1334-28143
Mobile: +91 8899026770

Mr. Deepak Kumar
Designation: Mgr. (PPX - T)
Email: deepakkumar1@bhel.in
Phone No: +91 1334-281130
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The offers received will be technically evaluated by BHEL & successful short listed parties will be asked to submit their detailed Techno-Commercial offers through formal NIT/Enquiry for our future requirements. Vendors shall confirm that there is no deviation with respect to BHEL Specifications. However, deviations, if any are to be listed as a separate attachment. The offers that do not meet the substantial requirements of our specifications are liable to be ignored.



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Following documents are to be necessarily filled and submitted along with the technical offer:

1. Details/Documents in support of Specification/PQR (**Annexure-1**).
2. Supplier/Vendor Registration Form - Go through online supplier registration portal <https://supplier.bhel.in/>. After filling the online registration form send the copy of same along with your offer within due date.
3. Details of Manufacturing Facility
4. Company Profile.
5. Financial report of the company.
6. Past experience along with documentary proof.

Only Technical BID along with the documents mentioned above should be sent and the envelope containing the offer shall be duly sealed and super scribed as **“Technical Bid for manufacture & supply of ‘Hydraulic Turning Motor Assembly for Steam Turbine’ against ‘BHEL EOI No.: PPX-BHEL/Hydraulic Turning Motor Assembly/STE-TE/EOI/21-22’ Due Date -12.04.2022, submitted by (Name of company)”**.

- This notification shall be published on www.hwr.bhel.com, www.bhel.com & www.eprocure.gov.in
- Last date for downloading tender documents shall be 11.02.2022 till 1700 Hrs.(IST). EOIs received up to 13:45 Hrs. (IST) on 12.02.2022 will be considered and opened on the same day at 14:00 Hrs. (IST) in the Tender Room BHEL HEHP, Haridwar.
- Technical Offers complete in all respect must be addressed to “AGM (PPX-T)”.
- EMD & Tender fee are not applicable.
- The Quotation should be from the Principal/Original Manufacturer, failing which the quotation is likely to be ignored. In Case the quotation is submitted through agent, the quotation must accompany original authorization letter.
- BHEL will not be responsible for any type of postal delay / incomplete information from vendor.
- Amendments / Corrigendum, if any, will be hosted on our web site only.
- Drawings & specifications will be shared with vendor after receiving duly filled and signed & stamped Non-Disclosure and Proprietary Information Agreement (**Annexure-2**).
- Vendors submitting their bids through e-mail may be advised to have following clear subject line:
 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 1:45 PM (IST) on the day of bid opening, however, if no password is received up to 4:00 PM (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.eprocure.gov.in.



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Annexure-I

 **Expression of Interest (EOI) for Supply of Hydraulic Turning Motor Assembly**

Date: 22-09-2021

Expression of Interest
For
Supply of Hydraulic turning Motor Assembly for
Steam Turbine

EOI No.: BHEL / HYDRAULIC TURNING MOTOR ASSEMBLY / STE-TE / EOI / 22-09-2021

Document No. HYDRAULIC TURNING MOTOR ASSEMBLY -EOI-09-2021

BHARAT HEAVY ELECTRICALS LIMITED
HEAVY ELECTRICAL EQUIPMENT PLANT
HARIDWAR-249403, INDIA

1 | Page



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Expression of Interest (EOI) for Supply of Hydraulic Turning Motor Assembly

DISCLAIMER

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 supply of Load shackle. 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.



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Expression of Interest (EOI) for Supply of Hydraulic Turning Motor Assembly

Item Description

Hydraulic Turning motor Assembly is used for barring gear operation of Steam Turbine. The function of the Hydraulic Turning motor Assembly is to rotate the turbine-generator rotor train at sufficient speed before start-up; to overcome breakaway torque and to avoid non-uniform heating / cooling during rolling / shutdown. Pictorial representation of Hydraulic turning motor assembly is as under (Refer Figure - 1):

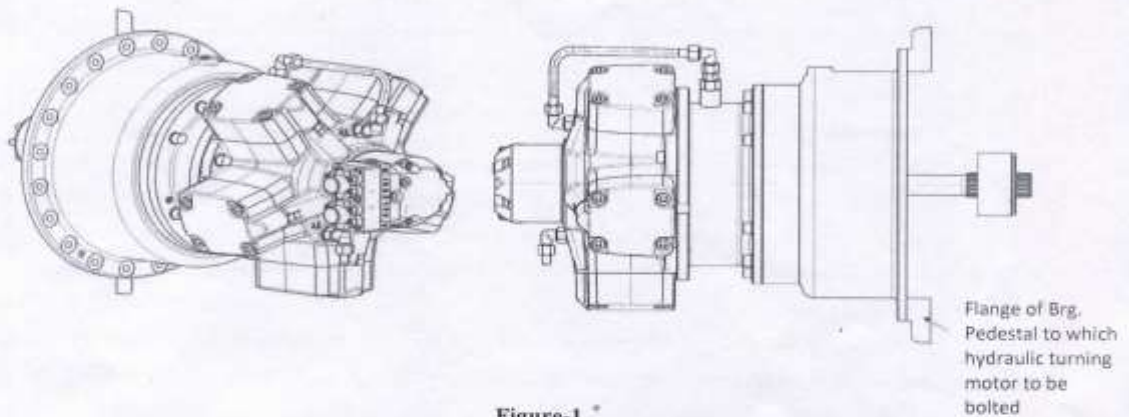


Figure-1 *

1. Qualification Criteria:

The parties meeting the below mentioned experience, Manufacturing & Testing Facilities Requirement and Technical Requirement shall be considered for further development of vendor for Supply of Hydraulic Turning Motor Assembly

A. Experience Requirement:

- Vendor to confirm that they are supplier of Hydraulic turning motor assembly and shall have capability of assembly of the same at their works.
- Vendor must have experience of successfully manufacturing/assembly & supplying of at least three (3) no. of Hydraulic turning motor assembly to OEMs/end user of Steam Turbine (200 MW & above), fitted out with overrunning clutch, Babbitted journal bearing, Spline shaft/ Spline flange and High Torque Radial Piston type Hydraulic motor (Operating fluid: ISO VG46 or equivalent) having minimum torque capacity of 1500Nm & RPM 50, during last 7 years from the date of enquiry.

In support of above points (a & b) vendor to submit following information as per below table, where Hydraulic turning motor assembly have been supplied.



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Table-1

SL.	Name of Customer	Detailed Address	Name, Phone no. and email - Id of contact person	Purchase order No.	Date of Supply	Hydraulic motor (Radial Piston type) make, Capacity & RPM	Over-running clutch make & capacity	Babbitted Journal bearing (Size and source to mention)	Spline shaft/ Spline Flange (Material & Thread detail/ Specification)	Qty

Vendor to submit the following documents as an evidence of acceptance of supplied component, for the above mentioned successfully executed order:

- I. 3 Nos. of Un-Priced Purchase Orders (POs) copies for above supply list.
- II. Dispatch document for any two number of complete **Hydraulic Turning Motor Assembly** of referred experience.
- III. Drawing & photograph of supplied Hydraulic Turning Motor Assembly mentioning capacity of different components viz. High Torque Radial Piston type Hydraulic motor, overrunning clutch, Spline shaft, spline flange etc. (any one supply as per submitted experience list).
- IV. Source of babbitt material and Test report of babbitted journal bearing and babbitt material assembled in **Hydraulic Turning Motor Assembly** mentioned in Table -1 to be submitted. The correlation of test certificate with purchase order referred to be ensured by vendor.
In case of outsourcing, Vendor should provide the details of the source and detail sought above are also to arranged from source of babbitted bearing. Also, submit a letter of consent / agreement from the source.
- V. At least two (02) no. of the Hydraulic turning motor assembly listed above must be in operation for minimum **TWO (02)** year at thermal power plant utility for rotating the steam turbine-generator rotor train. In support of this an end user certificate regarding satisfactory operating condition from OEM to be submitted from OEM/end user.

Or

Supplier to provide the document that they are approved supplier of Hydraulic turning motor assembly for the OEM of steam turbine manufacturers (200MW and above) and at least two purchase order must have been executed to that customer (Supporting document: Approved Supplier of OEM/ end user & 2 no. purchase order copy from same OEM executed during last 7 year from the date of enquiry).

B. Manufacturing & Testing Facilities Requirement:

- a. Vendor to confirm that they have in-house machining facilities to manufacture the parts of hydraulic turning motor assembly.



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- b. Vendor to confirm that they have in-house facility for assembly/inspection/testing/checking facilities for enquiry items. In case of outsourcing, Vendor should provide the details of the source and submit a letter of consent / agreement from the source.

C. Technical Requirement:

- a. All items of the assembly shall be as per bill of material (BOM) 01150132000 only, conforming materials, technical specification, material specification, acceptance standard, product standard, technical & assembly requirement in totality.
- b. Vendor to confirm that High Torque Radial Piston type Hydraulic motor shall be suitable for Operating fluid ISO VG46 or equivalent.
- c. External thread/Shaft profile of spline shaft (Item no. 3 of BOM) shall be compatible/match with motor (Item no. 3 of BOM), overrunning clutch (Item no. 2 of BOM), & Flange (item no. 5 of BOM).
- d. Spline flange (Item no. 40 of BOM) to be supplied in loose condition. However, compatibility/matching of External thread/Shaft profile of spline shaft (item no. 4 of BOM) with spline flange (Item no. 40 of BOM) to be ensured at vendor's work.
- e. Babbitting of the Bearing shells (item no. 13 of BOM) shall be done by Centrifugal Casting process. Babbitt material as per specification HW12897 to be used.
- f. Inspection and acceptance of babbitted bearing shall be done as per specification PS1.0032.
- g. Scope includes procurement of items, materials, Castings, forgings, babbitting, final machining of part items, and compatibility of parts items with each other and assembly of hydraulic turning motor as per drawing requirements. **Supplier to take note of it & confirm the final supply of enquiry item Hydraulic turning motor assembly shall be as per drawing 01150132000 meeting all requirements and bill of material (BOM) 01150132000 in totality.**

2. Selection of Supplier/ Manufacturer / Company:

Based on the information provided under this EOI, the prospective Supplier/ Manufacturer / Company shall be technically shortlisted. The short listed Supplier/ Manufacturer / Company will further be evaluated on the basis of terms and conditions defined in the enquiry.

Pre-bid clarification meeting can be held with the short listed parties regarding deliverables and physical checking of facilities with respect to machining, testing/inspection/ assembly etc. at vendor works.