



भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited
(भारत सरकार का उपक्रम / A Government of India Undertaking)
CIN : L74899DL1964GOI004281

सेंट्रल फाउंड्री फोर्ज प्लांट / Central Foundry Forge Plant

रानीपुर, हरिद्वार / Ranipur, Haridwar

फोन / Phone: 01334-284044 | ईमेल / Email: rlakra@bhel.in

NOTICE INVITING EXPRESSION OF INTEREST

Date: 01.04.2024

Sealed Expression(s) of Interest (Eol) are invited through registered post/speed post/courier/by hand on or before **25.04.2024 up to 02:30 PM** from **capable and interested parties** for the under-mentioned work. Eol documents can be downloaded from the Eols section of the website of BHEL: hwr.bhel.com & www.bhel.com.

Last date of **SUBMISSION** of Eol : **25.04.2024**
Place of **SUBMISSION** of Eol : **Tender Room**
Administrative Building
Central Foundry Forge Plant
Bharat Heavy Electricals Limited
Ranipur, Haridwar – 249403,
Uttarakhand, India

EOIs can also be submitted to arpitg@bhel.in and rlakra@bhel.in

Parties are required to ensure at their end that Eol documents complete in all aspects reaches CFFP on or before Eol opening date and time without any plea of delay on any account. For more details, please visit our website hwr.bhel.com & www.bhel.com or may contact on: **+91 1334 284093 or 284044**, e-mail: arpitg@bhel.in, rlakra@bhel.in

Name of work
Purchase of Ferro Molybdenum (Mo content 60%-65%) on Rate Contract Basis with Price Variation Clause

Note:

- BHEL reserves the right to accept or reject any / all application(s) without assigning any reason thereof.
- If any document(s) submitted by vendor is/are found false at any stage, the Eol (offer) will be cancelled immediately.
- BHEL will not be responsible for the loss or delay of Eol documents in transit in any case.
- All further corrigenda, addenda, amendments, time extensions, clarifications etc. to the Eol, if any, shall be hosted only on our website.
- This notice is accompanied by details of EOI and 4 annexures, namely:
Annexure – 1: Indicative Scope of Supply
Annexure – 2: Basis of Rate Contract
Annexure – 3: Suggestive PVC Formula for Ferro Moly
Annexure – 4: Pre-qualification criteria and details of Vendor's Experience
Annexure – 5: Specification of Ferro Molybdenum



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SUBJECT: Purchase of Ferro Molybdenum on Rate Contract Basis with Price Variation Clause

1. Introduction:

This Expression of Interest (Eoi) seeks response from organizations/companies/industries that are willing to and are capable of supplying Ferro Molybdenum as per the specification of CFFP/BHEL Haridwar as per the quantity requirement – on both, monthly and annual basis or as indicated by BHEL. The Ferro Molybdenum so supplied will be used for preparation of Ferro Alloys in Steel Melting Shop (hitherto, SMS) of CFFP, BHEL Haridwar.

1.1 About Bharat Heavy Electricals Limited (BHEL):

BHEL is a leading state owned company wherein Government of India is holding 63.17% of equity. BHEL is an integrated power plant equipment manufacturer and one of the largest engineering and manufacturing company of its kind in India engaged in core sectors of the economy, viz. Power, Transmission, Industry, Transportation (Railways), Renewable Energy, Oil & Gas, Water and Defence with over 180 products offerings to meet the needs of these sectors. A widespread network of 17 Manufacturing Divisions, 2 Repair Units, 4 Regional Offices, 8 Service Centres, 6 Overseas Offices, 6 Joint Ventures, 15 Regional Marketing Centres and current project execution at more than 150 project sites across India and abroad corroborates the humungous scale and size of its operations. BHEL also has a widespread overseas footprint in 80 countries with cumulative overseas installed capacity of BHEL manufactured power plants nearing 10,000 MW including Belarus, Bhutan, Egypt, Indonesia, Iraq, Kazakhstan, Malaysia, New Zealand, Oman, Rwanda, Sudan, Tajikistan and UAE. The high level of quality & reliability of BHEL products is due to adherence to international standards by acquiring and adapting some of the best technologies from leading companies in the world including General Electric Company, Alstom SA, Siemens AG and Mitsubishi Heavy Industries Ltd., together with technologies developed in its own R&D centres.

1.2 About Central Foundry Forge Plant (CFFP):

Incepted in 1976, CFFP is a strategic business unit of BHEL. CFFP is catering to the needs of steel castings and forgings mainly for the power plant equipment along with other industries such as steel, cement plants, defence, ship building etc. CFFP has received various accolades and certificates such as ISO-9001 from BVC, ISO 14000 and ISO 18000 from TUV-SUD and ISO 50001 from BSI.

CFFP has Steel Melting Shop (SMS) with capacity to prepare pour molten, liquid metal to cater to the needs of foundry and forge divisions. It has ability to melt and process wide



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variety of steel grades right from plain carbon grades to creep resistant, super critical and high chromium stainless steels. Steel Foundry (SF) of CFFP makes steel castings from 500 kg to 63 MT single piece weight and cast fabricated castings up to 120 MT weight. It caters to various needs of power plant manufacturing, steel industry, ship building, defence, infrastructure etc. The composition of various products requires including alloying elements to achieve desired chemistry for attaining required characteristics.

2. Scope of Cooperation:

BHEL is seeking Expression of Interest (Eoi) from experienced vendors for supply of Ferro Molybdenum on the basis of an annual rate contract. The vendor should have the capacity to cater to the annual as well as monthly requirement of Ferro Molybdenum in CFFP. The indicative details of supply shall be as per **Annexure – 1**.

3. Basis of Rate Contract:

The rate contract shall include a price variation clause the basis of which shall be an index. This index must be of repute which can be accessed by BHEL on either free or chargeable basis. Details sought are as per **Annexure – 2**.

In order to give the vendors a prospective idea of working of the Price Variation Formula, a **suggestive approach/formula** with example is given in **Annexure – 3**. Please note that this formula is only suggestive in nature and not finalized. The final working basis for the PVC shall be made available at the time of floating of tender enquiry for purchase of Ferro Molybdenum on RC basis, as desired by BHEL.

4. Pre-Qualification Requirements:

The prospective vendor shall have supplied minimum 30 MT of Ferro Molybdenum in one financial year during the period from 01.04.2017 to the date of floating of EOI. Detailed list of documents for establishing pre-qualification shall be as per **Annexure – 4**. The applicants are also expected to financially sound and capable of carrying out the intended work.

5. Brief Description of Eoi Process:

The interested prospective vendors shall ensure that their response along with annexures and supporting documents are received by BHEL on or before **25.04.2024**. The response should be accompanied with **details on company background, product profile, reference list of customers, performance certificate from customers, and annual audited financial reports for last 3 (three) years including auditor's report**.



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In case any further information is needed, vendors can contact CFFP.

The applicant shall submit their offer with all annexures duly signed and stamped. Your response is to be sent to the following address:

**Tender Room,
Administrative Building
Central Foundry Forge Plant
Bharat Heavy Electricals Limited
Ranipur, Haridwar – 249403,
Uttarakhand, India
Phone: +91 1334 284093, 284044**

EoIs can also be submitted to arpitg@bhel.in and rlakra@bhel.in

Upon receipt of responses against EoI from such vendors, BHEL will review the responses to ascertain suitability of the offer made by the prospective contractor and shortlist the vendors for further discussions. Detailed discussions on commercial and other terms and conditions to float the tender enquiry and subsequently, finalise the Purchase Order shall be held with shortlisted vendors. The detailed terms and conditions for such a contract shall be disclosed separately.

6. Miscellaneous:

6.1 Right to reject or accept any or all applications:

- Notwithstanding anything contained in this EoI, BHEL reserves the right to accept or reject any application and to annul the EoI Process and reject all applications, at any time without any liability or any obligation for such acceptance, rejection or annulment and without assigning any reasons thereof. In the event that BHEL rejects or annuls all the applications, it may, at its discretion, invite all eligible vendors to submit fresh applications.
- BHEL reserves the right to disqualify any applicant during or after completion of EoI process, if it is found there was a material misrepresentation by any such applicant or the applicant fails to provide, within the specified time, supplemental information sought by BHEL.
- BHEL reserves the right to verify all statements, information and documents submitted by the applicant in response to the EoI. Any such verification or lack of such verification by BHEL shall not relieve the applicant of his/her obligations or liabilities hereunder nor will it affect any rights of BHEL.
- Acceptance/communication/discussion with one or any of the applicants shall not be interpreted in the way of work order by any applicant. The course of action including



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tender enquiry, placement of PO etc. shall be governed by BHEL's Purchase Policy 2013, Fraud Prevention Policy etc.

7.2 Governing Laws & Jurisdiction:

The EoI process shall be governed by, and construed in accordance with, the laws of India and the Courts at Haridwar (India) shall have exclusive jurisdiction over all disputes arising under, pursuant to and / or in connection with the EoI process.



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Annexure – 1

Indicative Scope of Supply

Item	Ferro Molybdenum
Brief Specification*	Size: 10-50 mm Subscribing to IS 1469-1993 Grade: FeMo63C10 Molybdenum Content: 60 % – 65 %
Annual Requirement	100 – 150 MT
Monthly Requirement	10 – 15 MT
Place of Delivery	Central Stores, Central Foundry Forge Plant Bharat Heavy Electricals Ltd. Ranipur, Haridwar Uttarakhand – 249403
Tentative Delivery Period	30 days for each lot
Testing	Third party inspection report from any one of the following agencies shall be required: LRIS/ BVIS (WINGS OF BUREAU-VERITAS) /DNV/TUV(SUD) /ALFRED H KNIGHT/ SGS Final inspection shall be done at CFFP/BHEL Haridwar The scope of third party inspection shall be as under: A. The inspection is to be carried out as per the ordered specification ensuring original manufacturer's packing, Original manufacturer test certificates etc. as per specification and the linkage B. The material should be identified as per the specification like original manufacturer's name, Batch/lot no, Net weight, material name. The material should be packed as per specification and sealed by the inspection agency. The seal details should be mentioned in the third party inspection report. C. The test certificate should contain the complete witnessing of the chemical analysis of material as per IS1472 for nos. of test required in a lot and their testing methodology for evaluating nos. of element required by the material specification, size verification as per P.O. Specification, purchase order no, Batch/lot no of material, seal details of the inspector along with corresponding packing (packing list).

- Detailed specification is as per Annexure - 5



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Annexure – 2

Basis of Rate Contract

The rate contract is to be done with a price variation clause on a long term basis. The index used in such clause / contract should be of repute which can be accessed by us on either free or chargeable basis.

Accordingly following details are sought:

Whether your firm is presently, or was in past engaged in a long term contract for supply of Ferro Molybdenum	(Yes / No)
What is the name of the company with which you are engaged in such contract?	
Contact Details of the Company	
Is the referred rate contract running?	(Yes / No)
How long is / was the duration of rate contract?	
What is / was the PVC formula used in the rate contract?	
What is / was the index used in this rate contract?	
Details of Index (website/subscription method)	
Please also attach a copy of the rate contract	



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Annexure – 3

Suggestive PVC formula for Ferro-Moly:

$$[1 + \{(A1-A0)/A0\}] \times L1 \text{ (Agreed rate)}$$

Scenario 1: Supply is completed within delivery schedule

A1 = Average Ferro Moly price based on Argus Media (Ferro-molybdenum 60% Mo ex-works India INR/kg) of 30 days prior to the date of e-way bill

Scenario 2: Supply is completed beyond delivery schedule

A1 = Lower of:

1. Average Ferro Moly price based on Argus Media (Ferro-molybdenum 60% Mo ex-works India INR/kg) of 30 days prior to the scheduled delivery date

Or

2. Average Ferro Moly price based on Argus Media (Ferro-molybdenum 60% Mo ex-works India INR/kg) of 30 days prior to the date of e-way bill

A0 = Average Ferro Moly price based on Argus Media (Ferro-molybdenum 60% Mo ex-works India INR/kg) of January 2024 which is equal to Rs. 2385.00/kg (as per Attached details)

*The data of January 2024 is quoted just for example, the final base data as per this formula (or any other formula, agreed upon) shall be provided at the time of final tender enquiry.

Example:

A0 for Jan '24 = Rs. 2385.00 / kg

L1 Rate: Rs. 2100/kg (excl. of GST)

PO Placement date: 05.02.2024

Scheduled delivery date: 06.03.2024

Case 1: Delivery done on 06.03.2024

E-way bill is dated 01.03.2024

A1 = Average Ferro Moly price based on Argus Media (Ferro-molybdenum 60% Mo ex-works India INR/kg) of 30 days prior to the date of e-way bill i.e., 31.01.2024 – 29.02.2024

A1 = Rs. 2366.14 / kg



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$$\begin{aligned}\text{Price after application of PVC} &= [1 + \{(A1-A0)/A0\}] \times L1 \\ &= 1 + \{(2366.14-2385)/2385\} \times 2100 \\ &= [1 - (18.86)/2385] \times 2100 = \text{Rs. 2083.39 / kg}\end{aligned}$$

Case 2: Delivery done on 08.03.2024

E-way bill is dated 03.03.2024

A1 = Lower of

1. Average Ferro Moly price based on Argus Media (Ferro-molybdenum 60% Mo ex-works India INR/kg) of 30 days prior to the scheduled delivery date 06.03.2024 (05.02.2024 – 06.03.2024) = 2380.65

Or

2. Average Ferro Moly price based on Argus Media (Ferro-molybdenum 60% Mo ex-works India INR/kg) of 30 days prior to the date of e-way bill (01.02.2024 – 02.03.2024) = **2370.68**

$$\begin{aligned}\text{Price after application of PVC} &= [1 + \{(A1-A0)/A0\}] \times L1 \\ &= [1 + (2370.68-2385)/2385] \times 2100 \\ &= \text{Rs. 2087.39 / kg}\end{aligned}$$



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Annexure – 4

Pre-Qualification Requirements

S. No.	Requirement	Response (YES/NO) and Remarks, if any
1	Whether the applicant has experience in supplying minimum 30 MT of Ferro Molybdenum in one financial year during the period from 01.04.2017 to the date of floating of EOI	
2	As a supporting document to response in # 1 above, following documents are required:	
2.1	Copy of Purchase Orders / Purchase Agreements	
2.2	Copy of invoice / BL copy / any other document to confirm supply of material against above purchase order	
2.3	Copy of test certificate for the supplied material	
3	Please also mention the name of manufacturer(s) from whom you have supplied material in the past	
4	Whether applicant's audited annual financial reports including auditor's report for last 3 years are enclosed	

Please enclose relevant documents with your submission.

FERRO MOLYBDENUM**1. SCOPE**

This specification governs the quality of Ferro Molybdenum with the following requirements.

2. APPLICATION

The material shall be used as alloying addition for manufacturing of alloy steel

3. CONDITION OF DELIVERY

The size should be in the range of 10-50 mm. However oversized material should not exceed 10% by weight and undersize material should not exceed 5% by weight.

4. COMPLIANCE WITH NATIONAL STANDARDS

The specification in general is based on Indian standards specification IS 1469-1993 (Reaffirmed 1999); Grade: FeMo63C10.

5. FREEDOM FROM CONTAMINATION

The material shall be free from extraneous contamination such as slag.




6. CHEMICAL COMPOSITON


The material shall conform to the following chemical composition when it is analyzed in accordance with IS:12614 or equivalent international standard /instrumental analysis traceable to International standard.

The sampling shall be done as per IS: 1472.

ELEMENT	% MIN	%MAX
Carbon	-	0.10
Molybdenum	60	65
Silicon	-	2.0
Sulphur	-	0.10
Phosphorus	-	0.05

RMI	ARUN AGARWAL		WORKED BY	M.K.SAHU	
MPIC	ROHIT VARSHNEY		CHECKED BY	B K BEDI	
CHAIRMAN CPSC	G M VERMA		APPROVED BY	RANJAN KUMAR	
			APPROVED : PLANT STANDARDS COMMITTEE		
			PREPARED : SMS TECH	ISSUED : Steel Melting Shop	DATE : 13-09-18

			PLANT PURCHASE SPECIFICATION (CFFP - HARDWAR)		FF 05009 Rev 07 Page 2 of 3
		7. INSPECTION AT SUPPLIER'S WORKS: <ul style="list-style-type: none"> CFFP reserves the right to witness the testing of the material at supplier works and therefore the supplier shall notify the readiness of the material in advance. If any specific inspection requirements are written in purchase order, the same shall be applicable. CFFP may, at its discretion, test the material after receipt and acceptance of the material will be based on the CFFP'S test results. For result of analysis and properties of material the decision of CFFP shall be final and binding on the supplier. 			
COPYRIGHT AND CONFIDENTIAL The information on this documents is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company		8. TEST CERTIFICATES One Original and three copies of Test Certificate from the Manufacturer containing the following information along with test result of clause 3,5 and the chemical composition as per clause 6 should be provided. Manufacturer's Name Name of the material Batch/Lot No. Lot Quantity. Note: <ul style="list-style-type: none"> a) A manufacturer supplying directly to BHEL should include BHEL's P.O. No. and Challan No. also in the TC. b) Any other supplier should provide a covering letter along with original Manufacturer's TC as above mentioning BHEL's P.O. No. and Challan No. 			
			9. PACKING AND MARKING The material shall be packed in tamper proof metallic drum such as to prevent loss/deterioration in quality during handling, transportation and storage. Preferred packing size shall be 50 Kg drums however drums with weight up to 250 Kg will be acceptable with 5 packs of 50 kg each in one drum. It should be in the manufacturer's packing. Each drum should be marked with the following details. Name of the material Manufacturer's Name / Trade mark Batch/Lot No. Net weight.		
		10. REFFERED STANDARDS IS: 1469 -1993, IS: 12614, IS: 1472 and AA 11311 (Corporate specification BHEL)			
			WORKED BY CHECKED BY	M.K.SAHU B K BEDI	 

			PLANT PURCHASE SPECIFICATION (CFFP - HARDWAR)		FF 05009 Rev 07 Page 3 of 3
<u>REVISION RECORD SHEET</u>					
COPYRIGHT AND CONFIDENTIAL The information on this documents is the property of Bharat Heavy Electrical Limited It must not be used directly or indirectly in any way detrimental to the interest of the company	SN	Revision No.	Revision date	Nature of Changes	
	01.	04	07.09.2009	-Clauses 8 and 9 revised incorporating requirement of manufacturer's packing and Test certificate.	
	02	05	30.07.2010	- Clause 3: Size range redefined. - Clause 6: Testing and sampling shall be done as per IS 12614 & 1472. Limit for Sulphur content has been increased from 0.05% to 0.10%. - Clause 8: Clause 5 included in the T.C. - Clause 9: Size of the pack and tamper proof metallic drum incorporated as per SP-0612 dated 11.03.2010. -Clause 6: Analysis with international standard /instrumental analysis traceable to international standard added.	
	03	06	14.08.2017		
	04	07	12/09/2018	-Clause 9: Preferred packing size shall be 50 Kg drums however drums with weight up to 250 Kg will be acceptable with 5 packs of 50 kg each in one drum.	
				WORKED BY CHECKED BY	M.K.SAHU B K BEDI