



An ISO 9001
Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirapalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

ENQUIRY

NOTICE INVITING TENDER

Phone: +91 431 257 76 53

Email : karunanidhy@bhel.in

spsy@bhel.in

Web : www.bhel.com

TWO PART BID

Tender to be submitted in two Parts

Enquiry
Number:

2601800005

Enquiry
Date:

18.01.2018

Due date for submission
of quotation:

14.02.2018

You are requested to quote the Enquiry number date and due date in all your correspondence. This is only a request for quotation and not an order.

Please note that under any circumstances both delayed offer and late offers will not be considered. Hence vendors are requested to ensure that the offer should reach physically on or before 14.00 Hrs(IST) on the Date of tender opening. Tenders received after 14.00Hrs (IST) will not be considered for evaluation.

Item	Description	Quantity	(Indigenous Vendors) Matl. Will be Delivered to
10	Portable Handheld Grinding Cum Polishing Machine For IN-SITU Mettalography as per the technical specification & commercial conditions applicable(To be downloaded from web site www.bhel.com or http://tenders.gov.in)	1 No.	FOR, BHEL, Stores, PPPU, Thirumayam

Important points to be taken care during submission of offer

- 1) Material shall be delivered to (By Indigenous vendors): As stated above.
- 2) By Foreign Vendors: CFR Chennai Seaport / Airport
- 3) Delivery required 2 months from the date of purchase order.
- 4) Erection & Commissioning period required 1 Week from the date of intimation by BHEL to vendor for deputation of their Engineers for E&C.
- 5) EMD for this Tender will be (INR): 40000
- 6) Compliance Forms. TRY/IMP/03 & TRY/IND/03A to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
- 7) All updates, amendments, corrigenda, etc., (if any), for each tender will be posted only on the above websites from time to time, as and when required, until each tender is opened. There will be no publication of such updates, amendments, corrigenda, etc., through newspapers or any other media.

BHEL's General guidelines / instructions (refer MM / CE / GENL / 001 - EMD) including bank guarantee formats and list of consortium banks, commercial terms check-list can be downloaded from BHEL web site <http://www.bhel.com> or from the Government tender website <http://tenders.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry reference .

Tenders should be submitted before 14.00Hrs (IST) on the due date
Tenders will be opened online at 14:30 hours on the due date
Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present.

Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED**

DGM / Capital Equipment / MM

S.PARTHASARATHY
MANAGER
CAPITAL EQUIPMENT / MM
BHEL, TRICHY-620014.

PART- A

**TENDER REQUIREMENTS FOR THE SUPPLY OF
'PORTABLE HANDHELD GRINDING CUM POLISHING MACHINE FOR IN-
SITU METALLOGRAPHY**

SECTION – I: Qualifying Criteria

The BIDDER is expected to give complete details against each clause in the table given below and wherever necessary an additional sheet may be attached (giving clear reference number) to cover the required details. Otherwise the technical offer will not be considered.

S.No.	TENDER PARTICULARS	VENDOR's RESPONSE
1.1	VENDOR / Original Equipment Manufacturer (OEM) might have supplied & commissioned at least TWO numbers of 'PORTABLE HANDHELD GRINDING CUM POLISHING MACHINE FOR IN-SITU METALLOGRAPHY' system of the similar system in the past TEN years	(as on the date of opening of this Tender).
1.2	VENDOR / OEM should quote, who have supplied and commissioned in the last TEN years (as on the date of this tender opening) at least ONE of 'PORTABLE HANDHELD GRINDING CUM POLISHING MACHINE FOR IN-SITU METALLOGRAPHY' system of the offered model : (i) in at least one country other than the country of origin to establish Vendor's global business activity. and (ii) atleast one number in India. The referred equipment / systems shall be presently working satisfactorily for more than one year from the date of commissioning (as on the original date of this tender opening). The name and contact addresses of the customers to whom the above said equipment were supplied to be furnished with details.	
1.3	Vendor has to submit at least ONE PERFORMANCE CERTIFICATE for satisfactory performance of "PORTABLE HANDHELD GRINDING CUM POLISHING MACHINE FOR IN-SITU METALLOGRAPHY" system as referred under clause 1.2 above, for a minimum period of one year from the Date of Commissioning from their customers in India or in any other country outside the country of origin, supplied and commissioned in the last TEN years.	(as on the original date of this tender opening)



(PART A) PORTABLE POLISHING MACHINE

S.No.	TENDER PARTICULARS	VENDOR's RESPONSE
1.4	Performance Certificate in Original Form may be sent directly to BHEL/Purchase through E-mail / TELEFAX directly by the Customer of the Vendor. The original certificate may be returned after verification by BHEL, if required. For obtaining the Performance Certificate, a suggestive format is provided in the enclosure ANNEXURE - A.	
1.5	BHEL reserves the right to verify the information provided by the Vendor for the referred machine at their referred customer's works. It shall be the responsibility of the vendor to facilitate the visit of BHEL's team at their referred customer works. The Travel, Board, and Lodging expenses for BHEL Personnel shall be borne by BHEL. In case the information provided by vendor is found to be false / incorrect, the offer shall be rejected. BHEL reserves the right to accept or reject the OEM'S based on the assessment of their technical and financial capability.	

SECTION – II

The BIDDER/VENDOR are requested to provide the following information:-

S.No.	TENDER PARTICULARS	VENDOR's RESPONSE
2.1	The VENDOR has to furnish Reference List of Customers, with complete address, details of contact person, where 'PORTABLE HANDHELD GRINDING CUM POLISHING MACHINE FOR IN-SITU METALLOGRAPHY' system have been supplied in the past	
2.2	Specify details of 'PORTABLE HANDHELD GRINDING CUM POLISHING MACHINE FOR IN-SITU METALLOGRAPHY' system supplied to any other unit of BHEL, if any and to provide details on model and year of commissioning	
2.3	Details on SERVICE-AFTER-SALES Set-up in India including the Address of Agent/Service Centers In India.	
2.4	Any Additional data to supplement the manufacturing capability of the OEM for the subject equipment.	

E. Jinda

SECTION – III

The BIDDER to note the following and comply with while submitting the OFFER:

S.No.	TENDER PARTICULARS	VENDOR's RESPONSE
3.1	The BIDDER shall submit the offer in TWO PARTS-Technical [with PART A & PART B] & Commercial and Price Bid.	
3.2	The Offer shall contain a comparative statement of Technical Specifications given by BHEL and the Offer Details submitted by the Bidder, against each clause. A just 'CONFIRMED' or 'COMPLIES' or 'YES' or 'NO-DEVIATION' or similar words in the technical comparative statement may lead to disqualification of the Technical Offer. In case of any deviations in any of the technical specifications, such deviations should be clearly specified in the comparative statement. All systems and sub systems proposed in the solution should be detailed in description with illustrations/photographs, if required	
3.3	The BIDDER shall assure a continuous support for SPARES and SERVICE for five years, from the date of commissioning of the equipment at BHEL Works.	
3.4	The Technical Offer shall be supported by Product Catalogue and Data Sheets in ORIGINAL and complete technical details / literature on the QUOTED MODELS of 'PORTABLE HANDHELD GRINDING CUM POLISHING MACHINE FOR IN-SITU METALLOGRAPHY' system	
3.5	The Commercial Offer (given with the Technical Offer) shall contain the Scope of Supply and the Un-Priced Part of the Price-Bid, for confirmation for the scope of supply.	
3.6	Earlier performance & field experience (service support) with BHEL (if any) will be a reckoning factor for the technical qualification of the OFFER. Vendor can quote of supply to BHEL units of systems of similar capability.	



(PART A) PORTABLE POLISHING MACHINE

ANNEXURE - A

Suggestive Format for the Performance Certificate

The Performance should be certified by the customer on Customer's Letter Head and submitted along with the OFFER or sent directly to BHEL with the Tender Enquiry Number as the reference.

PERFORMANCE CERTIFICATE

1.0	Name / Type of the Equipment :	
2.0	Supplier's Name & Address	
3.0	Make & Model number of 'PORTABLE HANDHELD GRINDING CUM POLISHING MACHINE FOR IN-SITU METALLOGRAPHY' system and other Major Accessories forming part of the main equipment	
4.0	Month & Year of Commissioning	
5.0	Application for which the Equipment is generally used	
6.0	EQUIPMENT DETAILS :	
6.1	Size of the specimen / samples / jobs tested in the subject equipment	
7.0	Performance of the Equipment (Please tick the appropriate option)	Satisfactory Non Satisfactory
8.0	Service after Sales Support given by the Vendor / OEM (Please tick the appropriate option)	Satisfactory Non Satisfactory
9.0	Other Remarks (if any)	
Date :		
		Signature & Seal of the Authority Issuing the Performance Certificate



PART B**TECHNICAL SPECIFICATIONS FOR 'PORTABLE HANDHELD GRINDING CUM POLISHING MACHINE FOR IN-SITU METALLOGRAPHY'**

S. No.	PARTICULARS AND BHEL SPECIFICATION	VENDOR's OFFER
1.0	PURPOSE & APPLICATION	
1.1	Handheld grinding cum polishing machine is to prepare in-situ mirror surface finish for making a metallographic replica of components / test coupons to conduct microstructure examination.	
1.2	Specimens for micro examination will be prepared from Critical Pressure Parts coming in High Pressure Boilers, Industrial Valve Components, Castings covering a wide range of materials like Carbon Steel, Low Alloy & High Alloy Steels, Quenched & Tempered Steels, Austenitic & martensitic Stainless Steels; Nickel & Titanium Alloys	
2.0	CONTROL UNIT WITH GRINDING / POLISHING UNIT	
2.1	The weight of control unit shall be less than 2.5 kg for the dimension of the unit (width x depth x height) of 130 mm x 260 mm x 100 mm.	
2.2	In case, the dimension (width x depth x height) of the control/ carry case is upto 360 mm x 240 mm x 210 mm, the weight shall be maximum of 7 kg and the same unit shall have feature of remote control operation to operate the polisher at higher altitude while carry case placed at lower/ ground level.	
2.3	The bidder has to provide two control unit / controller for the grinding / polishing activity in this supply.	
2.4	Power source shall be suitable to AC 230 V, 50-60 Hz	
2.5	Control unit may have the features of a) On/OFF switch b) Motor RPM controlling knob c) RPM Indicator and d) Overload mechanism/fuse to trip off if overloaded along with a light indicator or alarm.	
2.6	Grinding / polishing Motor must run smoothly without over heating problems during operation of motor and may be of brushless type. Supplier have provide one standard type motor with speed of 1,000 (min) - 40,000 (max) rpm with cable cord of length 1.5 - 3 meters and one torque type motor having speed of 1,000 (min) - 25,000 (max) rpm	



(PART B) PORTABLE POLISHER MACHINE

	with cable cord of length 1.5 - 3 meters.	
3.0	REMOVABLE ATTACHMENTS/ HANDLES WITH EQUIPMENT	
3.0	Vendor must provide the following attachments along with equipment quoted	
3.1	Straight handle – 2 nos	
3.2	Right angle handle – 2 nos	
3.3	Speed reducer (1/4) – 2 nos	
3.4	45 deg handle– 2 nos	
4.0	CONSUMABLES / SPARES	
4.0	The following consumables/ spares to be provided along with the equipment:	
4.1	Support rubber discs / rubber carrier of 30 mm diameter for grinding/polishing operation- 10 nos	
4.2	Carry case / Tool case with suitable size for packing the entire equipment for easy carrying.	
4.3	Vendor must list down all other important spares and accessories with unit rate required to be procured along with the equipment for 5 years of continuous operation	
5.0	ACCESSORIES : PORTABLE METALLURGICAL MICROSCOPE	
5.1	Portable metallurgical Microscopes for field inspection of prepared surfaces and replicas	
5.2	Portable microscope with battery-powered LED illumination.	
5.3	Complete with 10x eyepiece and 10x/20x/40x objective lens	
5.5	Weight of the microscope excluding the objective lens shall be less than 1.1 kg	
5.6	Magnetic cross table with XY-table with magnetic clamping suitable for inspection of ferrous tubes.	
5.7	Tripod base for curved surfaces.	
5.8	Round base, for use on flat surfaces.	
6.0	DOCUMENTATION	
6.1	Three copies of the operation & maintenance manuals containing electric schematics,	



(PART B) PORTABLE POLISHER MACHINE

	circuit diagrams, PCB drawings, Trouble-shooting charts, mechanical sub-assemblies, rating of bought-out Items, etc. shall be supplied.		
7.0	INSTALLATION/COMMISSIONING AND TRAINING		
7.1	The Equipment with all accessories is to be installed & commissioned at BHEL works by the service engineer of the vendor.		
7.2	Complete Training for BHEL persons to be given on operation & maintenance of the offered equipment at BHEL works at the time of commissioning		
8.0	PERFORMANCE GUARANTEE		
8.1	The equipment & accessories are to be guaranteed for its performance for a minimum period of 12 months from the date of commissioning at BHEL Works or 18 Months from the date of despatch whichever is earlier.		

