



**BHARAT HEAVY ELECTRICALS LIMITED**  
CORPORATE RESEARCH & DEVELOPMENT DIVISION  
VIKASNAGAR, HYDERABAD - 500 093, INDIA

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RD:DP:MPX:F-04

ENQUIRY

Date 04-12-2013

Ref: 711306241

Enquiry for **Ion-beam milling equipment along with its spares and accessories**

Enquiry No:711306241

Enquiry Date : 04-12-2013

Due Date: 07-01-2014

Indicative Delivery Date : 15-03-2014

Sl.No	Item Description	Unit	Qty
1	Ion beam milling equipment with spares and accessories as per item specifications	LOT	1
2	Disk punch as an accessory as per item specifications	LOT	1
3	Specimen Lapping and Grinding Kit as an accessory as per item specifications	LOT	1
4	Dimpler and its consumables as an accessory as per item specifications (To be quoted as optional item)	LOT	1

Please submit your quotation for the above material in sealed cover superscribed with enquiry no, enquiry date and due date subject to our enclosed terms and conditions. The quotations shall reach us on or before the due date by 12 noon. The tenders can also be dropped in the tender box kept at the security gate,BHEL R&D. In case you are not in position to submit the offer,please send reply suitably specifying the reasons.

Sl.No	Description	Document Ref.
01	Enquiry, General Terms & Conditions, Commercial Terms & Conditions etc.	Volume - 1
02	Technical specifications, Scope of Supply etc.	Volume - 2

M Hemanth Kumar  
Manager  
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	<b>ENQUIRY &amp; QUALIFYING CRITERIA</b>	Volume - 1 Enquiry No 711306241
Ion-beam milling equipment along with its spares and accessories		

1	Tendor inviting officer / Authority, Designation and Address	Additional General Manager(MM) BHEL R & D, Vikas Nagar (Near Balanagar), Hyderabad -500093
2	Item Description - Qty	1) Ion beam milling equipment with spares and accessories as per item specifications - 1 LOT 2) Disk punch as an accessory as per item specifications - 1 LOT 3) Specimen Lapping and Grinding Kit as an accessory as per item specifications - 1 LOT 4) Dimpler and its consumables as an accessory as per item specifications (To be quoted as optional item) - 1 LOT
3	Enquiry Reference no.	711306241
4	Indicative Delivery Date	15-03-2014
5	Due date, Time and place for submission of tender	07-01-2014 upto 12 noon. Sealed Quotations shall be addressed to AGM(MM), BHEL R & D Division, Vikas Nagar (Near Balanagar), Hyderabad AP,India Pin - 500 093 Quotations can also be deposited in the Tender box located at Security Gate of BHEL R & D BHEL shall not be responsible for any postal/courier delay.
6	Place, Date and time of Tech.Bid opening	Tender Opening Cell (Sangam) BHEL R & D Office. 07-01-2014, 2 PM
7	Mode of Submission of Tender	Please submit your offer in one common sealed cover containing two parts in separate sealed covers as detailed below. 1. First cover shall contain: a. Technical & Commercial bid b. Filled in Commercial Compliance Statement (mandatory) c. Copy of price-bid with price(s) cells blank (un-priced price bid) 2. Second cover shall contain price bid. Price bid containing price quotes ,installation and /or commissioning charges shall be spelt out clearly taking into account total charges rather than quoting vaguely such as charges per man-day or charges per engineer per day etc. If the price bid was found later to be different from the unpriced price bid format in any way, the offer will be rejected summarily. The rates shall be quoted both in figures and in words.  The offers can also be submitted through e-mail and have to be sent in PDF format to e-mail id: 'eoffers@bhelrnd.co.in' only. Copies should not be marked to anyone. The e-mail offers should have two attachments. One attachment shall contain a) Technical & Commercial bid b) Filled in Commercial Compliance Statement (mandatory) and c) Copy of price-bid with price(s) cells blank (un-priced price bid). The second attachment shall contain price bid. The subject of the e-mail should contain Enquiry No, Enquiry Date and Due date.



## GENERAL TERMS & CONDITIONS (GTC)

Volume - 1  
Enquiry No  
711306241

Ion-beam milling equipment along with its spares and accessories

SL.No.	Clause	BHEL REQUIREMENT
1	General	<p>a. All offers must include name of the contact person, phone no/mobile no, Fax no, email-id. Unsigned offers are liable for rejection.</p> <p>b. We, BHEL R&amp;D, is registered with Department of Scientific and Industrial Research (DSIR) for the purpose of availing Customs Duty exemption in terms of Government Notification no.24/2007-Customs dated 01-Mar-2007 &amp; Central Excise Duty Exemption in terms of Government Notification No. 16/2007-Central Excise dated 01-Mar-2007 as amended from time to time. Hence suppliers are requested to submit their bids clearly stating applicable taxes/duties. All foreign quotes will be evaluated with custom duty @ 5.15% for cost comparison.</p> <p>c. Taxes &amp; Duties quoted will be taken for cost evaluation &amp; order placement and no change will be entertained later except in the case of changes made by the government. In case any Taxes/ Duties exempted, a self declaration for the same may be attached to the offer. Changes in taxes and duties because of the changes in turn over etc will be to supplier's account.</p> <p>d. Where ever vendor registration form and EFT details have been submitted earlier, the same need not be submitted again unless there is a change.</p> <p>e. BHEL R&amp;D do not issue 'C' form .</p> <p>f. L1 status shall be decided on Cost to BHEL Basis.</p>
2	Foreign Suppliers	<p>BHEL will deal directly with foreign vendors, where ever required, for procurement of goods.However, if the foreign principal desires to avail of services of an Indian agent,then foreign principal should ensure compliance to regulatory guidelines which require mandatory submission of agency agreement containing agency commission.</p> <p>Any supplier (Agents/distributors/representatives) desirous of quoting imported goods/services, they should submit the quote in foreign currency along with agency agreement copy, failing which their offer is liable for rejection.In case of non submission of agency agreement copy,the principal should submit the quotation to BHEL directly. Foreign supplier will also indicate in their offer Indian agent's name, if any, address and percentage of agency commission out of the quoted price.</p> <p>Fully owned Indian Subsidiaries/distributors of Foreign Companies shall quote in Foreign Currency on FOB basis only.</p>
3	Late Tenders	Tenders received after due date/time(12:00hrs) will not be considered
4	Discrepancy in words and figures	<p>(a) If, in the price structure quoted for the required goods/ Services/ works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.</p> <p>(b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and</p> <p>(c). If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above.</p> <p>(d) If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.</p>
5	Two Part bid clarifications	In the case of Two-part bid, the vendor should furnish technical and commercial clarifications, if any, within stipulated time mentioned,failing which, it will be construed that the vendor is not interested in the tender and BHEL shall not consider the offer for further evaluation.
6	Price Impacts	In the event of any bidder, after finalizing the technical specifications and scope of supply, opting to revise their original bid, they have to submit the Price-Impact only. The Original price bid along with Price-Impact bid shall be opened during price bid opening. Unsolicited price impacts will not be considered.
7	Price bid evaluation	All offers in price bid opening or reverse auction shall be evaluated in Indian currency based on unit price, packing & forwarding, taxes/duties, freight charges if any, exchange rate.Loading due to non-acceptance of our standard commercial terms will be evaluated as per the LOADING FACTORS form as enclosed along with the enquiry.The exchange rate declared by State Bank of India under TT Selling rate on the technical bid open date shall be adopted for evaluating foreign currency bids.

8	Packing	The supplier shall be responsible for the goods being properly and adequately packed so as to prevent any loss, damage or deterioration during transit.
9	Withdrawal	In case the supplier withdraws their offer before placement of order, BHEL reserves the right not to send next enquiry(ies). In case the supplier withdraws the quotation after its acceptance by BHEL or fails to supply the goods as per the terms and conditions of contract, or at any time repudiated the contract wholly or in part, BHEL shall be at liberty to cancel the Purchase Order and to recover from the supplier the extra cost and other loss, incidentals due to the breach of contract on the part of the supplier through risk purchase.
10	Risk Purchase	In case of default/late delivery, BHEL reserves the right to make alternate arrangement for procurement at suppliers risk and cost.
11	Banned List	The offers of the bidders who are in the banned list and the offers of the bidders who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL website www.bhel.com.
12	Over All L1	Order will be placed on overall L1 basis. Vendors should quote for all items, otherwise the offer will be rejected.
13	Additional Information	Suppliers are requested to visit our web site regularly for any updates and additional information, "All corrigenda, addenda, amendments, time extensions clarifications, etc. to the tender will be hosted on BHEL website only". The corrigendum will not be published in news paper.
14	Destination	Indian Vendors: Destination shall be Stores, BHEL R&D, Hyderabad. Foreign Vendors: BHEL R.O.D Office, Mumbai, India.
15	Arbitration	Subject to the jurisdiction of Hyderabad/Secunderabad, Andhra Pradesh, India in respect of any suit or other legal proceedings relating this contract.
16	Inspection	On receipt, the goods shall be subjected to inspection and our decision regarding the acceptability of the goods shall be final and binding on the suppliers.

**Signature of the bidder with Seal & Date**

	<b>COMMERCIAL TERMS &amp; CONDITIONS (CTC)</b>	Volume - 1 Enquiry No 711306241
Ion-beam milling equipment along with its spares and accessories		

SL.No.	Clause	BHEL REQUIREMENT	SUPPLIERS ACCEPTANCE / REMARKS
1	Validity of Offer	90 days from date of techno-commercial bid opening.	
2	Price basis	<p>The prices shall be firm for entire period of contract.            The suppliers shall indicate packing and forwarding charges,if any, separately.            All foreign suppliers shall quote the lowest prices on 'FOB-Nearest International Airport' basis. An amount of 3% on basic value towards freight and insurance will be added for cost comparison.            All Indian suppliers shall quote the lowest prices on 'free delivery at BHEL R&amp;D Stores or F.O.R destination' basis. In case of Ex-Works, an amount of 3% on basic value towards freight and insurance will be added for cost comparison.</p>	a. For Destination b. Ex-Works
3	Rate Contract	<p>In case the goods enquired are on Rate Contract basis with any other unit of BHEL, such fact should be clearly indicated in the quotation giving full particulars of Rate Contract number, validity and price and also your willingness to comply with order if placed against such Rate Contract. A copy of Rate contract signed by the supplier should be sent with the quotation.</p>	
4	LD Clause	<p>Any delay beyond delivery date will attract penalty @0.5% of the undelivered portion of order value per week of delay and pro-rata for part of week subject to maximum of 10% of undelivered portion of order value.In case of non acceptance to this LD Clause, 10% of basic material cost will be loaded on the quoted prices while cost comparison. (Please refer the enclosed 'Loading Factors' sheet).</p>	
5	Payment Terms	<p>a) For Indian Offers : BHEL standard payment term is "100% payment along with taxes by EFT/RTGS within 30 days of receipt and acceptance of material at BHEL R&amp;D Stores,Hyderabad". For other payment terms there will be a loading on the offer as mentioned in our "Loading Factors" sheet which is enclosed to this enquiry.            b) For Foreign Offers : BHEL standard payment term is "100% Invoice value by wire transfer within 30 days of receipt and acceptance of material at BHEL R&amp;D Stores,Hyderabad". For other payment terms there will be a loading on the offer as mentioned in our "Loading Factors" sheet which is enclosed to this enquiry.All bank charges inside India shall be to BHEL account and outside India shall be to supplier's account.</p>	
6	Freight & Insurance	<p>Insurance will be arranged by BHEL in case of Ex-Works as well as FCA / FOB basis supplies.In such cases ,an amount of 3% towards freight and insurance will be added for cost comparison.</p>	
7	Agency Agreement	<p>Guidelines regarding dealing with Indian agents of foreign suppliers</p> <ol style="list-style-type: none"> <li>1. BHEL shall deal directly with foreign vendors, wherever required, for procurement of goods. However, if the foreign principal desires to avail of services of an Indian agent, then the foreign principal should ensure compliance to regulatory guidelines which require mandatory submission of agency agreement.</li> <li>2. It shall be incumbent on the Indian agent and the foreign principal to adhere to the relevant guidelines of government of India, issued from time to time.</li> <li>3. The agency agreement should specify the precise relationship between the foreign oem and services to be rendered by agent / associate, whether general in nature or in relation to the particular contract, must clearly stated by the foreign supplier / Indian agent. Any payment, which the agent / associate receives in India or abroad from the oem, whether as commission or as a general retainer fee shall be brought out in record in the agreement and be made explicit in order to encurse compliance to the laws of the country.</li> <li>4. Any agency commission to be paid by BHEL to the Indian agent shall be Indian currency.</li> <li>5. When ever Indian agents are representing on behalf of their principals, the relevant authorization letter and agreement copy to be enclosed along with technical bid to consider the offer.</li> </ol>	
		<p><b>FOR INDIAN SUPPLIES :</b>            =====            Suppliers are requested to quote for the delivery mentioned in the enquiry. However, in case it is not possible to meet the delivery requirement of BHEL, they shall mention in the right column the best possible delivery period</p> <p>1) From date of Purchase order =====&gt;</p> <p>2) From receipt of material / input data / drawings etc. from</p>	

8	Delivery Period	<p>BHEL=====&gt; (if applicable)</p> <p>3) From receipt of approval of design documents / drawings etc. by BHEL=====&gt; (if applicable)</p> <p>4) Time from PDI to despatch =====&gt; (if applicable)</p> <p>However BHEL shall inform the vendor about rejection of the offer before price bid opening in case of not meeting the delivery requirements of BHEL.</p> <p>=====</p> <p>FOR FOREIGN SUPPLIES :</p> <p>=====</p> <p>Suppliers are requested to quote for the delivery mentioned in the enquiry. However, in case it is not possible to meet the delivery requirement of BHEL, they shall mention in the right column the best possible delivery period</p> <p>1. From date of Purchase order :=====&gt;</p> <p>2. From receipt of input data / drawings etc. from BHEL=====&gt; (if applicable)</p> <p>3. From receipt of approval of design documents / drawings etc. by BHEL =====&gt; ( if applicable )</p> <p>4. From date of LC Opening=====&gt; ( if applicable)</p> <p>5. From date of PO acceptance =====&gt; (wherever issues like export clearance etc. are involved, mentioning the reasons)</p> <p>However BHEL shall inform the vendor about rejection of the offer before price bid opening in case of not meeting the delivery requirements of BHEL.</p>	
9	Taxes and duties	<p>All Indian suppliers shall clearly mention current sales tax/VAT,Excise duty and Service Tax etc, if any,payable in addition to the quoted price and indicate applicable rates/percentage,item-wise clearly.The vendors should mention applicable Registration Number(s) specifically in their quotation.The suppliers are requested to submit their bids clearly stating applicable taxes and duties.The quoted taxes/duties will be taken for cost evaluation and order placement and no change will be entertained later except in the case of changes made by the government. In case of Service Tax, proof of payment of service tax is required to be submitted for reimbursement of the same.</p>	
10	Price basis	<p>The prices shall be firm for entire period of contract. The suppliers shall indicate packing and forwarding charges,if any, separately. All foreign suppliers shall quote the lowest prices on 'FOB-Nearest International Airport' basis. An amount of 3% on basic value towards freight and insurance will be added for cost comparison. All Indian suppliers shall quote the lowest prices on 'free delivery at BHEL ASSCP,Gurgaon(Near New Delhi),Haryana-122001. or F.O.R destination' basis.In case of Ex-Works,an amount of 3% on basic value towards freight and insurance will be added for cost comparison.</p>	<p>a. For Destination</p> <p>b. Ex-Works</p>
11	Weight and Packing Dimensions.	<p>The Supplier shall indicate the shipping weight (Kgs) and dimensions(L x W x H in cms) clearly along with offer.</p>	

**Note :** All the clauses of the above format should be filled and submitted with the Techno Commercial Bid (Part-1). The filled in BHEL Commercial terms & Conditions format submitted with technical bid, responding to all the clauses duly signed with seal **only shall be considered**. Any other Commercial terms & conditions of bidders entered else where in their offer shall not be considered and are liable for rejection.

**Signature of the bidder with Seal & Date**



## ITEM SPECIFICATIONS

Volume - 2  
Enquiry NO  
711306241

Ion-beam milling equipment along with its spares and accessories

SL.No.	Item			
1	<b>Ion beam milling equipment with spares and accessories as per item specifications</b>			
	sl no	Descriptions	BHEL Specifications	Vendor Specifications/ Deviations
	1.0	Scope	(a) Primarily for TEM sample preparation (3mm dia samples) from the following materials: • Plain Carbon Steels • Low Alloy and High Alloy steels (1.25 Cr steels, 9 Cr Steels) • Stainless steels (18Cr steels, Super304H, etc.) • Ni-base superalloys (such as Inconel 617, Inconel 740, Inconel 738, Hastelloy X, etc.) • Cast irons • Ceramics • Brass samples • Copper samples • Aluminium samples • Co-base superalloys (b) The machine may be preferably upgradable to SEM sample preparation in future. This SEM sample preparation capability is optional.	
	2.0	Ion-beam milling system	As follows:	
	2.1	Type: Table/Bench – top unit	Ion-milling system being offered must be a table-top or bench-top model. A compatible table for bearing its weight, operation of the equipment with storage drawers (for spares and accessories) with lock has to be quoted additionally as an optional item.	
	2.2	Ion sources	<ul style="list-style-type: none"> <li>• 2 ion-sources/ guns (Saddle-field type/ Penning-type):</li> <li>• Motorized guns are preferable yet optional</li> <li>• Both having same energy ranges for operation in order to produce distortion free sample during milling</li> <li>• Both the ion-sources must have independently adjustable milling angle, independently adjustable gas flow control using mass-flow controller/ regulators/ motorized needle valve for either rapid or slow ion-milling</li> <li>• Installing/ Mounting and removing these guns from the equipment should be easy during replacement/ change of any consumables inside the gun (if any)</li> <li>• Gas to be used for ion-sources must be Argon, 99.99% or higher purity and a cylinder with full gas capacity of this has to be provided along with the equipment during installation and demonstration. This may be procured in India itself (if the OEM is a foreign vendor). All connecting piping and regulators/ flow controllers required for connecting this cylinder to the equipment have to be included in the offer.</li> <li>• Offer should also include supply</li> </ul>	

		<p>of consumables for upto 1000 h initial operation of these guns along with the equipment (if any). These have to be quoted separately as optional items and must be indicated and justified clearly in the compliance sheet • Ion-source operating energy ranges: 800eV to 8 keV. (&lt;800 eV for lower part of range and &gt; 8 keV for higher part of range are preferable yet optional. But 800 eV to 8 keV range is a must) • Beam diameter (FWHM) for the guns: 500 microns or higher at the sample • A mechanism for observing beam alignment has to be provided • Ion-current density: peak value of atleast 1mA/cm<sup>2</sup> • Milling angle: -10 to 10 deg atleast and should be adjustable during operation. These have to be continuously and independatly variable.</p>	
2.3	Specimen stage and milling chamber requirements:	<p>• Loading and unloading of the samples has to be done using an air-lock system which prevents the entire milling chamber to be vented. This air-lock system should be provided with a specimen exchange mechanism for rapid transfer of specimens in less than 3 minutes • Specimen stage should be capable of in-plane specimen rotation (oscillation is optional yet preferable from 0-120 deg.) which has to be computer controllable/ programmable. Rotation speed should be atleast 5 rpm. • It should be possible to have milling only from one side (Sector milling capability) for preparation of cross-sectional TEM samples • Capability for having atleast 0.5mm movement of sample holder (in either direction (+/-)) within milling chamber is required • Capability for preparation of cross-section samples should exist for the equipment being offered. If any additional attachments are required for preparation of cross-section specimens in ion-milling system, they have to be quoted, indicated and justified as optional items.</p>	
		<p>• Diameter of samples to be held: 3mm dia. • Mechanism: Clamping type (2 No.s) for double side milling or Gluing type (2 No.) (Gluing type holders to be offered if and only if clamping type specimen holders are not existing for this equipment. This has to be indicated clearly if offered. Gluing type holders have to be offered as optional items only if clamping type holders are offered.) If clamping type specimen holders are offered,</p>	

2.4	Sample/ Specimen holder(s):	<p>each holder has to be provided for atleast 500 hours of operation with consumables such as clamp rings, etc. which may be worn out during operation. These have to be indicated clearly. If gluing type specimen holders are offered, all the accessories such as hot-plate, mounting resin, etc. which are required for gluing and also for removing the sample from the specimen holder have to be offered. These have to be mentioned clearly and justified. If any of the sample holders which are not as mentioned above but are proprietary, they have to be indicated and offered as optional items. • Accessories such as tweezers/ any specimen mounting kits, etc. which are required for handling the sample have to be provided and mentioned clearly. • Sample holder materials should be amongst the following: Graphite, Molybdenum, Copper, Stainless steel, Aluminium • A user friendly mechanism for loading and unloading the samples in the specimen holder has to be provided and mentioned • The specimen holder should have long life and durability These holders are for ambient temperature milling only. Liquid Nitrogen compatible holders are discussed in separate section of this enquiry.</p>	
2.5	Imaging or viewing system/ accessories	<ul style="list-style-type: none"> <li>• In-situ viewing of the sample preparation process by means of either (a) Binocular microscope or stereo microscope (atleast upto 50X magnification or higher) OR (b) Digital/CCD/CMOS camera with zooming options to atleast 100x attached to image recorder OR (c) both options (a) and (b) has to be provided. The (b) accessory should be capable of recording images of the sample being milled. Video option for (b) is optional yet preferable. • This accessory should have controls from GUI for setting the intensity of light for viewing purposes. • Automatic shutter should be present to reduce window contamination when not viewing the specimen Note: If option (a) is being offered but OEM also has capability to offer CCD/CMOS/Digital camera, it has to be quoted and indicated as optional item. If option (a) is being offered, the equipment being offered must be capable of being upgraded with option (b) in future. This kind of equipment only has to be quoted.</li> </ul>	

2.6	Power requirements:	Volts: 240 to 260 V Frequency: 50-60 Hz Single phase Necessary adapters (if any) have to be provided along with the equipment	
2.7	Vacuum System:	<ul style="list-style-type: none"> <li>• Pumping system: Dry pumping system with Diaphragm pump (oil-free, two stage or four stage) and a Turbo molecular/drag pump</li> <li>• Vacuum gauge: Cold cathode type for high vacuum/ chamber and Solid-state vacuum gauge/ Pirani vacuum gauge for low vacuum</li> <li>• Pressure of the main chamber (Base pressure): <math>&lt;1 \times 10^{-5}</math> mbar</li> <li>• There should be a provision in GUI to monitor pressure constantly</li> </ul>	
2.8	User interface, controls and termination of the milling process:	<ul style="list-style-type: none"> <li>• State of the art touch screen and/or computer controller with data-logging, storing and printing capabilities have to be provided by the OEM from the country of manufacture of the equipment, along with the equipment for monitoring process parameters, controlling the milling process, etc. This has to be connected to the equipment (by LAN, etc.) for recording/storing images and videos if option (b) is offered from 2.5 section of the enquiry. This touch screen and/or computer controller should be capable of remote diagnosis or service when connected to internet.</li> <li>• Touch screen should be available with the machine for monitoring parameters and control of process</li> <li>• State of the art computer control to be supplied by OEM from the country of manufacture of the equipment for controlling the milling process, etc. with data printer. This has to be connected to the equipment (by LAN, etc.) for recording/storing images and videos</li> <li>• Features such as pre-programmed recipes and user defined setting of parameters should be available. Also capability to store new programs should be available.</li> <li>• Automated sample loading from the airlock chamber should be possible</li> <li>• Auto termination by (a) optics/laser for opaque samples/ image processing techniques (b) time elapse method/ timer control</li> <li>• Capability for monitoring evolution of surface topography by image analysis should be available (if option (b) is offered from 2.5 section of the enquiry)</li> <li>• All variables such as chamber pressure, milling parameters, etc. have to be visible in the GUI during operation</li> <li>• The operator should be able to start, stop or pause the</li> </ul>	

		<p>milling process from this control system • The computer control when connected to internet should be capable of remote servicing/ monitoring • Help files (if any) should be provided for general maintenance (such as installation of gun/ during replacement of spares, etc.)</p>	
2.9	Specimen cooling system and accessories	<ul style="list-style-type: none"> <li>• Should not cause phase transformation of the material being milled</li> <li>• Liquid Nitrogen based</li> <li>• Close circuit cooling</li> <li>• Should be disposed on the sample or its surrounding during milling for maintaining low temperature at the sample</li> <li>• 2 No.s of clamp type holders compatible for this kind of operation at low temperatures have to be quoted and mentioned clearly with justification apart from the ambient temperature holders. Accessories such as tweezers/ any specimen mounting kits, etc. which are required for handling the sample have to be provided and mentioned clearly.</li> <li>• A user friendly mechanism for loading and unloading the samples in the specimen holder has to be provided and mentioned</li> <li>• The specimen holder should have long life and durability</li> <li>• Cold stage shall have 6-8 hour dewar capacity; The specimen temperature should be measured in-situ and a provision for this has to be made available. Automated cooling and warm-up/heat-up of the sample should be done (suing in-built heater preferably) and a mechanism should exist for this operation.</li> <li>• Storage of liquid Nitrogen should be possible either internally or externally and a mechanism to automatically dispense this has to exist. This has to be indicated clearly. Volume of storage also has to be indicated clearly. LN2 storage flask has to be provided for transporting and storage of the required amount of LN2 from LN2 suppliers' location to the location of the equipment</li> </ul>	
2.10	Weight of the equipment:	Less than 150 kgs.	
2.11	Sampling requirement:	Ion-milling system being offered should be capable of milling in such a way that large electron transparent areas are available both for conventional TEM mode as well as High Resolution (HR) TEM modes of operation.	
2.12	Language of operation	English	
		Two sets of cleaning accessories for cleaning the milling chamber and equipment (if any) have to be provided along with the	

2.13	Cleaning accessories:	equipment. If a function is already existing in the machine for self-cleaning, it has to be mentioned in detail. If these accessories are not necessary, clear reasons as to why cleaning accessories are not required have to be mentioned in detail.	
2.14	Erection and Commissioning	<ul style="list-style-type: none"> <li>• Erection and Commissioning or Installation has to be done at BHEL Corp. R&amp;D, Hyderabad, by the OEM or their authorized service agency/ personnel. All cables and adapters required for integration of the equipment have to be supplied along with the equipment. It is the responsibility of the supplier to integrate all the systems and ensure the functionality. Supplier should intimate their requirements (if any) for erection and commissioning after the receipt of PO. This has to be quoted separately as an optional item.</li> <li>• Demonstration of ion milling for some of the samples available with us as mentioned in 1.0 of the enquiry has to be done at the time of E&amp;C or Installation (Depending on samples available at lab at that point of time)</li> <li>• Training has to be given for atleast 2 people on-site for usage of all modes of the equipment. This has to be quoted separately as an optional item</li> </ul>	
2.15	Documentation	<p>One manual in English (Hardcopy) should be supplied along with the equipment indicating:</p> <ul style="list-style-type: none"> <li>• Detailed Usage/Operation Instructions for various types of samples</li> <li>• Cleaning procedures (if any)</li> <li>• Trouble shooting guide</li> <li>• Maintenance and Service manuals</li> </ul> <p>Apart from the above, CD(s)/ DVD(s) containing soft copy of the above indicated instruction manuals MUST be provided</p>	
2.16	Guarantee or Warranty	<ul style="list-style-type: none"> <li>• Guarantee or Warranty for all parts (other than accessories and spares): 12 months from the date of E&amp;C or 18 months from the date of supply/ shipment whichever is earlier</li> <li>• Extended warranty for 24 months is also to be quoted separately as an optional item</li> <li>• Contact information of service engineers MUST be provided at the time of installation or E&amp;C</li> <li>• Availability of trained service engineers in India for attending the problem in at most 5 days has to be ensured</li> </ul>	
		Recommended or suggested spares and tools kit (including major tools required for servicing at site) for atleast 2 years of normal working of	

	3.0 Spares	equipment by the Original Equipment Manufacturer have to be quoted and listed with proper justification and details. This list of spares has to be provided from OEM and a certificate in proof of this has to be submitted along with the offer.		
	4.0 Accessories	Optional sample holders for EBSD, TEM (dia. 2.3mm) and slope cutting may be offered (if any). These have to be offered only as optional items.		
2	<b>Disk punch as an accessory as per item specifications</b>			
	sl no	Descriptions	BHEL Specifications	Vendor Specifications/ Deviations
	1	Diameter of sample being punched:	3 mm	
	2	Removal of samples:	After punching, it should be easy to remove the cut disks from the punching machine	
	3	Thickness range:	This equipment should be capable of punching metallic samples as thick as 150 microns	
	4	Cutting mechanism	Spring loaded piston design mechanism required for ensuring no plastic deformation of the sample disk after punching	
	5	Others	Cutting action should be independent of user.	
	6	Spares	All spares required for 24 months functioning of this equipment have to be indicated and provided with justification. If these are not required, clear reasons as to why these are not necessary have to be provided.	
		Warranty	All supplied items to be provided with warranty for 12 months from the date of dispatch. In case of items involving erection and commissioning, supplier shall provide warranty for 18 months from date of dispatch or 12 months from erection and commissioning whichever is later.	
3	<b>Specimen Lapping and Grinding Kit as an accessory as per item specifications</b>			
	sl no	Descriptions	BHEL Specifications	Vendor Specifications/ Deviations
	1	Disk grinder	1 No. of disk grinder has to be supplied for uniformly thinning the disk shaped specimens of 3mm diameter to parallel sided ones	
	2	Thickness measurement mechanism on/along with disk grinder	Thickness of the samples should be continuously monitored using a thickness measurement mechanism with a scale having atleast 10 microns thickness indicators.	
	3	Specimen Lapping Kit	Heavy metal base with 3 No.s of extremely flat glass plates for lapping have to be provided. 100 No.s of lapping sheets/disks	

		of grit sizes 5 microns, 15 microns and 40 microns have to be provided with this kit.	
4	Accessories	Solid metal mounting cylinders 8 No.s; Mounting wax - 12 No.s; Compatible hot plate for mounting and removal of samples - 1 No.; Tweezers for handing thin samples - 2 No.s	
5	Spares	All spares required for 24 months functioning of this equipment have to be indicated and provided with justification. If these are not required, clear reasons as to why these are not necessary have to be provided.	
	Warranty	All supplied items to be provided with warranty for 12 months from the date of dispatch. In case of items involving erection and commissioning, supplier shall provide warranty for 18 months from date of dispatch or 12 months from erection and commissioning whichever is later.	
4	<b>Dimpler and its consumables as an accessory as per item specifications (To be quoted as optional item)</b>		
	sl no	Descriptions	BHEL Specifications
	1	Sample Size	Suitable for 3 mm diameter disk shaped samples
	2	Requirements	Should be capable of dimpling upto less than 20 microns with autotermination and depth measurement system along with stereomicroscope/ binocular microscope for viewing the sample surface after dimpling
	3	Grinding and Polishing wheels and rings	Soft (Phosphor bronze) spherical 2 mm wide grinding wheel - 12 No.s; Hard (Stainless Steel) Spherical 3mm wide grinding wheel - 8 No.s; Polishing wheel - 4 No.s; Felt polishing ring - 75 No.s
	4	Consumables	0-2 microns polishing compound syringe (Diamond/Cubic Boron Nitride) - 3 No.s; 2-4 microns polishing compound syringe (Diamond/Cubic Boron Nitride) - 3 No.s; 4-6 microns polishing compound syringe (Diamond/Cubic Boron Nitride) - 3 No.s; Alumina suspension (0.05 microns) 3 X 50ml (+/- 20%)
	5	Spares	All spares required for 24 months functioning of this equipment have to be indicated and provided with justification. If these are not required, clear reasons as to why these are not necessary have to be provided.
			For the suppliers agreed for minimum warranty period and not agreed for stipulated/required warranty

	Stipulated or Required Warranty	period,loading will be applied @10% of the order value per anum for the reduced warranty period.Please refer to enclosed loading factors.The stipulated/required warranty period is 24 months.	
	Warranty	All supplied items to be provided with warranty for 12 months from the date of dispatch. In case of items involving erection and commissioning, supplier shall provide warranty for 18 months from date of dispatch or 12 months from erection and commissioning whichever is later.	
G	<b>General Specifications</b>		
	sl no	Descriptions	BHEL Specifications
	1	After Sales Support:	Supplier must have office in India or authorized service agent in India to provide after sales service, support and maintenance. A certificate in proof of this has to be submitted along with the bids.
	2	Annual Maintenance Contract (AMC):	AMC charges for the equipment along with all the accessories for 3 years beyond the warranty period have to be quoted per year in % of the order value of the supplies only, as an optional item. These charges have to be valid for 3 years beyond the standard warranty period. The AMC charges shall be added for cost evaluation. BHEL reserves the right to place a separate order/ orders for AMC contract for 3 years and/ or part thereof before expiry of standard warranty period at the rates quoted. AMC Charges should be quoted as follows: AMC Charges after 1st year: _____ % AMC Charges after 2nd year: _____ % AMC Charges after 3rd year: _____ %
	3	Brochures/ Technical details:	Brochures/ Technical details/ supporting information for compliance to all the items specifications listed in the enquiry have to be submitted along with the offer. Photographs of the equipment also have to be submitted.
4	Compliance Statement:	Compliance statement for each and every item mentioned in the enquiry has to be provided either separately or in the space provided for compliance and submitted along with the offer. The vendor should clearly indicate whether they are able to supply as per BHEL specifications for each specification. This should clearly be written in vendor compliance box of the enquiry as "Yes" or "No". The vendor	
			Vendor Specifications/ Deviations

		may mention reasons for (i) deviations from specifications (ii) providing better than mentioned specifications wherever applicable (iii) for mentioning "No" in the compliance sheet.	
5	Existing Customers List and performance certificate from them:	The vendor must have supplied this equipment (Item 1) to atleast 5 customers with same specifications. Full contact address, name and contact numbers of the customers have to be provided at the time of submitting the technical bid. Also, performance certificate from 3 of the customers must be submitted along with the technical bid.	
6	Agency agreement (If applicable)	Agency agreement of the Indian business partner with OEM should be provided. This agreement should contain details of products considered, territory of operation, commission and responsibility of the Indian business partner with the OEM and should be signed both by the OEM as well as the Indian business partner	
7	Manufacturer's Test Certificate	Manufacturer's Test Certificate has to be provided before shipment	

\* Vendors are advised to write specifications in detail and not to write like 'Complied/ Yes / No ' etc. in specifications.

**Signature of the bidder with Seal & Date**

## LOADING FACTORS



NOTE : IN CASE OF DEVIATION TO BHEL TENDER SPECIFIED TERMS, LOADING FACTOR INDICATED IN FOLLOWING TABLE WILL BE APPLIED TO QUOTED PRICE WHILE EVALUATING THE LOWEST QUOTE

A. FOR INDIGENOUS PURCHASES					
SL.NO	SCOPE	COMMERCIAL TERMS	BHEL STANDARD TERM	AS OFFERED	LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS
A.1	SUPPLY OF EQUIPMENT	PAYMENT TERMS	100% PAYMENT, WITH IN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF MATERIAL AT BHEL R& D	SAME	NIL
				PAYMENT AGAINST PROFORMA INVOICE / DESPATCH DOCUMENTS	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE TOTAL PO VALUE FOR ONE MONTH
				FULL ADVANCE PAYMENT WITH BANK GUARANTEE	LOADING @ ( SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE TOTAL PO VALUE FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH
				PART ADVANCE (X%) PAYMENT WITH BANK GUARANTEE AND BALANCE PAYMENT WITH IN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF THE MATERIAL	LOADING @ ( SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH
				PART ADVANCE (X%) PAYMENT WITH BANK GUARANTEE AND BALANCE PAYMENT ON RECEIPT AND ACCEPTANCE OF MATERIAL	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH AND LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON BALANCE AMOUNT FOR ONE MONTH
A.2	SUPPLY OF EQUIPMENT INCLUDING ERECTION AND COMMISSIONING (E&C)	PAYMENT TERMS	90% PAYMENT, WITH IN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF MATERIAL AND BALANCE 10% WITH IN 30 DAYS OF COMPLETION OF E&C.	SAME	NIL
				100% PAYMENT WITH IN 30 DAYS AFTER COMPLETION OF SUPPLIES AND E&C	NIL
				90% PAYMENT AGAINST PROFORMA INVOICE/ DESPATCH DOCUMENT AND BALANCE 10% WITH IN 30 DAYS AFTER COMPLETION OF E&C.	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON 90% OF THE VALUE OF PO FOR ONE MONTH
				90% PAYMENT AGAINST PROFORMA / DESPATCH DOCUMENT AND BALANCE 10% AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON TOTAL VALUE OF THE PO FOR ONE MONTH
				90% ADVANCE PAYMENT WITH BANK GUARANTEE AND BALANCE 10% PAYMENT WITH IN 30 DAYS AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON 90% OF THE PO VALUE FOR DELIVERY PERIOD (ROUNDED OFF TO THE NEAREST MONTH) + 1 MONTH
				PART ADVANCE (X%) PAYMENT WITH BANK GUARANTEE AND (90 -X) % PAYMENT ON RECEIPT AND ACCEPTANCE OF THE MATERIAL AND 10% PAYMENT WITH IN 30 DAYS AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (ROUNDED OFF TO THE NEAREST MONTH)+ 1 MONTH AND LOADING @ ( (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON BALANCE (90-X)% AMOUNT FOR ONE MONTH
				PART ADVANCE (X%) PAYMENT WITH BANK GUARANTEE AND BALANCE (90 - X) % PAYMENT AFTER RECEIPT AND ACCEPTANCE OF THE MATERIAL AND 10% PAYMENT AFTER COMPLETION OF E&C	LOADING @ ( (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (ROUNDED OFF TO THE NEAREST MONTH)+ 1 MONTH AND LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON BALANCE AMOUNT (100-X)% FOR ONE MONTH

B. FOR FOREIGN PURCHASES (IMPORTED)						
SLNO	SCOPE	COMMERCIAL TERMS	BHEL STANDARD TERM	AS OFFERED	LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS	
				SAME	NIL	
B.1	SUPPLY OF EQUIPMENT	PAYMENT TERMS	100% PAYMENT BY WIRE TRANSFER WITHIN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF MATERIAL AT BHEL R&D. (DESPATCH DOCUMENTS WILL BE SENT TO BHEL R&D DIRECTLY ALONG WITH BANK DETAILS)	SIGHT DRAFT ON PRESENTATION OF DESPACH DOCUMENTS VIZ INVOICE, AWB ETC TO OUR BANKERS	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+6%) ON THE BASIC VALUE FOR ONE MONTH PLUS PAYMENT RELATED BANK CHARGES INCURRED BY BHEL	
				LC PAYMENT AGAINST DESPACH DOCUMENTS	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE BASIC VALUE FOR ONE MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL	
				FULL ADVANCE PAYMENT BY WIRE TRANSFER /LC WITH BANK GUARANTEE	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE BASIC VALUE FOR DELIVERY PERIOD(Rounded off to nearest month) + 1 MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL	
				PART ADVANCE (X%) PAYMENT BY WIRE TRNSFER/LC WITH BANK GUARANTEE AND BALANCE PAYMENT WITH IN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF THE MATERIAL	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL	
				PART ADVANCE (X%) PAYMENT BY WIRE TRNSFER/LC WITH BANK GUARANTEE AND BALANCE PAYMENT ON RECEIPT AND ACCEPTANCE OF MATERIAL	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD (Rounded off to nearest month) + 1 MONTH AND LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON BALANCE AMOUNT FOR ONE MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL	
B. FOR FOREIGN PURCHASES (IMPORTED)						
SLNO	SCOPE	COMMERCIAL TERMS	BHEL STANDARD TERM	AS OFFERED	LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS	
				SAME	NIL	
B.2	SUPPLY OF EQUIPMENT INCLUDING ERECTION AND COMMISSIONING ( E&C )	PAYMENT TERMS	90% PAYMENT BY WIRE TRANSFER WITH IN 30 DAYS FROM THE DATE OF RECEIPT AND ACCEPTANCE OF THE MATERIAL AND BALANCE 10% WITH IN 30 DAYS AFTER COMPLETION OF E&C	SIGHT DRAFT ON RESENTATION OF DESPACH DOCUMENTS VIZ INVOICE, AWB ETC TO OUR BANKERS	LOADING @ ( SBI BASE RATE ON TENDER OPENING DATE+6% ) FOR ONE MONTH PLUS PAYMENT RELATED BANK CHARGES INCURRED BY BHEL	
				90 PAYMENT BY WIRE TRANSFER /LC AGAINST DESPACH DOCUMENTS BALANCE 10% WITH IN 30 DAYS AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+6%) ON 90% OF BASIC VALUE FOR ONE MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL	
				90% PAYMENT BY WIRE TRANSFER / LC AGAINST DESPACH DOCUMENTS. BALANCE 10% AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+6%) ON THE BASIC VALUE FOR ONE MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL	
				90% OF BASIC VALUE AS ADVANCE PAYMENT BY WIRE TRANSFER /LC WITH BANK GUARNTTEE AND BALANCE 10% WITH IN 30 DAYS AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+6%) ON 90% OF THE BASIC VALUE FOR DELIVERY PERIOD (Rounded off to nearest month) + ONE MONTH PLUS LC RELATED BANK CHARGES INCURRED BY BHEL	
				PART ADVANCE (X%) PAYMENT BY WIRE TRANSFER /LC WITH BANK GUARANTEE AND BALANCE (90-X)% PAYMENT BY WIRE TRANSFER /LC AFTER RECEIPT AND ACCEPTANCE OF THE MATERIAL AND 10% PAYMENT WITH IN 30 DAYS AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD(Rounded off to the nearest month) + ONE MONTH AND LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON BALANCE (90-X)% FOR ONE MONTH	
PART ADVANCE (X%) PAYMENT BY WIRE TRANSFER /LC WITH BANK GUARANTEE AND BALANCE (90-X)% PAYMENT BY WIRE TRANSFER /LC AFTER RECEIPT AND ACCEPTANCE OF THE MATERIAL AND 10% PAYMENT AFTER COMPLETION OF E&C	LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON THE PART ADVANCE AMOUNT (X%) FOR THE DELIVERY PERIOD(Rounded off to the nearest month) + ONE MONTH AND LOADING @ (SBI BASE RATE ON TENDER OPENING DATE+ 6% ) ON BALANCE AMOUNT (100-X)% FOR ONE MONTH					

C. PENALTY FOR DELAYED DELIVERY (COMMON FOR INDIGENOUS AND IMPORTS)				
SLNO	COMMERCIAL TERMS	BHEL STANDARD TERM	AS OFFERED	LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS
C	LD CLAUSE	IN THE EVENT OF DELAY IN AGREED CONTRACTUAL DELIVERY, PENALTY OF 0.5% ( HALF PERCENT) PER WEEK BUT LIMITED TO A MAX OF 10% VALUE OF UNDELIVERED PORTION OF BASIC MATERIAL COST WILL BE APPLICABLE	AGREED	NIL
			IF NOT AGREED	LOADING @ 10% OF THE BASIC MATERIAL COST
			IF AGREED FOR X%	LOADING @ ( 10-X)% OF THE BASIC MATERIAL COST
D. GUARANTEE/WARRANTY PERIOD (COMMON FOR INDIGENOUS AND IMPORTS)				
SLNO	COMMERCIAL TERMS	BHEL STANDARD TERM	AS OFFERED	LOADING FACTOR FOR NON COMPLIANCE TO BHEL STANDARD TERMS
D	GUARANTEE/WARRANTY PERIOD	STIPULATED OR REQUIRED GUARANTEE/ WARRANTY PERIOD (X)	AGREED	NIL
		MINIMUM ACCEPTABLE GUARANTEE / WARRANTY PERIOD (Y)	NOT AGREED FOR STIPULATED BUT AGREED FOR MINIMUM GUARANTEE/WARRANTY	LOADING @ 10 % OF THE ORDER VALUE PER ANNUM FOR THE REDUCED GUARANTEE PERIOD (X-Y)



**Against this enquiry for the subject item/ system with detailed scope of supply as per enquiry specifications, BHEL may resort to “REVERSE AUCTION PROCEDURE” i.e., ON LINE BIDDING (THROUGH A SERVICE PROVIDER). The philosophy followed for reverse auction shall be English Reverse (No ties).**

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
2. Those bidders who have given their acceptance for Reverse Auction (quoted against this tender enquiry) will have to necessarily submit „online sealed bid? in the Reverse Auction. Non-submission of „online sealed bid? by the bidder for any of the eligible items for which techno-commercially qualified, will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
3. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
4. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
5. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
6. Bidders have to fax the Compliance form (annexure IV) before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
7. In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at “Total Cost to BHEL” like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.
8. Reverse auction will be conducted on scheduled date & time.
9. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.
10. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, (Annexure VII) as provided on case-to-case basis to Service provider within two working days of Auction without fail.
11. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL?s standard practice.
12. Bidders shall be required to read the “Terms and Conditions” section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the „Business Rules of Reverse Auction?, which will be communicated before the Reverse Auction.
13. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant BHEL guidelines, shall be initiated by BHEL and the results of the RA scrapped/ aborted.
14. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.
15. In case BHEL decides to go for reverse auction, the H1 bidder (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.

**AUTHORISATION LETTER FOR E-PAYMENT/ NEFT / RTGS**  
(PLEASE FILL UP THE FORM COMPLETELY IN CAPITAL LETTERS ON YOUR COMPANY LETTERHEAD ONLY)

Vendor Code (to be filled by BHEL)	
------------------------------------	--

Type of Request (Tick one)	NEW	CHANGE
1 Company Name		
2 Address		
3 City with PIN Code		
4 State		
5 PAN Number		
6 TIN/ VAT No.		
7 CST No.		
8 Service Tax No.		
9 Name of Contact Person		
10 Mobile number		
11 Ph. no. with STD Code		
12 Fax No. with STD Code		
13 Email ID		
14 Website (URL)		

**BANK DETAILS FOR EFT / RTGS**

1	Bank Name	
2	Branch	
3	Branch Code	
4	Branch Address	
5	Branch Phone No	
6	Account No.	
7	Account Type: SB/ Current/ other (Specify)	
8	MICR Code	
9	IFSC Code	

I, as an authorized representative / owner of the above named company, hereby state as under:

1. Enclosed here with a cancelled cheque in support of our company's bank details.
2. Authorize BHEL R&D Hyderabad, to electronically make payments to the designated bank account with bank charges, if any, to our account.
3. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold BHEL / transferring Bank responsible.
4. I hereby certify that the particulars given above are true, complete and correct.
5. This authority remains in full force until BHEL receives and acknowledge written notification requesting change or cancellation.

Date :

Authorised Signatory  
Designation :

COMPANY SEAL



# Bharat Heavy Electricals Limited

Corp. R&D DIVISION

VIKAS NAGAR,

HYDERABAD- 500 093 (INDIA)

Ph: 040 - 23772704, Fax: 040 - 23770698, email: mpx@bhelrnd.co.in

RD:MPX:F-13

## VENDOR REGISTRATION FORM

(Indigenous supplier)

[FORM TO BE SUBMITTED\* BY THE BIDDER ALONG WITH TECHNICAL-BID]

Before filling, please refer to instructions on page-4

### 1.0 VENDOR PROFILE:

1.1 Name and address of the vendor:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Phone Nos.:

Fax No.:

Email: 1.

2.

1.2 Local representative name & address in Hyderabad/Secundrabad :

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Phone Nos.:

Fax No.:

Email:

Contact Person:

Mobile No:

### 2.0 TYPE OF ORGANISATION:

PROPRIETORSHIP	Company:	Sister Concern ( mention vendor registration number of main organization)	
Partnership	CORPORATION	Small Scale Industry	ANY OTHER(Please specify)

In case of SSI unit, copy of registration to be enclosed. It is requested that MSME registration certificate to be enclosed

### 3.0 ANNUAL TURN OVER:

#	Year	Turn-Over, Rs.
1	Current Year(budgeted)	
2	Previous year ( 200 - 0 )	
3	Prior Year ( 200 - 0 )	

### 4.0 NAME AND ADDRESS OF THE BANKER:

4.1 Bank Name

4.2 Branch name

4.3 Account number

4.4 Account Type

4.5 MICR Code:

4.6 IFSC Code(RTGS/NEFT):

4.7 Bank Phone number(s),

Blank cheque, duly cancelled, to be enclosed.

Please note that all payments shall be made through Electronic clearance services to your above account against the orders executed, if any.

**5.0 REGISTRATION PARTICULARS**(relevant copies to be enclosed)

- 5.1 IT Permanent Account No.(PAN):  
 5.2 State Sales Tax/VAT Registration No:  
 5.3 Central Sales Tax Registration No:  
 5.4 ED Registration No:  
 5.5 Service Tax Registration No:  
 5.6 PF Account No:  
 5.7 Labour Licence No:  
 5.8 ESI Account No:

**6.0 CONTACT PERSON:** S/Sri:

Designation:

Phone / Mobile No:

**7.0 TOTAL NUMBER OF EMPLOYEES:**

Graduates (Engr/Scientists/Mgmt/Fin.)	Consultants	Workers		
		Sup./Skilled	Semiskilled	Unskilled

**8.0 LIST OF PRODUCTS/ SERVICES OFFERED:**

#	Products/ Services	Capacity
1		
2		
3		
4		
5		
6		

**9.0 REFERENCE LIST :**

(Only recognized public and private sector companies, attach if printed copy available)

#	Customer	Volume / Year
1		
2		
3		
4		
5		
6		
7		

**10.0 INFRASTRUCTURE / FACILITIES:**

#	Facility (with specifications)	Age/ Year procured
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

**11.0 REGISTRATION WITH OTHER BHEL UNIT/UNITS:**

#	Unit	Registration No	Year
1			
2			
3			
4			

**12.0 ANY OTHER INFORMATION :**

**DECLARATION:**

The information furnished above is true and authentic.

(CEO / PROPRIETOR)

**SEAL:**

**DATE:**

Note:

- 
1. Registered bidders, having BHEL (R&D) registration no. or have submitted this format for registration, need not furnish this information again.
  2. The competent authority reserves the right to accept or reject the registration.
  3. Vendors approved for registration will be informed by mail / email, as convenient. A separate communication will be sent in case of non-registration also, citing reasons thereof.
  4. BHEL reserves the right to take penal action as deemed fit if any of the information provided by the vendor(s) is found to be incorrect.
  5. AGM, Head (MM) may be contacted for clarification/additional information on registration.

**Instructions**

- 
1. Fill all items. Please mention "N.A." for items/ clauses not applicable.
  2. Use A4 sheets for this document and the enclosures. Use of additional sheets is permitted if space provided is not adequate.
  3. Attach copies of latest documents in respect of items 5.0 (Registration no.s)
  4. Photographs of registered office and the chief executive/proprietor shall be furnished.



RD:MPX:F-14

# Bharat Heavy Electricals Limited

Corp. R&amp;D DIVISION

VIKAS NAGAR,

HYDERABAD- 500 093 (INDIA)

## SUPPLIER REGISTRATION FORM

(FOREIGN SUPPLIER)

ALL COLUMNS SHOULD BE PROPERLY FILLED IN THE SPACE PROVIDED FOR.WHEREVER IT IS NOT APPLICABLE PLEASE WRITE "NOT APPLICABLE".INCOMPLETE OR INCORRECT FORMS MAY NOT BE CONSIDERED.

### 1.0 GENERAL INFORMATION:

1.1 NAME OF COMPANY

1.2 DETAILS OF HEAD OFFICE:

ADDRESS :  
 TELEPHONE :  
 FAX :  
 EMAIL :  
 WEB SITE :

1.3 DETAILS OF FACTORY/WORKS:

ADDRESS :  
 TELEPHONE :  
 FAX :  
 EMAIL :  
 WEB SITE :

1.4 DETAILS OF MARKETING AGENT

ADDRESS :  
 TELEPHONE :  
 FAX :  
 EMAIL :  
 WEB SITE :

1.5 CHIEF EXECUTIVE

1.6 CONTACT PERSON(S)

FOR PRODUCT OFFERED

NAME(S) :  
 OFFICIAL CPACITY :  
 ADDRESS :  
 TELEPHONE :  
 FAX :  
 EMAIL :

1.7 YEAR OF ESTABLISHMENT

1.8 PRODUCTION CAPACITY PER ANNUM

1.9 PARTICULARS OF PRODUCT INCLUDING  
 SPECIFICATION AND RANGE OFFERED  
 FOR REGISTRTION  
 (Attach brochures and catalogues)

1.10 NAME(S) OF BANKERS

1.11 BANKER'S CERTIFICATE

1.12 PORT OF LOADING

1.13 NEAREST AIRPORT

1.14 NAME OF THE INDIAN AGENT, IF ANY  
WITH AUTHORIZATION LETTER

**2.0 FINANCIAL INFORMATION:**

2.1 TOTAL CAPACITY

2.2 ANNUAL TURN OVER FOR LAST 3 YEARS

2.3 WHEHER CREDIT LICENSE ACCEPTABLE      YES/NO

**3.0 QUALITY MANAGEMENT SYSTEMS**

ENCLOSED FORMAT PART-B

3.1 EXPERIENCE LIST FOR SAME/ SIMILAR ITEMS  
TO BE ENCLOSED

**4.0 FUTURE EXPANSION PLANS:**

(Give details)

**5.0 LIST OF ENCLOSURES:**

(Including brochures, catalogues, technical literature etc)

**6.0 ANY OTHER INFORMATION:**

SIGNATURE OF SUPPIER (Authorized signatory)

NAME :

DESIGNATION :

DATE :

OFFICIAL SEAL

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Note:

1. BHEL Reserves the right to take penal action as deemed fit if any of the information provided by the vendor is found to be incorrect.
2. Please attach separate sheets, if space found is inadequate



# **Bharat Heavy Electricals Limited**

**Corp. R&D DIVISION**

**VIKAS NAGAR,**

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## **GUIDE LINES REGARDING DEALINGS WITH INDIAN AGENTS OF FOREIGN SUPPLIERS**

- i. BHEL shall deal directly with foreign vendors, wherever required, for procurement of goods. However, if the foreign principal desires to avail of the services of an Indian agent, then the foreign principal should ensure compliance to regulatory guidelines - which require mandatory submission of an Agency Agreement.
- ii. It shall be incumbent on the Indian agent and the foreign principal to adhere to the relevant guidelines of Government of India, issued from time to time.
- iii. The Agency Agreement should specify the precise relationship between the foreign OEM / foreign principal and their Indian agent and their mutual interest in the business. All services to be rendered by agent/ associate, whether of general nature or in relation to the particular contract, must be clearly stated by the foreign supplier/ Indian agent. Any payment, which the agent or associate receives in India or abroad from the OEM, whether as commission or as a general retainer fee should be brought on record in the Agreement and be made explicit in order to ensure compliance to laws of the country.
- iv. Any agency commission to be paid by BHEL to the Indian agent shall be in Indian currency only.
- v. Whenever Indian agents are representing on behalf of their principals the relevant authorisation letter and agreement copy to be enclosed along with Technical bid to consider the offer.

