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Tender No./BHEL Enquiry Ref. No.	101-148 Dated 23.03.2011
Last Date & Time for bids submission	25.04.2011 up to 1400 Hrs
Opening date & time for opening of Part-I	25.04.2011 at 1500 Hrs

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INSTRUCTIONS TO THE BIDDERS:

1.0 **QUOTATIONS**

Quotations are invited for manufacturing, supply and commissioning of Dry-type painting booth to BHEL Goindwal Sahib.

Bidders shall submit the offer in **TWO INNER ENVELOPES** as indicated below which shall be sealed in one outer envelope.

Envelope I This sealed envelope should contain all the copies of commercial bid, technical bid together with un-priced commercial bid. This envelope should be clearly marked "Part I - Technical and Un-priced commercial bid", indicating Tender No., Due Date and Address & Reference of the Bidder.

Following sequence of documents is desirable:

- 1) Introductory/Covering/Reference letter
- 2) Checklist duly ticked
- 3) List of documents attached
- 4) List-cum-summary of deviations of commercial terms
- 5) Qualifying Criteria (PART-A).
- 6) BHEL commercial terms [Annexure I; format duly filled with remarks to interpret clearly the intended submission.
- 7) BHEL technical terms [PART-B; format duly filled with remarks to interpret clearly the intended submission]. List of mandatory spares shall be included in the rate schedule and shall be considered for arriving at the total cost of package. List of optional spares can be quoted separately.
- 8) Declaration format [Annexure II]
- 9) Unpriced bid format [Annexure III: duly filled **Prices not to be mentioned here**]

Envelope II This sealed envelope should contain price details. This envelope should be clearly marked "Part II - Price bid", indicating Tender No., Due Date and Address & Reference of the Bidder.

It should contain only the duly filled and signed Price bid format, Annexure III.

Both the envelopes (Part I & II) shall be put in one cover, duly sealed, superscribing as Quotation for Tender No., due date of opening and the address and reference of the Bidder. The above offer should reach this office on or before the due date by 14.00 Hrs (IST).

Tender should not be addressed to any Individuals name but only by designation to:

Manager / MM BHARAT HEAVY ELECTRICALS LIMITED



INDUSTRIAL VALVES PLANT, 433, INDUSTRIAL COMPLEX, GOINDWAL SAHIB- DISTT. TARN TARAN - 142423 PUNJAB (INDIA)

Tenders should be free from **CORRECTION AND ERASURES**, Corrections if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.

Offers should be in ENGLISH and accompanied by detailed technical literature, catalogue and detailed dimensional drawings in ENGLISH or otherwise, the offers will not be considered.

Sealed tenders can be dropped in the tender box kept at Reception of Administrative Block of our above office address.

2.0: **Evaluation of tenders:**

Part-I, i.e. Techno-Commercial offers shall be opened on <u>25.04.2011 at 1500 hrs</u>. Techno-commercial offers shall be evaluated vis-à-vis our technical and commercial terms and conditions. Clarifications if any required by BHEL for Technical evaluation / commercial evaluation would be sought from Bidders before opening of Part II - price bid.

Part-II, i.e. Price bid shall be opened of only those bidders who are adjudged as qualified in Part-I. Bidders shall be informed about the same.

Price bids shall be opened on an informed date and time.

3.0: **Award of contract**:

Prices quoted shall be evaluated as net cost to BHEL, i.e. landed cost to BHEL net of duties, cess and any cenvatable taxes. Any other incidentals like agency commission for foreign bidders shall be a factor for calculating the net cost. Further, any deviation in terms and conditions, if finally accepted by BHEL shall also invite loading.

Lowest quotation shall be declared as L1 bidder and given the contract. LOI placed on L1 bidder shall be the reference date for start of contract. On receipt of PO/LOI, the bidder is required to submit contract execution bank guarantee [CEBG] on prescribed format from any one of the scheduled banks [list given] within days. CEBG should be valid for months.

4.0 <u>General Terms and points to be noted/complied/binding on bidders by default on submitting the bids</u>:

4.1 Offers shall be submitted by the Original Equipment Manufacturer. In case of Indian agent bidding on behalf of foreign bidder, the Principal's offer should be enclosed.



- 4.2 Equipment offered shall be "New". Re-built / Re-conditioned / Used equipments will not be accepted. Incomplete offers will not be considered for further processing.
- 4.3 BHEL reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at any of BHEL projects / units.
- 4.4 The due date of submission of tender may be extended by BHEL which shall be announced as corrigendum to original NIT No. & only at our website. Validity of bids shall be deemed to be extended accordingly till the extension period is within the validity period sought, i.e.
- 4.5 BHEL may decide to reject bid from any bidder which shall be informed to bidder with reasons of rejection.
- 4.6 BHEL may decide to scrap the tender/refloat the tender without assigning any reasons thereof before any LOI/PO is committed.
- 4.7 The correspondence exchanged against the tender from both tenderer and BHEL through email are considered as valid document legally though it is not signed. It is treated as valid confirmations made on behalf of the respective company and very much comes under the legal ambit of the business transaction and hence it is binding on both the parties to the business.
- 4.8 Any transaction pertaining to the tender from both the parties of business done round the clock irrespective of the office or business hours of the companies, are valid legally and binding on both the parties. This applies to the extent only in such cases where deadline time for transaction is not specifically declared by either or both the patties to the business.
- 4.9 In case Letter of Intent (LOI) is issued through email, the PC generated time and date of mail shall be construed as the official time and date of release of LOI. In as much as this date is within the last date of validity given by the bidder the LOI is said to have been issued within the validity period and shall be bidding on both the parties to the business.
- 4.10Bidders participating in the tender should declare in their offer as per Annexure II that whether they have been black-listed / kept on hold for a specified period / given Business holiday for a specified period by any Public sector undertaking or Government departments. The reasons for such action with details and the current status of such hold shall be clearly furnished to BHEL. If no such details are mentioned in the offer then it will be construed that the subject bidder is not under any such hold. But at a later date if it comes to the notice of BHEL about any such hold under enforcement on the subject bidder, BHEL will have every right to reject the offer of such vendors at any point of time and also under any stage of the finalization of the subject tender irrespective of the status of the subject bidder in that tender. Such bidders will not be permitted to participate in the further tender proceedings and will be communicated suitably. They will not be also considered for any ongoing tenders even if participated till the hold is officially lifted and confirmed in writing.



TERMS AND CONDITIONS

COMMERCIAL TERMS

- C.1 **Fixed price**: Prices quoted by the bidder shall be fixed and not subject to any escalation whatsoever during the period of bid validity and execution of the Purchase Order. A bid submitted with an adjustable price will be treated as non-responsive and rejected. Prices shall be written in words and figures. In the event of difference, the price in words shall be valid and binding. Unit prices shall be considered correct in the event of any discrepancy with regard to total price.
- C.2 **Bid currency:** Indian bidders should submit the prices only in Indian Rupees. Foreign bidders may submit their bid in their home currency, which should be clearly indicated in the un-priced commercial bid as well as in the price bid.

C.3 **Terms of Delivery**:

- C.3.1 Bidders are required to quote their best delivery period. Delivery from the date of Letter of Intent /Purchase Order to be mentioned in the offer.
- C.3.2 Foreign Bidders should submit their offer for net CFR / Mumbai Seaport / Airport. Freight charges upto Mumbai port to be indicated separately.
- C.3.3 Indian Bidders should submit their offer for FOR BHEL, Goindwal, Punjab basis. Freight charges from works to BHEL, Goindwal to be indicated separately.
- C.4 Taxes and Duties: All Taxes and Duties payable as extra to the quoted price should be specifically stated in offers along with CST & TIN No / Tariff No. etc., failing which the purchaser will not be liable for payment of such Taxes and Duties. Our TIN No. 03021035905, CST. No. 15529218 Dt. 06-03-1985 & BHEL ECC No. AAACB4146PXM005, Assessment circle Chheharta, Amritsar. Taxes and duties for equipment part shall be mentioned separately and for commissioning shall be mentioned separately.
- C.5 **Validity:** The offers for main equipment and spares shall be kept open for acceptance for a period of 120 days (one hundred and eighty days) from the date of opening of the tender (Part I).
- C.6 Indian Agent & Agency commission: An Indian Agent can represent only one Foreign Manufacturer against a particular Tender. The CFR price quoted by the foreign bidder shall include the agency commission however; the agency commission component payable to their Indian Agents shall be shown separately in the Offer. This will be paid by BHEL in Indian Rupees, on satisfactory commissioning & acceptance of the equipment. The bidder shall furnish authenticated copy of the Agency Agreement detailing the precise relationship between them and their mutual interest in the business so as to consider the offer of the Indian Agent for the indigenous portion of the supply. For the main equipment, the offer should be from Principal / Original Equipment Manufacturer. The supplier has to furnish original Authorization Letter for the Indian Agent along with the offer.



- C.7 **Short shipment / Warranty replacement**: In case of any short shipment in the main equipment / spares, customs duty levied on such supplies, shall be borne by the supplier. Any warranty replacement during the warrantee period shall be on FOR, BHEL, Goindwal, Punjab, basis.
- C.8 **Inspection & Testing**: All goods shall be subject to inspection by BHEL or its authorized representatives at supplier's works or at BHEL stores. The supplier will not charge for the facilities provided for inspection of goods. In case of machine tools, the machine would be inspected and proved at supplier's works prior to dispatch however; final inspection and acceptance of the machine will be carried after installation of the machine at BHEL, Goindwal, Punjab.
- C.9 **Cenvat & VAT credit**: (for Indigenous Bidders only) the quotation must indicate Tariff item number and rate of Excise Duty applicable. The original Excise Duty Gate Pass will be required to be furnished in case charged to us. If the bidder is availing Cenvat credit for his input materials, the effect of proforma credit should be passed on to the purchaser.
- C.10 **Packing**: The Supplier shall arrange for packing suitably in all respects considering the peculiarity of the material involved for normal transport by sea / air / rail / road and suitably protected against effect of tropical salt laden atmosphere in the event of shipment being delayed at ports.
- C.11 Salient points of HSE (Health Safety & Environment) that are to be complied/considered while submission of offer are:
 - C.11.1 Consumption benchmarks related to output shall be provided wherever applicable for key input resources (energy/fuel/chemicals).
 - C.11.2 Competency requirements for operation, maintenance and calibration, if any, shall be communicated.
 - C.11.3 If any hazardous chemicals as per MSIHC (Manufacturing, Storage and import of Hazardous Chemicals) Rules 1989/94/2000 are used, the MSDS shall be provided, along with on site & off site emergency plan (as applicable).
 - C.11.4 The noise level at operator level shall be within 85 dBA.
 - C.11.5 OH&S (Occupational Health and Safety) control measures for safe working of machine as applicable shall be specified.
 - C.11.6 The machine / equipment shall be fitted with guard for rolling and moving parts and shall comply with applicable OH&S legislations and Factories Act 1948.
 - C.11.7 The supplier shall submit the layout drawing of operating controls, displays etc. and operating instructions to enable ergonomics evaluation and approval.
 - C.11.8 The recommended PPE (Personal Protective Equipment) for the equipment shall be furnished.
 - C.11.9 Alarm system (both visual and audible) and Automatic switch off of the equipment shall be provided for any intrusion, overloading, short circuiting or any malfunctioning of the equipment.
 - C.11.10 Details of all hazardous / harmful substances discharged as by-products / wastes during operations of the machine / equipment, such as fumes, gases, dust particles, aerosols UV.



/IR (Ultra violet / infra red) radiations, etc. shall be furnished, along with their concentrations and their TLV, (Threshold Limit Value).

- C.11.11 Appropriate pollution control measures shall be proposed to keep the emissions from the machinery / processes within the prescribed limit as stated in Environment Protection Rules 1986.
- C.11.12 All furnaces, process units, DG sets, paint booths, shot blasting chambers, etc shall be provided with stack(s) of sufficient height as per guidelines laid down in the Environment Protection Rules 1986.
- C.11.13 Wherever industry specific standards are not available for control of pollutants, general emission standards shall be used.
- C.11.14 Chemicals banned due to their negative impact on the environment shall not be used in the process
- C.11.15 Fuels with sulphur content less than 0.05% shall be proposed.
- C.11.16 Details regarding nature of waste generated and appropriate disposal practices available shall be provided, along with the operation procedure of the plant / process. Hazardous chemicals and flammable substances shall be transported only through authorized transporters and all safety practices as laid down in applicable legislative requirements such as Central Motor Vehicle Rules, Manufacture, Storage and Import of Hazardous Chemical 1989, etc. shall be followed.
- C.11.17 Primary materials used in the equipment shall be specified and they shall be eco friendly
- C.12 BHEL reserves the right to go for a Reverse Auction (RA) instead of Opening the submitted sealed bid, which will be decided after technical evaluation. Bidders shall be informed. Information and general terms and conditions governing RA are given below.

C.13 GENERAL TERMS AND CONDITIONS OF RA

- C.13.1 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 ON INTERNET.
- C.13.2 For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
- C.13.3 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.
- C.13.4 BHEL will inform the vendor in writing in case of reverse auction, the details of Service Provider to enable them to contact & get trained.
- C.13.5 Business rules like event date, time, and Start price, bid decrement, extensions etc. Also will be communicated through service provider for compliance.



- C.13.6 Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of Reverse auction. Without this, the vendor will not be eligible to participate in the event.
- C.13.7 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 vendor to enable them to fill-in the price and keep it ready for keying in during the Auction.
- C.13.8 Reverse auction will be conducted on scheduled date & time.
- C.13.9 At the end of Reverse Auction event, the lowest bidder value will be known on the network.
- C.13.10 The lowest bidder has to Fax the duly signed Filled-in prescribed format as provided on case-to-case basis to BHEL through Service provider within 24 hours of Auction without fail.
- C.13.11 Any variation between the on-line bid value and the signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct business with BHEL as per prevailing procedure.
- C.13.12 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.
- C.13.13 BHEL reserves the right to negotiate if need be, with the "L1" vendor of the Reverse Auction.
- C.14 **Force Majeure clause**: If at any time during the continuance of this contract the performance in whole or in part by either party of any obligations under this contract shall be prevented or delayed by reason, of any war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine, restrictions or acts of GOD (hereinafter referred to as events) then provided notice of happening of any such events is given by either party to other within twenty one days from the date of occurrence thereof neither party shall reason of such events be entitled to terminate this contract nor shall either party have any such non performance and delay is resumed as soon as practicable after such events has come to an end or ceased to exist. If the performance in whole or part of any obligation under this contract is prevented or delayed by reason or any such event claims for extension of time shall be granted for period considered reasonable by the purchaser subject to prompt notification by the seller to the purchaser of the particulars of the events and supply to the purchaser if required of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed to be a waiver of time in respect of remaining deliveries.



- C.15 Penalty for late delivery: Delivery terms mentioned in the PO/LOI shall be adhered to. In case of approval of drawings or any other technical documents, a nominal period of 15 days shall be considered as included in the delivery period mentioned. If BHEL is taking more time in such approvals, delivery period can be extended accordingly. All such technical documents to be approved by BHEL shall be submitted within 10 days of release of PO/LOI. Delivery of the goods specified in the purchase order should be made within the time prescribed. Failure to dispatch the materials in the time as per the delivery quoted in our Purchase Order would make the supplier liable to an un-conditional penalty at the rate of ½% of the value of goods for each week of delay subject to a maximum of 15% of the Purchase Order value. If any vendor does not accept PLD ½% of the value of goods for each week of delay subject to a maximum of 5%, their offer is likely to be rejected by BHEL and the price bid shall not be opened. Bidders accepting for 15% PLD shall not be loaded on account of PLD. However bidders who offer any other % PLD [between 5% to 15%] shall be loaded @ % deviation from 15% and their accepted %.e.g. If a bidder accepts for a max of 7% LD only, their offer would be loaded @ 8% (15 - 7 = 8). As regards LD, the delivery date (FOR dispatching station for indigenous / FOB delivery for import) shall be considered.
- C.16 **Risk purchase:** If the supplier fails to deliver the goods within the delivery specified in the Purchase Order, BHEL will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the delivery period mentioned in the Purchase Order.
- C.17 **Guarantee:** Guarantee on satisfactory performance of the equipment shall be give for 12 months from the date of acceptance of the machine at BHEL or 18 months from dispatch whichever is earlier.
- C.18 Contract Execution Bank Guarantee: The successful bidder shall furnish a Contract Execution Bank Guarantee (CEBG) equal to 5% in the format enclosed and from one of the banks mentioned therein. In case of import, the foreign vendor shall arrange to give a Punjab National Bank (PNB) Goindwal Sahib and PNB will provide the CEBG to BHEL in the format enclosed. The CEBG shall be executed valid for the delivery period (FOR dispatching station for indigenous / FOB delivery for import) with additional 2 months as claim period. The CEBG shall be furnished within 1 month from the date of Letter of Intent. In case any bidder does not accept for submission of Contract Execution Bank Guarantee (CEBG), their offer is likely to be rejected and the technical bid not processed. All bank charges in India and outside India will be to the supplier's account.
- C.19 **Performance Bank Guarantee [PBG]:** Performance Bank Guarantee (PBG) for 10% of the total order value covering the agreed Guarantee period (with additional 2 months as claim period) has to be furnished. In case of indigenous bidder the PBG shall be in the format enclosed and from one of the banks mentioned therein. In case of import, the foreign vendor shall arrange to give a counter guarantee to Punjab National Bank (PNB) Goindwal Sahib and PNB will provide the PBG to BHEL in the format enclosed. In case any bidder does not accept for submission of



Performance Bank Guarantee (PBG), their offer is likely to be rejected and the technical bid not processed. All bank charges in India and outside India will be to the supplier's account.

C.20 **Agency Commission**: Please specify the %age agency commissioning, if applicable or else please mention "not-applicable".

Special Note: Foreign bidders/Indian agents quoting on behalf of a foreign principal are requested to read para nos. C.3.2, C.6, C.18, C.19 carefully and comply with these.

TECHNICAL TERMS

- T.1 Offer should contain complete scope of supply with all technical details, specifications, delivery and other commercial terms and conditions.
- T.2 Point by point confirmation for the Technical Specification enclosed, [Pl. note this is in two parts-Part A requiring credentials for pre-qualifications, Part-B requiring confirmation on technical criteria and requirement of BHEL] is to be provided. If there are any deviations on account of your design, the same should be clearly specified. Offers received without confirmation to our specification will be rejected.
- T.3 List of customers to whom same or similar equipment have been supplied along with performance certificates to be enclosed.
- T.4 Relevant catalogues to be attached
- T.5 List of spares parts (with part numbers) for one year operation and maintenance should be attached.
- T.6 Information on shipping weight and cubage (length, width & height) to be provided.

Note: For detailed Technical Specification Refer Part-B.



ANNEXURE-I Commercial terms and conditions confirmation sheet

PLEASE NOTE THAT THE CONDITIONS INDICATED IN THE COMMERCIAL TERMS AND CONDITIONS APPLICABLE FOR THE TENDER ARE APPLICABLE ONLY TO THE EXTENT THEY ARE NOT SUPERSEDED BY THE FOLLOWING CONDITIONS

Description of the Equipment:
BHEL Tender No. & Date

Sl No	Description	Vendor's confirmation
1	Payment terms: 100% payment, within 45 to 90 days, After successful commissioning & acceptance of equipment at BHEL, Goindwal, Punjab, against submission of 10% Performance Bank Guarantee. or 80% of the material cost to be paid against delivery / dispatch documents within 45 to 90 days. Balance 20% of the material cost along with Erection & Commissioning charges, if any, will be paid after successful commissioning & acceptance of equipment at BHEL, Goindwal, Punjab, against submission of 10% Performance Bank Guarantee. (options of "through Bank" for	
	indigenous and "through L/C" in case of import are available) In case of import, an Irrevocable unconfirmed Letter of Credit shall be established for 80% of material cost 1½ months prior to shipment with a and validity of 3 months (including the document negotiation period). This L/C will be negotiable against shipping documents. For the balance 20% of material cost along with Erection & Commissioning charges, if any, an Irrevocable unconfirmed Letter of Credit shall be established 1 month prior to visit of the foreign technician (for commissioning) validity of 3 months (including the document negotiation period). This L/C will be negotiable against acceptance certificate and 10% Performance Bank Guarantee. All LC opening charges in India and outside	



T	In dia
	India will be to the supplier's account.
	Loading for deviation on payment terms if the above is not agreed by vendor will be @ 1.5% per month. Note:
	In case any bidder does not accept for payment of 20% payment after successful commissioning & acceptance of equipment at BHEL, Goindwal, Punjab and submission of Performance Bank Guarantee for 10%, their offer is likely to be rejected and the technical bid not processed.
2	Currency of payment: In case of foreign bidders please indicate the currency like Euro / US\$ / GBP etc. For indigenous bidders the currency shall be Indian Rupees.
3	Taxes & Duties: All Taxes, Duties, Service Taxes etc. payable as extra to the quoted price should be specifically stated in offers along with CST & TIN No / Tariff No. 03021035905, CST. No. 15529218 Dt. 06-03-1985 & BHEL ECC No. AAACB4146PXM005, Assessment circle Chheharta, Amritsar
	Income Tax applicable. Any service charges payable towards supervision of E&C, training, performance prove-out etc., will be released after deduction of Income Tax as per Indian Income Tax Act / as per the Govt. of India rules. The TDS certificate will be issued by BHEL.
4	Contract Execution Bank Guarantee: The successful bidder shall furnish a Contract Execution Bank Guarantee (CEBG) equal to 5% in the format enclosed and from one of the banks mentioned therein. In case of import, the foreign vendor shall arrange to give a Punjab National Bank(PNB) Goindwal Sahib and PNB will provide the CEBG to BHEL in the format enclosed. The CEBG shall be executed valid for the delivery period (FOR dispatching station for



	additional 2 months as claim period. The CEBG shall be furnished within 1 month from the date of Letter of Intent. In case any bidder does not accept for submission of Contract Execution Bank Guarantee (CEBG), their offer is likely to be rejected and the technical bid not processed. All bank charges in India and outside India will be to the supplier's account.	
5	Performance Bank Guarantee (PBG)	
	Performance Bank Guarantee (PBG) for 10% of	
	the total order value covering the agreed	
	Guarantee period (with additional 2 months as	
	claim period) has to be furnished. In case of	
	indigenous bidder the PBG shall be in the format	
	enclosed and from one of the banks mentioned	
	therein. In case of import, the foreign vendor	
	shall arrange to give a counter guarantee to Punjab National Bank(PNB) Goindwal Sahib	
	and PNB will provide the PBG to BHEL in the	
	format enclosed.	
	In case any bidder does not accept for	
	submission of Performance Bank Guarantee	
	(PBG), their offer is likely to be rejected and the	
	technical bid not processed.	
	All bank charges in India and outside India will	
	be to the supplier's account.	
6	Liquidated damages:	
	Delivery of the goods specified in the purchase	
	order should be made within the time prescribed.	
	Failure to dispatch the materials in the time as	
	per the delivery quoted in our Purchase Order	
	would make the supplier liable to an un-	
	conditional penalty at the rate of ½% of the	
	value of goods for each week of delay subject	
	to a maximum of 15% of the Purchase Order	
	value. If any vendor does not accept LD ½% of	
	the value of goods for each week of delay	
	subject to a maximum of 5%, their offer is	
	likely to be rejected by BHEL and the technical	
	bid not processed. Bidders accepting for	
	maximum LD percentages in between 5% to	



	15% will be loaded @ % age deviation from	
	15% and their accepted %age. Eg. If a bidder	
	accepts for a max of 7% LD, their offer would	
	be loaded @ 8% (15 – 7 = 8). As regards LD,	
	the delivery date (FOR dispatching station for	
	indigenous / FOB delivery for import) shall be	
	considered.	
7	Risk purchase:	
	If the supplier fails to deliver the goods within	
	the delivery specified in the Purchase Order,	
	BHEL will be entitled to terminate the contract	
	and to purchase elsewhere at the risk and cost of	
	the seller either the whole of the goods or any	
	part which the supplier has failed to deliver or	
	dispatch within the delivery period mentioned in	
	the Purchase Order.	
8	Delivery:	
	Bidder shall indicate the delivery period	
	required for	
	The following activities.	
	(a) Firm Time period, from the date of Letter of	
	· · ·	
	Intent (LOI), required for delivery of the	
	equipment, (FOR dispatching station for	
	indigenous / FOB delivery for import) to be	
	indicated.	
	(b) Commissioning, Prove-out and handing over	
	of complete system to be indicated.	
	Note: The above delivery periods indicated will	
	not have bearing on activities such as	
	submission of CEBG, drawing approval etc. It	
	shall be the bidder's responsibility to have all	
	technical clarifications sorted out before	
	submission of price bid / participating in the RA.	
	The Purchase Order (to be release after receipt	
	of CEBG) will carry the above-indicated	
	delivery period.	
9	Guarantee:	
	Guarantee period shall be 12 months from the	
	date of commissioning or 18 months from	
	dispatch whichever is earlier.	
10	Agency Commission:	
10	Please specify the %age agency commissioning,	
	if applicable or else please mention "not-	
	applicable"	



11	Validity:	
	Validity of the offer should be 120 days from	
	the date of tender opening.	
12	Contacts:	
	Details of contact person's name, designation,	
	department with complete postal and email	
	address along with phone and fax numbers to be	
	mentioned	
13	Terms of Delivery:	
13.1	Foreign Bidders: CFR Mumbai Port	
13.2	Indigenous Vendors:	
	FOR, BHEL, Stores	
	Industrial Valves Plant	
	433, Industrial Complex	
	Goindwal – 143 423	
	District: Tarn Taran (Punjab), India	
14	Port of loading:	
15	Country of origin:	
16	Weight:	
	Approximate Net weight of the total	
	consignment	
	Approximate Gross weight of the total	
	consignment	



Annexure-II: **DECLRATION FORMAT**

Reference: BHEL Tender enquiry no.

Bidder quotation no:

We hereby confirm that we have quoted for the said tender in two-part bids and our price bid does not include any terms and conditions over and above whatever mentioned in our Techno-Commercial offer.

Further, after opening of Part-I, i.e. Techno-Commercial bids, once we accept/confirm any communication regarding any terms and conditions from BHEL, that shall be binding and overriding any terms mentioned in Price Bid even though the price bid is opened later on.

We also declare that we have provided information whether we have been black-listed / kept on hold for a specified period / given Business holiday for a specified period by any Public sector undertaking or Government departments. The reasons for such action with details and the current status of such hold have furnished to BHEL. We declare that if no such details are mentioned in the offer then it should be construed that we are not under any such hold. We declare that at a later date if it comes to the notice of BHEL about any such hold under enforcement on the subject bidder, BHEL will have every right to reject our offer at any point of time and also under any stage of the finalization of the subject tender irrespective of our status in that tender.

Signature with seal of bidder



Annexure-III: UNPRICED/PRICED* BID FORMAT

Torridor Engarism No.		
Tender Enquiry No:		
Quotation No.		
Equipment Description	[As per BHEL]	[As per offer]
Price schedule		
Main equipment		
Mandatory Spares		
, I		
Excise duty	[Inclusive/Extra]	%
Cess thereon	[Inclusive/Extra]	%
CST, against form "C"/VAT	[Inclusive/Extra]	%
Delivery destination	FOR Goindwal Sahib [for	Including all incidentals
	indigenous bidders]	
	CFR Mumbai Seaport [for	
	foreign bidders]	
Commissioning charges		
Service charges on		
commissioning charges		
Validity of offer from opening		
of Part-I		
We hereby confirm that the price	es mentioned above are firm till t	he execution of contract.

^{*} Same format is to be used as unpriced bid format, i.e. duly filled for all information except PRICES and again for Price bid format duly completely filled including prices.



ANNEXURE IV: CONTRACT EXECUTION BANK GUARANTEE

This deed of guarantee made this day of 20 by the in favor of Bharat
Heavy Electricals Limited, Industrial Valves Plant, Goindwal having its registered Office at New Delhi
(Hereafter called the first party) where as M/s having its registered office at
(hereafter called the contractor) have entered in to contract with the first party for the
supply of
contractor M/s have approached the for a guarantee and at
their request and in consideration of the arrangement arrived at between the contractor and the BHEL
Industrial Valves Plant, Goindwal the said has agreed to give such guarantee as herein
after mentioned to the aforesaid first party. Now therefore, these present witness that we the
do hereby undertake to the first party a sum of Rs (Rupees
the first party indemnified to the extent of Rs
of this guarantee against any breach in execution of contract without giving prior information to the
party of the same (the decision in this respect being solely the discretion of the first party). We further
undertake to pay the aforesaid amount in the lump sum on demand without demur or
such part thereof as the first party may demand from time to time, irrespective of the fact whether the
said contractor admits or denies such claim or questions its correctness in any court tribunal of
arbitration proceedings or before any authority. The aforesaid guarantee will remain in full force and
we shall be liable under the same irrespective of any concession for time being granted by the said first
party to contractor M/s in or for fulfilling the said agreement between the
contractor M/s and the first party and the guarantee will remain in full force till
irrespective of any change of terms, conditions or stipulation or any variations
in the terms of said agreement irrespective of whether notice of such change or variation is given to us
or not and claim to receive such notice of any change and/or variation of the terms and/or conditions of
the said agreement is hereby specifically waived by us. Further we shall not be released from this
guarantee by any forbearance or the exercise or non exercise of any of the power or rights under the
said agreement by the said first party against the contractor irrespective of whether notice of such
forbearance enforcement or non-enforcement of any power or rights, modifications or changes made in
the said agreement or concessions shown to contractor M/s by the first party is given to
us or not. The guarantee herein contained shall not be determined or affected by the liquidation of
winding up or insolvency of or change in the constitution of the contractor M./s
but shall in all respects and for all purposes binding and
operative until all payments of all moneys dues or that may hereafter becomes due to the said first party
is paid in respect of any liability or obligation for the contractor under this guarantee subject to however
that the first party shall have no right under this guarantee after expiry of six months from the date of
completion of the contract unless this guarantee is extended by mutual agreement. And lastly we
hereby declares that it has power to issue this guarantee under the
Company's memorandum and article of association and the undersigned has full power to do so on its
behalf under the power of attorney dated granted to him by the proper authorities of the
Company. Notwithstanding anything contained here in before, our liability under this guarantee is



restricted to Rs (Rupees	only). Our guarantee shall remain in force till
unless a claim in writing is presente	ed to us and if unpaid a suit or action to enforce such
claim is filed against within 6 months from the	date, all your rights under this guarantee shall be
forfeited and we shall be released and discharged fr	om all liability there under.
Dated by its const	ituted attorney.



ANNEXURE V: **PERFORMANCE BANK GUARANTEE**

1. In accordance of M/s Bharat Heavy Electricals Limited (A Government of India undertaking, a Company incorporated under the Companies Act 1956 having its Registered Office at "BHEL House", SIRI Fort, New Delhi 110 049) through its, Industrial Valves Plant, Goindwal 62014 (hereinafter called "the Company") having entered into a contract with
2. We (indicate the name of the Bank with full address), do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Company stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Company by reason of breach by the said Contractor(s) of any of the terms and conditions contained in the said Agreement or by the reason of the contractor(s) "failure to perform. the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs
3. We undertake to pay unconditionally to the Company any money so demanded notwithstanding any dispute(s) raised by the Contractor in any suit, or proceedings pending before any Court or Tribunal or Arbitration or before any other authority relating thereto our liability under this present being absolute and unequivocal. The payment under this guarantee would not wait till the disputes have been decided by any Court or Tribunal or in the arbitration proceedings or by any other authority. The payment so made by us under this Bond shall be a valid discharge of liability for payment there under and the Contractor (s) shall have no claim against us for making such payment.
4. We (indicate the name of Bank), further agree that the guarantee herein contained shall remain in full force and effect during the period that would betaken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Company under or by virtue of the said Agreement have been fully paid and its claim satisfied or discharged or till Office/Department/Division of the Company certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.
5. (i) Unless a demand or claim under this guarantee is made on us in writing on or before the we shall be discharged from all the liability under this guarantee thereafter. But where

such claim or demand has been preferred by the Company with the Bank before the expiry of the said



date, the claim shall be enforceable notwithstanding the fact that the said enforcement is effected after the said date.

- (ii) For the purpose of this clause, any letter making demand on the Bank by M/s BHEL will be dispatched by Registered Post with Ack. Due or by Telegram or by any Electronic media addressed to the above mentioned address of the Bank shall be deemed to be the claim/demand in writing referred to above irrespective of the fact as to whether and when the said letter reaches the Bank, as also any letter containing the said demand or claim is lodged with the Bank personally.
- 6. We (indicate the name of the Bank), further agree with the Company that the Company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time of from time to time any of the powers exercisable by the Company against the said Contractor (s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by any reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of the Company or any indulgence by the Company to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating would, but for this provision, have effect of not so relieving us.
- 7. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s)
- 8. It shall not be necessary for the Company to proceed against the contractor before proceeding against the guarantor—Bank and the guarantee herein contained shall be enforceable against them notwithstanding any security, which the Company may have obtained or obtain from the Contractor shall, at the time when proceedings are taken against the guarantor hereunder be outstanding or unrealized.
- 9. Any claim or dispute arising under the terms of this document shall only be enforced or settled in the Courts of Tarn Taran, Punjab.
- 10. The guarantor hereby declare that it has power to execute this guarantee and the executant has full powers to do so on its behalf under the proper authority granted to him/them by the guarantor

Important Note: - The formats for execution of Bank Guarantees (both CEBG & PBG) shall be kept valid to cover the period of BG plus an additional claim period of two months. The Bank Guarantee bonds (BG) are to be submitted on non-judicial stamp paper of Rs. 100/-



ANNEXURE: VI: List of consortium of banks for releasing Bank Guarantees:

Bank guarantees should be got released from any of the below banks only.

- (1) State Bank of India
- (2) State Bank of Hyderabad
- (3) State Bank of Travancore
- (4) Canara Bank
- (5) Bank of Baroda
- (6) Punjab National Bank
- (7) Deutsche Bank AG
- (8) HDFC Bank Ltd
- (9) Standard Chartered Bank
- (10) CITI Bank N.A.
- (11) ABN AMRO Bank N.V.
- (12) ICICI Bank Ltd.
- (13) IDBI Ltd.
- (14) The Hongkong and Shanghai Banking Corporation Ltd.
- (15) Syndicate Bank
- (16) State Bank of Mysore
- (17) State Bank of Maharastra
- (18) UCO Bank
- (19) Allahabad Bank
- (20) Andhra Bank
- (21) Corporation Bank
- (22) Dena Bank
- (23) Union Bank of India
- (24) United Bank of India
- (25) Vijaya Bank
- (26) Axis Bank (Unit Trust of India)
- (27) Bank of Maharastra
- (28) Bharat Overseas Bank
- (29) Bank of India
- (30) Indian Bank
- (31) Indian Overseas Bank
- (32) Oriental Bank of Commerce
- (33) Central Bank of India
- (34) State Bank of Patiala
- (35) Punjab & Sind Bank
- (36) State Bank of Bikner & Jaipur



Annexure VII: FORMAT TO RECEIVE E-PAYMENT THROUGH EXISTING ACCOUNT WITH SEFT/RTGS ENABLED BANK BRANCH

Sub: E-payments vide SEFT/RTGS - Reg.

VENDOR CODE AS PER BHEL	:	
VENDOR NAME AS PER BANK RECORDS	:	
ACCOUNT TYPE	:	
BANK ACCOUNT NUMBER	:	
NAME & ADDRESS OF THE BANK	:	
BRANCH CODE	:	
BRANCH RTGS CODE	:	
BRANCH MICR CODE	:	
NAME OF THE AUTHORISED SIGNAROTY	:	
I/we confirm that I/We will bear the charges, if any levied by my/our bank for the credit of SEFT/RTGS amounts in our account. For		
Date:		
We confirm that we are enabled for receiving SEFT/RTGS credits and we further confirm that the account number, the signature of the authorized signatory, branch code, RTGS code and MICR code of our branch mentioned above are correct.		
BANK VERIFICATION		
(Manger's/Officer's signature under bank stamp)		
Date:		
2		



PART A DRY TYPE DOWN DRAFT CUM SIDE DRAFT SPRAY PAINTING BOOTH

$\underline{\textbf{SECTION} - \textbf{I}} : \ \textbf{QUALIFYING} \ \textbf{CRITERIA}$

The BIDDER has to compulsorily meet the following requirements to get qualified for considering the technical offer.

S. No.	REQUIREMENTS	Vendor's Response
1	Only those vendors (OEMs), who have supplied and commissioned at least one Dry Type Spray Painting Booth with the following:	
	1. Booth size of at least 3M x 3M or more and	
	2. Exhaust system with stack / chimney	
	in the past ten years and at present such equipment should be working satisfactorily for a minimum period of one year after commissioning, as on the date of opening of this Tender are eligible to quote.	
	(However, if such equipment had already been supplied to	
	BHEL, then that equipment should be presently working	
	satisfactorily for a minimum period of six months after	
	commissioning, as on the date of opening of this Tender.)	
	endor should submit following information where similar equipmened, for qualification of their offer.	t has been
1.1	Name and postal address of the customer or company where similar equipment is installed.	
1.2	Name and designation of the contact person of the customer.	
1.3	Phone, FAX no and email id of the contact person of the customer.	
1.4	Month and Year of commissioning of the equipment.	
1.5	Application for which the equipment is supplied	
1.6	Along with the Technical offer, the Vendor should submit one Performance certificate from the customer for the satisfactory performance of the equipment supplied to them. For obtaining the Performance certificate, a suggestive format is provided in SECTION – IV.	
	1	



1.7	BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false/ incorrect, the offer shall be rejected.	
2.0	DELIVERY: The bidder shall quote the best possible delivery. However the delivery shall not exceed 6 months with an additional grace period of 2 months. The additional grace period will attract a penalty, which is explained in the commercial terms of the enquiry. The delivery period shall be reckoned from the date of purchase order to dispatch from the vendor works.	



SECTION – II

The BIDDER / VENDOR is requested to provide the following information:

S. No.	REQUIREMENTS	Vendor's Response
3.0	The BIDDER/VENDOR to furnish Reference List of Customers, with full address, details of contact person, where Paint booths have been supplied in the past.	
4.0	Details of Paint booths supplied to other BHEL units, if any. (Year of commissioning, Booth size,).	
5.0	Details on SERVICE-AFTER-SALES Set-Up in India including the Address of Agents / Service Centers in South India.	
6.0	Any Additional Data to supplement the manufacturing capability of the BIDDER for the subject equipment.	



$\underline{SECTION-III}$

The BIDDER to note:

S. No.	PARTICULARS	Vendor's Response
7.0	The BIDDER / VENDOR shall submit the offer in TWO PARTS.	
	 Technical Offer [with PART A & PART B] and Commercial offer. Price Bid. 	
8.0	The Technical Offer shall contain a comparative statement of Technical Specifications demanded by BHEL and Offer Details submitted by the Bidder, against each clause. A just 'CONFIRMED' or 'COMPLIED' or 'YES' or 'NO-DEVIATION' or similar words in the technical comparative statement may lead to disqualification of the Technical Offer.	
9.0	The Technical Offer shall be supported by product Catalogues & Data Sheets and also technical details of Bought-Out-Items with copies of Product Catalogue to the extent possible.	
10.0	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.	



$\underline{SECTION-IV}$

The performance certificate should be produced on Customer's Letter Head.

PERFORMANCE CERTIFICATE

1. Supplier of the equipment	
2. Make & Model of the Equipment	
3. Month & Year of Commissioning	
4. Application for which Equipment is used	
a) Booth Size in Meter (L x W) b) Exhaust Blower capacity in HP	
6. Performance of the Equipment	Satisfactory
(Tick whichever is applicable)	Good
	Average
	Not Satisfactory
7. Any Other remarks	·
Date:	Signature & Seal of the Authority



PART-B TECHNICAL SPECIFICATION OF DRY TYPE SPRAY PAINTING BOOTH

SL.No	DETAILS OF BHEL SPECIFICATION		Vendor's Offer Details
1.	Type of painting Booth:		
1.1	 Down cum Side Draft Dry type non-pressurized Spray Painting booth shall consist of the following. Booth chamber of GI powder coated sheets. 3 Ton capacity Ground Motorized Trolley with flame proof motor & 10 m BG Track. Overhead Monorail Electrical Hoist of 3 Ton capacity for up down and transverse movement with 3.5 m lift. Track 15 meter length along with support structure for 3 Ton hoist. Free push and pull overhead trolleys of 500 kg capacity with rotating mechanism for the overhead track - 4 nos. Double bi-fold hinged doors on the front side for the full height of the chamber. Sliding side doors for entry and exit of valves to be painted on hoist and push and pull overhead trolleys Fresh Air Supply Through louvers provided at top. Control Panel. Exhaust system with stack / chimney. Four spray guns connected inside the booth with sufficient length of 	Vendor to confirm	
2.	hose. Application:		
2.1	The Painting booth will be used for painting various Valves like Gate, Globe and Non Return Valves of sizes 2" to 24" bore dia. and pressure rating upto 600 psi		
3.	Job specification:		
3.1	Job material: Low Carbon steel / Alloy steel		
3.2	Weight of jobs= Range from 30 kg to 3,000 kg		
3.3	Maximum size of the job is L=3000mm, L=1000mm & W=1000mm		



SL.No	DETAILS OF BHEL SPECIFICATION		Vendor's Offer Details
4.	Paint Coating details: -		
4.1.	Primer coating: Primer: Heat Resistant Aluminium Paint a Dry Film Thickness (DFT) of 20 microns per coat (minimum)		
4.2.	Finish coating: Primer: Heat Resistant Aluminium Paint a Dry Film Thickness (DFT) of 20 microns per coat (minimum)		
4.3.	Paint consumption: Including Primer and finish variants, the total consumption of paint per day with 2 shift operation will be approximately 20 liters.		
5.	Layout of Painting booth:		
5.1	Please refer Annexure- VIII at the end of the specification for the layout of proposed painting booth.		
6.	Features of Spray Booth:		
6.1	Painting Chamber: The chamber shall be fabricated with 1.2mm GI sheet with integral flanges of bolted construction	Vendor to confirm	
6.2	Inner dimension of Chamber: The useful Inner dimension of Chamber shall not be less than 5 m (L) X 5 m (W) X 4 m (H). Vendor can recommend and justify their option of chamber size considering the largest job size.	Vendor to confirm	
6.3	Maximum height of booth (topmost point) can be upto 4.7 m	Vendor to confirm	
6.4	The booth shall be provided with Double bi-fold entry doors for a width of 3000 mm at the entrance. Height of doors shall be equal to chamber height. These doors shall have sufficiently large transparent glasses for allowing natural light inside the booth and viewing. These doors shall preferably be supported by bearings for easy open/close.	Vendor to confirm	
6.5	Sliding side doors 2000 mm wide for entry and exit of valves to be painted on hoist and on free push and pull overhead trolleys. Height of doors shall be equal to chamber height.	Vendor to confirm	



DETAILS OF BHEL SPECIFICATION	Vendor's Offer Details
The painting booth should maintain an adequate supply of fresh air at the operators breathing level.	Vendor to specify
The booth should reduce the fire hazard to an absolute minimum	Vendor to confirm
The booth should be designed in such a way that it saves on floor space.	Vendor to confirm
Painting: All structures of the booth shall be painted with two coats of airdrying enamel paint (RAL 6011 Reseda green color)	Vendor to confirm
Job handling:	
Job to be painted will be handled by 3 Ton capacity Electrical Hoist for up down and transverse movement mounted on Monorail. There shall be rotating movement of the hoist so as to paint the valve on both sides. For smaller jobs free push and pull manual trolleys each of 500 kg capacity - 4 nos. to be provided, with rotating mechanism.	Vendor to confirm
For painting heavy and bigger jobs 3 Tonne motorised ground trolley of L=3000mm X W=2000mm X H=1000mm to be provided.	Vendor to confirm
There shall be a slit of width 300 mm at the roof of the painting chamber to allow EOT crane chain. This slit shall extend to a depth of 3 meters from the entrance door. This slit shall be covered with flexible sealing arrangement so as to allow the crane chain.	
Control panel:	
Preferably Floor mounted control panel in Mild steel duly painted with enamel paint shall be provided outside the paint booth and housed with reputed make standard electrical Siemens switch gears and MCB suitably interlocked for the sequence of operation. All equipments shall be suitably earthed and shall be connected with centralized control panel through copper cables and glands fitting. Push buttons with switch indication shall be provided along with 3 Phase input supply indication. Centralized control panel shall have proper ventilation fan and suitable lighting. All copper cables shall be laid in cable tray.	Vendor to confirm
	The painting booth should maintain an adequate supply of fresh air at the operators breathing level. The booth should reduce the fire hazard to an absolute minimum The booth should be designed in such a way that it saves on floor space. Painting: All structures of the booth shall be painted with two coats of airdrying enamel paint (RAL 6011 Reseda green color) Job handling: Job to be painted will be handled by 3 Ton capacity Electrical Hoist for up down and transverse movement mounted on Monorail. There shall be rotating movement of the hoist so as to paint the valve on both sides. For smaller jobs free push and pull manual trolleys each of 500 kg capacity - 4 nos. to be provided, with rotating mechanism. For painting heavy and bigger jobs 3 Tonne motorised ground trolley of L=3000mm X W=2000mm X H=1000mm to be provided. There shall be a slit of width 300 mm at the roof of the painting chamber to allow EOT crane chain. This slit shall extend to a depth of 3 meters from the entrance door. This slit shall be covered with flexible sealing arrangement so as to allow the crane chain. Control panel: Preferably Floor mounted control panel in Mild steel duly painted with reputed make standard electrical Siemens switch gears and MCB suitably interlocked for the sequence of operation. All equipments shall be suitably earthed and shall be connected with centralized control panel through copper cables and glands fitting. Push buttons with switch indication shall be provided along with 3 Phase input supply indication. Centralized control panel shall have proper ventilation fan and suitable lighting. All copper



DETAILS OF BHEL SPECIFICATION	Vendor's Offer Details
Electrical:	
$415V \pm 10\%$, $50~HZ \pm 3~HZ$, $3~Phase~AC$ (3 wire system without neutral) Power Supply will be provided by BHEL at a single point near the machine, All types of cables, connections, circuit breakers etc. required for connecting BHEL's power supply point to different parts of the equipment / control cabinets, shall be the responsibility of vendor. Material detail of earthing is to be informed by vendor well in advance so that the same could be incorporated during construction of foundation.	Vendor to confirm
Electrical control panel should be complete with required electrical elements such as contactors, MCB s, fuses, rectifiers, isolators etc. of reputed make.	Vendor to confirm
All electrical & electronic control cabinets & panels should be dust and vermin proof and shall have IP 54 protection.	Vendor to confirm
All Motors shall conform to IEC or Indian Standards. Motor make: ABB/ Siemens / Crompton greaves / BB or any other make subject to acceptance by BHEL.	Vendor to confirm
Vendor should ensure proper earthing for the machine and its peripherals.	Vendor to confirm
Air Filtration:	
Consumption of paint will be 20 litres./ day Other than paint arresting metal filters with exhaust blowers, Vendor to analyse and specify the requirement for any other additional Filter system. If required, Vendor to specify details of the filtering arrangement envisaged.	Vendor to specify
	Electrical: 415V ± 10%, 50 HZ ±3 HZ, 3 Phase AC (3 wire system without neutral) Power Supply will be provided by BHEL at a single point near the machine, All types of cables, connections, circuit breakers etc. required for connecting BHEL's power supply point to different parts of the equipment / control cabinets, shall be the responsibility of vendor. Material detail of earthing is to be informed by vendor well in advance so that the same could be incorporated during construction of foundation. Electrical control panel should be complete with required electrical elements such as contactors, MCB s, fuses, rectifiers, isolators etc. of reputed make. All electrical & electronic control cabinets & panels should be dust and vermin proof and shall have IP 54 protection. All Motors shall conform to IEC or Indian Standards. Motor make: ABB/ Siemens / Crompton greaves / BB or any other make subject to acceptance by BHEL. Vendor should ensure proper earthing for the machine and its peripherals. Air Filtration: Consumption of paint will be 20 litres / day Other than paint arresting metal filters with exhaust blowers, Vendor to analyse and specify the requirement for any other additional Filter system. If



SL.No	DETAILS OF BHEL SPECIFICATION	Vendor's Offer Details
11.	Exhaust Blower:	
11.1	Suitable blower with sufficient capacity should be provided for sucking the paint fumes from the painting chamber.	Vendor to confirm
11.2	Blower capacity: Minimum required 20000 m ³ / Hr x 2 Nos	Vendor to specify
11.3	Motor capacity: Min 10 HP x 2Nos	Vendor to confirm
11.4	Motor type: TEFC	Vendor to confirm
12	Compressed Air: Compressed air at 60 to 70 psi will be made available at one point. Vendor to ensure proper functioning of all systems / sub systems of the equipment at this air pressure or vendor to introduce necessary devices to increase the air pressure to the required level. The vendor shall indicate the inlet point for compressed air in the layout drawing of the machine.	Vendor to confirm
13.	Lighting:	
13.1	The lighting inside the booth shall be such that with naked eye it should be easily possible to identify and differentiate the painted / unpainted areas on the job. The fixtures should be flame proof.	Vendor to confirm
13.2	Lighting wattage of each light: Vendor to specify	Vendor to confirm
13.3	Number of light fixtures: Vendor to specify	Vendor to confirm
14.	Exhaust stack / Chimney:	
14.1	Stack / chimney with weather cowl shall be provided up to a height 3 Meter above the Building roof to let out the fumes to atmosphere. Height of the building roof is 10 meters approximately.	Vendor to confirm



SL.No	DETAILS OF BHEL SPECIFICATION	Vendor's Offer Details
15.	Safety:	
15.1	The paint booth shall have all safety features included. Vendor has to specify the details of safety features. Proper interlocks are to be incorporated and their working to be fully functional at the time of trials	Vendor to confirm
15.2	All the pipes, cables etc. of the equipment should be well supported and protected.	Vendor to confirm
15.3	All the rotating parts used on equipment should be guarded and statically & dynamically balanced to avoid undue vibrations	Vendor to confirm
15.4	If any safety / environmental protection enclosure is required it should be built in the machine by the vendor	Vendor to confirm
16.	Environment:	
16.1	Noise level shall not exceed 85 dB (A), 1 meter away from the equipment. Reinforcement and thickness of ducts and chamber enclosure materials should be selected such that there is no unwanted noise when the paint booth is in operation.	Vendor to confirm
17.	Ambient condition:	
17.1	All electrical and electronic components should be tropicalised to withstand ambient conditions of temperature max 50 degree C and relative humidity up to 85%. Both do not occur simultaneously.	Vendor to confirm
18.	Spares:	
18.1	List of Mandatory spares to be supplied with the paint booth shall be enclosed with the offer along with price of the spares in price bid. Spares for successful running of the booth for one year shall be quoted as optional. A list of such spares shall be enclosed with the offer.	Vendor to specify



GT 17			
SL.No	DETAILS OF BHEL SPECIFICATION	Vendor's Offer Details	
19.	Erection and commissioning:		
19.1	Erection and commissioning of the entire system shall be under the scope of the supplier. 1. Symplicate take full geographic for complete erection and	Vendor to confirm	
	1. Supplier to take full responsibility for complete erection and commissioning. Start up, testing of equipment, it's control system & all types of other supplied equipment etc. are the responsibility of the supplier.		
	2. Service requirement like power, air & water shall be provided by BHEL at only one point to be indicated by supplier in their foundation/layout drawings.		
	3. Only crane facility will be provided by BHEL, free of cost. All other requirements like welding power source, consumables, Gas etc are to be brought by the supplier.		
20.	Leveling & Anchoring System:		
20.1	Complete anchoring materials including foundation bolts, fixators, levelling shoes etc should be supplied.	Vendor to confirm	
21.	Foundation Details:		
21.1	Vendor shall submit the General arrangement layout drawing along with the offer. The layout shall show complete equipment with all accessories including space requirement for equipment and accessories. Vendor shall submit complete foundation details including static and dynamic loads within one month from the date of P.O. BHEL will construct complete foundation for the machine.	Vendor to confirm	
21.2	The Vendor shall indicate detailed specifications of grouting compound and Grouting procedure etc. for foundation bolts of the machine.	Vendor to specify	



	Vendor's Offer Details
Documentation:	
Three hard copies and one CD of the following documents in English are to be supplied along with the equipment.	Vendor to confirm
Operation and maintenance manual	Vendor to confirm
GA drawing	Vendor to confirm
Electrical circuit drawing	
Water flow circuit drawing	
Civil drawings like water tank etc.	
Spare parts manual	Vendor to confirm
Make& Specification for all bearings used in the equipment should be provided	Vendor to specify
Inspection at Vendor works:	
Pre dispatch inspection will be carried out by BHEL Engineers to check the Parts, sub assemblies and sub systems of the total equipment	Vendor to confirm
Performance testing at BHEL:	
Performance test will be carried out after commissioning of the equipment at BHEL. Minimum three cycles of painting has to be successfully proved to BHEL with proper functioning of all systems and sub systems of the equipment.	Vendor to confirm
Training:	
After commissioning the Equipment at BHEL training is to be imparted to the operators and maintenance crew for a period of 2 days in the operation and maintenance of the equipment and system.	Vendor to confirm
Guarantee:	
12 months from the date of acceptance of the machine at BHEL or 18 months from dispatch whichever is earlier.	Vendor to confirm
	Three hard copies and one CD of the following documents in English are to be supplied along with the equipment. Operation and maintenance manual GA drawing Electrical circuit drawing Water flow circuit drawing Civil drawings like water tank etc. Spare parts manual Make& Specification for all bearings used in the equipment should be provided Inspection at Vendor works: Pre dispatch inspection will be carried out by BHEL Engineers to check the Parts, sub assemblies and sub systems of the total equipment Performance testing at BHEL: Performance testing at BHEL: Performance test will be carried out after commissioning of the equipment at BHEL with proper functioning of all systems and sub systems of the equipment. Training: After commissioning the Equipment at BHEL training is to be imparted to the operators and maintenance crew for a period of 2 days in the operation and maintenance of the equipment and system. Guarantee: 12 months from the date of acceptance of the machine at BHEL or 18 months



SL.No	DETAILS OF BHEL SPECIFICATION	Vendor's Offer Details
27.	General:	
27.1	Over all space required for the Paint booth including sub systems: L x W x H	Vendor to specify
27.2	Total connected load in KW:	Vendor to specify
27.3	Approximate total weight of the Equipment including accessories	Vendor to specify
27.4	Weight of the largest Part or sub assembly	Vendor to specify



New Bay-1 Down/ Side Draft, Dry Type Painting Booth [5m(I)x 5m(W)x 4 m (H)] ST EOT (5m lift) Opening Paint Arresting Filters Chimney(13 m Height) Chimney(13 m Height)



ANNEXURE IX: CHECKLIST

Document/Reference	To check	Remarks
Qualifying criteria [Part-A]	Duly filled and required	
	documents attached	
Technical sheet [Part-B]	Duly filled and any	
	deviation/advanced offer	
	mentioned	
Commercial terms	Annexure- duly filled for all	
	columns	
Unpriced bid	Filled for all items except	
	Prices and attached along	
	with Techno-commercial	
	offer	
Declaration form	Signed and attached along	
	with Techno-commercial	
	offer	
Separate bids	Part-I containing General,	
	Commercial & Technical	
	offer along with Unpriced	
	bid sealed separately in an	
	envelope;	
	Part-II containing Priced bid	
	sealed separately in an	
	envelope;	
	And both the sealed	
	envelopes put in an outer	
	main envelope.	