

SHT. 01 OF 05



BHARAT HEAVY ELECTRICAL LIMITED

UNIT'S ADDRESS:

UNIT'S PHONE NO.:

CONTACT PERSON'S NAME/DESGN./PHONE NO./E-MAIL
(FROM PURCHASE DEPT.)

Enquiry No. :

Due Date :

Supplier Qtn. No.:

Specification :

Date:

SPECIFICATION CUM COMPLIANCE CERTIFICATION FOR BENCH TYPE MPI MACHINE

NOTE:-

- Vendor must submit complete information against each clause. . The offer meeting these clauses would only be processed.
- The "Offered" Column and where applicable, the "Deviations" & "Remarks" Column of this format shall be filled in by the Vendor and submitted along with the offer. Inadequate / incomplete, ambiguous, or unsustainable information against any of the clauses of the specifications/requirements shall be treated as non-compliance.
- The offer and all documents enclosed with offer should be in English language only.
- All dimensions are in mm unless otherwise stated.

ADDRESS OF THE SUPPLIER :

ADDRESS OF THE INDIAN AGENTS :

TELEPHONE NOS.:

TELEPHONE NOS.:

FAX NOS.:

FAX NOS.:

E-MAIL ADDRESS :

E-MAIL ADDRESS :



**PDF
Complete**

Your complimentary
use period has ended.
Thank you for using
PDF Complete.

[Click Here to upgrade to
Unlimited Pages and Expanded Features](#)

SHT. 02 OF 05

<u>SCOPE : SUPPLY, ERRECTION & COMMISSIONING OF BENCH TYPE MPI MACHINE.</u>					
SL.NO.	DESCRIPTION FOR BHEL REQUIREMENT	REQUIRED	OFFERED	DEVIATIONS	REMARKS
1.0	PURPOSE & WORKPIECE				
1.1	Purpose: The Bench Type Magnetic Crack detection equipment is required for carrying out Magnetic particle examination of deferent kind of materials and product with AC and HWDC. It shall be rugged , compact designed and stationary.	Vendor to confirm			
1.2	Essential Features :				
1.2.1	The equipment shall be suitable to conduct Circular and longitudinal Magnetization of the product.	Vendor to confirm			
1.2.2	Shall have central conductor facility to test hollow Products .				
1.2.3	Shall have the facility to conduct visible and fluorescent testing with inbuilt Black light provision.				
1.2.4	Shall have the facility to carry out de-magnetization of the material tested.				
2.0	<u>Technical features</u>				
3.1	Current output : Peak current output shall be 4000 to 5000 Amps. AC/DC .	Vendor to confirm			
3.2	Test Bed : Min.1500mm long , fixed head stock and adjustable tail stock to hold the job of different length for head shot and 300mm dia coil (preferably base mount) for longitudinal magnetization . Central conductor shall be of copper with 30 to 40 mm dia. output using closed loop feed back control in AC/HWDC modes.				
3.3	Current control : Solid state, SCR step less. Shall be equipped with self regulating output using closed loop feed back control in AC/HWDC modes.				
3.4	Insulation : Class F				
3.5	Protective systems : Shall be provided with short circuit and over load protective systems.				
3.6	Ammeters : Shall have separate ammeters to show AC and HWDC output current.				
3.7	ON / OFF Switch : Foot switch or push bar type				

SCOPE : SUPPLY, ERRECTION & COMMISSIONING OF BENCH TYPE MPI MACHINE.					
SL.NO.	DESCRIPTION FOR BHEL REQUIREMENT	REQUIRED	OFFERED	DEVIATIONS	REMARKS
3.8	Other features :				
	Shall be provided with 220 V output socket to connect lamp or other accessories. Power indicating lamps, magnetization on/off indicator , AC/DC selector switch . Current control selector for AC & DC, AC / DC selector switch , Auto combination shot facility, etc.				
3.9	Input : 415 V , 2 phase , 50 cycles				
4.0	Essential Accessories :				
4.1	Central conductor of copper with 40 mm dia				
4.2	Adjustable lamp and Ultra Violet lamp mounted on the frame.				
4.3	Black colour inspection hood of resin for fluorescent testing of jobs under ultra violet light .				
5.0	Other optional accessories : Fluid spray can ,Black light , Field indicators etc.				
7.0	Spares (optional) : Necessary spares for two year trouble free operation.				
8.0	General clause :				
8.1	The equipment shall be capable of operating at specific accuracy and trouble free performances with minimum maintenance for at least 3 years .The performance history of any equipment for the same purpose supplied earlier to BHEL/Bhopal by the party shall be the yardstick for assessment of the above. All electrical , electronic and controls shall be of reputed make .Efficient after sales service shall be provided after guarantee period offer shall be technically rejected if the past history of the supplier is found not satisfactory.				
8.2	Appearance : It shall have nice appearance with rust proof varnish and attractive colour finish				
8.3	Safety				
8.4	Suitable inter locks shall be provided to prevent the equipments from damage and for the protection of operator. Necessary protection device(like over load/short circuit/ earth fault protection device) and any other protection as recommended by the manufacturer shall be provided.				

SCOPE : SUPPLY, ERRECTION & COMMISSIONING OF BENCH TYPE MPI MACHINE.					
SL.NO.	DESCRIPTION FOR BHEL REQUIREMENT	REQUIRED	OFFERED	DEVIATIONS	REMARKS
8.5	Environmental condition : All electrical parts are to be tropicalised to temp. 5 deg C (min.)and 50 deg C (max) and relative humidity 0 to 95 %.				
8.6	Demonstration/training : Free demonstration/training in operation of equipment at BHEL shall be provided by the supplier.				
8.7	Inspection : The equipment shall be inspected and tested at manufactures works prior to dispatch and in presence of BHEL representative.				
8.8	Commissioning : The equipment shall be commissioned and proved in all respect for accuracy and performance at Bhopal by the supplier free of cost.				
8.9	Guarantee : The equipment shall be guaranteed in respect of accuracy, performance , design , material and workmanship for a period of not less than 12 months from the date of commissioning or 18 months from the date of despatch.Free after sales service and free replacement of defective parts shall be provided during guarantee period .				
8.10	Four copies of the following literature shall be supplied along with the equipment				
8.10.1	Calibration certificate from standard / reputed laboratory				
8.10.2	Descriptive leaflets, technical literature & drgs.				
8.10.3	Accuracy and calibration charts with actual readings and specifying traceability				
8.10.4	Electrical and electronic circuit diagrams including PCB details, schematic and wiring digrams of complete instrument.				
8.10.5	Test & guarantee certificates.				
8.10.6	Operation and maintenance manual with spare part catalogue.(Shall include total electrical and electronic circuit diagram of cards , inter connection etc)				
9.0	Details to be included in the offer	Vendor to confirm			
9.1	Technical literature , general arrangement drawing , constructional features of equipment , requirement of power and other services, manufacturer's name , model no., size & weight of the equipment.				
9.2	List of standard accessories.				
9.3	List of optional accessories with item wise price & details.				

SCOPE : SUPPLY, ERRECTION & COMMISSIONING OF BENCH TYPE MPI MACHINE.					
SL.NO.	DESCRIPTION FOR BHEL REQUIREMENT	REQUIRED	OFFERED	DEVIATIONS	REMARKS
9.4	Item wise price of recommended spares for 2 years.				
9.5	Relevant IS,BS standard to which the equipment is designed				
9.6	List of customers to whom such equipments are supplied.				
9.7	Point to point replay on our specification & general conditions .				
10.0	QUALIFYING CONDITIONS :	Vendor to confirm			
	<p>Only those vendors, who have commissioned at least one Machine for similar rating in the recent past in INDIA and such machine is presently working satisfactorily for more than one year after commissioning should quote. The following information should be submitted by the vendor about the companies where similar machines have been supplied. This is required from all the vendors for qualification of their offer.</p> <p>1.Name,designation, Phone No., Fax No. and E-mail address of the contact person/issuer of the Performance Certificate of the customer is to be informed.</p> <p>2. Complete postal address of the customer.</p> <p>3. Year of commissioning.</p> <p>4. Application for which the machine is supplied</p> <p>5. Performance certificate mentioning model, year of commissioning, broad specification and application, from any one of the customers regarding satisfactory performance of machine supplied to them issued within one year of the tender opening date.</p> <p>6. BHEL reserves the right to physically see and verify performance of referred machine for performance vis a vis its application and job accuracies.</p> <p>7. Technical evaluation of only those offers will be made who qualify as per the above qualifying conditions. Other offers shall not be considered.</p>	Vendor to comply with the offer			