



BHARAT HEAVY ELECTRICAL LIMITED

UNIT'S ADDRESS:

UNIT'S PHONE NOS.

CONTACT PERSON'S NAME/DESIGN./PHONE NO./E-MAIL
(FROM PURCHASE DEP'T.)

Enquiry No. :

Due Date :

Supplier Qtn.
No.:

Date :

SPECIFICATION CUM COMPLIANCE CERTIFICATE FOR TOOL PRESETTER

NOTE:-

- 1. Vendor must submit complete information against all clauses.**
- 2. Inadequate / incomplete, ambiguous, or unsustainable information against any of the clauses of the specifications/requirements shall be treated as non-compliance.**
- 3. The offer and all documents enclosed with offer should be in English language only.**

ADDRESS OF THE SUPPLIER :

TELEPHONE NOS.:

FAX NOS.:

E-MAIL ADDRESS :

ADDRESS OF THE INDIAN AGENTS :

TELEPHONE NOS.:

FAX NOS.:

E-MAIL ADDRESS :

**SCOPE: SUPPLY, ERECTION & COMMISSIONING OF DEEP FREEZER (SUB ZERO TREATMENT CHAMBER) COMPLYING WITH
SPECIFICATION AS BELOW**

Sl. No	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED BY	OFFERED	DEVIATIONS	REMARKS
1.0	PURPOSE & WORK PIECE MATERIAL				
1.1	Purpose: (Operations/Jobs involved)	To measure cutting length, diameter / radius, cutting edge angles. These are to be measured automatically and displayed on monitor.			
2.0	Technical Data:				

(Signature)
(Ashok)
Sr. Engineer

Sl. No	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED BY	OFFERED	DEVIATIONS	REMARKS
2.1	Measuring range	X-axis: 0-600 mm Z-axis 0-600mm			
2.2	System resolution (Minimum)	X-axis: 0.005 mm Z-axis 0.005mm			
2.3	Movements	Precision guide ways in X & Z axis with compressed air / Pneumatic.			
2.4	Tool edge detection	Optical automatic type. Screen with cross lines for reference and 20x magnification lens.			
2.5	Spindle	Spindle rotation is on high precision, Preloaded matched pair of AC bearings. Spindle accuracy of 0.002mm is minimum			
2.6	Spindle taper	ISO 60.			
2.7	Tool Clamping	Pneumatic i.e., Compressed air / Vacuum.			
2.8	Construction	High grade casting / Granite rigid Base mounted on a rigid table.			
2.9	Values display				
a	Screen	Fixed and floating cross hair for automatic measurement. Screen size of minimum 12"			
b	Values measurement	Tool tip and radii to be displayed automatically			
2.10	Power Supply	Vendor to specify			
3.0	Mandatory Accessories and facilities				
a	USB port for printer, PC, Mouse and key board	Vendor to Conform			


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Sl. No	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED BY	OFFERED	DEVIATIONS	REMARKS
b	Transfer of machine tool program compatible measuring data to a CNC control.	Vendor to Conform			
c	ISO 60 to ISO 50 reduction sleeve with necessary accessories so as to directly mount on the spindle.	Vendor to Conform and quote.			
4.0	Electrical :				
4.1	220V (+ 10%V to - 15%V), 50HZ +/-3 HZ.	Vendor to confirm			
4.2	Tropicalisation: All electrical / electronic parts shall be tropicalized	Vendor to Conform			
4.3	Cables / wiring and other electrical material shall meet relevant BIS standards	Shall be of reputed make			
5.0	SAFETY ARRANGEMENTS & ENVIRONMENTAL PERFORMANCE OF THE MACHINE:				
5.1	Equipment should have adequate and reliable safety interlocks / devices to avoid damage to the equipment, work piece and the operator due to the malfunctioning or mistakes. Equipment functions should be continuously monitored and alarm / warning indications through lights.	Vendor to Conform			
5.2	If any safety / environmental protection enclosure is required it should be built in the machine by the vendor.	Vendor to Conform			
6.0	SPARES:				
6.1	Itemized breakup of mechanical, Hydraulic, Pneumatic, electrical and electronic, instrumentation spares used on the equipment in sufficient quantity as per recommendation of Vendor for warranty period for trouble free operation should be offered by vendor.	Vendor to Conform			
6.2	Vendor to Conform that complete list of spares for the equipment along with specification / type / model and name & address of the spare supplier shall be furnished along with documentation to be supplied with the equipment.	Vendor to Conform			
7.0	DOCUMENTATION :				
7.1	Five sets of following documents (Hard copies) in English language should be supplied along with the machine	Vendor to Conform			
7.2	Operating manuals of Equipment	Vendor to Conform			


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 (Sr. Engineer)



Sl. No	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED BY	OFFERED	DEVIATIONS	REMARKS
7.3	Detailed Maintenance manual of the equipment including trouble shooting & maintenance schedule with all drawings of assemblies/sub-assemblies/parts including Electrical / Electronic circuit diagrams & wiring diagrams.	Vendor to Conform			
7.4	Catalogues, O&M Manuals of all bought out items including drawings, wherever applicable.	Vendor to Conform			
7.5	Test certificates are to be provided.	Vendor to Conform			
8.0	TRAINING				
8.1	BHEL Persons should be trained in the area of (a) Mechanical, Electrical & Electronic maintenance of the equipment (b) Operation of the equipment.	Vendor to Conform			
9.0	COMMISSIONING				
9.1	Supplier to take full responsibility for carrying out the commissioning, start up, testing of the equipment & it's controls etc.	Vendor to Conform			
9.2	Successful proving of BHEL components (Cl. No. 12.1) by the supplier shall be considered as part of commissioning. All tests, as mentioned at clause 12 (Machine Acceptance) shall form part of the commissioning activity.	Vendor to Conform			
9.3	Charges, duration, terms & conditions for Commissioning should be furnished in detail separately by vendor along with offer.	Vendor to Conform			
10.0	PROVE OUT OF BHEL COMPONENTS :				
10.1	Prove out of the equipment on components shall be done at BHEL works to the specified design accuracy after commissioning. Material for the prove out components shall be provided by BHEL. Vendor shall be fully responsible for prove out the equipment on components as specified by BHEL to the full satisfaction of BHEL. Clarifications, if any required by vendor, regarding requirements of the prove out components, whether specified or not, should be discussed and cleared by vendor during initial technical discussions.	Vendor to Conform			
11.0	MACHINE ACCEPTANCE: (Tests/Activities should be Performed by Vendor)				


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Sl. No	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED BY	OFFERED	DEVIATIONS	REMARKS
11.1	Tests/Activities should be carried out at supplier's works on the machine before dispatch :				
11.2	Demonstration of all features of the equipment, control system & accessories for efficient and effective use of the equipment	Vendor to Conform			
11.3	Measuring range, Resolution test to demonstrate the maximum capacity of the equipment.	Vendor to Conform			
12.0	Tests/Activities should be carried out at BHEL works while commissioning the equipment :				
12.1	Demonstration of all features of the equipment, control system & accessories to the satisfaction of BHEL for efficient and effective use of the equipment.	Vendor to Conform			
12.2	Full range test to demonstrate the maximum capacity of the equipment.	Vendor to Conform			
12.3	Supplier's engineer shall demonstrate for of 2 to 3 components.	Vendor to Conform			
12.4	Training of BHEL personal in operation of complete equipment by the supplier's experts / engineers during their stay at BHEL works	Vendor to Conform			
13.0	Packing	Vendor to specify the type of packing.			
14.0	GUARANTEE :				
14.1	As per BHEL Standard terms and conditions.	Vendor to Conform			
14.2	Service beyond guarantee period	Vendor to Specify			
14.3	Supplier shall be responsible for after sales service of the equipment.	Vendor to Conform			
15.0	GENERAL :				
15.1	Equipment Model No.	Vendor to specify			
15.2	Total connected load (KVA):	Vendor to specify			
15.3	Size of the equipment (Length, Width, Height) with complete equipment & accessories	Vendor to specify			
15.4	Painting of Equipment / Electrical Panels	Vendor to specify			
15.5	Total weight of the equipment	Vendor to specify			


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15.6	Vendor to submit , along with offer, reference list of customers where similar or higher capacity tool presetters have been supplied mentioning broad specifications of the supplied equipment, i.e. Model, Measuring range, resolution etc.	Conform & Submit			
15.7	Detailed catalogues , sketch/ photographs of the m/c and accessories/ attachments should be submitted with the offer.	Vendor to Conform			
15.8	Vendors shall submit his latest design. In case of any variance with the present Spec., BHEL reserves the right to study & make minor changes.	Vendor to Conform			
16.0	Delivery Time	Vendor to specify			


P.V. Srihari babu

Dy Manager / Engg & Tech. (Pulv)



Abhijit Parida

Sr. Engineer / Prod(Pulv)

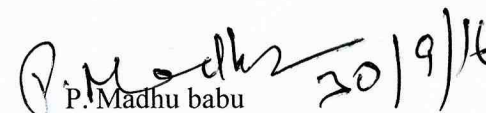


P.K. Tiwari

Sr.Manager / Prod., M&S (51 Shop)



M. Prabhakar Rao
AGM / Operations / Pulv

 20/9/16
P. Madhu babu

AGM / Operations & Purchase (Pulv)