



BHARAT HEAVY ELECTRICALS LIMITED

**Heavy Power Equipment Plant, Ramachandrapuram,
Hyderabad - 502 032. INDIA.**

Phones :

Purchase Dept. : Fax:

E-mail :

Indent No. :

Date :

Enquiry No. :

DueDate :

Vendor Qtn. No.:

Date:

TENDER DOCUMENTS TO BE FILLED BY THE Vendor FOR SUPPLY OF[1 No.]

Analogue Type Rockwell cum Superficial Hardness Testing Machine

ADDRESS OF THE Vendor :		ADDRESS OF THE INDIAN AGENTS:	
TELEPHONE NOS.:		TELEPHONE NOS.:	
FAX NOS.:		FAX NOS.:	
E-MAIL ADDRESS :		E-MAIL ADDRESS:	
NOTE:			
1. Vendor shall submit complete information against each clause of the specification given below point by point.			
2. The Vendor should fill the "Offered" Column in compliance to specified requirements and also "Deviations" column, where there is deviation from the requirement. Duly filled specification cum compliance certificate should be submitted along with the bid. 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 the documents enclosed with bid should be in English language only.			
4. The main equipment and accessories required for the machine to be offered.			
Sl.No.	Description for BHEL Requirement	Offered	Deviations
	Purpose:		Remarks
	Analogue Type Rockwell cum Superficial Hardness Testing machine as per ASTM E18 hardness testing of components in Rockwell Scale shall be quoted		
1	Technical details		
	a) Load Requirements in Kg _f :15, 30, 45 (Rockwell Superficial), 60,100,150 (Rockwell) Kg _f Any other load in addition to the above with in range is acceptable. Initial load = 10 (rockwell) and 3 (superficial).		
	b) Operating cycle:Manual		
	c) Machine should have measurable ranngge with callibration:21-68 HRC & 41-99.5 HRB		
	d) Resolution: 1 Rockwell scale		
	e) Maximum Test Height: 250mm and above.		
	f) Depth of throat:150mm (minimum)		

C. Jagadeesh

Analogue

14/11/2015

Sl.No.	Description for BH&L Requirement	Offered	Deviations	Remarks
	g) Approximate size of the machine :500mm(length)x250mm(width) x900mm (height). Minor variations in the size of the machine can be accepted by BH&L provided it is possible to accommodate in the available space in BH&L labs and provide comfortable operation of the machine. However the vendor has to specify the dimensions of the quoted model.			
	h) Testing tables size: dia 50 mm (round) and V groove 40-60 mm dia			
	i) Items required for machine foundation should be offered by supplier			
	j) Standard test blocks with calibration certificates			
	k) Equipment should be calibrated after installation			
	l) Vendor shall provide details of standard accessories supplied along with machine			
	m) Accessories for the calibration of the system shall be provided.			
	n) Standard spares required for the smooth operation of the machine during warranty period shall be supplied.			
	o) Price of the machine shall include standard accessories & standard spares required for smooth operation of the machine during the warranty period.			
2	Accessories required.			
	a) Rockwell Diamond indenter 120°-1No			
	b) Superficial Diamond indenter -1No			
	c) Steel ball indenter 1/16" -1 No			
	d) Standard test block HRC-1 no			
	e) Standard test block HRB-1 no			
	f) Testing tables: size dia 50 mm round and 40-60 mm V-groove.			
	g) Standard test block Rockwell superficial 30N -1 no			
	h) Allen spanners-1 set			
	i) Clamping device- 1 no.			
3	Spares required.			
	a) Rockwell Diamond indenter 120°-03 No.s			
	b) Superficial Diamond indenter -01No			
	c) Steel ball indenter 1/16" -01 No			
	d) Standard test block HRC-01 no each in the given range (20-30, 40-45)			
	e) Standard test block HRB-01 no each in the given range (20-55, 60-70)			
	f) Testing tables: size dia 150 mm (min) round.			
	g) Standard test block Rockwell superficial (30N) -1 no each in the given range (low, middle, high)			

C. Jayakrishna

Subash

Subash

Sl.No.	Description for BHEL Requirement	Offered	Deviations	Remarks
4	The Vendor shall furnish technical catalogue of the proposed equipment alongwith quotation and customers reference in India for the above equipment: Three sets of operating instruction manuals/schematic drawing shall be sent alongwith civil foundation plan.			
5	BHEL engineers will inspect above equipment prior to shipment at Vendor's works. It is the responsibility of the Vendor to prove all conditions of specification by providing required samples & tools at Vendor works. Sufficient advance inspection call to be given to BHEL and shall make necessary arrangements for the pre-despatch inspection, However BHEL will bear expenditure of travelling, boarding & loading of the BHEL inspector.			
6	ERECTION & COMMISSIONING			
6.1	Vendor to take full responsibility for carrying out the erection, startup, testing of the system, it's control & all types of other supplied equipment/accessories etc. Service requirement like power shall be provided by BHEL at only one point to be indicated by Vendor in their foundation / layout drawing. Other requirement like helping manpower shall be provided by BHEL.			
6.2	Vendor shall erect and commission the above machine at BHEL Hyderabad. Suitable training on all operational aspects and routine maintenance to be given by Vendor to BHEL engineers.			
6.3	The offer shall include following modality for erection & commissioning of the machine:			
	i. Complete erection and commissioning on turnkey basis.			
	ii. The Vendor shall do commissioning and provide necessary training to BHEL personnel and guidance during commissioning, Vendor has to repeat all geometrical accuracy tests, for which all tools etc. are to be arranged by the vendor at their risk.			
	iii. All foundation bolts/ anchoring materials/fixators/levelling shoes etc. required for final erection of the machine shall be provided by the Vendor along with basic machine.			
7	FOUNDATION:			
7.1	Foundation Design: In case any special foundation is required for installing the machine, detailed foundation drawings to be offered. The vendor should agree to supply 5 copies of machine layout and drawings within one month of placement of LOI/Order.			

C. Jayakrishna

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Sl.No.	Description for BHEL Requirement	Offered	Deviations	Remarks
8	GUARANTEE			
8.1	The machine shall be guaranteed for satisfactorily and trouble free service for at least 12 months from the date of commissioning and final acceptance. Any spare required during the guarantee period shall have to be arranged by the Vendor at free of cost.			
9	The Vendor shall explain in detail how the after sales service will be organised. The number of service engineers trained , qualified and experienced to attend service calls and details about ready availability of spares Shall be mentioned. Time taken for service engineers to Reach the site upon receipt of break down call shall be Indicated and assured.			
10	QUALIFICATION REQUIREMENTS:			
10.1	The Vendor shall have a minimum experience of 5 years in manufacturing of ASTM hardness testing machine as per ASTM E18 and should have supplied at least 2 equipment's of the model quoted to various reputed organisations preferably in India.			
10.2	The Vendor shall submit a Reference List of Customers for the model quoted including the names of the user contact persons, telephone numbers and e mail addresses.			
10.3	Performance Certificate from CUSTOMERS (minimum 2 Customers) with full contact details of CONTACT PERSON shall be submitted preferably in India.			
11	If any thing missing in the above specifications it has to be strictly meet latest standard of ASTM E18.			
12	PACKING			
12.1	Rigid packing to be made for all items of complete machine, all accessories and other supplied items to avoid any damage/loss in transit. When machine is dispatched in containers, all small loose items shall be suitably packed in boxes. Packing list to be provided in the box			
13	Delivery period: (To be specified by Vendor)			

C. Jayakrishna
C Jayakishore
Engineer/ME&LABS

B. RAMA KRISHNA

Add: General Manager / Tech. Devt.
BHEL, HYD-32

M Mahesh kumar
Manager/ME&LABS

K. Thirumalesh
Sr. Engr/M&S (CWS)