

## **Bharat Heavy Electricals Limited**

(High Pressure Boiler Plant)
Tiruchirappalli – 620014, TAMIL NADU, INDIA
CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

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ENQUIRY	Phone: +91 431 257 79 38
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	Web: www.bhel.com

Enquiry Number:	Enquiry Date:	Due date for submission of quotation:
2620800033	28.05.2008	27.06.2008

You are requested to quote the Enquiry number date and due date in all your correspondences. This is only a request for quotation and not an order

Item	Description	Quantity	Delivery (Item required at BHEL on)
10	Portable Hand – Held Electric Tube End Bevelling Machine as per the technical specification & commercial conditions applicable (to be downloaded from web site <a href="www.bhel.com">www.bhel.com</a> or <a href="http://tenders.gov.in">http://tenders.gov.in</a> )	6 Nos.	30.10.2008

BHEL commercial terms & conditions with Price Bid and Bank Guarantee formats along with technical specifications can be downloaded from BHEL web site <a href="http://www.bhel.com">http://www.bhel.com</a> or from the Government tender website <a href="http://tenders.gov.in">http://tenders.gov.in</a> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry reference "2620800033".

	Yours faithfully,
Tenders should reach us before 14:00 hours on the due date	For BHARAT HEAVY ELECTRICALS LIMITED
Tenders will be opened at 14:30 hours on the due date	
Tenders would be opened in presence of the tenderers who	
have submitted their offers and who may like to be present	Manager / Capital Equipment / MM

## PORTABLE, HAND-HELD ELECTRICALLY OPERATED TUBE - END BEVELING EQUIPMENT TECHNICAL SPECIFICATION

**Quantity: 6 Nos** 

S.No.	FEATURE	BHEL SPECIFICATION	VENDOR'S OFFER (with complete Technical Details)
1	PURPOSE/FUNCTION	The equipment is to be used for the edge preparation of Carbon / Alloy / Stainless Steel TUBE Ends for butt-joint fitup and welding. The tubes are used in High Pressure boiler applications.	
1.1	O.D.Chamfering	Outside Bevelling to 37.5° or 45.0° angle and 'J' style edge preparation. All styles with a land of 1.0 mm to 2.0 mm.	
1.2	Facing	End Facing of Pipes	
1.3	I.D.Boring	Internal Taper Turning to 10 ° to 12 °	
1.4	Machining Mode	The above three operations are to be done in single setting with suitable tool holders.	
2	MACHINE OPERATION	Electrically Operated	
2.1	Power Supply	230 +/- 10% V, 50 +/-3 Hz, Single Phase AC Supply, through a 3-Wire System. [3rd wire for protective earthing]	
2.2	Input Power Cable	The input power cable shall be of 15 metres in length and provided with a suitable end connector for 3-Pin Socket.	
2.3	Noise Level	Not more than 80dB, at a distance of one metre from the workspot.	

S.No.	FEATURE	BHEL SPECIFICATION	VENDOR'S OFFER (with complete Technical Details)
3	JOB DETAILS		
3.1	Diameter Range of Tubes	31.8 mm to 76.1mm (Outside Diameter)	
3.2	Wall Thickness	Minimum - 3 mm; Maximum - 12.5 mm	
3.3	Material	Carbon Steel, Alloy Steel, Stainless Steel	
4	MACHINE CONFIGURATION	Compact Design, Portable & Hand-Held	
4.1	Job Clamping	O.D. Clamping with a Locking Lever (suitable bases for varying job diameter to be provided)	
4.2	Electric Motor Output Power	Bidder to Specify [should not be less than 1000 W]	
4.3	Electric Motor Output Toque	Bidder to Specify	
4.4	Cutter Speed	100 to 150 rpm	
4.5	Tool Feed	Minimum 20 mm	
4.6	Construction	The equipment shall be made of impact resistant and corrosion resistant metal alloys with suitable coatings.	
4.7	Hook for suspension	Machine shall be provided with a hook to suspend. Vendor to confirm.	
4.8	Weight	Bidder to Specify	

S.No.	FEATURE	BHEL SPECIFICATION	VENDOR'S OFFER (with complete Technical Details)
5	TOOLINGS		
5.1	O D Clamping Bases (to clamp on to the outer diameter of tubes)	The machine should be capable of clamping tubes with OD 31.8mm/ 38.1mm / 44.5mm / 51.0mm / 57.0mm / 60.3mm / 63.5mm / 76.1mm.(Total: 8 sizes)	
5.2	Cutting Tool	HSS / Carbide Tool Bits (HSS with COBALT inclusion)	
5.3	Cutters and Tool Bits	<ol> <li>37.5° and 45.0° for O.D.Beveling</li> <li>Facing</li> <li>10° and 12° for I.D.Taper Boring</li> <li>'J' style for 'U' seam weld EP</li> </ol>	
6	SPARES		
6.1	Main Equipment	Complete List of Spares including Motor - Armature, Bearings, Contactors, Bushes, etc. to be <b>LISTED ITEMWISE</b> with quantity.	
6.2	Cutting Tools	Cutting Heads to hold tool bits, Tool Bits for Cutting Operations mentioned under <b>5.3</b> to be <b>LISTED ITEMWISE</b> with quantity.	
7	MANUALS		
7.1	No of Copies	2 (Two) for Each Machine	
7.2	Language	English	
7.3	O & M Manual Details :	Manual shall contain BLOW-UP details on assembly / dismantling, part numbers with part description for Maintenance, Safety Instructions while using, Operating Sequence for using the equipment for Beveling, Trouble Shooting Chart.	

S.No.	FEATURE	BHEL SPECIFICATION	VENDOR'S OFFER (with complete Technical Details)
8	GENERAL		
8.1	Cost Details	Price break-up shall be given separately for main equipment, accessories, cutting tools, spares, etc.	
8.2	Inspection/Testing	The equipment shall be inspected and tested for performance evaluation prior to despatch. Test Certificate shall be given.	
8.3	Commissioning	Detailed Instruction Sheet shall be given for easy commissioning of the equipment at BHEL works.	
8.4	Guarantee	The equipment shall be guaranteed for a minimum of twelve months from the date of commissioning or eighteen months from the date of despatch.	
8.5	Catalogue	The offer shall be accompanied with ORIGINAL Catalogues of the offered equipment.	