

Details of existing machines for carrying the Grinding operations on the components of						
Sl.No	Machine description	Model no.	Asset no.	Work place	Work centre	Remarks
1	Vertical Lathe	CVT 150 - I	51-6001	4224	3512	
2	Vertical Lathe	CVT 150 - II	51-2006	4224	3512	
3	Vertical Lathe	BV 12 - II	51-6062	4223	3512	

Details of Machine wise Grinding operations carried out on components of Pulverisers						
Machine Description	Machine Model No.	Asset No	Component Name	Description of Grinding operations	Grinding load met in hrs	Remarks
Vertical Lathe	CVT 150-I	51-6001	Flange Bush	Inside dia. Grinding	260	4 Hours / set
			XRP 1043			
			HP 1103, HP 1203			
			Gear Hsg. Top cover	Face grinding	195	3 Hours / set
			XRP 1003 & 1043			
			Planet carrier	Outside Taper	325	5 Hours / set
			XRP 1003 & 1043	Grinding		
			HP 1103, HP 1203			
Vertical Lathe	CVT 150-II	51-6002	Journal Hsg.	Inside dia. Grinding	780	4 Hours / set
			HP 1103, HP 1203			
			Upper Journal Hsg.	Inside dia. Grinding		4 Hours / set
			XRP 883, 1003 & 1043			
Vertical Lathe	BV 12 - II	51-6062	Z Bush	Inside dia. Grinding	130	2 Hours / set
			XRP 1003 & 1043			
			HP 1103, HP 1203			
			Gear Hsg. Bottom cover	Face grinding	195	3 Hours / set
			XRP 1003 & 1043			
			HP 1103, HP 1203			
				Total Load in Hours	1885	


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	BHARAT HEAVY ELECTRICAL LIMITED			Enquiry No. :	
	UNIT'S ADDRESS:			Due Date :	
	UNIT'S PHONE NOS.			Supplier Qtn. No.:	
	CONTACT PERSON'S NAME/DESIGN./PHONE NO./E-MAIL (FROM PURCHASE DEP'T.)			Date :	
<u>SPECIFICATION CUM COMPLIANCE CERTIFICATE FOR MOTORISED GRINDING SPINDLE / ATTACHMENT FOR BV12 & CVT 150 VTLs</u>					
	NOTE:-				
	1. Vendor must submit complete information against 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 :					
SCOPE: SUPPLY & COMMISSIONING OF MOTORISED GRINDING SPINDLE / ATTACHMENT FOR BV 12 & CVT 150 VTL.					
Sl. NO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED BY	OFFERED	DEVIATIONS	REMARKS
1.0	The motorised Grinding Spindle / Attachment shall be suitable for mounting on Turret tool Post of BV 12 & CVT - 150 Vertical Lathes to carry out the grinding operations of Planetary Gear Box components with a provision to mount horizontally also. (Both machines have coolant facility)	Vendor to confirm			

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1.1	BV 12: Minimum bore dia.200 & Maximum bore dia. 500 & Length: 400				
1.2	CVT 150: Minimum bore dia.300 & Maximum bore dia. 650 & Length: 400				
1.3	Day light of BV 12 & CVT - 150 machines 1000	To be noted			
1.4	Material of the Job	Carbon steel			
2.0	Technical Details				
2.1	Type of drive	Motor mounted directly on the spindle shaft			
2.2	Motor Specification & Power Supply. Motor shall confirm to IEC / Indian Standards.	1500rpm, / 5HP or above / continuous rating, 415 Volts +/- 10%, 50Hz 3 phase			
2.3	Adapters for mounting the Grinding attachment spindle on turret tool post of CVT 150 VTL & BV 12 are to be provided for both horizontal & vertical positions.	Vendor to confirm			
2.4	Wheel fixing adapter for diameters (wheel bore) with balancing provision - 2 Nos each.	Vendor to specify			
2.5	Size of grinding wheel for bore grinding	Vendor to specify			
2.6	Type and grade of grinding wheel for bore grinding.	Vendor to specify			
2.7	Size of grinding wheel for face grinding	Vendor to specify			
2.8	Type & grade of grinding wheel for face grinding.	Vendor to specify			
2.9	Separate control panel for the spindle	Vendor to confirm			
3.0	Separate adapter for flat grind wheel to be supplied. (which is suitable to clause 2.6)	Vendor to confirm			
3.1	The grinding attachment shall be complete with suitable mounting adapter to be readily mountable on tool turret of CVT 150 & BV 12 VTL.	Vendor to confirm			

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15

3.2	The spindle shall run with high concentricity, with minimum axial play and shall ensure vibration free operation. The bearing etc. used shall be of high precision.	Vendor to confirm			
3.3	On / Off switch / control knob shall be provided on control panel.	Vendor to confirm			
3.4	Accessories required for balancing of the wheel shall be supplied.	Vendor to confirm			
3.5	Two Nos. each of the grinding wheels (As per IS Std) suitable for 1) Bore grinding & shaft OD Grinding. 2) Face Grinding respectively (as per CL Nos. 2.8 and 2.9) shall be supplied along with the motorised grinding spindle / attachment.	Vendor to confirm & Specify the type & Grade of Grinding wheels. (To be quoted along with the attachment)			
3.6	Diamond dressing device with suitable mounting to be provided.	Vendor to confirm			
3.7	General arrangement drawing of the motorised grinding spindle / attachment along with adaptor for mounting on the CVT 150 & BV12 VTL. Shall be furnished with the quotation.	Vendor to confirm			
3.8	Customer reference list for similar motorised grinding spindle / attachment shall be furnished with the quotation.	Vendor to submit			
3.9	Four sets of operating & maintenance instructions manual, Assembly, Sub assembly drawings. Parts list, Test certificate of main motor, Material attestation certificates and inspection report of Grinding mandrel shall be supplied with the grinding spindle / attachment.	Vendor to confirm			
4.0	Accessories required for two years trouble free operation shall be quoted separately with price break up.	Vendor to confirm			
4.1	BHEL Engineers will inspect the grinding spindle / attachment at suppliers work before dispatch.	Vendor to confirm			

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12

4.2	Supplier engineer shall install the motorised grinding spindle on the machine, commission and demonstrate its features to BHEL Technical personnel.	Vendor to confirm			
4.3	Supplier shall prove out the bore grinding, face grinding and OD grinding of live jobs at BHEL for ensuring accuracies on the components with surface finish 0.8 & concentricity's 0.01mm.	Vendor to confirm			



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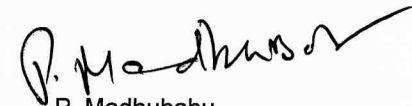
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