

BHARAT HEAVY ELECTRICAL LIMITED					
PIPLANI, BHOPAL-462022, INDIA					
TECHNICAL SPECIFICATION CUM COMPLIANCE SHEET OF "DYNAMIC BALANCING MACHINE" Specification No: CI-TXM-2020-21-01"					
IMPORTANT NOTE:-					
1. Vendor must specify in DETAIL with evidence complete specification against each clause. Offers with incomplete clause no. 13 will be treated as technically disqualified.					
2. The "Offered" Column and where applicable, the "Action by Vendor" & "Remarks" Column of this format shall be filled in by the Vendor and specified along with the offer. Inadequate / incomplete, ambiguous, or unsustainable specification against any of the clauses of the specifications/requirements shall be treated as non-compliance, and will be treated as technically disqualified. Participants shall write the technical parameters where ever "Vendor to specify" is written.					
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 :					
S. NO.	DESCRIPTION OF BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
1	PURPOSE	For balancing of Traction machines rotor of high RPM i.e. up to 6000 rpm at TXM DIVISION. Range of products for which the facility is required. IM3003 (High speed machine under development) TA4502 TA7003			
2	TYPE OF ELECTRONICS	PC BASED INTERFACE WITH GRAPHIC DISPLAY			
3	Maximum weight of rotor for symmetric load	1800 kg			
4	Maximum weight for each bearing pedestal	900 kg			
	Purpose of machine & application's brief details	Traction motor IM3303, TA4502 & TA7003 rotor dynamic balancing			
5		DIMENSION OF ROTOR	IM3303	TA4502	TA7003
			450MMX460MMX850MM	606MMX606MMX1042MM	750MMX750MMX1821MM
		WEIGHT	310 KG	500 KG	1800 KG
		RANGE OF RPM FOR BALANCING	6000RPM	1800RPM	1800RPM
		ACCEPTABLE LIMIT OUT OF BALANCE	5g mm	20g mm	20g mm
6	Rotor diameter range	463 mm to 750 mm			
7	Rotor weight range	310-1800 kg			
8	Journal diameter range	19 to 330 mm			
9	Drive	11 to 15 kw			
10	Drive make	ABB, SIEMENS, MITSUBISHI, DELTA, FUJI, TOSHIKAWA			
11	Drive type	Dried drive			
12	Balancing Speed range	400 to 6000 RPM			
13	Machine make				
14	Minimum Distance from coupling flange to centreline of right bearing	2300 to 2500 mm			

रॉड टिपले / Amit Kondu Tipple
प्रबंधक / Senior Manager
विभाग / TXM Division
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रविन्द्र कुमार गुप्ता / Dy. Manager
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सिंह / A.P. SINGH
प्री. सिंह (वि.से.) / Sr. Engineer (T.S.)
ए. अग्रियंता विभाग / Tech. Services Dept.
वि. अग्रियंता सेवा विभाग / BHEL, BHOPAL

अनुराग शर्मा / ANURAG SHARMA
प्रबंधक (अभिकल्प) / Manager (Design)
टी.एम.ई. विभाग / T.M.E. Division
बी.एच.एल., भोपाल / BHEL, Bhopal

प्रकाश यादव / Dy. Manager
उप प्रबंधक (वि.से.) / Sr. Engineer (T.S.)
विभाग / BHEL, BHOPAL

27
RAVINDR KUMAR GUPTA / INVANDRA KR. GUPTA
DY. Manager / TXM Division
उप प्रबन्धक / विभाग / BHEL, BHOPAL
टी.एल.ए.एम. भोपाल
बी.एच.ई.एल.

QUALITY
60
DATE
RANINDRA KR. GUPTA
Ranindra Gupta, Dy. Manager
उद्य. प्रबंधक / DY. Manager
उद्य. विभाग / BHEL, BHOPAL
टी.एस.एस. भोपाल
डी.एस.ई.एल.

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61	The vendor must be an Original Equipment Manufacturer (OEM) or authorized agent of the OEM. Authorized agents have to submit valid authorization certificate.	Vendor to Specify and submit.			
62	The vendor must have supplied and commissioned at least ONE BALANCING MACHINE of same or higher capacity i.e. BALANCING RPM 6000 FOR 1800 KG ROTORS in the past 10 years (on the date of opening of Tender). Vendor should submit PO copies with technical specification as proof for the same. For micro and small enterprises in line with GOI circular 1(2)(1)/2016-MA 10/03/2016 relaxation permitted for prior turnover criteria only however prior experience is mandatorily required and no relaxation in this regard is given.	Vendor to Specify.			
63	The balancing machine referred to in Clause 62 must be working satisfactorily for more than one year (on the date of opening of Tender). Vendor should submit proof of the same	Vendor to confirm			
64	Complete postal address including contact details of the customer(s) where balancing machine referred to in Clause 62 have been supplied.	Vendor to Specify.			
65	Year of commissioning of the balancing machines referred to in Clause 62 (Copy of Commissioning Report should be furnished)	Vendor to Specify.			
66	Performance certificate/feedback from the customers regarding satisfactory performance of the balancing machine referred to in Clause 62 and supplied to them. The performance certificate/feedback should bear the PO no with date and date of commissioning. The date of issue of the certificate/feedback should not be older than one year from the date of opening of tender.	Vendor to Specify.			
67	BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false / incorrect, the offer shall be rejected.	Vendor to confirm			
68	Average annual T/O of the OEM for the last three financial years should be at least 13.50 lakhs. P/L statements for the years ending 2017-18, 2018-19 & 2019-20 to be provided For micro and small enterprises in line with GOI circular 1(2)(1)/2016-MA 10/03/2016 relaxation permitted for prior turnover criteria only however prior experience is mandatorily required and no relaxation in this regard is given.	Vendor to submit (P/L statements to be submitted with the offer)			

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र. अमिता विभाग / Tech. Services
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for revision
Anurag Sharma only

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69	DETAILS TO BE FURNISHED WITH THE OFFER:- Following details must be supplied with the offer:-				
70	Full technical details / specifications, general arrangement drawing, mechanical assembly drawing etc.	Vendor to furnish			
71	Material specifications which are used in the manufacturing of the equipment.	Vendor to specify			
72	List of customers to whom similar machines have been supplied along with their contact details	Vendor to furnish			
73	Point wise reply to each & every point of our specification is a must. It not complied, then the offer will not be considered.	Vendor to furnish			
74	AMBIENT CONDITION & TROPICALISATION:-				
75	All electronic components should be tropicalised to withstand environmental temp. Variation from 4 to 50 degree C and RH variation from 5 to 95 %.	Vendor to confirm			
76	STRESS RELIEVING OF ALL FABRICATED ITEMS:-				
77	All fabricated bracketries are to be stress relieved. No castings are to be used for the manufacturing of the fixture.	Vendor to confirm			
78	TRAINING:-				
	O&M Training: Training should be imparted to our operators & maintenance staff so that they should be in a position to run / maintain the system, independently at BHEL works	Vendor to confirm			

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