

BHARAT HEAVY ELECTRICAL LIMITED, JHANSI

Specification no. 6232

Item no. MT/1/6/1551/1 & MT/1/6/1551/2

Location BAY-8

Quantity TWO

SPECIFICATION CUM COMPLIANCE CERTIFICATE OF TOROIDAL C.T. WINDING MACHINE

Note :

- 1 VENDOR must submit complete information against clause No-11.0 (Qualifying Condition). The offer meeting this clause would only be processed.
- 2 The "Specify/to be confirmed by vender" Coloumn and where applicable, the " Deviations" Coloumn of the formate shall be filled in by the Vendor and submit along with the offer. Technical details also to be submitted with the offer. Inadequate/ Incomplete, Ambiguous, or unsustainable information against any of the clauses of the specification / requirement shall be treated as non- compliance.
- 3 The offer and all documents enclosed with offer should be in English language only.

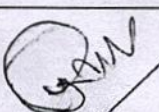
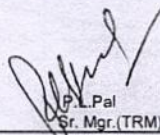
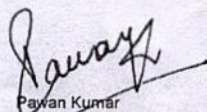
SCOPE:

DESIGN, MANUFACTURING, SUPPLY, ERECTION & COMMISSIONING OF TOROIDAL C.T.WINDING MACHINE AS PER SPECIFICATION BELOW

S.NO.	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFY/ SUBMIT / CONFIRM BY VENDER	VENDOR OFFER	DEVIATIONS
1	PURPOSE & WORK PIECE MATERIAL:			
1.1	Heavy duty TOROIDAL C.T. WINDING MACHINE is required for the winding of C.T. Coils.- Qty - 02 Nos.	Vendor to confirm		
2	SPECIFICATION			
2.1	Make Of Machine	Vendor to specify		
2.2	Model Of offered Machine	Vendor to specify		
2.3	Minimum I.D. after winding --- 125 MM	Vendor to confirm		
2.4	Maximum O.D. after winding --- 500 MM	Vendor to confirm		
2.5	Maximum Height after winding --- 180 MM	Vendor to confirm		
2.6	Wire Gauge to be used for winding(Copper only) --- 8SWG To 20SWG	Vendor to confirm		
2.7	Control. : The Machine shall be controlled by PLC based control panel comprising the following minimum configuration.: PLC system with suitable no. of inputs and Outputs, Drive for winding speed control as per user requirement through Speed POT. for automatic winding of C.T. Apart from these the panel must have all necessary switchgears, overload relays, push buttons, indications, interposing relays, Drive fault reset PB, Drive Run indication, Speed control POT, Emergency PB, Drive display unit for viewing and entering drive parameters, SFU, Control Wiring & Power Wiring with Printed Ferrules, Fuse TBs & Other Essential Items for M/c Control.	Vendor to confirm		
2.8	Pitch Control- Through A.C Motor with close loop servo speed controller	Vendor to confirm		
2.9	Fill Counter-- 5 Digit , Preset, Digital display, Micro processer control	Vendor to confirm		
2.10	Wind Counter-- 5 Digit , Preset, Digital display, Micro processer control	Vendor to confirm		
2.11	Main Motor - A.C. Motor with close loop servo speed controller	Vendor to confirm		
2.12	Main. Motor Power rating - 2.1 K.W.(Min.)	Vendor to specify		
2.13	Motor Make-SIEMENS /ABB /BHARAT BIJLI / ROTOMOTIVE/ GEC/ CROMPTON only	Vendor to specify		
2.14	Drive Make-SIEMENS /ABB / YASKAWA / SCHNEIDER only	Vendor to confirm & specify		
2.15	P.L.C H.M.I Make- SIEMENS /ABB / ALLEN BRADLEY / SCHNEIDER only (Both PLC and HMI should be of Same Make)	Vendor to confirm & specify		
2.16	Additional Motor power Rating	Vendor to specify		
2.17	Core Rotation --CC,CCW Selectable	Vendor to confirm		
2.18	Shuttle Speed -- Variable up to 50 R.P.M (Min.)	Vendor to confirm& specify		
2.19	Suitable Dereeler	Vendor to confirm		
2.20	Type of Wire Tensioner System	Vendor to specify		
2.21	Electric Power required	Vendor to specify		
3	DETAILS TO BE SUBMITTED WITH THE OFFER			
3.1	Dimensioned outline with general arrangement drawing	Vendor to submit		
3.2	Technical literature	Vendor to submit		
3.3	Any special tools required for maintenance of the equipment item wise price details.	Vendor to specify		
3.4	Total electrical load	Vendor to specify		
3.5	Total weight of the equipment.	Vendor to specify		
4	SAFETY / PROTECTION			
4.1	The equipment shall be fully safe in operation with all safety measure. Necessary guards and protection covers are to be provided to protect the equipment.	Vendor to confirm		
4.2	Over current, over voltage and any other for the protection of system/ equipment are to be included as well as suitably interlocked for the safe operation.	Vendor to confirm		
5	ACCESSORIES AND TOOLKITS			
5.1	The TOROIDAL C.T.WINDING MACHINE shall be supplied complete with all standard accessories and in ready to use condition.	Vendor to confirm		
5.2	List of standard accessories & tools with M/c	Vendor to confirm & submit		
5.3	Details of Magazines Carrying wire for winding (supplied with machine with respect to Point No. "1" & "2").	Vendor to specify the size & Qty.		
6	PAINTING			
6.1	Two coats of red oxide metal primer and finished with two coats of synthetic enamel paint of verdigris green paint.	Vendor to confirm		
7	DOCUMENTATION :			
7.1	During participation in technical Bid.			
7.1.1	Dimensioned outline G.A. Drawing.	Vendor to submit		

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GN, MANUFACTURING, SUPPLY, ERECTION & COMMISSIONING OF TOROIDAL C.T.WINDING MACHINE AS PER SPECIFICATION BELOW

S.NO.	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFY/ SUBMIT / CONFIRM BY VENDER	VENDOR OFFER	DEVIATIONS
7.2	After Receipt of Order: (For approval)			
7.2.1	Three set of GA drawing	Vendor to confirm		
7.2.2	Three sets of electrical schematic and control circuit diagram	Vendor to confirm		
7.2.3	Vender will provide foundation drawing/design/details with in 15 days after issueing of purchase order.	Vendor to confirm		
7.3	With the supply			
7.3.1	Three sets of M/c maintenance manual, Operation manual of m/c including Ele.control & Schematic drawing,M/c Assembly &Sub Assembly drawing, Spares - part list concerned drawing of spares.	Vendor to confirm		
7.3.2	Catalogues, O&M Manuals of all bought out items including drawings- 3 set	Vendor to confirm		
7.3.3	Complete PLC & HMI program backup file :as commissioned with comments in English is to be provided.	Vendor to confirm		
7.3.4	Complete electrical circuit diagram of the system with all wiring and termination details "as commissioned" , with PLC ladder shall be provided in soft and hard bind copies.	Vendor to confirm		
7.3.5	The Drive parameter backup file :as commissioned in both hard and soft copies, One Hard bind copy of Drive commissioning manual.	Vendor to confirm		
8	TRAINING			
8.1	Demonstration of all system, features of machine to BHEL representatives for use & operation of supplied machine & accesories at supplier's Works during inspection.	Vendor to confirm		
8.2	A.Training to the BHEL operators for use & operation of all system, features of supplied machine at BHEL JHANSI during commissioning. B. Training to the BHEL maintenance engineers (Electrical, Mech, Electronics) in their respective field for maintenance of all system, Features,PLC program troubleshooting and Program Uploading procedure for supplied PLC/system at BHEL JHANSI during commissioning.	Vendor to confirm		
9	GUARANTEE:			
9.1	24 Months form the date of commissioning of the M/c.	Vendor to confirm		
10	GENERAL, ERECTION AND COMMISSIONING			
10.1	The equipment is to be inspected & tested at supplier works by our representative before dispatch in line with specification.	Vendor to confirm		
10.2	The supplier must inform 15 days in advance to M/s BHEL for the inspection of machine.	Vendor to confirm		
10.3	Complete erection and commissioning work will be in the scope of vender with his own tools and labour.	Vendor to confirm		
10.4	civil work related to foundation will be in the scope of BHEL.(vender to submit foundation drawing within 15 days from the date of issue of P.O.)	Vendor to confirm		
10.5	Successful proving of component by the supplier shall be considered as part of commissioning	Vendor to confirm		
10.6	Schedule of Commissioning shall be submitted before starting the commissioning.	Vendor to confirm		
10.7	M/s BHEL will provide Electric supply,air, water supply at a single point as indicated by supplier during commissioning of machine. Distribution of the same will be in the scope of supplier.	Vendor to confirm		
11	QUALIFYING CONDITION			
11.1	Only OEM / Authorised dealer (Authorisation document required) those, who have supplied and installed at least two Nos. of TOROIDAL C.T.WINDING MACHINE [same or higher capacity (8-20 SWG) for same type of work piece material] in last five years from date of tender opening should quote. Corresponding P.O. COPY & INSTALLATION REPORT/ COMMISSIONING REPORT and PERFORMANCE REPORT of at least one year satisfactory performance after commissioning of two nos machines must be submitted with the offer.	vendor to submit		
12	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		
 Setish Soni Dy.Mgr. (WEX)  Y.K.Dhingra Dy.Mgr.(WEX)  P.L.Pal Sr. Mgr.(TRM)  Pawan Kumar Sr. Mgr.(WEX)				