

TECHNICAL SPECIFICATION FOR 'AUTOMATIC WIRE CUTTING AND STRIPPING MACHINE'

SPECIFICATION NO. EMT- 6870

(This specification is for one number Automatic Wire Cutting and Stripping Machine)

SL NO.	DESCRIPTION OF BHEL REQUIREMENT	REQUIREMENT	OFFERED	DEVIATION
1.0	PURPOSE :			
1.1	'Automatic Wire Cutting and Stripping Machine' is required for Cutting and Stripping of different cross section of wires for the manufacturing of different types of Control Panels.	Vendor to note.		
2.0	SCOPE :			
2.1	The scope of supply includes the design, manufacturing, supply, commissioning and prove out of the machine at BHEL works, Haridwar.	Vendor to confirm.		
3.0	TECHNICAL SPECIFICATION OF 'AUTOMATIC WIRE CUTTING AND STRIPPING MACHINE':			
3.1	Machine should be compatible for wire with insulation like PVC, Teflon.	Vendor to confirm.		
3.2	It should be able to process wire cross-section from 0.05 to 10 Square mm.	Vendor to confirm.		
3.3	It should have USB port for loading software, running programs and data backup.	Vendor to confirm.		
3.4	It should be able to interface with wire marker, pre feeder, stacker, inkjet printing and PC.	Vendor to confirm.		
3.5	It should have a wire straightener for handling wires up to 6 mm diameter.	Vendor to confirm.		
3.6	It should have safety cover.	Vendor to confirm.		
3.7	It should have provision for PC control for setting machine parameters from database.	Vendor to confirm.		
3.8	The offer should include licensed software & communication cables for the applications like interfacing the machine with the network/ PC and programming.	Vendor to confirm.		
3.9	It should be compatible with roller drive for effecting a wire transport mechanism.	Vendor to confirm.		
3.10	Blade set and wire guide for different sizes of wires to be supplied along with the machine.	Vendor to confirm.		
3.11	Service tool kit to be provided along with the main equipment.	Vendor to confirm.		
3.12	Any accessories needed to interface and run the machine optimally should be included in the offer.	Vendor to inform		
4.0	TECHNICAL CATALOGUE/LEAFLET :			
4.1	Detailed technical Catalogue/leaflet/drawing etc. of 'Automatic Wire Cutting and Stripping Machine' indicating all the details such as overall size of machine,	Vendor to submit		

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	part details, technical parameters, bill of material, drawing etc. are to be furnished in the offer.			
5.0	SOURCE OF ELECTRIC SUPPLY :			
5.1	BHEL will provide input power supply of 3 phase 415 ± 15% V / 1 phase 230±15%, 50Hz +/-3% to Isolator Switch (BHEL scope). Cable connection (approximately 5 meters) from isolator switch to 'Automatic Wire Cutting and Stripping Machine' will be in the scope of vendor. There will be no neutral wire and Earthing will be provided through shop structured column.	Vendor to confirm.		
6.0	NOISE LEVEL :			
6.1	Maximum noise level generated during the operation of the machine must be less than 85 dB from 1 meter away from machine with correction factor for background noise.	Vendor to confirm.		
7.0	ENVIRONMENTAL CONDITION :			
7.1	Ambient Temperature: 2°C to 48°C	Vendor to note		
7.2	Relative humidity: 30 to 98 %	Vendor to note		
7.3	Voltage fluctuation: +/- 15 %	Vendor to note		
8.0	SPARES :			
8.1	Following spares are to be supplied with the Machine:-	Vendor to furnish list of spares.		
	1. Blade set used in the machine = 1 no. each type			
	2. Drives (if used)= 1 no. each type			
	3. PLC & I/O Card (if used)= 1 no. each type			
	4. Feedback devices (If used) = 01 No. Each type			
8.2	Vendor may quote other recommended list of spares for 2 years trouble free operation (if any).			
9.0	PRE-ACCEPTANCE OF AUTOMATIC WIRE CUTTING AND STRIPPING MACHINE AT VENDOR'S WORKS :			
9.1	Automatic Wire Cutting and Stripping Machine will be inspected by BHEL engineers on following points at vendor's works: Overall Dimensions of each component, make and specification of different parts, technical parameters etc. with respect to offered model as per clause no-4. All operations of 'Automatic Wire Cutting and Stripping Machine' to be checked. OR BHEL persons will carry out Remote Inspection instead of physical PDI of equipment using mutually agreed Software/ Video Conferencing platforms (Cisco Webex/ Google meets/ Microsoft teams etc.) and give dispatch clearance after satisfaction from all angles. During this PDI, all functionalities shall be	Vendor to confirm.		

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	witnessed by the team and all machine performances shall be verified.			
9.2	All spares as per clause no-8.0 to be checked.	Vendor to confirm.		
10.0	OPERATION AND MAINTENANCE MANUALS :			
10.1	3 Sets of operation and maintenance manuals in English language should be supplied along with Machine: Operation & Maintenance manual must contain in following (whichever is applicable)	Vendor to confirm.		
	1. Detailed Hydraulic & Pneumatic diagram.			
	2. Detailed Electrical & Electronics circuit diagram.			
	3. Complete bill of material (including brought out items) with make & specifications.			
	4. Do's & Don'ts			
	5. Preventive maintenance check list.			
	6. Hard copy of PLC Program with comments (If used)			
	7. Hard copy of drive parameter (If used)			
	8. Procedure of uploading/downloading backup e.g. PLC, Drives etc.			
	9. OEM Manuals of PLC, Drives & Others (whichever is applicable)			
	10. One soft copy of complete O&M manual on CD/PENDRIVE			
11.0	INSTALLATION AND COMMISSIONING :			
11.1	Commissioning of 'Automatic Wire Cutting and Stripping Machine' shall be done by the vendor at BHEL Haridwar works. Vendor shall demonstrate function of the 'Automatic Wire Cutting and Stripping Machine' during commissioning and also train BHEL persons on various operations of the Machine. 'Automatic Wire Cutting and Stripping Machine' will be accepted only after successful demonstration at BHEL, Haridwar works.	Vendor to confirm.		
11.2	During commissioning if any item is damaged / not functioning, vendor shall replace the same without any cost to BHEL.	Vendor to confirm.		
12.0	GUARANTEE/WARRANTEE:			
12.1	Vendor shall provide 12 months guarantee/warranty from date of commissioning of 'Automatic Wire Cutting and Stripping Machine' at BHEL works.	Vendor to confirm.		
13.0	PACKING :			
13.1	The equipment shall be suitably packed to prevent damage during transit and storage. All small and loose items like spares etc. should be suitably packed in separate wooden boxes.	Vendor to confirm.		

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(EMT)
(Ranjit K.)

eg. both
(CHANDRA
G, SR,
(ACM, BI-4)

In view of maintainability
and mech & electrical spare
point of view Tech. spec.
seems satisfactory. Please
(WEX, Elec/Mech, BI-4)

G.S. Meena
(WEX CNC, BI-1) (GS MEENA)

10/09/2020

PRE-QUALIFYING REQUIREMENTS FOR 'AUTOMATIC WIRE CUTTING AND STRIPPING MACHINE':-

DESCRIPTION OF BHEL REQUIREMENT	TO BE SUPPLIED/ CONFIRMED/ SUBMITTED BY	OFFERED	DEVIATION	REMARKS
<p>1. The vendor shall be an Original Equipment Manufacturer (OEM). Only the OEM or their Authorized representative/dealer in India along with Authorization letter can submit offers. An Authorized Representative/Dealer in India, cannot quote for the same equipment from more than 1 OEM.</p> <p>2. The vendor should have supplied & commissioned at least one similar rating machine in the past fifteen years (From the date of opening of Tender) and the supplied machine must be operating satisfactorily for at least one year from the date of commissioning.</p> <p>3. Foreign OEM shall have Authorized Indian dealer(s)/representative(s) for after sale service and support. An authorization letter for the dealer/representative shall be provided with confirmation that after sale service support shall be provided by them.</p> <p>4. The vendor or their authorized service representatives shall have trained engineers in India for commissioning & service for the offered equipment and shall be in a position to provide prompt after sales service and spares support for our installations.</p> <p>The following information should be submitted by the vendor about the companies where similar 'Automatic Wire Cutting and Stripping Machine' have been supplied. This is required from all the vendors for qualification of their offer.</p>	Vendor to accept & confirm/inform.			
1. Name of the customer / company where referred 'Automatic Wire Cutting and Stripping Machine' is installed.	Vendor to inform.			
2. Complete postal address of the customer.	Vendor to inform.			
3. Month & Year of commissioning	Vendor to inform.			
4. Parameters of 'Automatic Wire Cutting and Stripping Machine' supplied and application for which it is supplied.	Vendor to inform.			
5. Name and designation of the contact person of the customer.	Vendor to inform.			
6. Phone, Fax No. and email address of the contact person of the customer.	Vendor to inform.			
7. Performance certificate/Copy of purchase order with supporting acceptance papers or a direct Email from the customer where 'Automatic Wire Cutting and Stripping machine' has been supplied.	Vendor to submit.			
8. BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false/ incorrect, the offer shall be rejected.	Vendor to accept & confirm.			

(EMT) *Ranjeet K.*

(ACM, BI-4)

(WEX, CNC, BI-1)
(G.S. Meena)