



सेन्ट्रल फाउन्ड्री फोर्ज प्लांट

Central Foundry Forge Plant

भारत हेवी इलेक्ट्रिकल्स लिमिटेड

Bharat Heavy Electricals Limited

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Ref: FF /17-18/100T/01

Specification for Requirement & installation of Programmable Burner
Controller for 100T furnace

Sl. No.	Details	Requirement from vendor	Vendor Response
5.0	PACKING		
5.1	The components should be supplied in suitable packing to avoid any damage during handling, transit and storage.	Vendor to specify and confirm	
6.0	INSPECTION, DEVIATION AND REPLACEMENT		
6.1	BHEL reserves the right to inspect components at vendor's place before dispatch. The supplier shall be given prior intimation in such case. However inspection at BHEL shall be final. The supplier shall offer BHEL representative all reasonable test facilities without charge to satisfy the latter that the components are being furnished in accordance with this specification.	Vendor to note and confirm	
6.2	The components may be tested at CFFP, BHEL and will be binding on supplier. If any component received at CFFP is found not in accordance with the requirements, it shall be rejected and the vendor shall have to compulsorily replace it immediately.	Vendor to note and confirm	

Prepared By	Checked By	Reviewed By	Approved By
SE(SE & PS Maint.)	SE(M/c shop & CNC Maint.)	Manager(M&S)	SDGM(M&S)



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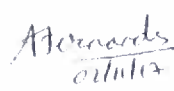
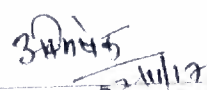
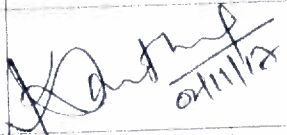
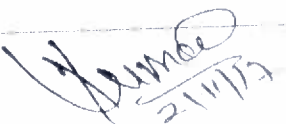
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Sl. No.	Details	Requirement from vendor	Vendor Response
4.1	Supplier is advised to visit the site to understand the requirement & functioning of installed system of furnace for compatible burner controller system.	Vendor to Note	
4.2	The standard guarantee for complete burner controller system will be 12 months from the date of commissioning & testing.	Vendor to confirm	
4.3	Burner controller system shall be tested for at-least three Heat treatment cycles.	Vendor to confirm	
4.4	PBG: The vendor has to submit Performance Bank Guarantee of 10% of order value valid for 12 months from the date of commissioning in the format provided.	Vendor to confirm	
4.5	After Sales Service: In case of any fault observed the same shall have to be rectified at the earliest preferably on same day when notified, either verbally or through any other means. Even one incidence of non-satisfactory performance will be sufficient ground for revoking the complete bank guarantee	Vendor to confirm	
4.6	Payment: Within 30 days after successful commissioning and completion of project in all aspects through e-payment mode.	Vendor to confirm	
4.7	Liquidated Damages: A Penalty of 0.5% of order value per week will be levied in case of late total work completion in all aspects subject to maximum of 10% of work order value.	Vendor to confirm	
4.8	Vendor should inspect the site before quoting the rates	Vendor to confirm	
4.9	In case of difference in rates quoted in form of words and numbers, rates in words will accepted as final quoted rates	Vendor to confirm	
4.10	All other terms and conditions as per BHEL applicable policies	Vendor to confirm	

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Specification for Requirement & installation of Programmable Burner
Controller for 100T furnace

Sl. No.	Details	Requirement from vendor	Vendor Response
	Contact no. & official email-id of customer must be provided.		
3.0	SCOPE OF SUPPLY		
3.1	Programmable base unit with CPU Make acceptable: EUROTHERM, SIEMENS, ABB, GE	Vendor to confirm	
3.2	Analog input module having 24 channels with terminals compatible to Type K, R, S etc. Make acceptable: EUROTHERM, SIEMENS, ABB, GE	Vendor to confirm	
3.3	Digital output Module having 48 channels with terminal unit Make acceptable: EUROTHERM, SIEMENS, ABB, GE	Vendor to confirm	
3.4	HMI (Human Machine Interface) Display: 7" TFT/LED (min.) Resolution: 800X480 VGA (minimum) Flash Memory: 4GB (minimum) Power Supply :24VDC Interface: PC, Ethernet, USB Protection: Front IP66 (or better) Make acceptable: EUROTHERM, SIEMENS, ABB, GE, EXOR	Vendor to confirm	
3.5	Communication cable Make acceptable: Reputed	Vendor to confirm	
3.6	24V SMPS DC Power Supply Make acceptable: Reputed	Vendor to confirm	
3.7	Note: Any work or material not covered in the scope of work but later found necessary for the completion of the project (limited to controlling of Burner Controller) shall be executed by vendor without any additional charges.	Vendor to confirm	
4.0	Special Terms & Conditions of Supply , Installation and commissioning		
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Approved By			
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Specification for Requirement & installation of Programmable Burner Controller for 100T furnace

Material code description: Supply and commissioning of Programmable Burner Controller as per specification FF/CFF/SFM/100T/BC/01 for 100T furnace having 24 thermocouples for 24 burners with 7" HMI colour display.

Sl. No.	Details	Requirement from vendor	Vendor Response
	Vendor must confirm/specify details as demanded against each clause of this specification. Inadequate / incomplete, ambiguous, or unsustainable information against any of the clauses of the specifications/requirements shall be treated as non-compliance.		
1.0	OBJECTIVE:		
1.1	This specification governs the requirement of programmable burner controller along with all required components for operating 24 burners having 24 thermocouples and 7" HMI display. The scope of work includes Supply of PLC/PID controller base unit with CPU, analog input modules with terminal for thermocouples, digital output module with relay boards & terminal unit, minimum 7" HMI colour display, communication cable and power supply. Installation testing and commissioning of burners controller system. Note: Functionally system supplied must be compatible with current components fitted on the furnace & supplied HMI must be programmed as per current HMI fitted on the machine.	Vendor to confirm	
2.0	PRE-QUALIFICATION CRITERIA:		
2.1	Experience, of having successfully installed & commissioned Controllers and therefore as a proof submit the copy of at least one order within last Three years with date ending as on tender date.	Vendor to confirm. (Purchase orders copy/ies)	

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