

control discrete and analogue output functions, perform data handling operations and communicate with external devices.

1.3.22.2 Manufacturer's Standards

- A. The manufacturer shall have fully operational ISO9001 certification issued by an internationally recognised agency for "Quality Systems- Model for Quality Assurance in Design/Development, Production, Installation, and Servicing."
- B. The manufacturer shall submit properly documented record of supply of similar equipment working satisfactorily in the similar climatic and service conditions for the last 10 years. This shall be the minimum prerequisite to propose such equipments.
- C. The manufacture in addition to above shall also submit a written authenticated statement to provide after sale support services including that of availability of spares for a minimum period of 10 years from the date of completion of commissioning of entire project.
- D. The system shall comply with current EEC Directives for compliance to EMC immunity and elimination as indicated by IEC 1000 and associated sections of the machinery directive BS EN 60204.

1.3.22.3 Design and Manufacture

- A. The programmable logic controller and all of the corresponding components together with accessories, interconnecting cables and associated connectors used within the contract shall be supplied by the same manufactures.
- B. All products shall be designed, manufactured, and tested in accordance with recognized UL, CSA, IEC and CE mark industrial standards. The system shall be operational during and after testing. See tables on the following page for standards requirements.

1.3.22.4 Training

- A. The manufacturer or its authorized representative shall provide complete technical training during the project execution phase and after completion of the project, as directed by the department. This shall include headquarters or local training, regional application centres, and local or headquarters technical assistance.

1.3.22.5 Reference Standards

- A. The PLC equipment shall confirm to the requirement of the following standards: