

- a. BS 7671 16th Edition of the IEE Regulations for Electrical Installations
- b. BS EN 60204 Safety of machinery
- c. BS EN 61000 Electro-magnetic compatibility
- d. BS EN 61131 Programmable Controllers
- e. BS EN 50170 General purpose field communication system
- f. ISBN 0 86341 233 5 IEE Guidelines for the documentation of computer software for real time and interactive systems
- g. ISBN 0 11 883906 3 HSE Programmable Electronic Systems in safety related applications

1.3.22.6 Environmental Conditions

- A. All components of the PLC system, except CRT terminals and programming workstations, shall confirm to the following environmental specifications
 - a. **Storage Conditions** Temperature -40 To 85 Degrees Celsius
 - b. **Operating Conditions** Temperature 0 To 55 Degrees Celsius
 - c. **Humidity** 5 to 100% relative humidity, non-condensing

1.3.22.7 PLC Hardware

- A. PLC system shall comprise of a central processing unit, input/output modules, serial interface modules and programming units. The PLC shall be of modular construction and as required and approved by the engineer with plug in I/O cards and facility to install expansion racks when necessary. The system shall include 25% spare capacity in hardware and memory for future modifications.
- B. The PLC shall be supplied complete with a laptop programming and diagnostic device plus all necessary leads and programming software & manuals.
- C. The PLC control equipment shall be housed in the common controls section of MCC and shall be fed by Non door interlocked MCCB. A separate signal marshalling section shall be provided to accommodate all input and output signals to the Control and Telemetry section.