



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)



Specifications of Electrical Plants



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Flashover





Corona Discharge





Corona discharge





Functional Requirements in Electrical Hazards



Functional requirements in electrical hazards pertain to the specifications and standards that electrical systems must meet to ensure safety and reliability.

Some key functional requirements include:

1. Insulation: Electrical systems must have proper insulation to prevent leakage currents, sparks, and short circuits. Insulation materials should be selected based on their voltage rating and application.

2. Earthing/Grounding: Proper grounding of electrical systems prevents electric shock and ensures that fault currents are safely diverted away from equipment and personnel.

3. Overcurrent Protection: Electrical circuits should be equipped with fuses or circuit breakers to protect against overcurrent, which can lead to overheating and fires.

4. Isolation: Adequate isolation mechanisms, such as switches and circuit breakers, should be in place to disconnect electrical equipment during maintenance or in case of emergencies.



Functional Requirements in Electrical Hazards



5. Voltage Regulation: Voltage levels should be regulated within specified limits to prevent overvoltage situations, which can cause equipment failure and electrical fires.

6. Proper Ventilation and Cooling: Electrical equipment, especially high-power devices, should be adequately ventilated and cooled to prevent overheating, which can lead to electrical fires.

7. Regular Maintenance and Inspection: Periodic inspections and maintenance of electrical systems are essential to identify potential hazards and ensure that equipment is in good working condition.

8. Compliance with Standards: Electrical installations and equipment should comply with national and international safety standards to guarantee their reliability and safety.



THANK YOU