



Net Zero
by 2035

Training Programme on

Hazardous Area Classification as per Indian Standards in Hydrocarbon Industry & Guide for Selection of Electrical Equipment in Classified Hazardous Areas

25th - 26st May, 2023 (0930 Hrs to 1630 Hrs)

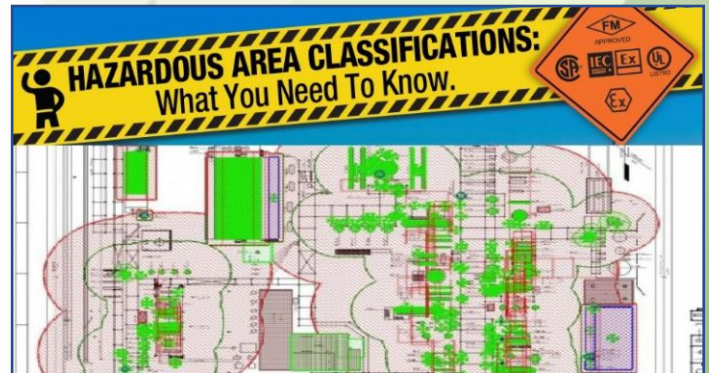
Program Objectives

Today, Electrical technology plays a decisive role in the reliable & safe operation of industrial plants. The Plant Operators & Engineers in Refinery and Petrochemical complexes has a major responsibility for the safe operation and shut down of the plant in view of the fact that certain electrical equipment produce sparks during normal or abnormal operation and also failure of any electrical equipment can be source of ignition which may ignite the flammable liquids, gases or vapours, dust.

The practice of area classification recognizes the differing degree of probability with which the flammable concentrations of combustible gas or vapour may arise in the installation in terms of both the frequency of occurrence and probable duration of existence on each occasion. The concept of area classification has evolved about 60 years back keeping in mind the likelihood of presence of flammable mixture both in terms of frequency of occurrence and probable duration of existence on each occurrence.

This program shall be essentially on carrying out area classification as per applicable Indian standard to be followed in India i.e. IS-5572. In India this code is mandatory. We shall be touching upon the basic concept, the art & science, principles of area classification to provide a complete overview and then the detailed methodology for doing area classification, zones, gas groups, Temp class, extent & limits of classification from various equipment etc.

The programme will further cover the Electrical/ Instrumentation equipment selection criteria for installation in hazardous area for smooth operation of the plant as per various parts of IS/IEC codes under 60079 and IS 16724/ IEC-60079-14 covering explosion protection concepts and selection of equipment based on hazardous area classification and special considerations based on case specific.



Contents

A. Hazardous Area classification

- Concept, Genesis & Objective of Hazardous area classification
- International and National Standards on Hazardous area classification
- Definition, Terminology and Types, Classifications of Hazardous material
- Zones of Classification
- Gas groups and Temperature class
- Comparison among various National and International standards
- Typical hazardous area classification with respect to Hazard source list in accordance with Indian Standards
- Classification on account of Hazardous dust

B. Selection of Equipment in Classified Hazardous area

- Source of Hazard
- Equipment Protection Level (EPL)
- Relationship between ‘EPL and Zones of Classification’ & ‘EPL and Type of Protection’
- Type of Ex Protection Equipment
- Equipment Marking System
- Equipment enclosures for Hazardous area installation
- Testing agency & Statutory approvals and Certification
- Installation & Maintenance of Ex Equipment

Who may attend

The programme is designed for all personnel from Electrical, Control & Instrumentation, Operations & Maintenance, Project and Safety department of various Oil and Gas sectors

FACULTY



Sh. Harish Kumar
Senior General Manager
(Electrical)



Sh. Rajiv Saha
Dy. General Manager
(Electrical)



Sh. Subhadip Acharya
Asst. General Manager
(Electrical)



Sh. Manish Kumar
Senior Manager
(Electrical)

Programme fee for the participants is as follows :

PROGRAMME REGISTRATION FEE (ONLINE MODE)	PROGRAMME REGISTRATION FEE (OFFLINE MODE)	PROGRAMME REGISTRATION FEE (RESIDENTIAL MODE) #
For nominations > 5 Nos: INR 12,500 + 18% GST (INR 2250)= INR 14,750 per delegate	For nominations > 5 Nos: INR 13,500 + 18% GST (INR 2,430)= INR 15,930 per delegate	For nominations > 5 Nos: INR 16,500 + 18% GST (INR 2,970)= INR 19,470 per delegate
For nominations: 3-5 Nos: INR 13,500 + 18% GST (INR 2,430)= INR 15,930 per delegate	For nominations: 3-5 Nos: INR 14,500 + 18% GST (INR 2,610)= INR 17,110 per delegate	For nominations: 3-5 Nos: INR 17,500 + 18% GST (INR 3,150)= INR 20,650/- per delegate
For nominations < 3 Nos: INR 14,500 + 18% GST (INR 2,610)= INR 17,110 per delegate	For nominations < 3 Nos: INR 15,500 + 18% GST (INR 2,790)= INR 18,290 per delegate	For nominations < 3 Nos: INR 18,500 + 18% GST (INR 3,330)= INR 21,830/- per delegate

The residential mode will include stay and hospitality at EIL Guest House at Gurugram on first cum first serve basis (subject to availability). The organizations interested in availing residential facility may kindly provide email confirmation atleast 3 days before the commencement of the programme.

Payment of Programme should be made by NEFT transfer as per details below :

Name	ENGINEERS INDIA LIMITED (EIL)
Registered Office Address of EIL	Engineers India Bhavan, 1, Bhikaiji Cama Place, R.K. Puram, New Delhi - 110066
Office Address	EIL Office Complex, Sector 16 (NH8), Gurugram - 122001, Haryana
PAN Number	AAACE5318C
Name of the Bank & Address	State Bank of India Mehrauli Road, M.G. Road , Gurugram, Haryana-122001
Branch Code	01565
Current Account Number	35776275270
IFSC/RTGS Code	SBIN0001565
MICR Code	110002190

CORRESPONDENCE

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