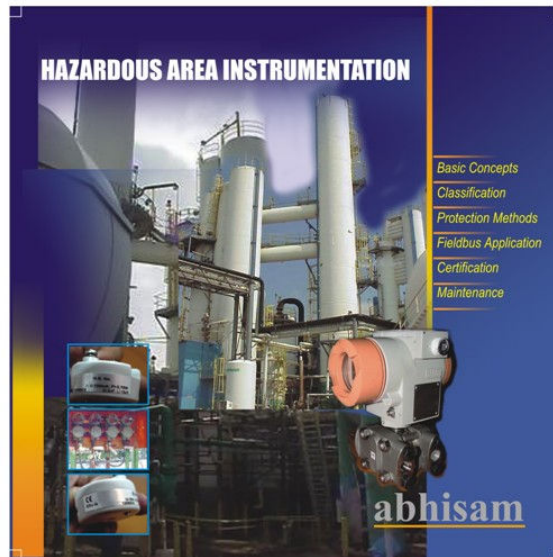


HAZARDOUS AREA INSTRUMENTATION

PRODUCT DATA SHEET

Introduction : The facilities for the exploration, production, processing and storage of Oil & gas, petroleum, hydrocarbons, chemicals and other explosive or flammable materials have areas that are classified by the authorities as 'Hazardous'. The types of instrumentation and automation systems that are used in these areas are designed differently from what are normally used in other 'safe' areas. This course explains the basic concepts of hazardous areas, area classification, material & temperature classification, NEC & IEC standards, design and selection of suitable methods of protection (like explosionproof, intrinsically safe, increased safety, pressurization, etc) for the instrumentation & electrical equipment to be used in these areas, certification, labeling and maintenance of the system integrity over the entire life cycle of the facility. Extensive animations, graphics and actual photos, charts, graphs and diagrams make this a wonderful learning experience.



CONTENTS

The course consists of six modules listed below and they covers all aspects of hazardous areas :

Module 1

Basic Concepts Introduction, history, fire triangle, LEL & UEL, flash point.

Module 2

Area / Material / temperature classification

This module explains the various ways of area classification, material classification and temperature classification using commonly accepted European and American standards. The terminology is explained along with the underlying logic. It also gives a step by step guide to classifying YOUR own plant, including ways by which you can reduce the extent of the classified areas.

Module 3

Methods of protection including methods like Explosionproofing, Intrinsic Safety, Increased Safety, Pressurization, etc.

This is one of the most important as well as the largest modules. We start with the different types of protection philosophies and then explain in detail how each method works. Explosion proof, Intrinsic Safety and other methods are explained through rich graphics, animations and real-life examples. More than 35 topic pages related to Intrinsic Safety alone! Everything you wanted to know but didn't know whom to ask!

Module 4

Fieldbus in Hazardous Areas

How to implement a **fieldbus in hazardous areas**? Find out here! Concepts of FISCO and FNICO explained.

Module 5

Certification

What is **Certification**? What do all those marks mean? ATEX and CE marking included

Module 6

Inspection & Maintenance

How do I maintain the instrumentation so that it continues to remain safe to operate in hazardous areas? What do I look for in Inspection?

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\$ 150 US

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