



Two Day Intensive Training Workshop on

## **HAZARDOUS AREAS**

on 27<sup>th</sup> & 28<sup>th</sup> January 2017 at Hotel Sharanam, Thane

brought to you by

**abhisam**

Abhisam Software Pvt Ltd, are pleased to announce, a two day intensive training workshop on Hazardous Areas for engineers, technicians, safety and other professionals, who need to know about hazardous areas and the electrical equipment, instruments and controls used in these areas.

Many areas in Oil & Gas facilities, chemical and petrochemical plants, shipping terminals, fertilizer plants, gas processing plants, power plants, plants that handle dusts, manufacture pharmaceuticals and other similar locations need to store, handle and/or process some materials that are highly inflammable and explosive. These areas are known as hazardous areas (also known alternatively as "classified locations"). A lot of care has to be taken during design, engineering, operations and maintenance of the equipment in these areas. The electrical, instrumentation and control system equipment & even mechanical equipment that are used in these areas is of a special type, suitable for use in hazardous areas. Proper understanding of hazardous areas is essential to ensure the continued safety of processes, people, equipment and the environment.

This hazardous area workshop consists of two parts. The first part covers Hazardous Area Classification & the current status of various standards applicable. This is very important, as proper hazardous area classification and management is necessary to not only ensure safety and compliance to regulatory norms, but also because very often poor area classification can raise lifecycle costs of the plant, as also cause accidents. Also, there are some several major changes in the applicable standards and regulations. If you are not aware of these and are still following the older standards, then it can cause non-compliance, with consequential risks.

The second part of the workshop covers hazardous area equipment including electrical, instrumentation & mechanical equipment. Understanding of the different methods of protection is essential to proper selection of equipment, as well as correct installation and maintenance. Other than Explosionproof and Intrinsic Safety, there are many other protection methods that can be used in hazardous areas. Understanding of these will not only save capital costs, but also lifecycle costs, while maintaining high standards of safety. Only correct selection, installation and maintenance of explosion protected equipment will ensure that hazardous areas will not have any untoward incidents during the lifetime of the facility.

The workshop is a great opportunity for engineers & technical professionals in manufacturing companies, engineering design consultants, Instrumentation vendors, Control System vendors, automation system vendors and system integrators, EPC companies, Instrument contractors as well as Safety professionals from industry and government to get training and expert guidance from senior engineers in industry.

## Day 1: Hazardous Areas, Standards & Classification

- Hazardous Area Concepts- Hazards related to Vapours, Gases & Dust
- Learning from past Incidents related to hazardous areas
- Explosion mechanisms
- Area, Material & Temperature Classification
- Hazardous Area Standards & Codes including Indian & IEC/NEC/CENELEC/ATEX
- Important Updates in above standards
- Release mechanisms, extent of releases, estimating extent of hazardous areas
- Practical exercise in Hazardous Area Classification & drawing preparation

## Day 2: Hazardous Area Equipment (Electrical & Instrumentation)

- Explosion Protection philosophy for electrical & instrumentation
- Methods of Protection including Explosionproof, Intrinsic Safety, Increased Safety, Dust Ignition protection, Pressurization, Purging, Oil Immersion
- Standards & Practices related to Hazardous Area Equipment- National & International including changes in ATEX
- Differences in equipment with conformance to IEC-Ex, IS & ATEX
- Hazardous Area Equipment Specifications
- Installation of Ex protected equipment including cable glands, personal competency, certification, marking/labelling
- Inspection & Maintenance of Ex protected equipment/Testing of equipment
- Interactive Q A session

### LEAD FACULTY

**Mr. B.K. Gupta**, who is a well-known expert in the hazardous area domain will be the lead faculty of this workshop. Mr. Gupta is an Electrical Engineer, who has almost 40 years of experience in industry, with various organizations including ONGC, Ex-Protecta & Phoenix Mecano. He is a member of ET-22 of the Bureau of Indian Standards which is the committee responsible for Ex standards in India as well as of IEC-INC, which is responsible for reviewing IEC standards for adoption in India. He is Vice President (Standards & Practices) of the Indian Flameproof Manufacturer's Association, as well as Secretary General of the TECEX Foundation. He is also the designated technical expert on the NABL panel for hazardous area equipment testing & conducts audits of Ex equipment testing labs. He has published several papers in National & International journals as well as presented at several National & International symposia. He is visiting faculty to Indian Maritime Training Centre. He regularly conducts training sessions all over India.

### WHO SHOULD PARTICIPATE

Design Engineers & Consultants, Maintenance/ Operations Engineers and executives, Safety Executives and Managers, Government authorities, Instrumentation suppliers, Control System suppliers, Inspection agencies, Shipping terminal engineers and other

engineering professionals who work with plants and facilities in Oil & Gas facilities, offshore installations, gas based power plants, fertilizer plants, shipping terminals, chemical plants, petrochemical plants, LNG/CNG storage and processing plants would find this workshop immensely useful.

## HOW TO PARTICIPATE

Please send your nominations to [sangeeta@abhisam.com](mailto:sangeeta@abhisam.com) alongwith your Name/Company Name and address, after which we will generate a Proforma Invoice. On payment of the charges, the seat will be blocked. The applicable charges are as below:

Fee: Rs. 18,000/- plus taxes @ 15% per person

**All charges are to be paid in advance before the workshop starts. No door registrations will be permitted. Seats will be allotted on a first come first served basis. Only a limited number of seats are available. Seats cannot be blocked if payment is not made.**

### Group Discount:

**IMPORTANT! Discounted fees are applicable only if payment is received before the workshop.** For organizations that will be only issuing POs/LOIs before the start date of the workshop but where payments would be made after the workshop, no discounts will be applicable.

### The following discounts will apply

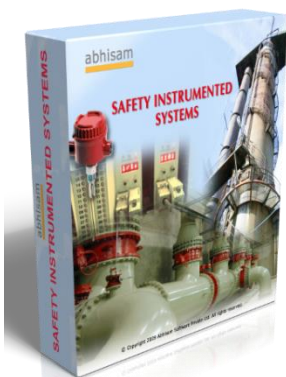
1. For 3 or more persons from the same organization a discount of 10% will be applicable on the basic price.
2. For 5 or more people from the same organization, a discount of 15% will be applicable on the basic price.

**ALL PARTICIPANTS WOULD BE GIVEN A CERTIFICATE OF PARTICIPATION**

## MORE INFORMATION

Questions? Please contact [sangeeta@abhisam.com](mailto:sangeeta@abhisam.com) or call us on +91 22 21732956 or +91 7208060349

## ABOUT ABHISAM



Abhisam Software Pvt Ltd is a company that is engaged in training technical professionals in various industry sectors via software (called as XPRTU™s), as well as traditional classroom workshops. Abhisam's learning products are **vendor neutral** and are used by a wide range of customers from Fortune 500 corporations, mid-sized companies, engineering consultants, as well as universities, regulatory bodies as well as individual engineers, all across the

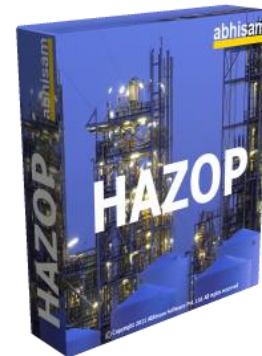
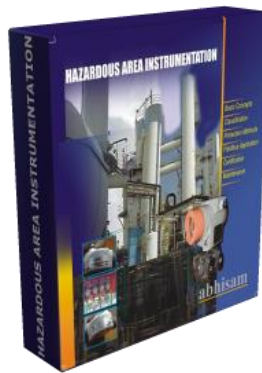
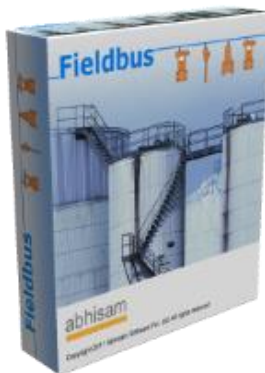
world. Abhisam’s software based training programs include the following

- Hazardous Area Instrumentation
- Gas Monitors
- RFID
- Safety Instrumented Systems
- HAZOP
- Fieldbus
- Safe Chemical Warehousing



Abhisam is the first company in the world to come out with these XPRTUs and have been very popular with engineers and technical professionals in all parts of the world including North & South America, Europe, Africa, the Middle East, Asia and Australia.

After going through these XPRTUs, the learner can take the Abhisam online competency exam in the respective subject and on passing, get a Certificate of Competency, as well as an electronic badge. These electronic badges are issued via Credly and are compatible with the new Mozilla Open Badges standard. Abhisam’s badges can be shared directly online on partner sites such as LinkedIn. This immediately raises the profile of the learner and signals to prospective clients that the learner is competent in that subject. Since badges are authenticated, the client can be reassured that the badge was actually earned.



For more information please visit [abhisam.com](http://abhisam.com)

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