



CTC  
2011

## Classification of Hazardous Areas on Marine & Offshore Assets

Date: September 13th 2011

**COOPER** Technology Center

This one day seminar highlights how Hazardous Areas are classified, describes the criteria used and outlines the precautions needed when selecting or installing equipment for operation on marine and offshore assets.

Accreditation:

Continued Education Units: 0.7\*

Professional Development hours: 7

\* This course meets the requirements of the Royal Institution of Naval Architects for Continuous Professional Development.



**Cost: \$525.00**



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## Highlights

Detailed review of hazardous areas:

- The effect of legacy documents on the current situation Zone versus Divisions
- The principles used in designating hazardous areas and the application of the Codes
- The process of designating hazardous areas and the applicable codes and standards
- The effect of boundaries, openings (e.g. doors), cable penetrations, ventilation, over-pressurization and air locks
- The principles of the key protection techniques 'd', 'i', 'p', 's', 'n' and 'e' and the reasons why some techniques are limited to particular applications
- Areas that are not designated as hazardous (e.g. crankcases) and their treatment
- Non-hydrocarbon development related risks: batteries, acids, oxygen enrichment, oxygen depletion, car carriers

## Agenda

- ABS Rule Requirements and general principles of electrical protection as part of the safety of the installation
- Conditions leading to Hazardous Areas and their identification
- Equipment protection techniques and considerations / precautions
- Certificates, acceptability, listed restrictions and continuing acceptability
- Clarification of ABS rules, application, nomenclature, and the EU directive for equipment located in explosive atmospheres (ATEX),
- Cautions: limitations of cable types and glands, conditions on certificates, ambient temperatures

### Who will Benefit:

Ship and offshore asset electrical systems designers, shipyard personnel, equipment suppliers, surveyors or inspectors involved in new construction and members of an owner's site team.

### ABS Instructor:

Zidiak has over 20 years experience as an engineer, senior engineer and then principal engineer at ABS for electrical, controls and automation approvals on both marine and offshore assets. Greg joined ABS after completing his B.S. in Electrical Engineering at Rutgers University in New Brunswick, New Jersey. He started work with ABS in 1990 as an engineer performing electrical plan review for various types of ships and offshore units. Over the years, he has been a member of the Ship Engineering Department and Offshore Engineering Department where he reviewed the hazardous area classification drawings and determined the suitability of the different methods of protection for electrical equipment. In 2005, he joined the ABS Corporate Technology Department, where he has been responsible for updating, revising and developing new ABS Rule requirements.

