6TH HAZARDOUS AREAS CONFERENCE
FOR MANUFACTURING, MINING, PROCESSING AND UTILITIES

Covering new Standards ISO80079-36, 37 and 38 for non-electrical equipment in explosive atmospheres

WHAT YOU WILL GAIN FROM ATTENDING:
- Update your knowledge on hazardous areas equipment and technologies
- Learn how to design and install safe working systems in hazardous areas
- See how Australian and international standards are being successfully applied
- Learn about the hazardous areas equipment installations and incident response through case studies and critical discussion
- Learn how to prepare your business for a hazardous area audit/inspection
- Discuss critical issues of compliance to standards with experienced hazardous area professionals
- Find practical solutions to your hazardous safety problems
- Network with experienced safety experts and your peers

WHO SHOULD ATTEND:
- Instrumentation and Control Engineers
- Engineering Managers
- Process Plant Engineers and Technicians
- Plant Managers and Project Managers
- Process Maintenance Technicians
- Risk Assessors
- Chemical, Process & Mechanical Engineers
- Instrumentation Technicians
- Design Engineers
- Manufacturers of Hazardous Areas Equipment
- Safety Facilitators
- Electrical Technicians and Managers
- Process Control Specialists
- Process Safety and Loss Prevention Managers
- Government Safety Regulators/inspectors
- OHS/Training Managers
- Tradespersons working in potentially explosive areas
- Electrical and Instrument Tradespersons
- And all engineering professionals who have an interest in hazardous areas

Keynote Speaker
MARK AMOS
Business Manager, IECEx
Secretariat for the Geneva, Switzerland headquartered International Electrotechnical Commission (IEC)

Continuing Professional Development
TWO DAY EVENT = 12 hours

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This conference has been created to meet and exchange ideas concerned with working in hazardous areas, thus preventing accidents and injuries in the workplace. The conference will provide participants with an understanding and knowledge of the hazards involved in using electrical and mechanical equipment in potentially explosive atmospheres. It will offer you the most up to date information and practical know-how to enable you to participate in hazard studies, and to specify, design, install and maintain the equipment in your plant. The content of the conference will focus on the latest standards and how best to apply them, ensuring compliance for hazardous area audits. Experienced speakers will examine the critical issues involved in the management of hazardous areas.

### Conference Day One – 27th September 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker</th>
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</thead>
<tbody>
<tr>
<td>8.00am</td>
<td>Registration</td>
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<tr>
<td>8.15am</td>
<td>Opening Address</td>
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<tr>
<td>8.30am</td>
<td>The Benefits of Conformity Assessment Certification over the Product Life Cycle</td>
<td>Mark Amos – Business Manager, IECEx</td>
<td>A Certificate of Conformity confirms only that an item of equipment conforms with the requirements of relevant specifications, which may include Standards, at the point of release to the market. These specifications define minimum levels of safety, performance, reliability and other key aspects but do not, and cannot, ensure that the equipment is immune to the environment in which it operates. It is illogical to presume that such an item of equipment continues to maintain this conformity to the relevant requirements for the life of the product in the real world however this can be common presumption - because ‘perception (or presumption) is reality’ the challenge is to find ways of assuring ongoing conformity.</td>
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<tr>
<td>9.00am</td>
<td>Let's Get the Ball Rolling – An Introduction to Hazardous Areas</td>
<td>Brad Guy – Hazardous Area Consultant, MOKI and Hazardous Area Auditor, QLD Electrical Safety Safety</td>
<td>Brad will introduce some of the basics of hazardous areas and set the scene for some of the more in-depth presentations to come. This will include zones and definitions covering the three gas and three dust groups. This will lead into apparatus grouping and temperature classification and will discuss Equipment Protection Level (EPL), finally leading into certification of equipment. Brad will also cover “who can do what” and the competencies and prerequisites required to complete certain work according to the standards.</td>
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<td>10.45am</td>
<td>How to Select your Hazardous Area Personnel</td>
<td>Randall Makin – Executive Director and Lead Explosive Area HA Auditor, Waterline Projects</td>
<td>Selecting a hazardous area partner to assist you in your HA journey can be difficult. Using case studies of actual projects, this paper will look at what you should look for from a legislative, competency and personnel perspective in a hazardous area partner (designers, auditors, classifiers, engineers and electricians) that will provide the best assistance in your HA work.</td>
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<td>11.30am</td>
<td>Changes in Ex Standards – The Electric Motor Perspective</td>
<td>Csaba Szabé – Product Manager - High Voltage Machines, Discrete Automation &amp; Motion - ABB Australia</td>
<td>Protection standards for electric motors installed in hazardous area environments are continually being updated. Late last year a new combined standard has been published IEC 60079 part 7 affecting Ex-e and mainly Ex-nA motors and their applications. Electric motors are the largest and most powerful equipment used in hazardous areas; they are easily capable to ignite the surrounding gases and represent significant inherent risks. The intention of this presentation is to explain the issues surrounding these protection methods and highlight the recent changes. The following topics are covered: review of “non-sparking” and “increased safety” concepts; summary of recent changes; review of the corresponding “installation” standard and provide a user guide for motor selection.</td>
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<td>1.15pm</td>
<td>Unique Challenges that Arise with Offshore Oil and Gas Facilities – Case Study</td>
<td>Alistair Tippett – Manager – New Plymouth Industrial, Beca</td>
<td>Here Alistair will share his practical experience managing hazardous areas in an offshore installation in New Zealand. It is not uncommon to have an offshore O&amp;G platform classified to one standard (i.e IEC) with a drill rig or Work Over Unit (WOU) either sitting on top or adjacent that has a different classification standard (i.e NEC). Sometimes these differing hazardous area classifications overlap introducing unique challenges with compliance and management. In addition, a typical conversion Floating Production Storage and Offloading (FPSO) vessel will use an aged shipping tanker and add modern topside facilities. Typically built in foreign shipyards, these installations can introduce some interesting issues with compliance and facility management that need to be balanced with operations.</td>
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<td>2.00pm</td>
<td>IECEx Certification of Personnel</td>
<td>Jeff Strath – Principal Hazardous Area / High Voltage Engineer, Specialist Electrical Engineering Group</td>
<td>IECEx have developed a complete package of Units of Competency for Ex industry. Here Jeff will provide specialist technical advice on entering into a hazardous area, expertise in explosion protection techniques, classification, installation, testing, maintenance, inspection, designing and auditing.</td>
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<td>3.15pm</td>
<td>Managing WHS Hazardous Atmosphere Risks to Health and Safety: A Hazardous Area Classification Dilemma</td>
<td>Dr Frank Mendham – Director, Blackie Mendham - Industrial Fire and Risk Engineering</td>
<td>Almost half a decade has passed since the introduction of harmonised Work Health and Safety legislation in most of Australia’s States and Territories. One of the first definitions noticed in the WHS Regulation was that of a hazardous atmosphere. It is defined (in part) as: ‘an atmosphere is hazardous if the concentration of flammable gas, vapour, mist, or fumes exceeds 5% of the Lower Explosive Limit (LEL)’. This paper addresses the questions of whether a 5% of LEL threshold is typically being considered in hazardous area classification. The possible misunderstanding in industry of the intention of the WHS legislation for managing hazardous atmospheres compared with defining HAC is addressed. Importantly, what might the potential cost to development if K-factors are reduced to 0.05 or alternatively, ignored?</td>
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<td>4.00pm</td>
<td>Static Electricity – “The Front Line”</td>
<td>Cem Novella – Managing Director, Static Electricity Control (SEC) &amp; Meech Australia Static Control (MASC)</td>
<td>Static electricity is responsible for at least two serious fires or explosions in industry worldwide every day, according to the National Fire Protection Association (NFPA) and the U.K.’s Institution of Chemical Engineers. The misdagnosis and misunderstanding of static electricity in a hazardous area poses a significant risk to plant, personnel and equipment. With electricians often forming the “front Line” responding to issues relating to static electricity, how can we better assist electricians with diagnosis, solutions, design and specification.</td>
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<td>4.45pm</td>
<td>Address to Delegates by Networking Session Sponsor – Rom-Control Pty Ltd</td>
<td>Leon Deutsch – Senior Consultant, Rom-Control</td>
<td>The Internet of Things is the new buzz word in IT circles that suggests how everyday household items will have connectivity in the future for sending and receiving of data, automation, etc. This presentation will be about the Industrial Internet of Things (IIoT) which will describe how connectivity and the Internet will influence the future of industrial automation in hazardous areas.</td>
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### Networking Session – 5.00pm to 6.00pm

An hour dedicated for all attendees to meet and socialise with experts and industry peers at the Hazardous Areas Conference Networking Session.
Safety, Compliance & Cost Effectiveness of EEHA Design and Installations over the Plant Lifecycle

Cris Kerrison – Principal, OGE
Australia is arguably one of the world leaders in the area of EEHA compliance. This presentation looks at some recent trends in how this compliance is achieved, whether this compliance has actually improved safety and whether the resulting solutions are appropriately cost effective when considered over the plant lifecycle. Recent project examples of EEHA design concepts and the resulting installations are discussed. Both cost effective and cost ineffective solutions are considered. Specific clauses from AS/NZS 60079.14 are reviewed and an opinion offered as to how the clauses may be interpreted in practical applications.

Changes to Hazardous Areas Standards - AS60079.14 and IEC60079.14

AS60079.14 has been released for public comment in Australia and IEC60079.14 has been released for use overseas. This paper will provide an insight into what changes in these publications will make the largest impact in the industry, specifically, changes to barrier glands with regards to effectively filled cables, cable glands for intrinsically safe equipment and requirements for cable glands in general.

Hazardous Area EquipmentInspections - Improved Efficiency & Cost Savings

Mark Tranfield – Managing Director, OCS Group - Singapore
In today’s climate, costs have become an ever important consideration when considering third party inspections for “safety critical equipment” such as hazardous areas equipment. There is a need for costs to be reduced and information reporting improved without compromising on quality. This can be achieved with the use of digital technology that offers electronic inspection methods on personal digital assistants (PDAs) and suitable software. This presentation will discuss how costs can be minimised and inspection quality and reporting can be improved.

Morning Tea – 10.45am

Demonstration of Competency for Hazardous Areas – IECEx CoPC vs AS/NZS 4761 vs Compex

Gareth Talamini – Managing Director, Extend Training
The IECEx Certificate of Personnel Competency (CoPC) Scheme was launched in 2009 with the intention of creating an internationally recognised standard for hazardous area workers and professionals to demonstrate their competency. But the international community has been slow to adopt the scheme. In Australia and New Zealand AS/NZS 4761 (on which the IECEx CoPC units of competency were based) has long been the preferred competency framework, and in Europe the Compex scheme (which also has claims to international recognition) is the norm. This presentation will provide a comparison of the three leading options, and discuss what the future of competency demonstration may look like in both Australian and international hazardous area industries.

Testing, Assessment and Certification of Mechanical Equipment used in Explosive Areas

Jemima Jackson – Project Leader, TUV Rheinland Australia
Standards ISO80079 36, 37 and 38 for non-electrical equipment for explosive atmospheres were released in February 2016. The standards provide a structured way of assessing the ignition risks introduced by the installation and use of non-electrical equipment in a hazardous area. Modified from the EN13463 series, which have been active in Europe for the past decade, the standards provide three new protection methods especially for non-electrical equipment. The presentation will cover practical applications of the new standards for equipment of differing levels of complexity in order to give an insight into the testing, assessment and certification process.

Lunch – 12.45pm

IECEx Certification of Services on Ex Equipment

Mark Amos – Business Manager, IECEx
Is equipment for explosive atmospheres ‘set and forget’? In recognition of the notion that the ongoing conformity of Ex equipment with specifications over its operational life is dependent on more than good design and control of manufacturing processes, it is a reasonable expectation that your employees and others in the community affected by how you manage your hazardous areas do more than ‘set and forget’. So where do you start, who can and should assist you and how? This paper outlines the objectives and operations of the IECEx Certified Service Facilities Scheme, explores the relevant IEC Standards and identifies the roles and responsibilities of entities mentioned in these Standards.

Hazardous Areas Auditing – The Devil’s in the Details

Kayne Herriman – Hazardous Areas Specialist & Hazardous Areas Auditor QLD Electrical Safety Office, Bluefield AMS
To say a piece of equipment is compliant to the relevant codes means that every detail has been checked. This is sometimes seen as dragging out the process but really we are making sure that the equipment is safe. The devil’s in the detail and the lack of detail is the risk. Kayne will share his experiences when conducting audits of electrical equipment in hazardous areas, the problems which were found, the details which were overlooked and the learning which he has taken away to pass on to others.

Afternoon Tea – 3.15pm

Gas Detectors for Risk Reduction: Safety in Numbers

Jonathan Lee – Territory Manager (NSW & VIC), HMA Group
Safety is highly regarded in hazardous area locations for protection of plant and personnel. The higher the inherent danger, the higher the requirement for redundancy in the measurement to ensure there is little room for error. Traditionally redundancy means multiple measurements to reiterate the same results. This can also be extended to a method of voting amongst a peer network of instruments. The topic challenges the ideas of measuring redundancy through different technologies to achieve a higher level of gas safeguards and measurements. Here Jonathon will discuss the advantages and disadvantages of toxic gas measurement via; single/point gas detector array, boundary/across beam open path measurement and acoustic loss/leakage detection.

Discussion Panel

This session will provide delegates with the opportunity to ask our speakers questions and discuss hazardous areas related issues in their workplace, covering typical problems and possible solutions.

Closing – 5.00pm

Sponsorship Opportunities

Representing your business at the 6th Hazardous Areas Conference in 2016 will provide you the opportunity to reach key decision makers from a multitude of industries. For more information on sponsorship and exhibition opportunities please contact IDC Technologies via email conferences@idc-online.com
GENERAL INFORMATION

REGISTRATIONS

Confirmation Details
A confirmation email and invoice will be sent to delegates within 3 days of receiving the registration.

Cancellation Policy
A fee of 20% cancellation will apply for cancellations received 7 – 14 days prior to the start date of the conference. Cancellations received less than 7 days prior to the start date of the conference are not refundable, however substitutes are welcome.

Venue
Oakwood Apartments Brisbane
15 Ivory Lane
Brisbane, QLD, 4000
BRISBANE, AUSTRALIA
Phone: (07) 3218 5800

Accommodation
The conference venue has accommodation available. Contact directly on (07) 3218 5800 and mention the conference when booking and receive the best room rate available.

Food and Beverages
All lunches, morning and afternoon refreshments are included.

Unable to Attend
If you are unable to attend the full conference program, contact us for details to attend individual sessions or to purchase the Conference Resource Kit.

Enquiries
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   Email:
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   Email:

2. HOW DID YOU HEAR ABOUT THIS EVENT?

☐ Received a brochure in the mail ☐ Received an email from IDC
☐ Searched online (Google, Yahoo etc) ☐ Recommended by a friend/colleague
☐ Other (please specify) ____________________________________________________________________________________

3. REGISTRATION & PAYMENT DETAILS

Prices shown are inclusive of GST

☐ 6TH HAZARDOUS AREAS CONFERENCE: 27th & 28th SEPTEMBER 2016

☐ OPTION 1: Early Bird Discount 10% OFF – Book on or before 30th August (SAVE $179.50)
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☐ OPTION 2: Standard Rate (NO Early Bird) – Book after 30th August
   $1795 x ____ delegates = $

☐ OPTION 3: 3 for 2 Offer & Early Bird 10% OFF – Book on or before 30th August (SAVE $2154)
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Additional delegates: Corporate packages available upon request

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