ATEX FOR OFFSHORE OPERATIONS 2010

WHAT HAVE WE LEARNT SO FAR...

23 November 2010
Aberdeen

Book now:
www.imeche.org/events/s1483

ATTENDING WILL HELP YOU:

- Understand the legal imperatives of this EC Directive
- Prevent the formation of explosive atmospheres in a workplace
- Avoid the ignition of explosive atmospheres
- Appreciate the methods of zoning offshore platforms
- Select ATEX 94/9/EC-compliant equipment in accordance with the intended zones
- Recognise the implications for operation and maintenance of equipment in a hazardous location
- Ask questions, seek specific help from and network with the assembled gathering of experts

Improving the world through engineering
The ATEX (ATmosphères EXplosibles) Directive is the framework for controlling explosive atmospheres and the standards of equipment and protective systems used in them. It is based on the requirements of two European Directives:

1) Directive 99/92/EC (also known as ‘ATEX 137’ or the ‘ATEX Workplace Directive’) on minimum requirements for improving the health and safety protection of workers potentially at risk from explosive atmospheres.

2) Directive 94/9/EC (also known as ‘ATEX 95’ or ‘the ATEX Equipment Directive’) on the approximation of the laws of Members States concerning equipment and protective systems intended for use in potentially explosive atmospheres.

Explosive atmospheres in the workplace can be caused by flammable gases, mists or vapours or by combustible dusts. If there is enough of the substance, mixed with air, then all it needs is a source of ignition to cause an explosion. Explosions can cause loss of life and serious injuries as well as significant damage. Preventing releases of dangerous substances, which can create explosive atmospheres, and preventing sources of ignition are two widely used ways of reducing the risk. Using the correct equipment in the correct application can help greatly in this.

In Great Britain the requirements of Directive 99/92/EC were put into effect through regulations 7 and 11 of the Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR).

Offshore oil and gas operators must perform risk assessment of equipment on their installations, to determine if the equipment is safe to use in the current area zone. Since the Directives became law many solutions have been found for using equipment in hazardous areas offshore. This seminar seeks to broadcast and share this experience.

**THIS EVENT WILL ATTRACT:**
The seminar is for engineers, managers, offshore operators, designers and manufacturers associated with the offshore oil and gas industry who wish to broaden their awareness of ATEX regulations.

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**SUPPORTING ORGANISATIONS**
Delegates can register for both the 'ATEX FOR OFFSHORE OPERATIONS' seminar and the 'LIVING WITH DSEAR' seminar and save a total of £50. Just select the relevant joint registration fee on the registration form or alternatively book online.

'LIVING WITH DSEAR' seminar will be held on 26 November 2010 in Newcastle.

For more information visit: www.imeche.org/events/S1511

TECHNICAL ADVANTAGES:

- Understand the background to PFEER re Piper Alpha & Lord Cullen’s recommendations
- Understand the relationship of PFEER to DSEAR and ATEX
- Understand the Application of EN 94/9/EC (ATEX) Directive to Offshore installations
- Understand hazardous Area classification, and reclassification
- Explore pitfalls in meeting the requirements of ATEX standards, EN 13463-1 2009
- Learn about the challenges of self-certification
- Learn about mitigating explosive risks in Gas Turbine packages
- Understand the requirements for living with ATEX: correct zoning, importation, temporary equipment, ongoing maintenance
- Learn from practical experiences of supplying ATEX compliant equipment offshore
ATEX IS NOT GENERALLY WELL UNDERSTOOD BY THOSE WORKING OFFSHORE. THERE IS A GENERAL ASSUMPTION THAT THE DANGEROUS SUBSTANCES AND EXPLOSIVE ATMOSPHERES REGULATIONS 2002 (THE MEANS OF IMPLEMENTING THE ATEX DIRECTIVE IN THE UK) ADD VERY LITTLE AS A RESULT OF OVERLAPS WITH MHSWR AND PFEER. THIS VIEW IS WRONG. THIS SEMINAR WILL EXPLAIN WHY THAT VIEW IS INCORRECT AND HELP YOU TO ADDRESS IMPORTANT POTENTIAL COMPLIANCE GAPS IN SAFE OPERATIONAL ARRANGEMENTS IN GENERAL AND IN THE LIGHT OF THE DEEPWATER HORIZON INCIDENT IN APRIL.

ROBERT PATIERSON
HEALTH, SAFETY AND EMPLOYMENT ISSUES DIRECTOR, OIL & GAS UK
14:00 COMMON PRACTICES AND PITFALLS FOR GAS DETECTION SYSTEMS WITHIN GAS TURBINE ENCLOSURES

Liam Hewitt, Consultant, Fraser-Nash Consultancy Ltd

• An introduction of how computational fluid dynamics (CFD) is used to quantify the effectiveness of gas detection systems in gas turbine enclosures
• Common reasons why gas turbine enclosures fail to meet ATEX (DSEAR) requirements for preventing the formation of hazardous explosive gas clouds, despite having standard gas detection systems
• Typical modifications to existing installations to improve the effectiveness of gas detection systems within gas turbine enclosures

Liam’s technical background is primarily in fluid and thermodynamics. He has worked with Fraser-Nash Consultancy in the energy & power and oil & gas engineering sectors since 2006. A large proportion of this work has been with direct drive and power generation gas turbines in the offshore industry. Liam represents Fraser-Nash Consultancy in the European Turbine Network (ETN), where common issues and development projects for gas turbines are discussed within a European-wide community of OEMs, end-users, consultancies and academicians.

14:25 DISCUSSION

14:30 AFTERNOON TEA

14:55 MECHANICAL PROTECTION FOR CRITICAL POWER AND DATA CABLES IN OFFSHORE INSTALLATIONS

Glen Bate, National Specifications Manager, Cable Management Products Ltd

• ATEX/IECEx requirements
• System integrity
• Mechanical strength
• Chemical resistance
• Flexibility
• Experience of applications
• Retrofit opportunities
• Maintenance requirements

Glen has spent several years in hazardous areas working with companies such as BP, Shell, Rolls Royce, AMEC and Wood Group on major projects and installations, combining a mechanical approach to the protection of critical power and data cables in hazardous environments with the latest requirements.

15:20 DISCUSSION
ATEX FOR OFFSHORE OPERATIONS 2010

...WHAT HAVE WE LEARNT SO FAR...

23 NOVEMBER 2010
ABERDEEN EXHIBITION AND CONFERENCE CENTRE

15:25 ATEX COMPLIANCE – A MANUFACTURER’S EXPERIENCES
Ian Calder-Potts, Chairman, Calder Ltd
Co-author: Peter Elliott-Moore, Director of Engineering, Calder Ltd
• Calder machines and ATEX
• No short cuts – The devil is in the detail
• The importance of certification and document control
• Your inspector is your best friend
• The future and the global machine
Ian has spent all but four years of his 47-year working life developing pumping solutions, and engineering high-pressure pump packages. He has worked with a wide variety of industries from gold and coal mining, to automotive, refining and oil and gas.

15:50 DISCUSSION

15:55 LIVING WITH ATEX – OBSERVATIONS ON SOME OF THE ONGOING ISSUES
Andy Hollins, Principal Consultant, ABB Engineering Services
• Why getting the zoning right matters
• Purchasing mechanical equipment for hazardous areas – some of the pitfalls
• Importing equipment
• Temporary and on-hire equipment
• Maintenance of mechanical equipment in hazardous areas
Andy has worked for 25 years in high-hazard process industries. After graduating he joined ICI in 1985, where he held a series of posts in process plant operation & maintenance, engineering department and R&D. Now a Principal Consultant with ABB Engineering Services, he has specific interests in process plant reliability and the safe operation of rotating equipment. Since 2002 he has been working with clients to address ATEX compliance issues associated with their mechanical equipment. Andy has presented at conferences and seminars and has written a number of papers on the subject of mechanical equipment, ATEX and related topics. He is a Fellow of the Institution of Mechanical Engineers.

16:20 DISCUSSION

16:25 CHAIRMAN’S CLOSING REMARKS

16:30 CLOSE OF SEMINAR
This programme is subject to change.
# ATEX for Offshore Operations 2010

## What Have We Learnt So Far...

## Booking Form

One form per person only (forms may be photocopied)

For added convenience, you can also book online at: www.imeche.org/events/s1483

### REGISTRATION (PLEASE COMPLETE IN CAPITALS)

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<td>Institution</td>
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Do you have any special requirements?

How did you hear about this event? Direct Mail □ Website □ Colleague □ Other □

### FEES AND CHARGES (PLEASE COMPLETE THE APPROPRIATE BOX)

Registration fees include entry to the sessions, refreshments, lunch and a copy of the event proceedings.

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### Extra Items

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Total £


* For a £50 discount you must register for both the ‘ATEX for Offshore Operations’ and ‘Living with DSEAR’ seminars by selecting the relevant joint registration option above.

Please do not send payment separately from this booking form.

By submitting this registration form, you will be indicating your consent to periodically receiving information on our events and publications, unless you indicate an objection to receiving such information by ticking this box □

### PAYMENT DETAILS

Payment must accompany this registration form. Registration will be confirmed only on receipt of full payment.

Please indicate method of payment: Cheque □ Credit Card □ BACS □ Invoice □ (see below)

Cheques should be made payable to IMechE and crossed. Please note overseas delegates may pay only by credit card, BACS or banker’s draft. A copy of the draft must accompany this form. It is the delegate’s responsibility to pay any bank charges.

Credit Card: Visa □ MasterCard □ (please note we cannot accept American Express, Diners Club or Maestro)

Card No □ Valid From □ Expiry Date □

Name of Cardholder

Billing Address of Cardholder (if different from above) □ Postcode

Amount to be deducted □

### INVOICE DETAILS (UK DELEGATES ONLY)

Delegates wishing to be invoiced must provide an order number. If your company does not use order numbers please include a formal request for invoicing on your company’s letterhead. A charge of £10 + VAT will be made to cover additional administration costs. Invoices are payable on receipt and no alterations to these terms will be accepted.

Order No □

Contact Name

Name and Address for Invoicing □ Postcode

Tel □ Fax □

BACS bank transfers can be made to: IMechE Current Account, NatWest Charing Cross Branch. Sort code: 60-40-05 Acc No: 00817767

A copy of the draft must accompany this form.

Swift Code: NWBEGB2L IBAN Code: GB96NWBE60400500817767

Please complete and return this form to: Event Registrations Institution of Mechanical Engineers 1 Birdcage Walk London SW1H 9JJ Fax +44 (0)20 7222 9881

For registration enquiries call Tina Churcher on +44 (0)20 7973 1258 or email t_churcher@imeche.org

Please read the information listed below as each booking is subject to IMechE’s standard terms and conditions.

### Conditions of Booking

Completed application forms should be returned to the address below, along with the correct payment. Attendance at the event will be confirmed on receipt of the full balance. All participants are advised to bring a copy of their confirmation with them on the day, to ensure the fastest possible entry.

### Special Requirements

Please inform us of any special requirements in dietary or access, on the relevant section of this form.

### Cancellation

For a refund (minus £25 + VAT admin charge), cancellations must be received at least 14 days prior to the event. Replacement delegates are welcome at any time. The IMechE reserves the right to cancel any event. In this case, the full fee will be refunded unless a mutually convenient transfer can be arranged. In the event that IMechE postpones an event for any reason and the delegate is unable or unwilling to attend on the rescheduled date, you will receive a full refund of the fee paid.

IMechE is not responsible for any loss or damage as a result of a substitution, alteration or cancellation/postponement of an event. IMechE shall assume no liability whatsoever in the event this conference is cancelled, rescheduled or postponed due to a fortuitous event, Act of God, unforeseen occurrences or any other event that renders performance of this conference impracticable, illegal or impossible. For purposes of this clause, a fortuitous event shall include, but not be limited to: war, fire, labour strike, extreme weather or other emergency.

Please note that while speakers and topics were confirmed at the time of publishing, circumstances beyond the control of the organisers may necessitate substitutions, alterations or cancellations of the speakers and/or topics. As such, IMechE reserves the right to alter or modify the advertised speakers and/or topics if necessary without any liability to the delegate. Any substitutions or alterations will be updated on our web page as soon as possible.

### Supporting Organisations

Members of the following organisations can register at our members’ rates: EI, OCA, OES, IChemE, Oil & Gas UK, PFI, FES, EEMUA

### Venue

This event will be held at Aberdeen Exhibition and Conference Centre (AECC), Bridges of Don, Aberdeen, Scotland, AB23 8BL. Details will be sent upon registration.

### Liability

The organisers do not accept liability for any injuries or losses of any nature incurred by delegates and/or accompanying persons, nor for loss or damage to their luggage and/or personal belongings.

### Accommodation

We have arranged special discounted rates at local hotels via the Corporate Team. Tel: (UK only) 0845 604 4060 International: +44 (0)20 7922 3950 Email: events@corporateteam.com www.corporateteam.com/events/848ATEX

### Enquiries

For event enquiries please call Tan Khatun on 020 7973 1306 or email t_khatun@imeche.org

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13-14 OCTOBER 2010 | LONDON
CARBON CAPTURE AND STORAGE: HOW IS IT WORKING AND WHAT NEXT?
This event will not only provide an understanding of latest policy developments, but also an insight into the challenges faced in implementing projects.

**Day One:** policy, legislation and funding issues; understand technical, regulatory, safety and environmental challenges

**Keynote:** Charles Hendry MP, Minister of State, Department of Energy & Climate Change

**Day Two:** technical and operational issues involved with designing, developing and operating CCS plant, infrastructure and storage facilities

**Keynote:** Jon Gibbins, Professor of Power Plant Engineering and Carbon Capture, University of Edinburgh

www.imeche.org/events/s1516

3 NOVEMBER 2010 | LONDON
YOUR FUTURE IN MECHANICAL PROCESS ENGINEERING - FREE EVENT
An informal session for students and recent graduates, allowing you to speak to longer-serving engineers and companies that can recruit and advise as you take the first step in your career.

www.imeche.org/events/L118

21 OCTOBER 2010 | LONDON
THE UK OIL AND GAS INDUSTRY: A GREAT BRITISH ENGINEERING SUCCESS STORY AND ONE OF OUR BEST-KEPT SECRETS
Free evening lecture presented by Malcolm Webb, Chief Executive, Oil & Gas UK

www.imeche.org/events/L165

17-18 NOVEMBER 2010 | LONDON
LNG DEVELOPMENTS: HOW THE TECHNOLOGY CAN MEET THE SUPPLY CHALLENGES OF THE NEXT DECADE
Day one will address the global picture, technology developments and shipping issues. Day two will focus on the outlook for the UK, legislation and safety issues, and global project experiences.

www.imeche.org/events/s1492

26 NOVEMBER 2010 | NEWCASTLE
LIVING WITH DSEAR
This seminar will look at how industry is reacting to 2002-DSEAR regulations; and the requirements of operators to avoid ignition sources, these need effort to achieve compliance, maintaining compliance, but has this benefited safe operations.

*Register for both the ‘ATEX for Offshore Operations’ and ‘Living with DSEAR’ seminars and save £50. See registration form for details.

www.imeche.org/events/s1511

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**JOURNALS**

Professional Engineering Publishing is the publisher for the Institution of Mechanical Engineers. For more information about our magazines, journals and conference proceedings visit www.pepublishing.com

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