

OFFSHORE WEIGHT CONTROL: MANAGING DESIGN, INSTALLATION AND COST.

Institution of
**MECHANICAL
ENGINEERS**

Process Division
Seminar

23 September 2014
Marriott Hotel, Aberdeen
www.imeche.org/events/S1819



The trend in offshore structures is towards larger, more integrated decks for new installations, which poses unique challenges since limits exist on lifting capacity.

Attend **Offshore Weight Control**, this September, in order to hear presentations from key industry leaders to enhance your understanding of weight control and learn how to manage conflicting demands from operators, designers and installers.

This seminar will introduce potential solutions for offshore weight control, including the use of new materials. It will also allow you to hear and learn from other industries, including aerospace, where weight control is critical.

Analyse an issue that has not been discussed in recent years and address the current issues arising from upgrades and modifications that are needed on current structures.

WHO SHOULD ATTEND?

- Offshore Structure Designers
- Offshore Product Suppliers
- Offshore Project Engineers
- Project Managers
- Weight Control Engineers

BENEFITS OF ATTENDANCE:

- **Gain** an understanding of the various aspects of weight control
- **Review** requirement needs from various parties
- **Learn** how to manage conflicting demands
- **Identify** reasons for increasing weight
- **Receive** insights into control measures
- **Understand** how composites can be used to complement a weight control strategy
- **Comprehend** the difference between weight reporting and weight control
- **Analyse** previous problems that have not been discussed in recent years
- **Integrate** with a cross-industry spread of people to give an all-round perspective
- **Discuss** potential alternatives to the "traditional" approach to weight control

WHEN 23 September 2014
WHERE Marriott Hotel, Aberdeen.
BOOK ONLINE www.imeche.org/events/S1819

MEDIA PARTNER:

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InnovOil

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Attending this event as either an exhibitor or sponsor will give you the opportunity to display your solutions, services and products to the right people at the right time.

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PROGRAMME

	09:30	REGISTRATION AND REFRESHMENTS
	10:00	CHAIR'S WELCOME AND INTRODUCTION Stuart Paterson, Project Manager, Saipem UK Ltd
WHAT ARE THE ISSUES?	10:10	WEIGHT GROWTH AND ITS MANAGEMENT Kevin Price, Principal Weight Control Engineer, AMEC Group Limited <ul style="list-style-type: none">• Weight growth – discuss the key drivers/sources/identification of weight growth with particular attention to separating growth from design development• Review the tools and methods of predicting growth and managing weight that are available to the weight engineer• How projects manage weight growth
	10:40	NETWORKING BREAK
	11:10	WEIGHT CONTROL FROM AN INSTALLATION CONTRACTOR'S PERSPECTIVE Vince McCarthy, Chief Operating Officer, Saipem Limited <ul style="list-style-type: none">• Prioritising weight control from project commencement• Risks of being “overweight”• Managing uncertainties prior to “weighing”
	11:40	WEIGHT CONTROL IN AN OFFSHORE BROWNFIELD DEVELOPMENT – THE ANDREW CASE STUDY Nick Edwards, Structural Engineer Andrew Area Development Project, North Sea, BP <ul style="list-style-type: none">• The nature of the Andrew Area Development Project has necessitated a very significant focus on weight – why?• What happened on the project (“the weight story”), and why? What were the key steps taken?• What was learnt? i.e. what can you do to deal with similar issues
	12:10	NETWORKING LUNCH
WHAT ARE THE SOLUTIONS?	13:10	ADVANCED MANUFACTURING PROVIDING WEIGHT SAVING SOLUTIONS Simon Eves, Technical Director, Pipex px <ul style="list-style-type: none">• Fibre reinforced materials can offer ideal solutions for offshore fixed and floating structure weight issues• Demand for weight reduction resulting in innovative thinking, application of existing or new technology• Case history: Pipex px@ MARRS@ OFFSHORE Phenolic Handrails to NORSOK and DNV standards, Phenolic Access Structures and Grating
	13:40	COMBINING PASSIVE FIRE PROTECTION WITH COMPOSITE GRATINGS - A STRUCTURAL CHALLENGE Richard Holliday, Principal Consultant, MMI Engineering Ltd <ul style="list-style-type: none">• Increased use of grated decks leads to unique challenges in Passive Fire Protection (PFP) design• Recent testing by HSE has raised questions on suitability of composite grating under fire conditions• This presentation will explain how these challenges can be combined to provide an optimised solution on weight sensitive designs
	14:10	HOW IT'S DONE IN OTHER INDUSTRIES – HOW AIRBUS CONTROLS WEIGHT Judi Cheeseman, Airbus <ul style="list-style-type: none">• Introducing Airbus & the Mass Properties role• Why weight matters in aerospace• The practicalities of how Airbus manages weight
	14:40	PANEL DISCUSSION
	15:10	CLOSING REMARKS
	15:20	CLOSE

Find out more about our speakers at www.imeche.org/events/S1819

- This programme is subject to change.
- The Institution is not responsible for the views or opinions expressed by individual speakers.

SPEAKERS AND CONTRIBUTORS



KEVIN PRICE
**PRINCIPAL WEIGHT CONTROL ENGINEER, AMEC
GROUP LIMITED**

Kevin Price has over 30 years experience in the offshore oil & gas industry and is a member of the Royal Institute of Naval Architects. He has been involved in the weight management of fixed and floating offshore projects in many geographical regions and has experience of a large number of large deck lifts.



NICK EDWARDS
**STRUCTURAL ENGINEER, ANDREW AREA
DEVELOPMENT PROJECT, NORTH SEA, BP**

Nick Edwards worked at Atkins for six years across various industries, but with a focus on fatigue of structures. Since then he has worked with BP on major offshore projects with a Structural focus.



SIMON EVES
TECHNICAL DIRECTOR, PIPEX PX

Simon Eves is a Technical Director for Pipex px®. He has been with the company for over 10 years and leads the promotion and development of FRP for Offshore and Subsea applications.



RICHARD HOLLIDAY
PRINCIPAL CONSULTANT, MMI ENGINEERING LTD

Richard Holliday is a recognised subject matter expert on Passive Fire Protection (PFP). A Mechanical Engineer with 29 years' experience; he joined MMI Engineering almost six years ago and heads up their PFP business on a global basis.



JUDI CHEESEMAN
AIRBUS

Judi Cheeseman has worked in the aerospace industry for several years in the field of Mass Properties and has worked on aircraft projects ranging from replacement supersonic transports research projects to the current state of the art large civil aircraft.

Offshore Engineering Organising Committee:

- Stuart Paterson, Project Manager, Saipem Ltd
- James Bridge, Chair, Offshore Engineering and Upstream Committee, IMechE

The organising committee would like to thank:

- Pressure Systems Group
- Manufacturing Industries Division
- Tribology Group
- Safety and Reliability Group
- Energy, Environment & Sustainability Group
- Structural Technology & Materials Group
- Management Group

BOOKING FORM

CONFERENCE CODE:
S1819AB

OFFSHORE WEIGHT CONTROL
23 SEPTEMBER 2014
MARRIOTT HOTEL, ABERDEEN AB21 7AZ

REGISTRATION Please complete in capitals.

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Do you have any special requirements?	

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

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- Events and training opportunities
 News and updates from the Institution
 Services and offers from our preferred partners

FEES AND CHARGES Please complete the appropriate box.

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

	FEE	VAT	TOTAL	£
Member, Institution of Mechanical Engineers	£308.00	£61.60	£369.60	
Member, supporting organisation	£308.00	£61.80	£369.60	
Non-member	£385.00	£77.00	£462.00	
Invoice charging (if applicable)	£10.00	£2.00	£12.00	
			TOTAL	

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PLEASE INDICATE METHOD OF PAYMENT:

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London SW1H 9JJ**
- 5 Fax:
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OTHER EVENTS TO LOOK FOR:



11-12 November 2014
Aberdeen

PRODUCTION EFFICIENCY: REVERSING A DECLINING TREND

With greater investment needed to maintain ageing assets in order to increase their level of production, comes an opportunity for the offshore industry to share best practice and learn from their partners. The solutions to improve production efficiency are not quick but the initiative to action improvements are and need to be shared so that financial investment continues across the UKCS.

www.imeche.org/events/C1419



3 December 2014
London

AGEING PLANT: MINIMISING HAZARDS THROUGH BETTER DETECTION TECHNIQUES

To get the best out of structures that are highly susceptible to deterioration, a greater emphasis must be placed on detection. This event will provide case studies showcasing the various different types of detection techniques that ultimately are able to reduce operating costs, reduce hazards and ensure compliance with latest guidance.

www.imeche.org/events/S1826



8 December 2014
Aberdeen

PIPING AND PIPELINE RISK-BASED INSPECTION

The UK oil and gas industry is facing its greatest challenge yet as the demand for energy across the UK continues to grow. A consequence of this is the pressing need for operators to ensure greater asset integrity both on and offshore. With this pressure comes the need to instil effective risk assessment and mitigation measures.

www.imeche.org/events/C1420

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1 Birdcage Walk
Westminster
London
SW1H 9JJ

T +44 (0)20 7222 7899

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