

CONVENTIONAL POWER BOILER USER GROUP 2016

THE LATEST DEVELOPMENTS IN FIRED BOILERS USED FOR POWER GENERATION

Institution of
**MECHANICAL
ENGINEERS**

8-9 November 2016
The Nottingham Belfry, Nottingham

More details available at
**[www.imeche.org/
powerboilerusergroup2016](http://www.imeche.org/powerboilerusergroup2016)**

KEY SPEAKERS INCLUDE:

Peter Spinney
Director, Markets and Technology NeuCo
GE Power Solutions

Mike Colechin
Partnership Manager
Energy Technologies Institute

William Hird
Combustion System Engineer
WH Power Ltd

Moore Holmes
Technical Specialist – Pressure
British Engineering Services

Power Industries Division
Conference



EXHIBITORS:



EVENT PARTNERS:

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CONVENTIONAL POWER BOILER USER GROUP 2016 THE LATEST DEVELOPMENTS IN FIRED BOILERS USED FOR POWER GENERATION

8-9 November 2016

The Nottingham Belfry, Nottingham

THE POWER INDUSTRY IS CHANGING RAPIDLY, WITH THE UK GOVERNMENT ON A CLEAR CLOSURE PATH FOR COAL GENERATION PLANTS. TO MAINTAIN ELECTRICAL SUPPLY FOR THE UK, THE POWER INDUSTRY MUST REFLECT THIS CHANGE. THIS IS BY CONTINUING TO SAFELY AND RELIABLY OPERATE EXISTING COAL FIRED PLANTS TO END OF LIFE AND BY BUILDING NEW OR CONVERTING EXISTING BOILERS TO RUN ON OTHER FORMS OF FUEL.

The Conventional Power Boiler User Group is a must-attend event to gain insights into all the key issues relating to the design, operation and maintenance of conventional (i.e. non HRSG) boilers used for power generation.

Attendees will take away key knowledge from leading operators, equipment suppliers and experts. Explore the potential future of energy in the UK, the use of waste and biomass fuels, maintaining and improving plant reliability, ensuring performance and managing risk.

KEY TOPICS INCLUDE:

- Hear the latest strategies from the **Energy Technologies Institute** for transitions to a low carbon energy system
- Understand neural network and model predictive controllers for optimised plant performance from **GE Power Solutions**
- Learn from **FCC Environment** about the design and operation of a modern 170kt Energy From Waste (EFW) plant
- Benefit from unique insights from **Uniper Technologies Ltd** into the changing boiler integrity issues over the past 60 years and current challenges
- Understand the challenges in power plant conversion from coal burning to biomass from **Doosan Babcock**
- **Hitachi Zosen Inova** highlight and share repair techniques that will enable an ageing power plant to continue to operate

ATTEND THE USER GROUP TO:

- Benefit from outstanding peer reviewed presentations from those at the cutting edge of industry
- Ensure compliance with regulatory legislation through better understanding and best practice
- Learn about the different approaches to modification, conversion, upgrading and retrofitting of power plant technologies
- Network with industry thought leaders and budget holders involved with the design, construction, operation and maintenance of power plant technologies
- Gain insights into the technologies and techniques being implemented

ORGANISING COMMITTEE

Power Industries Division
The Institution of Mechanical Engineers

MEMBER CREDITS:

Stuart Simpson Uniper Technologies	Mark Upton Doosan
Alan Fitzpatrick CNA Europe	Richard Walton SSE
Bill Hird SKM	Steve Brown British Engineering Services
David Waldron GE Power	Tom Speirs Atkins
Matthew Lee RWE Npower	

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PROGRAMME

DAY 1	
08:30	REGISTRATION AND REFRESHMENTS
09:00	CHAIR'S WELCOME AND OPENING REMARKS
	ENVIRONMENTAL COMPLIANCE AND EMISSIONS
09:10	KEYNOTE ADDRESS: TRANSITIONS TO A LOW CARBON ENERGY SYSTEM M Colechin, Energy Technologies Institute
	DESIGN, OPERATION AND MAINTENANCE
09:50	AN INTRODUCTION TO HOUSEHOLD WASTE BOILER DESIGN W Hird, WH Power Ltd
10:15	LINCOLNSHIRE EFW: DESIGN AND OPERATION OF A MODERN 170KT ENERGY FROM WASTE PLANT J Schaper, FCC Environment
10:40	QUESTION AND ANSWER SESSION
10:55	NETWORKING REFRESHMENT BREAK
11:25	EXPLOSIVE CLEANING FOR MAINTENANCE AND EFFICIENCY GAINS IN HIGH FOULING FUEL BOILER ENVIRONMENTS R Vogel, KRR Prostream
11:50	IMPROVED FIELD WELDING TECHNOLOGY FOR ADVANCED HIGH ENERGY PIPING MATERIALS P Amador, AZZ Inc.
12:15	QUESTION AND ANSWER SESSION
12:30	NETWORKING LUNCH
	SAFETY AND RELIABILITY
13:30	FUELLING INTEGRITY CONCERNS IN MODERN BOILER PLANT CJ Davis, PJ James and DJ Marks, Uniper Technologies Limited
13:55	INCREASING LIFE AND RELIABILITY OF EXPANSION JOINTS IN AGING CONVENTIONAL BOILER PLANTS J Waterhouse, DEKOMTE
14:20	INVESTIGATION AND MITIGATION OF THE ROOT CAUSE OF MAIN STEAM PIPE COMPONENT FAILURES J Horton, Frazer-Nash Consultancy
14:45	QUESTION AND ANSWER SESSION
14:55	NETWORKING REFRESHMENT BREAK
15:25	UMBRELLA SNCR DEVELOPMENT M Re, GE Power
	PERFORMANCE AND EFFICIENCY
15:50	NEURAL NETWORK AND MODEL PREDICTIVE CONTROLLERS FOR OPTIMISED PLANT PERFORMANCE P Spinney, GE Power Solutions
16:15	QUESTION AND ANSWER SESSION
16:25	COST EFFICIENT SOLUTIONS FOR ENSURING HIGH PERFORMANCE AND EFFICIENCY
PANEL DISCUSSION	
16:55	CHAIR'S CLOSING REMARKS
17:00	CLOSE OF DAY ONE
19:30	NETWORKING DINNER AND DRINKS RECEPTION

For the most up-to-date and detailed programme for the event, please visit:
www.imeche.org/powerboilerusergroup2016

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

PROGRAMME

DAY 2	
08:30	REGISTRATION AND REFRESHMENTS
09:00	CHAIR'S WELCOME AND OPENING REMARKS
	STATUTORY COMPLIANCE
09:10	KEYNOTE ADDRESS: POSTPONEMENT OF EXAMINATION UNDER THE PRESSURE SYSTEMS SAFETY REGULATIONS (PSSR) M Holmes, British Engineering Services
09:50	SKILLS AND DOCUMENTATION FOR PRESSURE SYSTEMS INTERVENTIONS J A Brown, Stainsby Brown Associates
10:15	QUESTION AND ANSWER SESSION
	MODIFICATION, UPGRADE AND REPLACEMENT
10:30	LIFE EXTENSION BY BIOMASS CONVERSION G Welford and I Graham, Doosan Babcock
10:55	NETWORKING REFRESHMENT BREAK
11:25	PLASMA IGNITOR DEVELOPMENT G Heinz, GE Power Solutions
11:50	YEONGDONG – AN INNOVATIVE BIOMASS CONVERSION SOLUTION M Kaliyaperumal, Doosan Babcock and R Panesar, Doosan Babcock
12:15	ENERGY FROM WASTE PLANT'S SECOND LIFE R M Suesstrunk, Hitachi Zosen Inova
12:40	QUESTION AND ANSWER SESSION
12:55	NETWORKING LUNCH
	INSURANCE
13:55	GETTING ENERGY FROM WASTE PLANTS INSURED J Douglas, Chubb
14:20	DO YOU NEED INSURANCE? A Fitzpatrick, CNA Hardy
14:45	QUESTION AND ANSWER SESSION
14:55	NETWORKING REFRESHMENT BREAK
15:25	CONVERSION TO BIOMASS: STRATEGIES FOR FUTURE FUELS
PANEL DISCUSSION	
15:55	CHAIR'S CLOSING REMARKS
16:00	END OF CONFERENCE

SPONSORSHIP OPPORTUNITIES

CREATE A BESPOKE STRATEGY THAT PLACES YOUR COMPANY IN FRONT OF SENIOR DECISION MAKERS

- Engage face to face with your target market of senior engineers
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- Generate new business leads
- Capture contact data from our highly qualified delegates to fuel your sales teams

CONTACT THE SPONSORSHIP TEAM ON:

T: +44 (0)20 7973 1249

E: sponsorship@imeche.org

WHO SHOULD ATTEND?

ALL ENGINEERS INVOLVED IN THE DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE (INCLUDING USERS, EQUIPMENT SUPPLIERS AND CONSULTANTS) OF CONVENTIONAL (NON-HRSG) BOILERS USED FOR POWER GENERATION WILL STRONGLY BENEFIT FROM THIS CONFERENCE. MANAGERS AND ENGINEERS WHO ARE INVOLVED IN THE FOLLOWING AREAS ARE STRONGLY RECOMMENDED TO ATTEND AND BENEFIT FROM THE USER GROUP:

- Pressure Systems
- Combustion/Fuel Systems
- Boiler Auxiliary Plant
- Flue Gas Cleaning
- Integrity
- Quality
- Asset Risk
- Materials
- Development and Technology

FEEDBACK FROM LAST USER GROUP

OVER 90% OF ATTENDEES

WOULD RECOMMEND A COLLEAGUE OR PEER TO JOIN THE CONVENTIONAL POWER BOILER USER GROUP

“”

A good opportunity to meet and learn from peers within the industry

Project Engineer, Doosan Babcock

“”

An excellent opportunity to meet & share problems with those who also share responsibility for addressing them

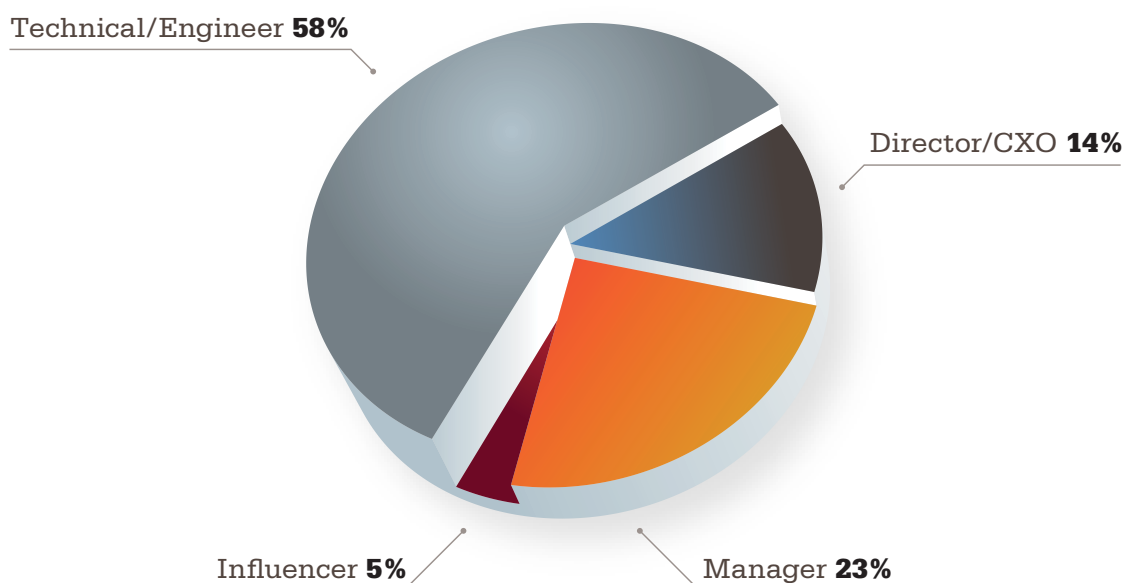
Head of Engineering-Technical Services, RWE

“”

Good blend of technical, commercial and legislative presentations

Technical Manager, Diamond Power

WHO YOU CAN MEET



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HOW TO BOOK YOUR PLACE

FEES AND CHARGES

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

Delegate Type	Standard Rate
Member, IMechE/supporting organisation	£489 + VAT
Non-member	£589 + VAT
Student/Retired	£159 + VAT

Group booking discounts are available. Contact us for more information.

THREE WAYS TO BOOK

- 1 Online:
[www.imeche.org/
powerboilerusergroup2016](http://www.imeche.org/powerboilerusergroup2016)
- 2 Email:
eventenquiries@imeche.org
- 3 Phone:
+44 (0)20 7973 1251

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

CONDITIONS OF BOOKING

Completed application forms should be returned to the address above, 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, ie 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 30 days prior to the event. Replacement delegates are welcome at any time. The Institution 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 the Institution postpones an event for any reason and the delegate is unable or unwilling to attend on the rescheduled date, they will receive a full

refund of the fee paid. The Institution is not responsible for any loss or damage as a result of a substitution, alteration or cancellation/postponement of an event. The Institution shall assume no liability whatsoever if this event is cancelled, rescheduled or postponed due to a fortuitous event, Act of God, unforeseen occurrence or any other event that renders performance of this conference impracticable, illegal or impossible. For the 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. The Institution reserves the right to alter or modify the advertised speakers and/or topics if necessary without any liability to you whatsoever. Any substitutions or alterations will be updated on the event's webpage as soon as possible.

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.

CONFERENCE VENUE

Nottingham Belfry Hotel
Mellor's Way
Nottingham
NG8 6PY

SPONSORSHIP & EXHIBITION OPPORTUNITIES GET INVOLVED

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.

BENEFITS OF SPONSORING

- **Showcase** new products
- **Raise** awareness of your operation
- **Improve** perception of your brand
- **Influence** other organisations' spending plans

This is an excellent way to enhance your company profile and communicate effectively to your target audience.

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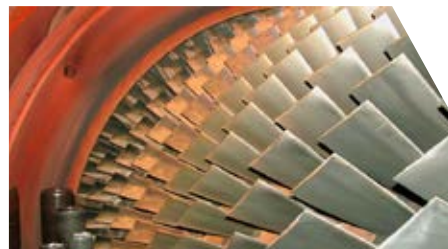
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FORWARD THINKING

We are the market leader among professional engineering bodies. We've been supporting engineers since 1847 and have 113,000 members in over 140 countries, working in the world's most dynamic and important industries. Our comprehensive events programme brings you the latest research and best practice from industry and academia.

OTHER EVENTS TO LOOK FOR



POWER GENERATION GAS TURBINE USER GROUP 2016

6-7 December 2016

The Thinktank, Birmingham

Aimed at all users of Gas Turbines, this event will enable discussion of common problems and issues, exchange ideas, identify potential solutions and learn about new developments.

www.imeche.org/GTUG2016



17 NOVEMBER 2016 THE DORCHESTER, LONDON

The Institution of Mechanical Engineers' Annual Dinner

The Institution's Annual Dinner will be returning to London's Dorchester hotel Thursday 17 November 2016, to celebrate the engineering profession with keynote address from The Rt Hon Patrick McLoughlin.

www.imeche.org/annualdinner2016

The Institution of Mechanical Engineers organise over 120 events a year, including free-to-attend lectures as well as conferences, seminars, annual luncheons and dinners. Please visit www.imeche.org/events for the complete list of events.

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