

Boiler House Management



A two day open course on managing and operating boiler plant

9/10 March 2010 - Nottingham.

- at peak efficiency
- safely
- with minimum environmental impact

Course Aim

To equip delegates to manage and operate boiler plant at peak energy efficiency, safely and with minimum environmental impact.

Who should attend?

Operators, Supervisors and Managers who have responsibility for the safe and efficient operation of boiler plant.

Plant Covered

- Hot Water and Steam Boilers
- Shell Boilers
- Water Tube Boilers
- Combined Heat and Power Units
- Waste Heat Boilers
- Process and Space Heating Systems



Course Content

Boiler Plant Safety

Potential problems and consequences

Types of Plant and Ancillary Equipment

Shell, water-tube, steam generators, superheaters, economisers

Boiler Protective Devices and Fittings

Functions and safe operating limits.
Testing of fittings and controls.

Industrial Fuels

Oil, gas, solid fuel. Composition, properties, characteristics. Fuel handling systems

Combustion Air

Properties, primary, secondary, excess air, ventilation

Products of Combustion

CO₂, CO, SO_x, NO_x, Grit and Dust, Smoke

Corrosion

Sulphur corrosion. Causes and Prevention

Draught

Forced, induced, natural

Heat Transfer

Conduction, Convection, Radiation

Environmental Issues

Clean Air Act, EPA, IPPC, Authorisation

Firing Equipment

Gas, liquid, solid fuel systems

Water Treatment

External and Internal treatment. Physical and chemical methods

Efficiency

Combustion analysis, heat recovery opportunities, insulation

Steam and Hot Water Generation

Temperature, pressure, heat content (enthalpy), saturated and superheated steam, dryness fraction, flash recovery, water hammer, priming

Safe Systems of Work

HSE Guidance Notes PM5 and PM60 SAFed (AOTC) Examinations of Steam and Pressurised Hot Water Systems

 **Course Details****Tailoring**

The course content is subject to modification. Registered delegates will be asked to complete an on-line questionnaire requesting details of their plant. These details will be taken into account by the course tutor who will vary the course to meet as many interest areas as possible.

Documentation

The course is fully documented. Each delegate will receive a copy of the book "The Boiler Operators handbook" prepared by National Industrial Fuel Efficiency Service (NIFES), together with supporting documentation and a certificate of attendance.

Venue

The venue is The Phoenix Centre, Millennium Way, Nottingham.

Dates

9/10 March 2010.

Accommodation

Delegates are responsible for making their own overnight hotel arrangements. A list of local hotels, indicating location and costs will be sent to those registering.

Registration

- To book your place please phone 0115 9844 944 and ask for Training Division.
- Course fee of £550 + VAT includes, tuition, "The Boiler Operators Handbook", supporting notes, buffet lunches and refreshments.
- Early registration is advised as delegate numbers are restricted to 10 per course.
- The course begins at 9.00 a.m. on day 1 and ends at 4.30 p.m. on day 2.

Further Details

Please contact Gail Balfour at NIFES Nottingham Office.

Spinney Hill, Ruddington, Nottingham NG11 6LN

Tel: 0115 9844944

email: training@nifes.co.uk

web: www.nifes.co.uk

Course Tutors

The courses will be delivered by one of the following experienced NIFES' training consultants.

Mr. Mike Cogan BEng CEng MEI

Mike has had 25 years experience in technical education and training in the UK and overseas. He has extensive experience of boilers, compressors and turbines and has led seminars for multi-national companies to improve safety and efficiency in plant operation.

Mr. David Morton BSc MSc CEng CSci CChem MEI MRSC

Dave has over 25 years experience in the energy industry including research and development, technical service and training. He has worked in the fields of combustion studies and fuel utilisation in a wide range of industrial and commercial applications.

NIFES Bespoke Services

NIFES provide tailor-made services and training courses for clients. These include:

- Tailored Boiler House Management courses delivered at clients' sites and tailored to specific plant and training needs of delegates.
- Development of Boiler Plant Operating Procedures in accordance with HSE Guidance Note PM5 and SAFed Guidelines for the Operation of Steam Boilers PSG2.
- Surveys of boiler plant and steam/hot water distribution systems to identify energy saving measures and highlight improved practice in boiler plant operation.
- Boiler plant decentralisation feasibility studies.
- Waste heat recovery feasibility.
- Studies on use of biomass and alternative fuel options.
- Integration of good quality combined heat and power.
- Safe systems of work.
- Environment emissions measurements and reports.
- Engineering design and project management of new boilers and ancillary plant.

Delegates' Comments

“Very good delivery from a very knowledgeable tutor. The course was interesting and most of all, informative..”

Elyo UK, Ambrosia Plant

“Well worth doing the course and will recommend it to others”

Boston Scientific, Galway, Ireland

“Very good and instructive course”

Emcor Facilities Services, AWE Burghfield

Recent Clients

Aberdeen University
BPB Paperboard
British Petroleum
Carbon Trust
Corus
CP Pharmaceuticals
De Beers
Defence Estates
Eden Vale
Ford Motor Company

Glanbia Cheese
Knorr Bestfoods
London Clinic
National Health Service
Nestlé
Parliamentary Works
Pringles
Proctor and Gamble
Rhone Poulenc
Scottish Courage

SP Tyres
Spirax Sarco
Sustainable Energy Ireland
Tate & Lyle
Toyota
Tullis Russell
UKAEA
Van Den Bergh Foods
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Volvo

