

Why choose NIFES?

NIFES Consulting Group (National Industrial Fuel Efficiency Service) has been supplying energy management solutions to industry, commerce and the public sector and in 50 countries worldwide for the last six decades. NIFES were established in 1953 and have over 140 staff who work in the UK and Ireland.

NIFES services include energy management, engineering design, environmental services, health and safety, technical services and training. The Boiler House Management courses will be delivered by one of the following experienced NIFES' Senior Training Consultants:

Mr Mike Cogan BEng CEng MIGasE MEI

Mike has over 30 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

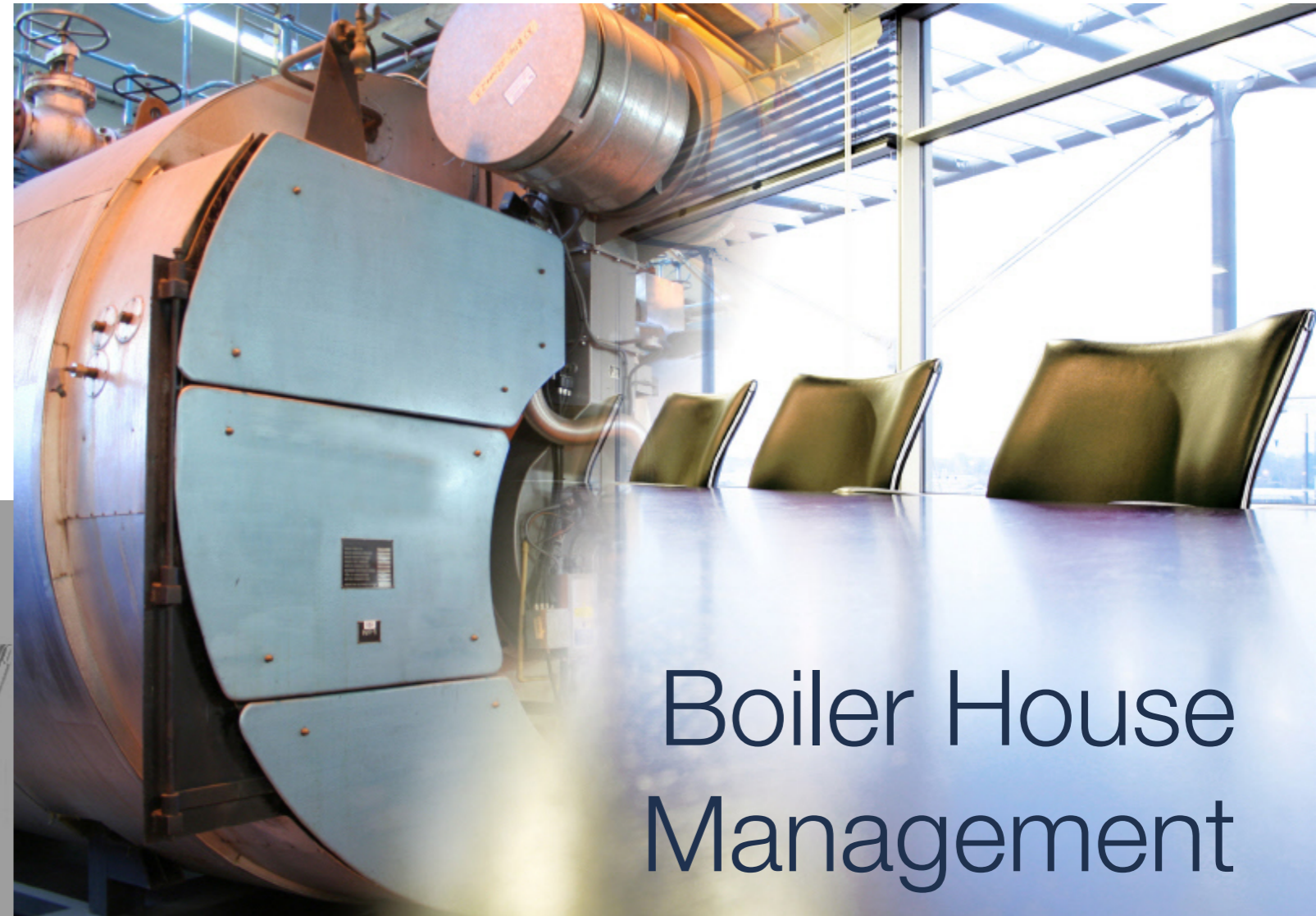
Dave has over 25 years experience in the energy industry including research and development, technical service and training. He has worked in the fields of combustion studies and fuel utilisation in a wide range of industrial and commercial applications.

Recent Clients

Aberdeen University
Babcock DynCorp
(RAF Cranwell)
BPB Paperboard
BP
Carbon Trust
Corus
Defence Estates
Eden Vale

Elyo Suez (BMW Oxford)
Ford Motor Company
Glanbia Cheese
HM Prison Service
Knorr Bestfoods
National Health Service
Nestlé
Parliamentary Works
Proctor and Gamble

Rhone Poulenc
Scottish Courage
Serco Services
SP Tyres
Spirax Sarco
Sustainable Energy Ireland
Tate & Lyle
Toyota
Vauxhall



Boiler House Management

A two day open course on managing and operating boiler plant.



Tel: 0161 9285791
Fax: 0161 9268718



training@nifes.co.uk



www.nifes.co.uk/training

Document Version 1.0



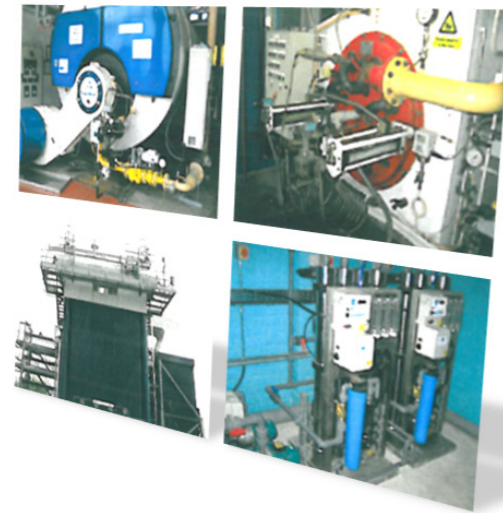
About the Boiler House Management course

A two day open course on managing and operating boiler plant.

One of our experienced consultants will provide training to equip delegates to manage and operate boiler plant at peak 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.



What does the course cover?

✓ Plant Covered:

- Hot Water and Steam Boilers
- Shell Boilers
- Water Tube Boilers
- Combined Heat and Power Units
- Waste Heat Boilers

✓ 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

✓ Combustion Process and Products - CO₂, CO, SO_x, NO_x, Grit and Dust, Smoke, Flue gas analysis and optimum values

✓ Draught - Forced, induced, balanced and natural

✓ Heat Transfer - Conduction, Convection, Radiation

✓ Environmental Issues - Toxicity, corrosion and climatic effects, Clean Air Act, EPA, IPPC, Authorisation

✓ Firing Equipment - Gas, liquid, solid fuel burners and burner control systems.

✓ Water Treatment - External and Internal treatment. Physical and chemical methods

✓ Steam and Hot Water Generation

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

✓ Efficiency - Combustion analysis, heat recovery opportunities, insulation

✓ Safe Systems of Work - HSE Guidance Notes PM5 and PM60 SAFed Guidelines and BG01, Examinations of Steam and Pressurised Hot Water Systems, Others as issued

How can I register a place?

To book your place please phone **0161 928 5791** and ask for Training Division or visit www.nifes.co.uk/training.

- ✓ 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 9.00am on day 1 and ends at 4.30pm on day 2

Tailoring

The course content is subject to modification with registered delegates being 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.

Dates and Venues

10-11 May 2011	London
5-6 July 2011	Manchester
18-19 October 2011	Nottingham

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.

Documentation

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

What our delegates are saying...

"Well worth doing the course and will recommend it to others"
Boston Scientific, Galway, Ireland

"Very good delivery from a very knowledgeable tutor. The course was interesting and most of all, informative"
Elyo UK, Ambrosia Plant

"Very good and instructive course"
Emcor Facilities Services, AWE Burghfield

NIFES Bespoke Services

NIFES provide tailor-made services and training courses for clients, including:

- ✓ Individual Boiler House Management courses delivered at clients' sites and tailored to the specific plant and training needs of delegates.
- ✓ Development of Boiler Safe Plant Operating Procedures in accordance with HSE Guidance
- ✓ Note PM5 and SAFed Guidelines for the Operation of Steam and Hot Water Boilers.
- ✓ 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.
- ✓ Steam plant conversion to Hot Water.