



INDEPENDENT STEAM & BOILER TRAINING









M&M TRAINING



Welcome to M&M Training Services Ltd.



"We are committed to offering a **professional training service**, that is current and up to date with all Legislation, Guidelines, and best working practices.

Having over **40 years of experience**, our trainers have the skills and knowledge to deliver our courses in our purpose built training room, online, or on the client's site.

M&M Training also provide Technical Boiler House Risk Assessments - helping you to take the necessary steps, to keep all personnel and property safe."

Mr. Paul Bough lEng MIET Managing Director

The Importance of Training

Whether the training is for yourself or your employees; having correctly trained staff is essential. Not only it is the law, it can also improve plant safety and it can also save vast amounts of money.

M&M Training addresses the need for training and ensures all attendees leave better equipped for their job.



What our customers have to say...

"Superb organisation! From the booking, through to the warm welcome, refreshments and lunch. The venue and facilities were also superb."

Johnsons Workwear

"The practical parts of the courses has given our employees an insight to 'behind the scenes'. They now fully understand the mechanics of our system."

Anglian Water

"The course content was excellent. The things covered have had an immediate positive impact and have highlighted some issues with traps etc that we will be rectifying ASAP."

Uni of Cambridge













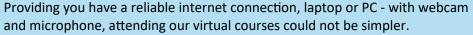
2021



Introduction of Virtual Training

2020/21 saw the introduction of various government guidelines designed to keep us safe. Therefore, M&M Training have developed the ability for you to attend our training courses virtually. Having successfully hosted the UK's first Virtual BOAS (CAT 2), we are now able to offer all our accredited courses virtually.

Our live virtual courses are designed to recreate a classroom experience, enabling full interaction with the tutor and classmates - all from the comfort of your own home/workplace.





E-Modules

Due to the success of the live virtual training. M&M will soon be able to offer our courses as e-learning modules. Each individual module can be viewed, paused and re-visited; thus, enabling our delegates to advance their knowledge anytime, anywhere.

Each module has a skill test to ensure delegates have understood the content shown. On successful completion of the set modules and with an application form completed, the delegate can receive accreditation.

Training Centre



Despite the restrictions placed on us all, we have implemented various safety measures within the specialist training facility, such as:

- Reduced Classroom Numbers
- Perspex Dividers
- One Way Systems
- Sanitisation Stations

These measures ensure we can protect our customers and staff.















Accredited Courses

Steam Utilisation

Who Should Attend?

This course is intended for all personnel that are involved with the steam plant. Also, for those who are responsible – or may become involved with the installation/ maintenance of steam equipment.

We recommend this course is taken in conjunction with our Boiler House Course.

<u>Aims</u>

To ensure that all personnel involved with steam equipment understand the principles of steam and are able to recognise how steam equipment should be sized, installed and checked to give maximum efficiency and safety. Delegates are given the opportunity to take a certified examination which is a recognised qualification valid for 5 years.

Couse Content

- The basic principles of steam
- Health and Safety Regulations
- Pressure Systems Safety Regulations (PSSR)
- Steam trap operation and types
- Installation and sizing of steam and condensate mains
- Operation of pressure reducing valves
- Maintenance safety procedures
- Practical demonstration of trap types and checking
- Basic principles of good working practice



Additional Information

The Steam Utilisation course typically begins at 09:00 and concludes at 16:00. Additionally, all refreshments and lunch are provided to delegates free of charge.

In order to accommodate our customers requirements, the course is available to attend in a variety of ways/locations. Such as;

- M&M Training Ltd
- Virtually
- On-site (at client's site)





Accredited Courses

Boiler House

Who Should Attend?

Our Boiler House course is intended for all personnel involved with the operation and management of steam boiler plant.

We recommend this course is taken alongside our Steam Utilisation Course.

<u>Aims</u>

To provide a detailed understanding of the operation of steam boiler(s) and to ensure operators are aware of the mandatory requirements and safety procedures surrounding the operation of a boiler. Delegates are then given the opportunity to take a certified examination, which is a recognised qualification valid for 5 years.

Course Content

- The basic make-up of the steam boilers
- Operation of gas and oil burners
- Water treatment
- Boiler operation
- Prevailing Boiler Guidelines
- Boiler log
- TDS and blowdown operation
- Safe isolation of the boiler
- Statutory Inspections and Examinations
- Fault finding



Additional Information

The Boiler House course typically begins at 09:00 and concludes at 16:00. Additionally, all refreshments and lunch are provided to delegates free of charge.

In order to accommodate our customers requirements, the course is available to attend in a variety of ways/locations. Such as;

- M&M Training Ltd
- Virtually
- On-site (at client's site)





Accredited Courses

Water Treatment

Who Should Attend?

Our Water Treatment course is intended for operators of industrial steam boilers and plant managers who wish to understand the importance of water quality for their boiler.

This course is typically taken in conjunction with our Steam Utilisation and Boiler House Course.

<u>Aims</u>

Upon completion, this course will enable the delegates to undertake the most important/regular tests on their industrial steam boiler. Complete with practical demonstrations, the delegate will be able to optimise their boiler plant water treatment, improving safety, efficiency and steam quality.

Course Content

- Reasons for water treatment
- What is water?
- How does water become contaminated?
- Distribution of water on Earth
- Hardness of water in the UK
- Pre-treatment of steam boilers
- Effects of scale
- Water treatment methods
- TDS Systems
- Safety and Legal Requirements
- Guidelines



Additional Information

The Water Treatment course typically begins at 09:00 and concludes at 16:00. Additionally, all refreshments and lunch are provided to delegates free of charge. Upon completion of the Water Treatment Course, all delegates are given lifetime access to a number of water treatment video tutorials.

In order to accommodate our customers requirements, the course is available to attend in a variety of ways/locations. Such as:

- M&M Training Ltd
- Virtually
- On-site (at client's site)





Boiler Operation Accreditation Scheme (BOAS)

Category 2 - Shell & Tube Steam Boilers

2021 saw M&M Training successfully host the first virtual BOAS course, as well as facilitating the 5,000th BOAS applicant.



Additionally, 2020 saw our own Director & Trainer; Mr. Leigh Ridlington become an approved BOAS Cat 2 Trainer.

Who Should Attend?

The BOAS course is an advanced course and is intended for boiler operators, managers and supervisors with a minimum of 6-months hands-on experience, or 100 boiler operating hours (for which evidence must be provided).

This syllabus is applicable to Operators and Managers with responsibility for horizontal multi-tubular shell boilers which are directly fired, waste heat boilers and combination boilers (direct fired boilers with a waste heat section).

Aims

To provide a thorough and complete understanding, and training in preparation for the BOAS qualification, whilst promoting safety and energy efficiency in the boiler house, with due regard for environmental aspects and legal requirements.

BOAS trained staff can ensure the boiler plant runs at its optimum efficiency. Correct training can potentially save thousands of pounds in fuel costs, chemicals and equipment used, and reduce repairs. The BOAS qualification is the only qualification which can prove competence upon completion.

Content

- Safety & Legal Requirements
- Basic Heat and Heat Transfer
- Feed Water and Boiler Water Analysis
- Draught and Combustion
- Energy Efficiency
- Environment
- Fuel Concepts
- Boilers and Auxiliaries
- Operation
- Control and Instrumentation



Other Categories

Cat 1 - Hot Water Boilers

Cat 3 – Water Tube Boilers

Cat 5 – Coil Steam Generators



TECHNICAL BOILER HOUSE RISK ASSESSMENTS



Technical Boiler House Risk Assessment

A suitable and sufficient Technical Boiler House Risk Assessment is a legal requirement under The Management of Health and Safety at Work Regulations 1999 (MHSWR), Section Three.

A Technical Boiler House Risk Assessment is an example of the type of record that should be kept and made available for scrutiny under The Pressure Systems Safety Regulations 2000 (PSSR), Regulation Fourteen, and is further recommended within BG01 Guidelines and The Health and Safety Executive Publication: INDG436.

What We Offer

Not just an Operational Task Risk Assessment, the Technical Boiler House Risk Assessment assesses the entire Boiler House; including things such as:

- The Steam Boiler(s) and Boiler Controls
- The Blowdown Vessel and Boiler Blowdowns
- The Water Treatment Plant and Associated Feedwater System
- The Feed Water Tank (Hotwell)
- The Primary Steam Header and Distribution System exiting the Boiler House

Within our detailed Technical Boiler House Risk Assessment; we consider issues such as, although not limited to:

- The likelihood and severity of potential injuries
- The location and layout of the boiler room
- Operational risks
- Manning levels
- Additional controls for remote and/or unmanned boiler operation
- Conformance with current Guidelines and Regulations
- Achievable efficiency gains
- Documentation available concerning steam raising plant and equipment

M&M Training offer an independent risk assessment of your Boiler House, carried out by engineers who provide you with a written report. Should there be any issues, these will be identified within the report by the use of a simple **traffic light system**.

The report will also recommend any necessary control measures needed, and the reduced level of risk shown within the traffic light system. We are then able to offer our services to help you take the necessary steps, to keep all personnel and the surrounding property safe.





ADDITIONAL SERVICES



In addition to our aforementioned courses/services, M&M Training can offer a more tailored option for you and your company. Listed below is a list of other courses/services we provide. Should you require any further information regarding these - please contact us.

Competency Checks

Whilst a number of our courses are certified/accredited, they do not provide proof of competency. Competence is a combination of:

- Training
- Skills
- Experience
- Knowledge

Therefore, we recommend an additional service in which we can conduct competency checks on delegates. This involves our trainers attending site, reviewing operational procedures, assessing the delegate's ability and evidence of their/your experience. Similar to the BOAS pre-requisite, experience can be proven by providing evidence of either 6 months or 100+ hours of work. Typically, we can assess a maximum of 5 delegates in a working day.

Service	Price (per day)
Competency Checks	£2,140.00



Services

- Operating Procedure Writing
- Water Treatment Risk Assessment
- Steam & Condensate Audits
- Training & Qualification Reviews/Analysis
- Assessing Potential Employees
- Production of Safe Systems of Work and Site Standards

Accredited Courses

- BOAS Cat 1, 2, 3 & 5
- Steam Plant & Maintenance
- Steam Utilisation
- Boiler House
- 1-Day Water Treatment
- 2-Day Water Treatment
- Steam Design
- Hazardous Fluids

Development Courses

- Steam Awareness
- Boiler House Awareness
- Steam Trap Training
- Control Valves
- De-superheaters
- Corrugator & Laundry
- Legionella Awareness
- Abrasive Wheels



PRICE LIST



Service	Price
Technical Boiler House Risk Assessment (TBHRA)	£4,250.00 + expenses

Virtual (Online) Courses				
Course Title	Duration	Price (per person)	5 Year Accreditation (Optional) + £100.00	
Steam Utilisation (SU)	1-Day	£300.00	✓	
Boiler House (BH)	1-Day	£300.00	✓	
Water Treatment (WT)	1-Day	£300.00	✓	
SU BH - Refresher	1-Day	£300.00	✓	
BOAS (Cat 2)	3-Day	Contact Us		
BOAS (Cat 2) - Refresher	1-Day	Contact Us		

In-House Courses				
Course Title	Duration	Price (per person)	5 Year Accreditation (Optional) + £100.00	
Steam Utilisation (SU)	1-Day	£350.00	✓	
Boiler House (BH)	1-Day	£350.00	✓	
Water Treatment (WT)	1-Day	£350.00	✓	
Steam Plant & Maintenance	1-Day	£350.00	✓	
Steam Boiler Water Treatment (CEA)	2-Day	£700.00	✓	
Steam Design	2-Day	£700.00	✓	
Hazardous Fluids	1-Day	£350.00	✓	
Steam & Boiler House Awareness	1 Day	£350.00	X	
Pressure System Awareness	1-Day	£350.00	X	
BOAS (Cat 1, 2, 3 & 5)	Contact Us			
BOAS (Refresher)	Contact Us			

On-Site Courses

<u>All</u> of our bespoke training courses can be undertaken at our customer's facilities. Please get in touch to find out more.



2022 TRAINING CALENDAR



		Steam Utilisation	Boiler House	Water Treatment	SU & BH Refresher	BOAS (Cat 2)	BOAS (Cat 2) Refresher
lan	<u> </u>	Mon: 31st				10th - 13th	
Jan						24th - 26th	
- Cab	<u>e</u>	Mon: 28 Feb	Tue: 01st	Wed: 02nd		07th - 10th	
Feb		Mon: 14th	Tue: 15th	Wed: 16th			Thu: 24th
Mar	ŭ	Wed: 16th	Tue: 01st Thu: 17th	Wed: 02nd Fri: 18th	Thu: 03rd	07th - 10th	14th - 15th
		Mon: 21st	Tue: 22nd	Wed: 23rd	Fri: 04th		
A m r	ê	Mon: 11th	Tue: 12th	Wed: 13th			
Apr		Mon: 25th	Tue: 26th	Wed: 27th	Thu: 07th	19th - 21st	Wed: 06th
May					Thu: 26th	09th - 12th	03rd - 04th
May		Mon: 16th	Tue: 17th	Wed: 18th			Tue: 31st
		Wed: 08th	Thu: 09th	Fri: 10th			
Jun		Mon: 13th	Tue: 14th	Wed: 15th	Wed: 01st	20th - 22nd	
Jul		Mon: 11th	Tue: 12th	Wed: 13th	Thu: 28th	18th - 21st	04th - 05th
Jui		Mon: 25th	Tue: 26th	Wed: 27th			
Aug		Mon: 08th	Tue: 09th	Wed: 10th			
Aug		Mon: 22nd	Tue: 23rd	Wed: 24th	Fri: 05th	15th - 17th	Thu: 04th
Son		Mon: 12th	Tue: 13th	Wed: 14th		05th - 08th	26th - 27th
Sep		Mon: 19th	Tue: 20th	Wed: 21st			
Oct	û	Mon: 03rd	Tue: 04th	Wed: 05th			31st - 01st
Oct		Mon: 24th	Tue: 25th	Wed: 26th	Fri: 21st	10th - 12th	Thu: 20th
Nov		Mon: 07th	Tue: 08th	Wed: 09th		14th - 17th	
Nov		Mon: 21st	Tue: 22nd	Wed: 23rd			Wed: 30th
	<u> </u>	Mon: 12th	Tue: 13th	Wed: 14th	Thu: 15th		
Dec		Mon: 05th	Tue: 06th	Wed: 07th	Thu: 01st		

Vov	In-House
Key	Virtual