



Your industrial boiler is at the heart of your operations and having fully functioning, energy efficient equipment is essential to keeping your business running smoothly.

An OEM service contract is a pro-active approach to routine maintenance which will reduce downtime and increase productivity.

To ensure you will always deal with the right person for your specific requirements, our service team is split into three departments -

- Planned Maintenance (Annual & Burner Servicing)
- Reactive (Breakdowns & Callouts)
- Upgrades (Conversions & Small Works)

PLANNED MAINTENANCE

Your servicing requirements are unique to you and your plant. This is why our boiler servicing contracts are tailor made to suit your individual needs, as well as covering all the essentials including a full maintenance and repair service, boiler health checks and emergency call outs.

Preventative regular burner and industrial boiler servicing not only minimises downtime but also ensures optimum fuel efficiency of your boiler. Our choice of service packages cover -

- Routine Boiler and Burner servicing
- Annual and 6 monthly health checks
- Insurance inspection preparation
- Ad-hoc servicing and repairs
- Efficiency checks





BREAK FIX

If your equipment breaks down, you can feel confident in the fact that our engineers fix 93% of problems during their first visit. This means you and your facility are up and running as soon as possible.

The urgency of your repair needs is of paramount importance to us and we aim to have one of our skilled engineers to your site as quickly as possible.

As an OEM we work closely with our suppliers to ensure materials are competitively priced and readily available.

Bespoke products are manufactured in our factory and an extensive range of replacement parts are available from our warehouse.

Sortimo Sortim

Our engineers carry in their vans over 360 stock items carefully selected by our team of industrial boiler specialists, minimising the need for a second visit.



Contact us -+44 (0)1535 665225 service@ byworth.co.uk



UPGRADES & REPAÎRS

Repairs

Our engineers are trained to resolve a variety of on site repairs including -

- Tube repairs
- Furnace mouth repairs
- All refractory repairs and replacements to boiler furnaces and doors
- Ceramic liner
- Bespoke quarls designed and manufactured for burner retrofits

Your service and upgrade requirements are not limited to Byworth equipment, our engineers are trained by many component suppliers and manufacturers.

Upgrades

Can your current equipment operate more efficiently?

Frequently, customers consider replacing or upgrading parts on their boiler to boost efficiency. Our friendly team of experts will help ascertain the most energy efficient solution to suit your individual application requirements.

Upgrades include -

- Modulating level controls
- Burners
- Economisers

We can also increace the level of safety of the boiler by installing better quality probes.

Average Savings on upgrades -

Burners - Fuel costs are typically reduced by 3%*

Economisers - Fuel costs are typically reduced by 5%*

* At MCR



Unity is an advanced boiler control system offering unprecedented management, efficiency, visibility, and fingertip control. It is capable of recording and cross-referencing data trends from every discrete system area to implement efficiency and cost-saving responses.

Unity's value is in its capability to significantly reduce cost, improve product & service performance and provide better value to our customers with improved response times as well as enhanced onsite efficiency.

Unity can be retrofitted to your plant by one of our highly experienced service engineers, so it is never too late to consider upgrading to a Unity controlled system.





A comprehensive range of industrial boiler spares available for immediate despatch.

Completing your boiler repairs as quickly as possible is vital to keeping downtime to a minimum – when things go wrong waiting for parts just isn't an option!

Whether you have steam boilers, industrial hot water boilers or any ancillary equipment, we can despatch your parts immediately.

Popular stocked items -

- Pumps
- Valve
- Flange, manhole and mudhole gaskets
- Water treatment chemicals & kits
- Heat exchangers
- Flue gas economisers
- Hotwell tanks
- Blowdown vessels
- Steam accumulators

- Door seals
- Gauge glasses
- Sight glasses
- Refractory
- Pipework insulation
- Ceramic insulation
- Byworth can also supply replacement boiler sections for all types of industrial boilers, including shell and tube sections, furnaces and boiler repair plates



Keeping your plant running
Same day despatch from our
Spares & Trade counter





As the leading British boiler manufacturer, Byworth offers candidates a unique operation training experience.

Your boiler operators are key to ensuring reliable, safe, and efficient day to day running of your plant, therefore investment in training will have a direct impact on your boiler operation.

Leverage Byworth's market leading training facilities alongside the extensive experience of our trainers to give your operators the best opportunity to learn.

Attendees will gain valuable practical experience in our operational boiler house, the theory of boiler operation in our customer centre, and witness British steam boiler manufacture from raw material to completed product in our manufacturing facility.

Our Courses

- Steam Introduction
- Boiler Operator Fundamentals
- Safe Operation & Management of Industrial Steam Boilers (Assured by City & Guilds)
- **Boiler Operator Accreditation Scheme**
 - Risk Assessment
- Water Treatment

(BOAS)

If your organisation requires a number of candidates to be trained or specific training on your own boiler plant, Byworth can offer training at your site tailored to your specific needs. **Byworth**

> Hands on, practical training in a controlled environment is the best way to learn how to safely operate and maintain a boiler.

STEAM INTR®DUCTION

An informative and invaluable one day course, open to individual companies. Perfect for those who want to increase employee awareness when working with, or around, steam systems.

Covering everything from the fundamentals of steam to the components used in steam systems and the steam/condensate cycle. The practical applications of safe and efficient boiler operation are also addressed.



block with views over the manufacturing

floor, so you get a real feel of the work going on around you.

We had a tour of the working areas which was very interesting all the aspects of manufacture were explained from delivery of sheet metal to the finished product all wrapped and leaving site. Job well done!"

Trustpilot review

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.::FUNDAMENTALS

The Fundamentals course is intended to give an introduction to persons who have limited experience of boiler operation focusing on best practice for maintaining a more efficient plant.



This two day course delivered at our manufacturing facility, Keighley, West Yorkshire, covers a number of topics: -

- Steam fundamentals
- Principles of heat transfer
- Basic overview of boiler controls: water level controls, blow down procedures, etc
- Routine safety checks including: gauge glass operation, evaporation test & cold start-up
- An introduction to feed water systems and water treatment
- Basic boiler house management
- Boiler construction (including factory tour)
- Safety guidelines Including: HSE Guidance notes INDG436 and BG01
- Delegates have the opportunity to operate a live boiler and witness various stages of our production line, gaining a unique insight into the subject matter

WOTER TREATMENT

The water quality in your boiler has a big impact on energy efficiency and the reliability of your whole steam system. Poor or inadequate steam boiler water treatment has been shown to be the cause of 95% of all boiler failures. Often this is a result of poor management of the water treatment regime by whoever is collectively deemed responsible.

Byworths water treatment course in accordance with BG01, will provide you with the skills you need to be able to monitor and control your boiler water quality to suit the changing steam demand on your boiler.

Delegates will have the opportunity to work with live testing, using chemicals to ascertain certain water conditions.

The course is limited on the number of delegates to ensure there are a maximum of 6 people per trainer when completing the live testing.

This course can be tailored to suit customers needs and can be run in your own boilerhouse.





Safe Operation & Management of Industrial Steam Boilers

ASSURED

Built from our extensive knowledge of training apprentices, boiler makers, and delivering traditional boiler operation courses, our City and Guilds assured Steam Boiler Operator course puts practical skills at the forefront, leveraging our modern facilities to back theory with assessed practical skills.

This course is designed to give candidates a thorough understanding of the boiler house and industrial boiler operation, giving operators the knowledge required to confidently operate their own equipment safely and efficiently.

Incorporating both practical and classroom based learning, this logical and holistic approach to boiler training ensures candidates are given the opportunity to engage with the working within the boiler house environment. trainer, the equipment, and the learning process.

The 12 teaching modules are logically arranged to cover the boiler system from cold water supply, through control, and ending with the basics of boiler management. At the end of each section of learning there will be a short online exam or practical assessment.

Assessing the course in this way reduces the stress and anxiety that can be caused by an end point assessment and allows candidates to focus on the key learning points from each module.

The practical elements of the course will be assessed by industry professionals with many years of experience

Course Key Learning Points:

- Recognise & deal with emergencies, safely re-start the system

- Understand legal responsibilities relating to steam systems

- The ability to interpret, test & manage water treatment

- Calibration, testing & setting of blowdown systems

- Diagnose & fix common water level issues

- Carry out Daily & Weekly testing

- Where to start with risk assessment

- Future technologies (metering & control)

- Manage the steam system to return optimum efficiency

- Recognise & understand the basic components of a steam system

- Read & interpret combustion results, recognising good combustion







ACCREDITATION

The Boiler Operator Accreditation Scheme (BOAS) is intended to give Accreditation to persons who already have experience of boiler operation.

The course aids attendees in satisfying BG01 'Guidance on Safe Operation of Boilers' recommendations, with operators advised to attain 'Certified Industrial Boiler Operator' status (Cert.IBO) and managers 'Diploma in Boiler Plant Operation Management' (Dip.BQM), respectively.

Our consultants tailor the course content and discussion to your site requirements with lots of best practice tips for maintaining a more efficient plant.

This four day course covers all aspects of the boiler house from the principals of steam through general operation and maintenance, to efficiency, environmental issues, and legislative requirements.

Delegates will have the opportunity to work on a live boiler and witness boilers at each stage of production, gaining a unique insight into the subject matter.

The course covers the following topics: -

- Principles of heat transfer
- Detailed overview of boiler controls: water level controls, blowdown procedures, etc
- Routine safety checks including: gauge glass operation, evaporation test & cold start-up
- Feed water storage systems and water treatment
- Boiler house management
- Boiler construction (including factory tour)
- Safety guidelines Including: HSE Guidance notes INDG436 and BG01



"I took the BOAS boiler training course BG01 at Byworth Boilers.

I have to commend the team there on their professional, friendly, and supportive way in which we were treated.

Our tutor presented the theory and practical elements in a way that made you feel relaxed and comfortable. You could not ask for better people to get you through the course work and the exam."

Customer Review



R!SK ASSESSMENT

Having a current risk assessment of your boiler house is a legal requirement under the Management Health and Safety at Work Regulations.

Once completed the risk assessment will cover the consideration of legal compliance. e.g. record keeping and training requirements.

The position of the boiler house to its surrounding area, equipment within the boiler house, chemical storage and health and safety are all considered.

This course runs over two days.

Day 1 - Introduction to Risk Assessment and assessment approaches specific to boiler houses.

Day 2 - Consultancy/workshop on the deligates current risk assessment.



Training Comparison

Subjects Covered	Steam Introduction	Fundamental 1 Day	Fundamental 2 Day	Water Treatment	City & Guilds	BOAS	Risk Workshop
Heat Transfer Principles	•	•	•		•	•	
Steam Fundamentals	•	•	•		•	•	
Primary Water Treatment	•	•	•		•	•	
Secondary Water Treatment	•		•	•	•	•	
Steam/Condensate Cycle	•	•	•	•	•	•	
Generic Steam System	•	•	•	•	•	•	
Principles of Safe Operation	•	•	•		•	•	
Boiler Construction	•	•	•		•	•	
Fundamentals of Combustion		•	•		•	•	
Controlling Combustion		•	•		•	•	
Controlling Water Level		•	•	•	•	•	
Verifying Alarms		•	•		•	•	
Boiler Operator Routines		•	•		•	•	
Controlling TDS			•	•	•	•	
Guidance & Best Practice	•		•	•	•	•	•
Regulations	•	•	•		•	•	•
Risk Assessment			•	•	•	•	•
Controlling Steam System		•			•		
Troubleshooting		•			•		
Environmental			•		•	•	
Metering					•		
Practical Sessions		•	•	•	•	•	•

IntroductionIntermediateAdvanced

Assessment Method

Certificate Of Attendance	•	•	•	•			
Quiz	•	•	•	•			
Examination					•	•	
Assessment					•	•	
Workshop							•

Location

Duration	1 day	1 day	2 days	1 day	5 days	4 days	2 days
Keighley	•	•	•	•	•	•	
On-Site		•	•	•		•	•

Notes

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