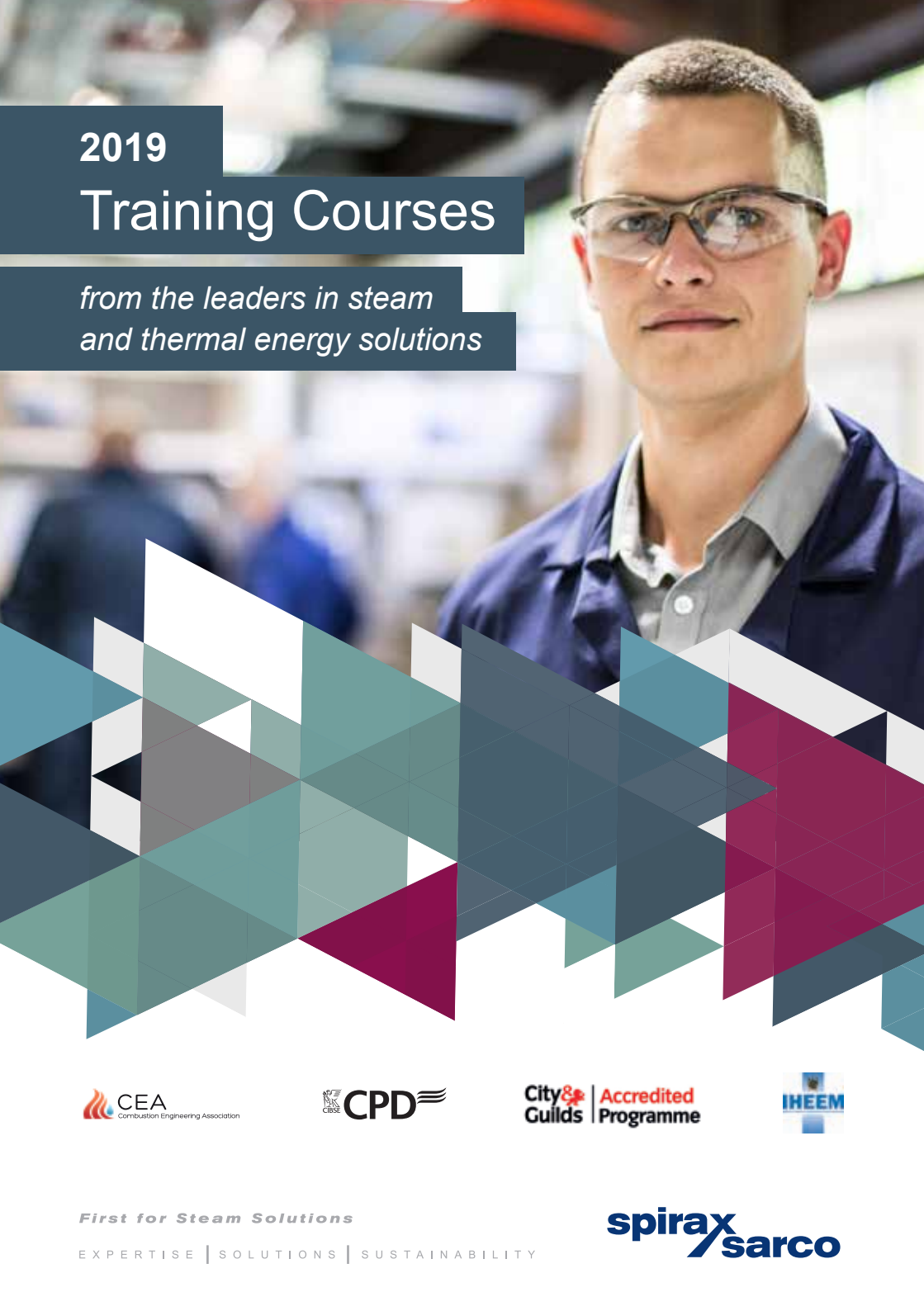


2019

Training Courses

*from the leaders in steam
and thermal energy solutions*



First for Steam Solutions

EXPERTISE | SOLUTIONS | SUSTAINABILITY

spirax
/sarco



Contents

Welcome	4
Our training pedigree and facilities	6
Rewarding competence	8
Building the case for investing in training	10
Introducing our Training Centre	12
Boiler Operator training path	14
Onsite training offering	16
Correspondence courses	18
Our training centre portfolio	20
Icon key	22

New to Steam Courses

Introduction to Steam and Condensate Systems	24
Steam Boiler Plant Fundamentals (Shell Boiler)	25

Boiler House Courses

Steam Boiler Plant Fundamentals (Shell Boiler)	28
Introduction to Boiler House Risk Assessment for managers	29



Boiler Operation Accreditation Scheme (BOAS) – Operator and Manager30

Boiler Operation Accreditation Scheme (BOAS) – Operator and Manager Renewal32

Boiler House Water Treatment34

Maintenance Courses

Steam Plant Maintenance: City & Guilds Accredited36

Safety Valve Accreditation37

Specialist Courses

Design of Steam and Condensate Systems40

Boiler House Water Treatment41

Legionella Awareness42

Specialist training43

How to book44

Get in touch45

You're in good company46



Welcome

Welcome to the Spirax Sarco 2019 training course brochure.

The world and European situation may appear unsettling at present for many but now is definitely not the time to take your eye off the ball with regards to training.

As a business there are always critical elements and a changing backdrop but the

responsibility to your people is an underlying constant.

The investment in training provides an opportunity to demonstrate your commitment to your teams and to their safety. I am pleased to announce that our continued relationship with City & Guilds has meant our Steam Plant Maintenance and Steam Boiler Plant Fundamentals courses have, once again, been



best sellers in 2018. Companies are realising the value of their investment in people and proving competence and giving individuals the skills they need motivates the workforce and increases competitive advantage. We have strengthened our ties this year and have now gained recognition in the Healthcare sector through IHEEM for both of the above mentioned courses.

We will continue to make changes to the courses, especially in line with your feedback, including how we deliver the courses to you

and ensuring that we make full use of the outstanding facilities we have in our training centre. Don't forget to visit our website at sxscm.uk/SpiraxTraining for all the latest news. Wishing you continued success throughout 2019.

Sally O'Connell

Sally O'Connell
UK Steam Technology Centre Manager



Our training pedigree and facilities >



Our training courses offer a unique opportunity to learn with the leading experts in steam technology. We are known for our quality products and knowledgeable approach, but it's our people who make us different. They have an unparalleled understanding of the application of steam across a wide range of industries which enables us to ensure our courses are:

- Current and up to date
- Relevant to your sector

By providing the skills and knowledge that can be used back in your workplace, we can help you to:

- Maximise the efficiency of your steam systems
- Increase steam safety
- Optimise performance
- Demonstrate competence and understanding



Rewarding competence >

We are frequently asked how you can demonstrate that your team are competent to do their job.
We work with a selection of companies to accredit our courses to help you fulfil this need.



CITY & GUILDS



City & Guilds are the UK's leading vocational awarding body. Our Steam Plant Maintenance and Steam Boiler Plant Fundamentals courses are accredited with them to provide you with the reassurance it is of the highest quality. We are also continually working on the formal accreditation of a number of our other courses.

COMBUSTION ENGINEERING ASSOCIATION (CEA)



The CEA is an educational charity which aims to promote the science of combustion engineering. We are an approved training provider of the Boiler Operator Accreditation Scheme (BOAS) for boiler operators and managers.

CONTINUING PROFESSIONAL DEVELOPMENT



We are committed to the principles of continual learning and demonstration of best practice. The majority of our courses are therefore also available as evidence of continuing professional development (CPD) through the Chartered Institution of Building Services Engineers (CIBSE).

INSTITUTE OF HEALTHCARE ENGINEERING AND ESTATE MANAGEMENT (IHEEM)



IHEEM is the UK's largest specialist Institute for the Healthcare Estates Sector. IHEEM recognises courses as being particularly relevant for those employed in the healthcare estates sector.



Building the case for investing in training >

Training should always be considered an investment but sometimes requesting the funds for your plans is not always straight forward. So to help you secure your budget here are the key reasons for investing in training. You can find more detailed information on our website.



**IMPROVES STAFF
RETENTION AND
MOTIVATION**



**PROVIDES THE
KNOWLEDGE FOR YOUR
TEAM TO WORK SAFELY**



**INCREASES
PRODUCTIVITY**



**ALLOWS YOU AND
THE TEAM TO KEEP
UP TO DATE**



**UPSILLS YOUR
WORKFORCE TO CREATE A
DIVERSE SKILL SET**



**PROMOTES HIGHER
LEVELS OF CUSTOMER
SATISFACTION**



**SPECIFIC JOB
REQUIREMENT E.G. BOILER
OPERATORS AND BOAS**



**INCREASES
YOUR COMPETITIVE
ADVANTAGE**



**YOU CAN ATTRACT THE
BEST TALENT IN THE
MARKETPLACE**

And if that hasn't persuaded you then consider this quote by the late American author and motivational speaker, Zig Ziglar >

" The only thing worse than training an employee and having them leave, is to not train them, and have them stay. **"**



Introducing our Training Centre >

Training courses are delivered at our state of the art training facility in Cheltenham. We have a fully working boiler house, demonstration and practical areas which allow delegates the chance to get hands on and put the theory into practice.

Take a virtual tour of the centre at [sxscom.uk/STCTour](https://www.spiraxsarco.com/training/virtual-tour)



REASONS TO TRAIN WITH US

1

Expert Trainers

Our trainers have the knowledge and experience to understand your challenges, ensuring content is relevant, up to date and practical, wherever possible.

2

Unrivalled Reputation

We have an unrivalled reputation for the quality of our training.

3

High Calibre Facilities

Our extensive training facilities including live boiler house and practical areas allow safe learning in a controlled environment.

4

Tailored Solutions

We also offer onsite training and bespoke training tailored to suit your requirements.

5

Widest Range of Courses

A range of courses to suit each level.



Boiler Operator training path >

If boiler operation is your chosen role, we have outlined the typical training path you could take.



STEP ONE

Basic introduction to steam systems.
See course B1 | Page 24

STEP TWO

Steam Boiler Plant Fundamentals
See course D6 | Page 25

6 months+ boiler house experience gained

STEP THREE

Accredited course in boiler operation and boiler house plant.
See course D6A | Page 30-31

5 year Renewal process

STEP FOUR

Accredited refresher course in boiler operation and boiler house plant
See course D6A | Page 32-33



Onsite Training offering

Can't attend our training centre? Don't worry we can come to you.

For the majority of our courses we can offer delivery of the course at your premises.



Just look out for the onsite icon next to the course to see which ones are available onsite.



HOW DOES IT WORK?

Simple: we pack everything up and bring it to you! However, please book early because our trainers are in demand!

WHAT DO YOU NEED TO DO?

Arrange a suitable training room and facilities and gather your delegates together.

HOW IS THIS PRICED?

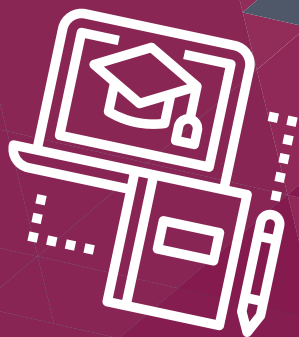
Each course has a minimum delegate requirement. Speak to us with details of your delegate numbers and location for the course and we can discuss the best option for you.

BESPOKE TRAINING

For something a little more specific to your requirements, we are also able to tailor the majority of courses or create a bespoke course specifically designed for your requirements.

Speak to us about your requirements and we will put together a suitable proposal and transparent costings.





Correspondence courses >

Did you know we also provide some complimentary learning support materials?

We know that some of you may wish to brush up on your knowledge before attending a course.



Our comprehensive correspondence courses are available in the following subjects:

AUTOMATIC CONTROLS - AN INTRODUCTION

Providing a basic introduction to automatic controls, with specific emphasis on temperature control.

HOT WATER HEATING

Focusing on an important part of the building services package - the hot water heating system. This course broadly covers some aspects of its design and function.

STEAM UTILISATION

A comprehensive course covering the properties of steam, making the best use of steam and steam plants and understanding how to become more efficient.

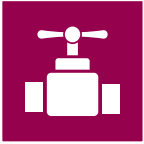
Each course is stand alone but they do complement the scheduled courses on offer and individuals may choose to study before attendance.

If you would like to register for one of these courses, visit our website at sxsc.com.uk/SpiraxTraining and complete the registration form.



Our Training Course portfolio >

Our courses are structured by category as follows:



NEW TO STEAM

For those needing the underpinning knowledge and introduction to steam and boilers.



BOILER HOUSE

Covering all aspects of the boiler house, safety and efficiency from fundamental level through to the BOAS accreditation.



MAINTENANCE

Comprehensive maintenance training to help you cut costs and improve the efficiency of your steam system.



SPECIALIST

A suite of specialist courses covering key topics affecting the steam and energy industry aimed at helping improve efficiency and cost savings.

Whilst courses may fall into more than one category we feel these make it easier for you to locate the course most suitable for your requirements.

On the following pages you will find a detailed description about each course, together with dates and prices. For further information please visit our website which will also be updated throughout the year with additional course dates and any new courses we launch.

Icon Key



NEW TO STEAM

For those needing the underpinning knowledge and an introduction to steam and boilers.



BOILER HOUSE

Covering all aspects of the boiler house, safety and efficiency from a fundamental level through to the BOAS accreditation.



MAINTENANCE

Comprehensive maintenance training to help you cut costs and improve the efficiency of your steam system.



SPECIALIST

A suite of specialist courses covering key topics affecting the steam and energy industry aimed at helping you improve efficiency and cost savings.



ONSITE

We can deliver this course at your site.



ACCREDITATION

This course provides an industry recognised accreditation.



PROGRESSION

This course is part of an overall training path.



CPD POINTS

Providing you with evidence of continuing professional development.



BESPOKE TRAINING

The content can be tailored to your specific requirements when delivering at your site.



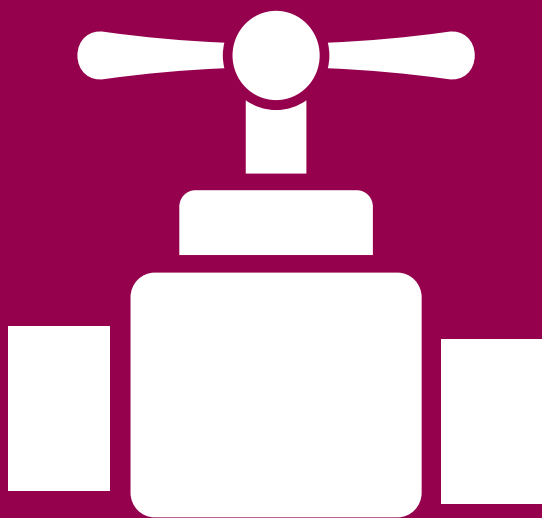
REVISED

To indicate when something has recently changed in a course.



APPRENTICES

This course is a great introduction for apprentices.



**NEW TO
STEAM
COURSES**



“

Really good introduction to how the different components work and why they are needed.

”

**DURATION**

1 DAY

DATES

21st January
12th February
27th February
26th April
10th June
2nd July
6th August
20th August
10th September
1st October
11th November
9th December

COST

£350+VAT

COURSE REF

B1

Introduction to Steam and Condensate Systems

WHO IS IT FOR?

Anyone requiring an appreciation of steam and condensate systems and factors affecting operation.

WHAT IS IT ABOUT?

This course provides a broad understanding of the purpose and safe operational requirements of steam and condensate systems.

COURSE OBJECTIVES

By the end of the course delegates will be able to:

- Understand the fundamentals of steam and its uses
- Understand why condensate is formed, how and why it is removed and its value
- Know the major components of a steam and condensate system
- Understand how steam gets to the point of use
- Understand the reasons for reducing pressure at the point of use

**DURATION**

2 DAYS

DATES

9th-10th January

22nd-23rd January

13th-14th February

28th February-1st
March

9th-10th April

24th-25th April

8th-9th May

21st-22nd May

17th-18th June

25th-26th June

15th-16th July

29th-30th July

21st-22nd August

28th-29th August

18th-19th
September

14th-15th October

17th-18th October

30th-31st October

12th-13th November

25th-26th November

10th-11th December

COST

£675+VAT

COURSE REF

D6S



Steam Boiler Plant Fundamentals (Shell Boiler) City & Guilds Accredited

WHO IS IT FOR?

Anyone involved in the day to day running of steam boilers – large and small, including newly appointed trainees and boiler operators as well as suitably trained and instructed persons. It is also relevant to those who are responsible for answering alarms and those needing an overview of how a boiler works or as a pre-cursor to the BOAS course.

WHAT IS IT ABOUT?

This practical course provides an understanding of the wet side of the boiler and outline trends in the management and control of boiler plant in order to achieve high levels of efficiency and safety with smooth operation.

COURSE OBJECTIVES

By the end of the course delegates will be able to:

- Identify major types of boilers – upright steam and shell boilers
- Understand the boiler fittings and their use
- Know the types of daily/weekly tests recommended
- Understand elements of feedwater treatment, deaeration and storage
- Understand boiler water level control, evaporation test and alarms
- Understand blowdown controls, vessels and pits
- Appreciate the benefits of heat recovering systems and efficiency fundamentals
- Understand the requirements of efficient best practice including BG01 ('Guidance on Safe Operation of Boilers')
- Understand how boilers produce steam and how this can affect other areas of the steam plant, e.g. load, erosion and water hammer

This course is only relevant to those operating shell boilers.

ADDITIONAL INFORMATION

The course delivered at our Training Centre is assessed by multiple choice test paper and practical assessment. Spirax Sarco is accredited by The City and Guilds of London Institute to deliver this course. Delegates will take practical and written tests as part of the course.

The City & Guilds accreditation does not apply to onsite delivery.



BOILER HOUSE COURSES



DURATION

2 DAYS

DATES

9th-10th January
22nd-23rd January
13th-14th February
28th February-1st March
9th-10th April
24th-25th April
8th-9th May
21st-22nd May
17th-18th June
25th-26th June
15th-16th July
29th-30th July
21st-22nd August
28th-29th August
18th-19th September
14th-15th October
17th-18th October
30th-31st October
12th-13th November
25th-26th November
10th-11th December

COST

£675+VAT

COURSE REF

D6S



Steam Boiler Plant Fundamentals (Shell Boiler) City & Guilds Accredited

WHO IS IT FOR?

Anyone involved in the day to day running of steam boilers – large and small, including newly appointed trainees and boiler operators as well as suitably trained and instructed persons. It is also relevant to those who are responsible for answering alarms and those needing an overview of how a boiler works or as a pre-cursor to the BOAS course.

WHAT IS IT ABOUT?

This practical course provides an understanding of the wet side of the boiler and outline trends in the management and control of boiler plant in order to achieve high levels of efficiency and safety with smooth operation.

COURSE OBJECTIVES

By the end of the course delegates will be able to:

- Identify major types of boilers – upright steam and shell boilers
- Understand the boiler fittings and their use
- Know the types of daily/weekly tests recommended
- Understand elements of feedwater treatment, deaeration and storage
- Understand boiler water level control, evaporation test and alarms
- Understand blowdown controls, vessels and pits
- Appreciate the benefits of heat recovering systems and efficiency fundamentals
- Understand the requirements of efficient best practice including BG01 ('Guidance on Safe Operation of Boilers')
- Understand how boilers produce steam and how this can affect other areas of the steam plant, e.g. load, erosion and water hammer

This course is only relevant to those operating shell boilers.

ADDITIONAL INFORMATION

The course delivered at our Training Centre is assessed by multiple choice test paper and practical assessment. Spirax Sarco is accredited by The City and Guilds of London Institute to deliver this course. Delegates will take practical and written tests as part of the course.

The City & Guilds accreditation does not apply to onsite delivery.



DURATION
1 DAY

DATES
15th February
11th April
19th June
17th July
16th October

COST
£350+VAT

COURSE REF
RA1

Introduction to Boiler House Risk Assessment for Managers

WHO IS IT FOR?

Anyone involved in the safe operation and assessment of a boiler house, boiler house operatives and managers.

WHAT IS IT ABOUT?

A practical course designed to provide an overview of the requirements of INDG436: Safe Management of industrial steam and hot water boilers in terms of risk assessments specific to the boiler house, the requirements of the legislation and a practical related activity using our boiler house.

COURSE OBJECTIVES

By the end of the course delegates will be able to:

- Understand the principles of risk assessment
- Complete the risk assessment process
- Know the definition of a competent person
- Identify and know the requirements of INDG436 and associated legislation
- Know the specific requirements for conducting a boiler house risk assessment

“ Made me think about my site. I will now be looking into my boiler house systems and procedures. ”



DURATION

5 DAYS

DATES

28th January-1st February
11th-15th February
25th-29th March
8th-12th April
20th-24th May
10th-14th June
1st-5th July
5th-9th August
9th-13th September
30th September-4th October
28th October-1st November
11th-15th November
25th-29th November
9th-13th December

COST

£1435+vat PLUS
KIWA registration
and assessment
fees (subject to
change)

KIWA fees
£475+vat for
Operator Cat 2
£525+vat for
Manager Cat 2

£150+VAT for dual
award (Operator/
Manager)

COURSE REF

D6A



Boiler Operation Accreditation Scheme (BOAS) – Operator and Manager

WHO IS IT FOR?

This course is designed for practicing boiler house operatives or those responsible for managing a boiler house and its operators.

WHAT IS IT ABOUT?

The Boiler Operation Accreditation Scheme (BOAS) provides national accreditation for industrial boiler operators and boiler plant managers. The BG01 guidelines recommend that all competent persons and owners/managers achieve the national industry standards which form part of the BOAS scheme.

Spirax Sarco is a licensed and approved BOAS training provider. This course provides preparation for undertaking the BOAS assessment covering all aspects of the required syllabus.

Successful candidates may use the designatory letters “Cert IBO” (Certified Industrial Boiler Operator) or “Dip BOM” (Diploma in Boiler Plant Operation Management). Candidates from both award categories take the same course and written papers³. Interviews are specific to each award.

Delegates taking the Cert IBO and Dip BOM will achieve Dual Award status.

All awards are valid for five years, after which a renewal course becomes necessary⁴.

This course only covers CAT 2 (shell boilers).
Onsite delivery only of Cat 3 (water tube) may be an option, please enquire.

COURSE OBJECTIVES

- To deliver the BOAS syllabus
- To prepare candidates for the BOAS accreditation

The syllabus⁵ will contain information on the following topics:

- Steam fundamentals
- Types of fuel, combustion and draught
- Feedwater
- Boilers, controls and instrumentation
- Operation
- Safety and legal requirements
- Efficiency and environment
- Management

THE ASSESSMENT PROCESS

The course includes all elements of the assessment process.

Both Operators and Managers need to complete the following:

1. Completion of mandatory evidence pack (different requirements for Operators and Managers)
2. Completion of series of written examinations¹
3. Interview with a third party (KIWA) assessor to establish the individual's knowledge and understanding, ability, skills and experience²

PRE-REQUISITES

ESSENTIAL

Boiler house operatives **MUST HAVE** 6 months (or 100 hours) verified practical experience.
Supply of paperwork/collation of evidence pack.

RECOMMENDED

Familiarisation with the BG01 guidelines. Attendance on the Steam Boiler Plant Fundamentals course – see page 28.

NOTES

¹ The course includes written examination papers. All candidates are required to sit examination papers regardless of award.

² Candidates from sites having shell boilers (CAT 2) are interviewed during the course.

³ Exact examination papers undertaken will vary depending on boiler type or award.

⁴ A renewal course is necessary at five yearly intervals – see page 32.

⁵ Syllabus may be subject to change.



DURATION

3 DAYS

DATES

25th-27th February

8th-10th May

29th-31st May

19th-21st June

12th-14th August

16th-18th
September

22nd-24th October

5th-7th November

4th-6th December

COST

£760+VAT PLUS
KIWA registration
and assessment
fees (subject to
change)

KIWA fees

£475+vat

Operator Cat

£525+VAT

Manager Cat 2

£150+vat for Dual
award (operator
and manager)

COURSE REF

D6AR



Boiler Operation Accreditation Scheme (BOAS) – Operator and Manager – Renewal

WHO IS IT FOR?

Qualified boiler operators and boiler plant managers/supervisors who have already undertaken the BOAS course and are already entitled to use the designatory letters “Cert IBO” and “Dip BOM” respectively.

For new/inexperienced boiler operators see the Steam Boiler Plant Fundamentals course – page 20.

For boiler operators and managers wishing to obtain a BOAS accreditation see the Boiler Operation Accreditation Scheme course page 22.

WHAT IS IT ABOUT?

The renewal course is for already accredited manager/supervisors and operators. The course should be taken on the fifth anniversary of gaining the BOAS award and five yearly thereafter.

There is no grace period for renewing candidates once the expiry date has been reached. Please contact us before your renewal date. Courses can be taken up to 6 months ahead of expiry.

Spirax Sarco is a licensed and approved BOAS training provider.

This course provides preparation for undertaking the BOAS assessment covering all aspects of the required syllabus. Successful candidates may use the designatory letters.

This course only covers CAT 2 (shell boilers).

Onsite delivery only of Cat 3 (water tube) may be an option, please enquire.

COURSE OBJECTIVES

- To deliver the BOAS syllabus
- To prepare candidates for the BOAS Renewal and re-accreditation

The syllabus will contain information on the following topics:

- Steam fundamentals
- Types of fuel, combustion and draught
- Feedwater
- Boilers, controls and instrumentation
- Operation
- Safety and legal requirements
- Efficiency and environment
- Management

THE ASSESSMENT PROCESS

The course includes all elements of the assessment process.

Both Operators and Managers need to complete the following:

1. Completion of mandatory evidence pack (different requirements for Operators and Managers)
2. Completion of series of written examinations
3. Interview with a third party (KIWA) assessor to establish the individual's knowledge and understanding, ability skills and experience.

PRE-REQUISITES

ESSENTIAL

Already BOAS accredited. Please contact us for rules regarding expiry dates and renewal.
Supply of mandatory evidence pack (requirements will be supplied).

RECOMMENDED

Familiarisation of the BG01 guidelines.

Attendance on Steam Boiler Plant Fundamentals course – see page 28.



DURATION

1 DAY

DATES

28th March

20th May

17th July

3rd October

COST

£360+VAT

COURSE REF

W1

Boiler House Water Treatment

WHO IS IT FOR?

Anyone involved in the day to day running of steam boilers and utility plant including site technicians, boiler operators, supervisors, plant engineers and maintenance engineers.

WHAT IS IT ABOUT?

This course is designed to explain why water treatment of steam plant helps ensure it operates safely and efficiently. The aim is to provide delegates with knowledge and information to help manage and treat the system effectively.

COURSE OBJECTIVES

By the end of the course delegates will be able to:

- Understand the importance of managing water treatment operations
- Understand the importance of water treatment guidelines
- Design and implement schemes to prevent scale, corrosion and fouling
- Understand chemical dosing requirements
- Know how to put a boiler water treatment strategy in place

ADDITIONAL INFORMATION

This course is run in collaboration with WCS Group.



MAINTENANCE COURSES



DURATION
4 DAYS

DATES
14th-17th January
4th-7th February
18th-21st February
18th-21st March
1st-4th April
15th-18th April
13th-16th May
3rd-6th June
24th-27th June
8th-11th July
22nd-25th July
12th-15th August
2nd-5th September
23rd-26th September
7th-10th October
21st-24th October
4th-7th November
18th-21st November
2nd-5th December
16th-19th December

COST
£1350+VAT

COURSE REF
M2

City & Guilds Accredited Programme



Steam Plant Maintenance – City & Guilds Accredited

WHO IS IT FOR?

Those involved with the maintenance and installation of steam systems and those wishing to obtain a recognised maintenance based steam accreditation.

WHAT IS IT ABOUT?

This course provides delegates with the basic knowledge and practical skills necessary to assess your competence and knowledge based on a City & Guilds approved syllabus.

COURSE OBJECTIVES

By the end of the course delegates will be able to:

- Understand the fundamentals of steam systems
- Demonstrate good installation practices
- Demonstrate fault finding through practical experience
- Maintain steam traps, pressure reducing valves, condensate pumps and other ancillary equipment
- Have an understanding of basic boiler house maintenance – Feedwater treatment and burners

ADDITIONAL INFORMATION

The course is assessed by multiple choice test paper and practical assessment. Spirax Sarco is accredited by The City and Guilds of London Institute to deliver this course. Delegates will take practical and written tests as part of the course.



One of the best courses I've been on.





DURATION

1 DAY

DATES

8th February

17th May

12th July

27th September

8th November

COST

£330+VAT

COURSE REF

M3

Safety Valve Accreditation

WHO IS IT FOR?

Those involved with the installation, maintenance and setting of safety valves and requiring training to work on them.

WHAT IS IT ABOUT?

This course gives an understanding of the importance of safety valves, their sizing, setting and installation and what work may be carried out on them, all in accordance with current legislation.

COURSE OBJECTIVES

By the end of the course delegates will be able to:

- Know the purpose of safety valves
- Understand the selection of set pressure
- Be able to identify factors affecting sizing
- Know the main issues around safety valve installation
- Know the key parts for installation of safety valves
- Understand what maintenance is permissible and how to carry this out safely

ADDITIONAL INFORMATION

This course only applies to Spirax Sarco safety valves.



SPECIALIST COURSES



DURATION

4 DAYS

DATES

Please enquire

COST

£1250+VAT

(to include a copy of the Steam and Condensate Loop book usually priced at £55 plus P&P)

COURSE REF

D1

Design of Steam and Condensate Systems

WHO IS IT FOR?

Designers, plant engineers, consultants and those responsible for the general layout of steam and condensate services.

WHAT IS IT ABOUT?

This project based course provides specialist knowledge of current practices in steam and condensate systems, and the factors to be considered in their design.

COURSE OBJECTIVES

By the end of the course delegates will be able to:

- Understand the properties of steam and why it is used
- Calculate the steam demand for different types of steam plant
- Understand the requirements of steam distribution systems
- Understand the need for different steam traps and air vents
- Understand the different methods of steam trap checking and their advantages and disadvantages
- Explain the requirement to remove and recover condensate
- Understand the need for pressure reduction and the different types available
- Explain the factors affecting control valves
- Realise the importance of flash steam recovery
- Explain how safety valves are set, as well as lifting and leaking
- Size pressure reducing valves, steam pipe, condensate pipe, control valves, steam traps, condensate pumps, flash vessels, safety valves and blowdown vessels

PRE-REQUISITES

A good technical knowledge is needed. Delegates will benefit by first taking the Steam Utilisation correspondence course.

“Very informative & problem solving for true applications.”

**DURATION**

1 DAY

DATES

28th March

20th May

17th July

3rd October

COST

£360 + VAT

COURSE REF

W1

Boiler House Water Treatment

WHO IS IT FOR?

Anyone involved in the day to day running of steam boilers and utility plant including site technicians, boiler operators, supervisors, plant engineers and maintenance engineers.

WHAT IS IT ABOUT?

This course is designed to explain why water treatment of steam plant helps ensure it operates safely and efficiently. The aim is to provide delegates with the knowledge and information to help manage and treat the system effectively.

COURSE OBJECTIVES

By the end of the course delegates will be able to:

- Develop a practical guide to water treatment operations
- Understand the importance of managing water treatment operations
- Develop schemes to prevent scale, corrosion and fouling
- Understand chemical dosing requirements
- Know how to put in place a boiler water treatment strategy

ADDITIONAL INFORMATION

This course is run in collaboration with WCS Group.



DURATION

1 DAY

DATES

16th April

4th September

COST

£295+VAT

COURSE REF

LA1

Legionella Awareness

WHO IS IT FOR?

Anyone involved in monitoring and managing hot and cold water systems to ensure the risk presented by legionella bacteria is minimised.

WHAT IS IT ABOUT?

This course is designed to raise awareness and reduce the risk associated with the water-borne bacteria that cause Legionnaires' disease. Delegates who attend this course will leave with an understanding of how to apply relevant legislation within their day to day duties, with a particular focus on the Health & Safety Executive's new version of the Approved Code of Practice (L8) and accompanying technical guidance (HSG 274) documents.

COURSE OBJECTIVES

By the end of the course delegates will be able to:

- Describe the typical symptoms of Legionnaires' disease and the types of people who are most susceptible
- Discuss methods of transmission of, and infection with, Legionnaire's disease
- Explain the key requirements of the legislation, codes of practice and guidance relating to the management of Legionella
- Identify key roles and responsibilities associated with the management of legionella bacteria
- Describe a risk assessment process and the importance of monitoring and control
- Understand how hot and cold water systems operate
- Identify and apply measures for controlling risks within hot and cold water systems, including testing regimes

ADDITIONAL INFORMATION

On successful completion of the course delegates will be awarded the Level 2 Award in Legionella Awareness (QCF), accredited by the Qualification Regulator in England and Wales, Ofqual.

This course is run in collaboration with WCS Group.



Specialist training

Need something a little more specific? A little more technical?

As the leader in steam and thermal energy solutions, we can help on a range of other more specific topics, training areas that may not need addressing on such a regular basis. Here are some examples of courses we have delivered in the past.

- Clean Steam Systems
- Understanding Pressure & Temperature Control
- Energy Saving Steam Systems & Carbon Reduction
- Steam Metering
- Boiler House Guidelines and Regulations

WHAT DO YOU NEED TO DO?

Call us and chat through your requirements and we will put together a suitable proposal and costings.



How to book

The easiest way to book is to use the online registration form on our website at:

sxscm.uk/SpiraxTraining

If you need any further information about the courses or guidance on which is most suitable then please call us on **01242 535211**, or drop us an email at training@uk.spiraxsarco.com

Please note that prices quoted are per person. Your booking can only be confirmed once we have received your completed registration form and a copy of your purchase order.

WHERE TO STAY

Our courses do not include accommodation but we will send through an up-to-date list of places to stay during your course with your confirmation of booking. This information is also available on our website at sxscm.uk/chelthotels

CATERING

Courses running at our training centre include refreshments and lunch in our outstanding Bistro.



CANCELLATIONS POLICY

Please see our website for latest full cancellation terms and conditions.

Please note we reserve the right to cancel any course date due to a shortage of delegates or unforeseen circumstances. We will provide as much notice as possible but in exceptional circumstances this may not always be possible. We recommend that any hotel bookings are made on a flexible basis.

PRICING

Correct at time of going to press.
Check website for current listings.
KIWA and examination fees may be subject to change.

Get in touch

We'd love to hear from you and we can be contacted as follows:

-  01242 535211
-  training@uk.spiraxsarco.com
-  [sxscom.uk/SpiraxTraining](https://www.sxscom.uk/SpiraxTraining)
-  @Spirax_Sarco_UK
-  SpiraxSarcoUK
-  Spirax Sarco UK

Spirax Sarco | UK Steam Technology Centre
Charlton House | Cirencester Road
Cheltenham | Gloucestershire | GL53 8ER

You're in good company

Here is a small selection of the organisations that have used our UK top class learning facilities:

- Acetate Products
- Airbags International
- Allianz Engineering
- Allied Bakeries
- AstraZeneca
- Coca-Cola
- Corus Strip Products
- Del Monte Foods
- Ferrero Island
- Ford Motor Company, Dagenham
- Georgia Pacific
- GlaxoSmithKline
- Hammersmith Hospital
- Imperial Tobacco
- Kohler Mira
- Mars
- Masterfoods
- Medical Research Council
- Nestlé
- Northumbrian Water
- Palace of Westminster
- Pfizer
- Rank Hovis
- Rolls-Royce Power Engineering
- Roxel UK Rocket Motors
- Royal Holloway University of London
- Royal Sun Alliance
- Smith & Nephew
- St George's Hospital, London
- St Joseph's Hospital, Newport
- Swallowfield Plc
- The Wrigley Company
- Unilever Bestfoods
- Unilever UK Foods
- United Utilities
- Wyeth Labs





UK Steam Technology Centre
Spirax-Sarco Limited, Charlton House, Cheltenham,
Gloucestershire, GL53 8ER, UK
T +44 (0)1242 535211
F +44 (0)1242 535578
E training@uk.spiraxsarco.com
sxscom.uk/SpiraxTraining

