



**Compliance & Validation Services**  
Presents a 3-Hour Online Training Course on:  
**Qualification and Routine  
Testing of Pure Steam Systems**  
20 August 2020  
3-Hour Online Training Course



**Start time:** 08:30 *London/Dublin*  
09:30 *Berlin/Amsterdam*

**Finish time:** 11:30 *London/Dublin*  
12:30 *Berlin/Amsterdam*

### Course Description and Who Should Attend

This course provides guidance on qualification and routine testing of pure steam systems used in pharmaceutical and biopharmaceutical manufacturing. The course includes an overview of the principal classes of steam used with particular focus on pure steam. The course covers qualification requirements including; key design aspects; installation verification activities such as, materials, welding, line slopes and drawing checks; functional tests, such as load / diversity challenge and pressure regulation; performance tests, such as thermodynamic tests on the steam and quality tests on the steam condensate. The course also outlines requirements for routine control and monitoring of pure steam systems. It is aimed at individuals involved directly or indirectly in managing, operating, qualifying and maintaining pure steam systems. Target disciplines include production, quality assurance, validation, technical support and engineering.

### Course Presenter



**John Welbourn, Compliance & Validation Services Limited:** A validation professional with over 30 years experience, John has been responsible for the management and execution of validation projects for many major pharmaceutical companies. He has broad experience in the qualification of equipment, utilities and computerised systems associated with pharmaceutical and biopharmaceutical manufacturing processes. He has presented at conferences in the UK, Europe and the US and has authored several articles on various aspects of validation. John has contributed to The University of Manchester's, Pharmaceutical Engineering Advanced Training (PEAT) Course and Dublin Institute of Technology's (DIT) MSc. course in Pharmaceutical Process Validation.

### Online Training Platform

We use the industry leading GotoWebinar®, LogMeIn, Inc. platform for our online training courses. It's intuitive and simple to use, however we do recommend that you check your system's compatibility using the '**CHECK SYSTEM COMPATIBILITY**' link provided below (we use 'standard webinar'). To find out more about how our online training process works, from booking through to the end of the course, please click on the '**HOW IT WORKS**' link provided below:

[CHECK SYSTEM COMPATIBILITY](#)

[HOW IT WORKS](#)

### Course Fees & Booking

The course fee is **£300 [GBP]**. Please use the links below to book online and to view our Terms & Conditions.

NOTE: If your finance centre or attendees are based in the United Kingdom (UK), or attendees are booking as private individuals (non-company), the course fee will be subject to an additional 20% UK VAT charge (**£360** per attendee including UK VAT).

For EU Countries where finance centres and attendees are NOT based in the UK, VAT will be ZERO RATED under the reverse charge rule. For non-EU countries and non-EU attendees, VAT is not applicable.

[CLICK HERE TO BOOK ONLINE](#)

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