





Presented by Management Forum

# A Practical Overview of Pre-Filled Syringes

**5-6 November 2025** + 11-12 May 2026, 11-12 November 2026

Master pre-filled syringe manufacturing, quality control, and regulatory compliance in this comprehensive 2-day course. Includes hands-on workshops, expert insights, and CPD certification.



#### Format:

Live online

(1)

#### CPD

12 hours for your records



Certificate of completion

# **Course overview**

This course offers a comprehensive introduction to the world of pre-filled syringes (PFS), designed specifically for those who are new to the field or looking to refresh their understanding of the fundamentals. Participants will gain a clear overview of the entire processing journey, from component selection and design considerations through filling, assembly, and quality control.

What sets this program apart is the independence of its expert speakers, who provide practical, vendor-neutral insights based on real-world experience across different parts of the industry. Their diverse perspectives help ensure a balanced view of current practices and future directions, free from commercial bias.

In addition to structured presentations, delegates will benefit from interactive workshops designed to encourage discussion, questions, and peer-to-peer exchange. This creates a unique opportunity not only to learn the essentials of pre-filled syringe processing, but also to explore the latest developments and challenges shaping the field today.

#### **Benefits of attending**

- Understand the full journey of pre-filled syringe processing, from design to quality control
- **Discover** key design choices and practical solutions to common challenges
- Explore vendor-neutral, real-world insights from independent experts
- Engage in interactive workshops that spark discussion and peer learning
- **Stay ahead** with the latest trends, innovations, and industry developments

#### Who should attend?

- Pharma start-ups and small to mid-sized pharma companies
- Contract research organisations (CROs) and contract manufacturing organisations (CMOs)
- Machine and equipment suppliers
- Hospital dispensaries
- Professionals new to pre-filled syringes (PFS) or looking to refresh their knowledge in a relaxed, open setting
- Experts involved in device programmes, product development, life cycle management, regulatory affairs, quality assurance, or combination products
- Drug delivery specialists
- Business development and product development managers



# **Programme**

#### Day 1

### Syringe manufacture from components to the final product – an overview

- Elements of pre-filled syringes
- Process options
   Component preparation: the basics
- Siliconisation: a closer look
- Filling and stoppering in a nutshell (with videos)

#### PFS filling & closing machines - available options

- Lab scale to high-speed
- Typical processes therein
- Decision matrix & supplier assessment criteria

#### PFS filling & closing machines - a closer look

- A typical filling line from start to end an overview
- Introduction of components Infeed
- Filling and closing in real life (with videos)
- Pumps 'fit for purpose'/stoppering options
- Getting the filled units out Outfeed

#### Terminal sterilisation of pre-filled syringes

- Why?
- How it is done?
- Points to consider
- Validation

#### Visual inspection of pre-filled syringes

- Defects and their detection
- Inspection methods
- Assessing batch and sorting quality
- Specific aspects of pre-filled syringes
- Visual inspection in the quality life-cycle
- Setting up a manual visual inspection

#### Secondary packaging machines for PFS: an introduction

- What is secondary packaging?
- Walk through a typical facility 2° packaging line (example/video)
- Trends in secondary packaging
- PFS handling special: glass-to-glass contact

#### Trends in PFS: drug delivery

- Market dynamics
- Innovation in PFS
- Drug development trends
- Manufacturing technology trends

#### Day 2

#### PFS: from the early days to the latest developments

- Evolution of systems
- Evolution of components
- Evolution of application and application systems

#### Device assembling and control processes for autoinjectors

- Target product process
- Impact primary packaging material
- Assembling steps
- Inline controls
- Function/release tests
- Final packaging

#### Regulatory requirements for pre-filled syringes

- ISO design compliance
- New MDR what about it?
- US requirements for combination products

#### A primer on system selection

- Points to consider
- Available options

#### Workshop: for 3 product profiles

- Identify the optimal components (primary and accessories)
- Identify the optimal target fill volume
- Identify the optimal processes (siliconisation and filling)

#### What comes back - typical technical complaints

- Some statistics
- PFS complaints 'decoded'
- Issues when dealing with PFS-related complaints
- Some examples and typical investigation routes

#### PFS state-of-the-union address and event summary

- Review of the market for PFS
- Review of PFS Processing
- Future trends in PFS

## **Presenters**



#### **Dale Charlton**

Dale Charlton is a Freelance Consultant for automation and fill / finish. Dale has spent a lifelong career in Life Sciences and Biotechnology encompassing both the academic and industrial sectors. Dale worked in a technical capacity in basic R&D at a major University and EMBL Heidelberg before embarking on a more formal academic career in biotechnology and studying for a PhD within the Drug Discovery Group of Pfizer into growth factor research (rGH, GHRF, IgF) . With industrial spells at Porton Down and Pittman-Moore (formerly Glaxo Animal Vaccines) in API and API scale-up, Dale settled back into biotech manufacture and moved more into the supply chain of finished drug products for small molecules & biologics, first as the MD of a life sciences distribution company and later as Director of Business Development, Optima pharma in sterile production automation. Having worked in the pharmaceutical industry from R&D to finished drug product, Dale has a unique understanding of the entire drug development life cycle and offers insight from both the pharma and a suppliers perspective.



#### Susanne Hall

Susanne Hall began her career in 1990 at Dr. Karl Thomae (today known as Böhringer Ingelheim) in Biberach as Head of Packaging Technology. In 1993, she joined Vetter's Research and Development department as Head of Packaging Material Incoming Control and in 2008 was named Team Leader of Secondary Packaging.

Since 2019, she has been the Director of Secondary Packaging and AVI Projects. In this position, Susanne leads three teams that ensure the implementation of customer products from development to commercial into production. For secondary packaging this includes device assembly, labeling and final packaging as well as implementing tests for a controlled safe process and the meeting of customer expectations. She is also responsible for the transfer of products from manual visual inspection to fully automated inspection lines.

Susanne has a diploma in engineering from the College of Engineering where she focused on specialized precision engineering.



#### **Andreas Rothmund**

Dr. Andreas Rothmund is Qualified Person (retd) at Vetter Pharma-Fertigung in Ravensburg, Germany, an independent contract manufacturer specialised in the aseptic production of pre-filled application systems. He started his industrial career in 1985 as a lab manager. After two years he took over production responsibility for a German company specialised in eye drops and eye ointments, a position he held for nearly eight years.

He joined Vetter in 1994, where he has held several positions, including Head of Production for one of Vetter's aseptic production units. He holds a degree in organic chemistry from the University of Constance, Germany.

# **Course dates**

5-6 November 2025

Live online

09:30-17:00 **UK (London)** (UTC+00)

Course code 15045

GBP 1,299 1,499

EUR **1,819** <del>2,099</del>

USD 2,087 2,399

Until 01 Oct

11-12 May 2026

Live online

09:30-17:00 **UK (London)** (UTC+01)

Course code 16282

GBP 1,299 1,499

EUR **1,819** <del>2,099</del>

USD 2,087 2,399

Until 06 Apr

11-12 November 2026

Live online

09:30-17:00 **UK (London)** (UTC+00)

Course code 16486

GBP **1,299** <del>1,499</del>

EUR **1,819** <del>2,099</del>

USD 2,087 2,399

Until 07 Oct

#### How to book



Online:

ipi.academy/1556

Alternatively contact us to book, or if you have any queries:



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Phone:

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- Booking more than one delegate on any one date qualifies for a 30% discount on the second and subsequent places.
- Most events qualify for an early booking discount prior to 6 weeks before the course date. Be sure to check on our website, where the latest discounts will be shown.

#### **Further information**

The fee includes all meals and refreshments for the duration of the course (for venue-based courses) and a complete set of course materials (provided electronically). If you have any particular requirements, please advise customer services when booking

#### Please note

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# **Reviews**



Overall very good.



William Hensler

Principal
Alantra BioPharma
Jul 21 2025



It was an enlightening course, and the speakers were so explanatory.



Stergios Kemidis

Head of R&D ANFARM HELLAS S.A. Nov 6 2024

#### \*\*\*

Speakers were very knowledgeable and openly shared their experience with the audience especially when asked about specific examples.



Natalia Harasimiuk

Associate Director Fuji Film Nov 6 2024

#### \*\*\*

I enjoyed it. I came to the webinar knowing nothing about the process, and I got away with a lot of knowledge. I enjoyed the chat between Andreas and Dale during the presentation, sharing their experience and complementing each other, that was knowledge beyond videos and presentations.



Serge Batubenge

Mgr. Engineering Regeneron Pharmaceuticals, Inc. Mar 30 2023

# Run this programme in-house for your whole team

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