# Test-Methods for Pre-filled Syringe Systems

#### Overview

The course will be an interactive lecture around Pre-filled Syringe Systems including ISO compliance testing. The participants will benefit from first hand information of both lecture leaders based on practical experience. The lecture includes the life cycle of a PFS from the idea to finished marketed product.

#### Who Should Attend

- The course is designed specifically for those who are involved or interested in the development, manufacturing and QC-testing of a Pre-filled Syringe System
- Engineers and Managers in Device Development and all other technical functions surrounding syringe systems
- Quality Personal / Regulatory Personal
- Clinical and commercial Drug Product Manufacturing

## **Learning Objectives**

- · Materials used for PFS Systems
- Luer Cone and Luer Lock Compliance Testing
- Requirements for the empty sterile sub-assembled syringe ready for filling
- · Test Methods for Drug Product Filled Syringes
- PFS used in Delivery Systems

### **Faculty**



## Horst Koller, CEO, HK Packaging Consulting

Prior to becoming a consultant, Horst worked for Abbott Diagnostic and SCHOTT Pharmaceutical Packaging with a total of more than 20 years industry experience. His consulting company is focusing on Technical, Regulatory and QM-Support around Primary and Secondary Packaging Systems including Medical Devices. He is an active member within the technical ISO Committees TC76 and TC84 as well as an active speaker on international conferences. He holds an Engineering degree in Biotechnology from the University of Applied Sciences in Mannheim / Germany.

0	Welcome	9:00	Requirements for the Empty Sterile Sub- assembled Syringes Ready for Filling- Part 1
5	Introduction to Syringe Systems and		Cone Breakage / Flange Breakage / Leakage
	Components	10:15	Coffee Break
)	Coffee Break	10:45	Requirements for the Empty Sterile Sub- assembled Syringes Ready for Filling- Part 1 (cont.)
0	Regulatory Requirements of Finished Pre-filled Syringes – Part 1		Cone Breakage / Flange Breakage / Closure Testing
	<ul> <li>System Characterization / Physical Characterization</li> </ul>		
		11:45	Requirements for the Empty Sterile Sub- assembled Syringes Ready for Filling- Part 2
	Lunch Break		Break Loose and Gliding Force / Needle Testing / Particulate Matter
	Regulatory Requirements of Finished Pre-filled Syringes – Part 2	13:15	Lunch Break
•	Pharmaceutical Characterization		
	Coffee Break	14:15	Additional Testing for Use in Delivery Devices
	Luer cone and Luer lock Compliance Testing for	15:15	Wrap-up of Day 2
	Blass and Polymer Syringes	15:30	End of Training Course
	Wrap-up of Day 1		