DAY 1

Time	Topic
8:30	Welcome and Introductions
9:00	Theory 1: Introduction into Regulatory Requirements • USP 1, USP 788 and 1788, USP 790 and 1790, PhEur e.g. 2.9.20, JP e.g. 6.06, Annex 1 • Similarities and differences in compendial methods • 100% inspection and AQL testing • Definitions and practical examples of inherent, intrinsic and extrinsic particles
9:45	Theory 2: Technical Principles of Automated Inspection Machines Part I • Functionality of automated inspection machines • Camera systems/light/motion • Image processing and database system
10:30	Break
10:45	Theory 2: Technical Principles of Automated Inspection Machines Part II • Interlinkage of parameters: speed, rotation speed, inspection parameters, detection probability, false reject rate • Properties, capabilities and limitations of automated inspection systems • Scope of Automated Visual Inspection • Considerations on Primary Containers and Product Properties
12:00	Lunch
13:00	Exercise 1: Principle Basic Image Processing Using the Argo Benchtop, Test Samples Parametrization
14:00	Theory 3: Transition from Manual to Automated Inspection • Manual inspection as a prerequisite for transition to automated inspection • Interpretation of inspection results and validation of data • Considerations on validation program for automated inspection • Performance measurement • Maintaining the manual inspection
14:45	Break
15:00	Theory 4: Qualification Test Set and Routine Test Set • Statistical considerations on number of objects containing defects • Particle selection, particle size and size uniformity • Test sets • Rejects and defects • Quality requirements
15:30	Exercise 2: Quality Factors and Knapp Simulation with Excel
16:00	End of Training Course