

PDA Visual Inspection Trainings Course

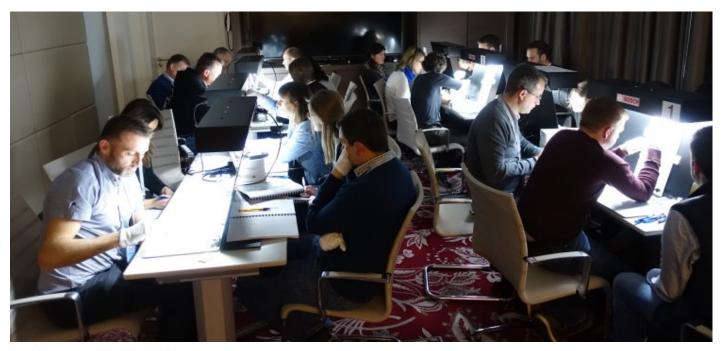
Hands on basic instructions

Markus Lankers, PhD September 2019



Goal of the Experiments

- Identify important parameters
- Recognize behavior of different particles
- •It's hard to be an inspector even for half a day





Test Set



- Test set contains 28 vials
- Blanks and rejects
- Every Inspector has to inspect all 28 vials in each experiment
- Patiently wait until the class is ready to move on to the next experiment





Documentation

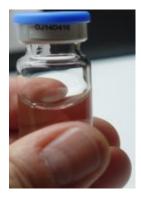
PARTICLE INSPECTION DATA SHEET #1: Normal Inspection

Inspector:	Test S	
Inspection Station:	Illumination Intensi	ty:lux
FULL Illumination Intensity	WITH Agitation	5 Sec/Background

Vial Number	☑	
	Reject	Accept
		_
		_
		-
		-
		-

- Write down your name on the data sheet
- Write down 3 digit number of the vial and your observation
- Write down Test set number
- Each inspector has to write down the inspection results for the entire set of 28 vials
- Write clearly







Setup of the instrument









Switch on both lamps

Measure light intensity. Mark a position at ~ 3000 Lux

Mark a position at ~ 3000 Lux



Tools



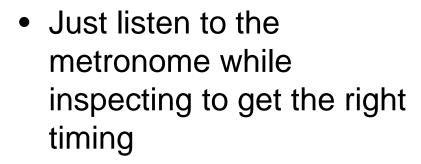








- Remove cover from sensor
- Select measurement range









Training

- Two vials off each set (marked with a dot) contain easy to observe particles
- Make yourself familiar with swirling and inverting for a couple of minutes with these vials to practice the particle detection
- Try swirling and inverting







Exp. 1: Standard condition



Inspect at marked position



Inspection time 5s black, 5 s white background



Swirl or invert



Record result



Exp.2: Elevated inspection time



Inspect at marked position



Inspection time 10s black, 10s white background



Swirl or invert



Record result



Exp.3: Reduced Light intensity - Setup of the instrument









Switch off one lamp

Measure light intensity

Mark a position at ~ 1500 Lux



Exp.3: Reduced Light intensity



Inspect at marked position



Inspection time 5s black, 5 s white background



Swirl or invert



Record result



Exp.4: No agitation



Inspect at marked position



Inspection time 5s black, 5 s white background



No Swirling or inverting



Record result