

## Inspection Machine Seidenader **XS** for Ampules and Vials

The Seidenader XS is an economical and user friendly machine for the inspection of particles in liquids and is specially designed for small to midsize production applications. Both, moving and non-moving particles are detected with extremely high reliability.

The Seidenader XS uses light extinction and light scattering methods, depending on product and container type.

### Fields of application:

- Vials and ampules
- 1 ml - 100 ml
- Clear liquids and suspensions

### Standard inspection criteria:

- Moving particles, glass chips and fibres
- Non moving particles in the bottom of the container
- Underfill

### Optional inspection criteria:

- Tip defects in ampules
- Black marks in ampules
- Overfill
- Cap/crimp defects in vials
- Cosmetic inspection on container

### Advantages:

- No moving inspection components like mirrors, lights, cables or cameras
- New generation of digital cameras with mega pixel chip for high resolution images
- Product transport in continuous motion
- Wide product range up to  $\varnothing$  51.6 mm/100 ml
- The XS-2 provides capacity for maximum throughput of 300 containers/min.
- Full IQ/OQ support package
- Integrated control cabinet and operator interface
- Minimal false reject rate

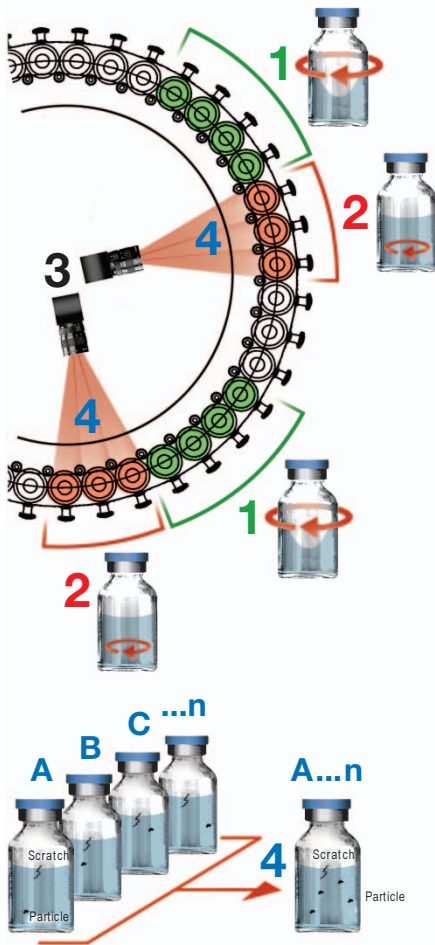


# Inspection Machine Seidenader XS

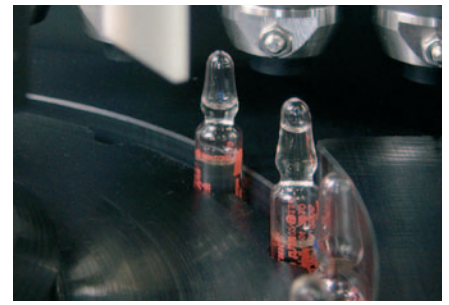
## Particle Inspection

Each product is inspected in two particle inspection stations using the image subtraction method:

- 1 Vials are rotated.
- 2 The rotation of vial is stopped, the liquid continues to move, particles move with the liquid.
- 3 A static CCD camera acquires multiple images.
- 4 The vision processor generates an overlay image to separate all objects which have moved between the images.

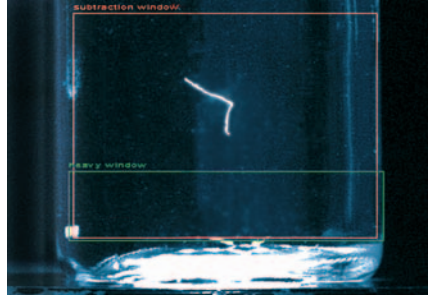


Infeed



Ampule tip inspection

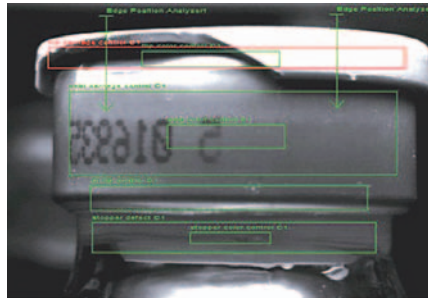
## Camera pictures of product inspection:



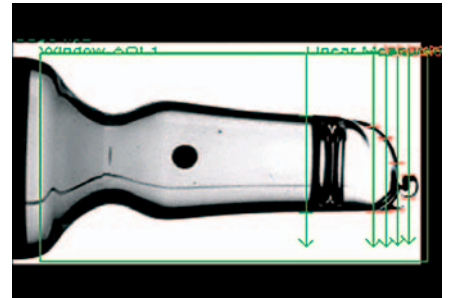
Particle detected with light reflection method



Particle detected with light transmission method



Cap defect



Ampule tip with geometry defect

## Technical Data Seidenader XS and XS-2:

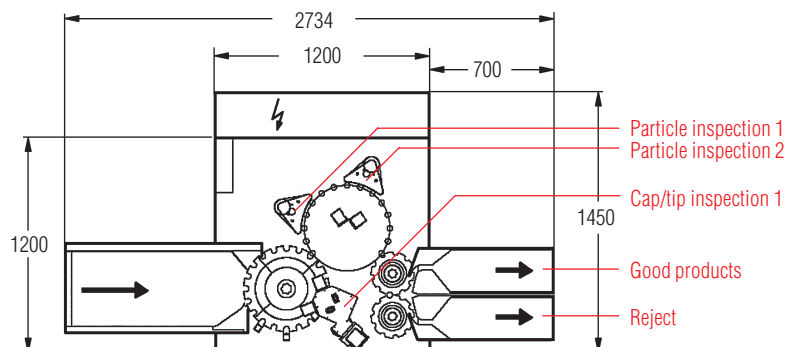
Application:	Ampules and vials	
Throughput rate:	XS:	XS-2:
	9,000 products/h up to Ø 12.0 mm	18,000 products/h up to Ø 12.0 mm
	6,000 products/h up to Ø 26.5 mm	14,400 products/h up to Ø 26.5 mm
	3,600 products/h up to Ø 42.5 mm	
	1,800 products/h up to Ø 51.6 mm	
Dimensions:	Base machine ca. 1,200 x 1,450 mm, height 2,500 mm	
Design:	Complies with current GMP recommendations, OSHA regulations, CE requirements, EN 60204-1 and 21 CFR part 11	
Voltage/frequency:	400 V, 3 Ph+ N+ PE, 50 Hz, ca. 4 kW standard, all other voltages possible through transformer	
Compressed air:	Pressure 6 bar, consumption ca. 10 Nm <sup>3</sup> /h, connection 1/2"	
PLC:	Siemens	
Vision processor:	SVIM <sup>®</sup> by Seidenader Vision	

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Since we are constantly working on the improvement of our high-quality machines, the texts, illustrations and figures on these pages are exemplary and not binding.