

SPEED Film 2D AOI



The system is the perfect solution for the 2D inspection of moist or dry soldering pastes and structures thanks to its innovative light technology. It is placed after the printing process and provides valuable information for the printer (Closed-Loop), which significantly contributes to optimizing the process.

NEW: inline 2D inspection of wet and dry pastes now available!

Of course, an individually adapted system structure shall be created to perfectly correspond with the respective requirements.

SPEED

Up to **300 cm²/s**

ACCURACY

Up to **3 μm**

Repeatability:
grey values ± 1 μm @ 4 sigma,
for each channel

CHARACTERISTICS

- ✓ High speed – up to 300 cm²/s
- ✓ Maximum accuracy – up to 3 μm
- ✓ Repeatability: grey values ± 1 μm @ 4 sigma, for each channel
- ✓ Intelligent algorithms preventing pseudo error occurrences
- ✓ **NEW:** All-Multilayer-Scan: multi-layer printing in one single inspection operation
- ✓ **NEW:** Layout correction via Correction Fiducials
- ✓ **NEW:** High Speed Option: Extended multi-camera system

INSPECTION PERFORMANCE

Resolution	Speed
3 μm	10 cm ² /s NEW: 25 cm ² /s (2nd Cam)
7 μm	30 cm ² /s
10 μm	80 cm ² /s
12 μm	120 cm ² /s
16 μm	180 cm ² /s
18 μm	300 cm ² /s

SYSTEM MODELS

- Inline
- Offline
- Integration in existing system (e.g. handling system, printer, etc.)
- Also available as table-top system with fully automatic handling for small products (macCube: mini automation cell)
- LEAN production cell

OPTIONS

- Offline programming unit
- Good-bad functions
- Testing unit
- Bar code reader
- Electrical width setup
- Flat Conveyor belt drive
- Round belt drive
- MES system communication
- CSV export

LIGHTING

- **Diffusion light**
evenly lit image
- **Top light**
highlights structural changes
- **Bottom light**
provides contrast
- **Laser beam**
inline measurement of the layer thickness

PASTE

- > Not enough soldering paste
- > Too much soldering paste
- > Soldering paste missing
- > Bridge / short circuit
- > Smeared paste
- > Dust / contamination
- > Incorrect paste form

PRINT

- > Area
- > Print shift
- > X/Y-offset
- > Layout analysis
- > Rotation
- > Incorrect form
- > Area analysis

BASE SIZE

Length	70 – 460 mm
Width	50 – 460 mm
Thickness	0,8 – 4 mm
Weight	up to 3 kg
Component space	± 30 mm at the top, 60 mm at the bottom (excluding clearance)

SYSTEM CONFIGURATION

Transport height	850 mm – 950 mm ± 50 mm
Transport width	max. 460 mm
Interface	SMEMA, Siemens
Transfer direction	left to right, right to left, bidirectional
Operating side	front
Fixed rail	front

INSTALLATION REQUIREMENTS

Power supply	230 V / 115 V, 50 / 60 Hz, ± 10 %
Electrical network	L1 + N + PE
Power input	2.0 kW
Compressed air connection	6 bar
Air consumption	<12 NI/min

MACHINE DESCRIPTION

	2 segments	3 segments
L x W x H	800 x 800 x 1800 mm	1200 x 800 x 1800 mm
Netto weight	approx. 300 kg	approx. 350 kg
Color	Basic Light	Basic Light
Noise level	< 75 dB	< 75 dB



QUICK

All sources are being checked – no loss of speed, with all details.



MODULAR

Our modular concept makes it possible to individually combine random options, for example, product resolution, speed and size.



ACCURATE

Our promise of quality: accurate laboratory measurements, now available for your manufacturing process.