

# OptiCon THT-Line

AOI System for efficient Quality Check of THT Assemblies



## Maximum Fault Detection

- Unique multispectral illumination
- THT component, THT solder joint and wave-soldered SMD component inspection
- Freely configurable test functions and illumination opportunities

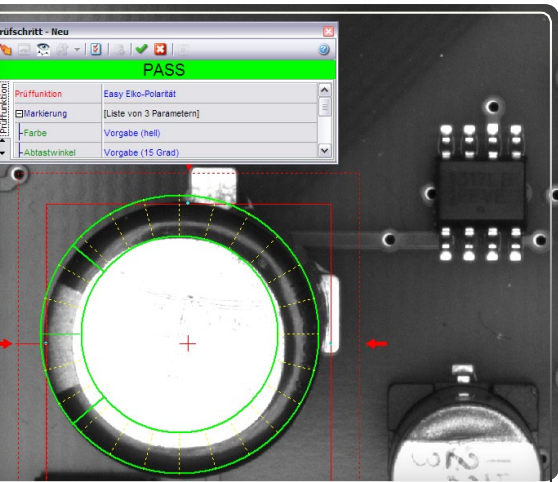
## Integration Options for THT Production Process

- Manual or automated feeding via accumulating transport system
- Component side and solder side can be inspected at multiple positions within the production line
- Solder side inspection either on the upper conveyer belt or during the PCB return in the lower system area

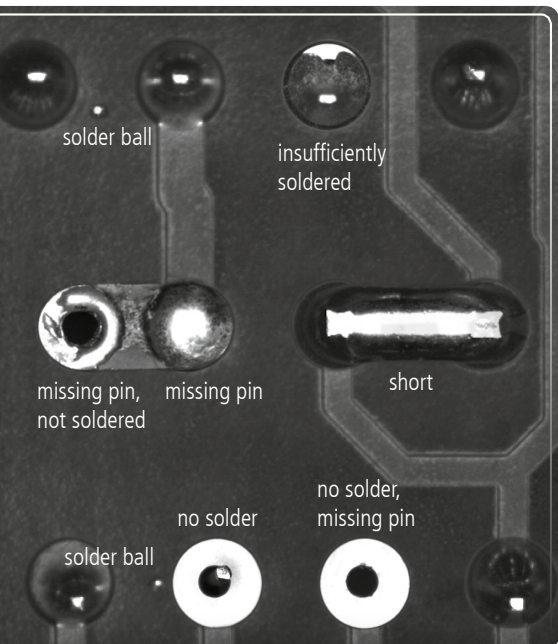
## Speed Advantages over common AOI Systems

- "Flip free" double-sided inspection of THT assemblies
- Multiple and independently working AOI modules in one system

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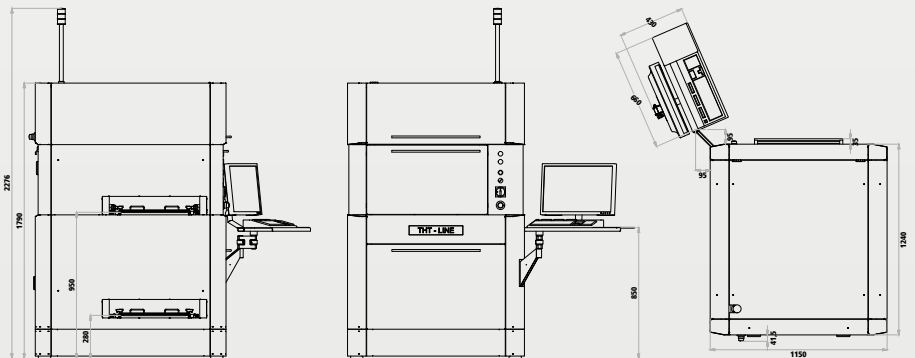
Polarity check at THT components



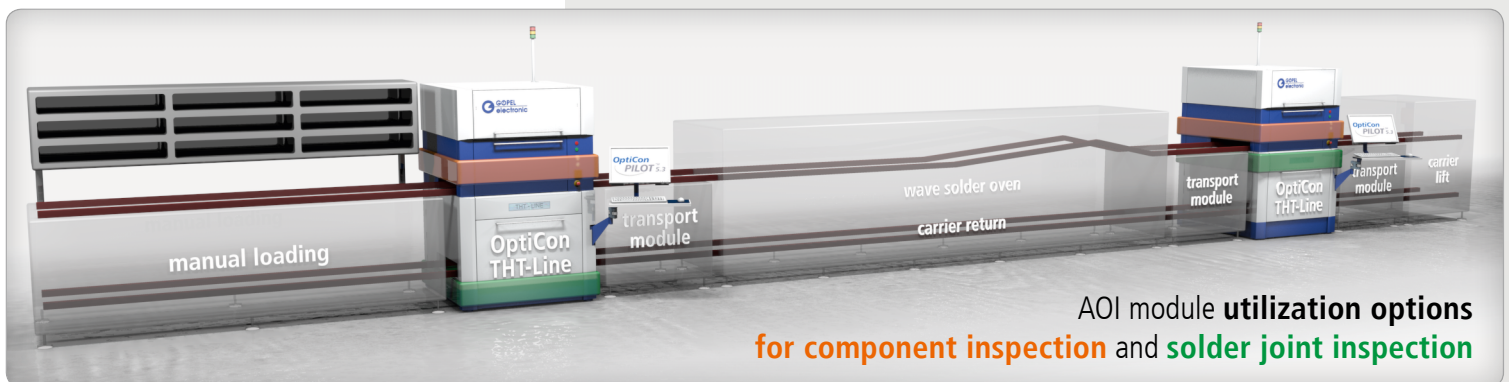
Typical solder faults

OptiCon THT-Line	Top-side AOI module	Bottom-side AOI module
<b>Image capturing technology</b>	CCD matrix camera	CCD matrix camera
<b>Colour depth</b>	up to 24 bit	up to 24 bit
<b>Integration</b>	in upper transport system	in upper and lower transport system
<b>Inspection scope</b>	Presence, placement/positioning, polarity and labelling (OCR) of THT assemblies	THT solder joints, SMD components, SMD solder joints
<b>Illumination system</b>	multispectral, multi-directional	multispectral, multi-directional
<b>Inspection speed</b>	up to 60 cm <sup>2</sup> /s	up to 100 cm <sup>2</sup> /s
<b>Maximum carrier size</b>	up to 620 mm x 510 mm	up to 620 mm x 510 mm
<b>Maximum inspection area</b>	540 mm x 450 mm	540 mm x 450 mm
<b>Inspection height</b>	up to 80 mm	5 mm
<b>Clearance</b>	above PCB: 80 mm below PCB: 20 mm	above PCB: 80 mm below PCB: 20 mm

System Specifications	
<b>Power requirements</b>	230 VAC / 2 kVA; 6 bar compressed air, consumption < 20 l/h
<b>Carrier transport system</b>	accumulation roller
<b>Transportation direction</b>	left-right / right-left / left-left / right-right
<b>Inline interface</b>	SMEMA, Siemens, Sensor
<b>Dimension (W x D x H)</b>	1150 mm x 1300 mm x 1800 mm



Options
Barcode/2D code reading system
Communication with RFID reading systems
System configuration for manual loading



AOI module **utilization options**  
for component inspection and solder joint inspection



AOI-THT/E/2013-04

ISO 9001 certified

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