

# V8 Series

High Precision and High Speed  
Offline AOI



## Advanced Hardware Structure

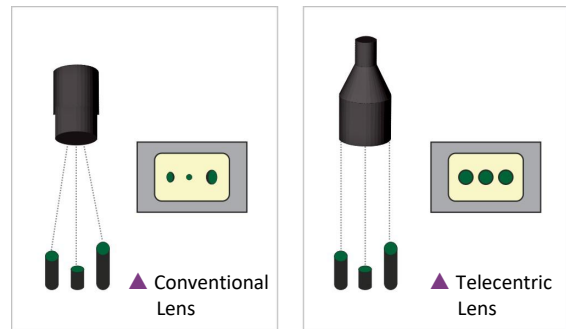
- **Granite Platform and Frame**

Ensure the stability of the equipment and the consistency of sharing program between machines.



- **Industrial Camera + Telecentric Lens**

The high component solder joint inspection is not affected as no shadow effect in the entire field of view.



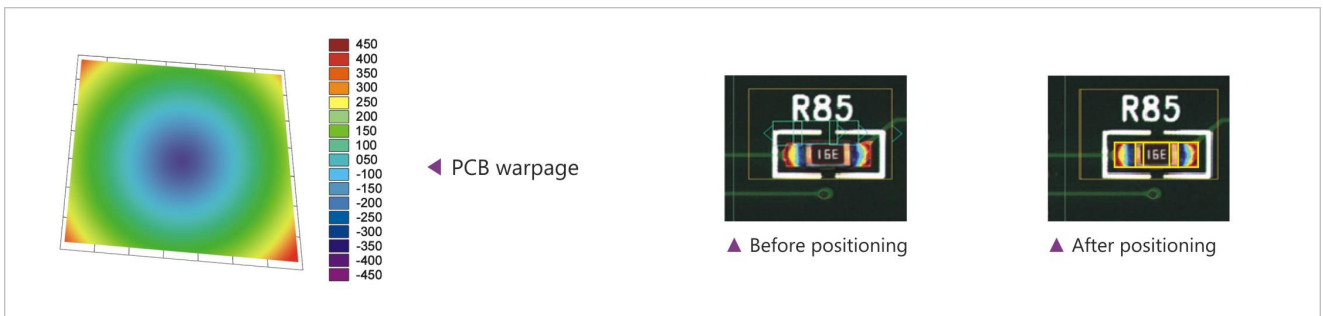
## Core Technology and Advantages

- **Solder Pad Position**

Solder pad position able to reduce high false call due to deformation of PCB after reflow, especially for FPC.

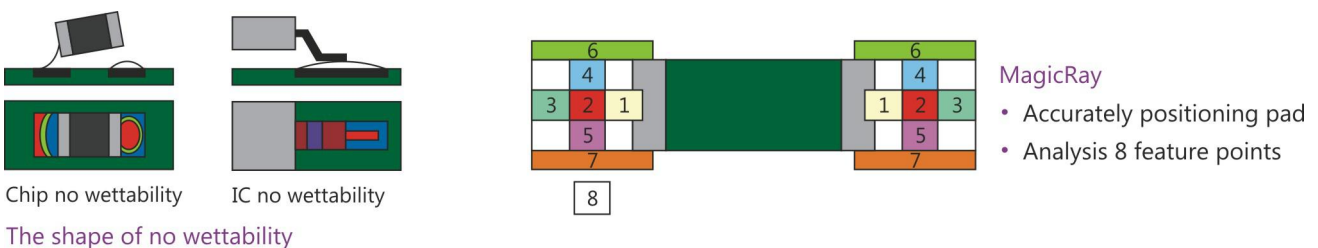
- **Entire FOV Assist Positioning**

High detection ability on no exposed pad components (BGA, etc.) or partially shielded components.



- **Poor Soldering Inspection**

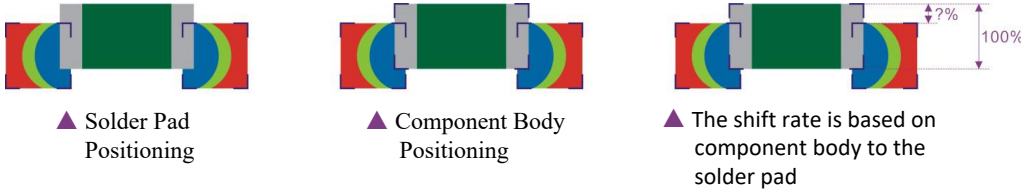
Based on precisely positioning on the solder pad, the features points of the entire solder pad will be analyzed. Therefore, the poor solder of chip or IC can be effectively detected.



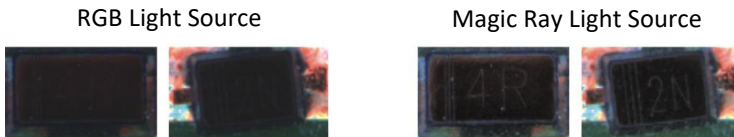
## Core Technology and Advantages

- **Detection Parameters Directly Interface with IPC Standards**——Based on the IPC test standard, the test results are more reliable.

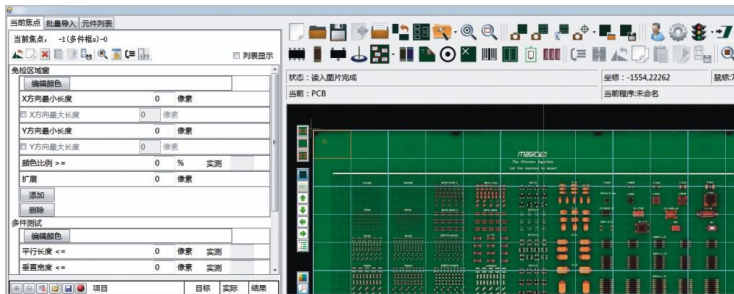
Shift: IPC-A-610-D Class 3 - If the component shift out of solder pad more than 25% of the component electrode, it will be NG.



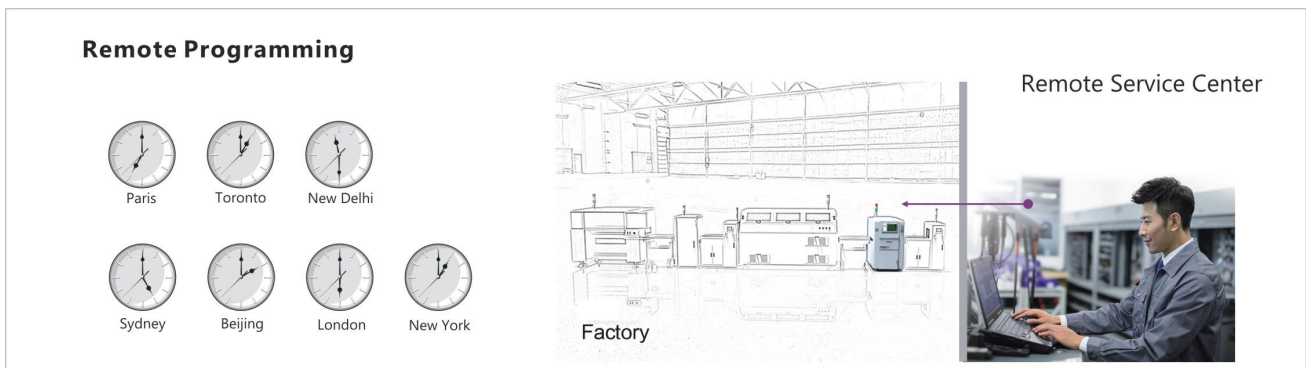
- **High Inspection Ability for Laser Body Marking**——The laser barcode and laser body marking are difficult to differentiate by RGB light source due to background noise. Magic Ray using unique design light source which is helpful to inspect the laser barcode and laser body marking.



- **Un-Populated and Solder Ball Inspection**——This function can be turned on at any time.



- **Remote Technical Support**——Established remote service center to support our worldwide customer on programming development and programming debugging by remote support through the internet.



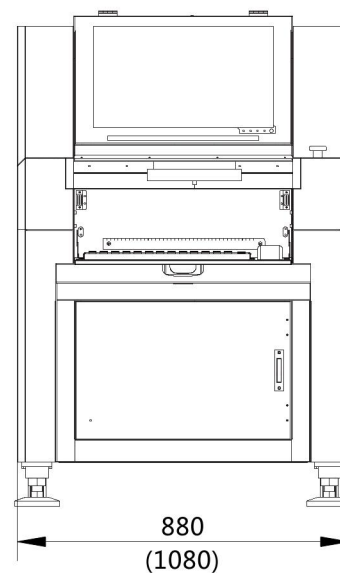
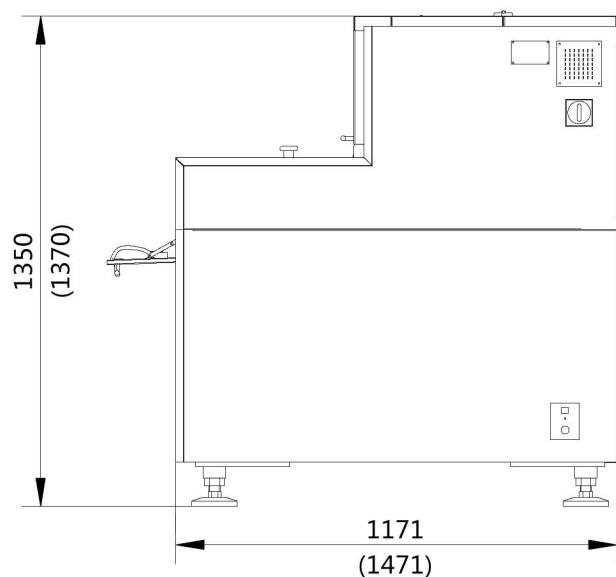
- **Other Advantages**——Intelligent programming (One click rectification, Add substitute, Sub-programming ,etc.); Offline programming and fine tuning in real time without stopping the production line; Special wave soldering algorithm for DIP inspection...

## Product Specification

Equipment Model		V8	V8XL
<b>Image System</b>	Camera	5M pixels industrial camera	
	Resolution(FOV)	15 $\mu$ (38.4*28.8mm)	
	Lens	Telecentric lens	
	Lighting	4 color ring shape LED (RGBW)	
<b>Movement Structure</b>	X/Y Movement	AC servo motor	
	Platform	Granite	
	Width Adjustment	Manual	
	Clamping	Automatic	
<b>Hardware Configuration</b>	Operating System	WINDOWS 10/WINDOWS 7	
	Communication	Ethernet, SMEMA	
	Power Requirement	Single phase 200-240V, 50/60Hz, 2.5A	
	System Dimensions	L880*W1171*H1350mm	L1080*W1471*H1370mm
	Weight	500kg	600kg
<b>PCB Size</b>	Size	50*50-430*330mm	50*50-650*510mm
	Thickness	$\leq$ 6.0mm	
	PCB Weight	$\leq$ 10kg	
	Clearance	Top/Bottom: 25/80mm (Top Clearance 25-60mm adjustment)	
	Clamping Edge	3.0mm	
<b>Inspection Categories</b>	Paste	Bridge,Misalignment,Insufficient/Excess solder,Foreign material	
	Post Reflow	Component:Wrong component,Missing,Polarity,Misalignment, Tombstone,Overturn,Damage,IC pin bend,Foreign material	
	Wave Soldering	Insert pin,No solder,Insufficient/Excess solder,Hole,Open solder,Solder ball	
	Inspection Component	Chip: 03015 and above LSI: 0.3mm pitch and above Others: Odd shape component	
	Inspection Speed	200-250ms/FOV	

Disclaimer: MagicRay keeps on improving this product with continuous efforts in research,development and reengineering. Please contact us for the latest version of this specification sheet.

## Equipment Size (Unit: mm)



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