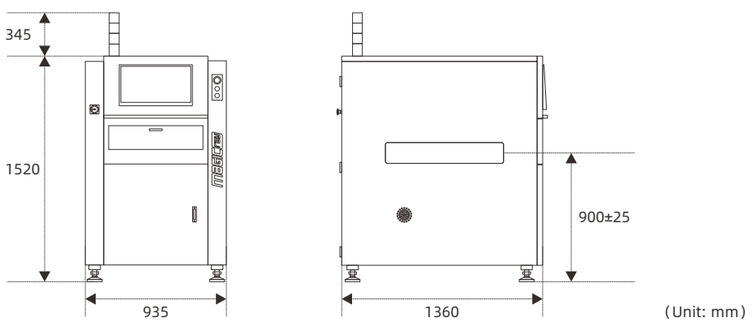
Product Specification

Equipment Model		VSP3000	VSP3000D
Image System	Camera	4M pixels industrial camera (12M pixels industrial camera optical)	
	Camera Resolution	20μm、15μm (12μm、9μm optional)	
	Z Resolution	0.37μm	
	High Accuracy	1μm	
	Illumination	LED R/G/B	
	Height Measurement Method	Projector	
Movement Structure	Movement	X/Y Movement: AC Servo + Ball Screw	
	Platform	Granite	
	Width Adjustment	Automatic	
	Transport Type	Belt	
	Board Loading Direction	left to Right or Right to Left (Set before extra of factory)	
	Fixed Edge	Front Lane	
Hardware Configuration	Operating System	Win 10	
	Communication	Ethernet, SMEMA	
	Power Requirement	Single phase 220v, 50/60Hz, 5A	
	Air Reauirement	0.4-0.6Mpa	
	Conveyor Height	900±25mm	
	System Dimensions	L935*D1360*H1520mm (without tower lignt)	
	Weight	900kg	950kg
Inspection Parameter	Size	50*60-510*610mm	Dual lanes: 50*60-510*320mm*2 Single lane: 50*60-510*580mm*1
	Warping	3mm	
	Max. Inspection Height	600μm	
	Min. Distance between PADs	100μm (150μm paste height)	
	Max. Inspection Size	20*20mm	
	Min. Inspection Size	0.1mm	
	Volume Repeatability	≤±1%	
	GR&R	≤10%	
	Inspection Speed	400~450ms/FOV	

Disclaimer: MagicRay keeps on improving this product with continuous efforts in research, development and reengineering. For more additional options and customized requirements, please contact sales or service.

Equipment Size



MagicRay Technology Co., Ltd.

Add: 4th Floor, Block B of Building NO.5, Yungu 2nd Section, Pingshan 1st Rd, Xili, Nanshan, Shenzhen, Guangdong, China
Tel: (+86) 755 8695 7197 Fax: (+86) 755 8631 7052 Email: os.sales@magic-ray.com Web: www.magic-ray.com

Customer Care Hotline: (+86) 400 888 6295

E20 / 03 — 2020.06

VSP3000 Series

High Precision and High Speed Inline 3D SPI

MagicRay Technology

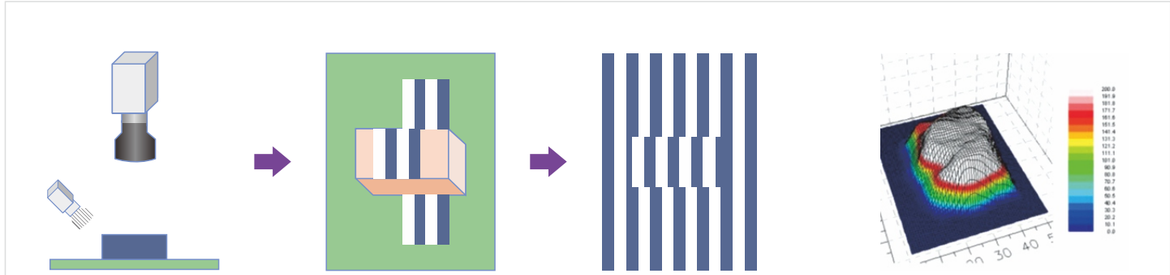
Trusted in Detail

Product Features

- For solder paste inspection after SMT printing
- Dual projection contributes to provide the 3D information of the solder paste
- High speed industrial camera can meet the needs of high output of the production line
- A variety of ways to determine the zero reference point can meet the inspection requirements of various colored PCB
- Granite platform + Casting beam + linear module, ensure high stability
- The combination of 3D and R/G/B can effectively detect for the bridge of the fine solder paste
- SPC software: The complete and variety SPC tools lends the user the flexibility of sorting and exporting the desired production results in a multitude of ways for quality analysis.

Optical Imaging Principle

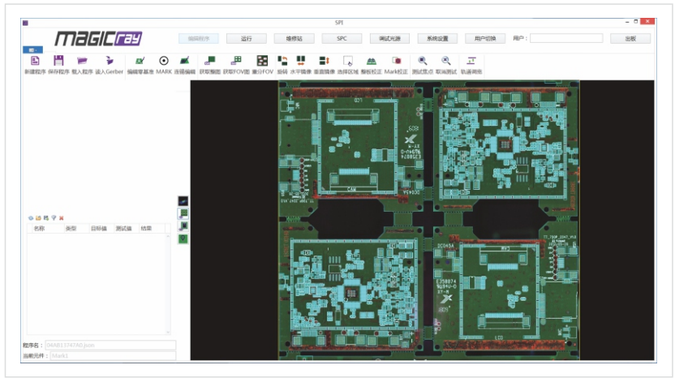
- By means of phase shift projection, the information of the height of the object with diffuse reflection can be well restored.



Core Technology and Advantages

Easy and fast programming

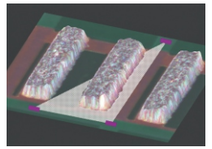
The information of the solder pad is auto generated by importing the Gerber file and CAD file, the programming can be complete by just input the parameter setting of the inspection.

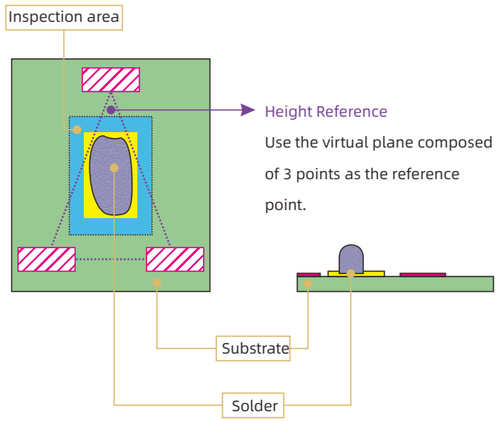


Core Technology and Advantages

Automatic zero reference point technology

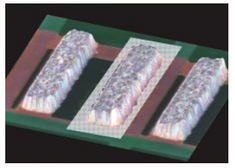
The zero reference point is generated automatically which able to shorten the programming time.

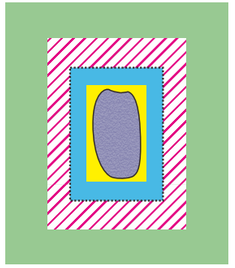




Color filter technology

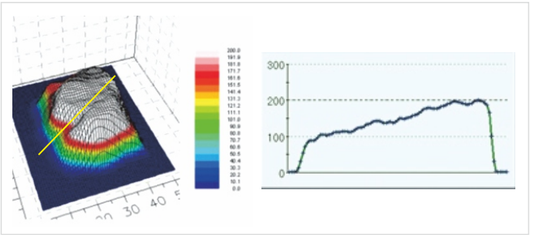
Can effectively overcome the” Icicle” phenomenon cause by the PCB warpage.





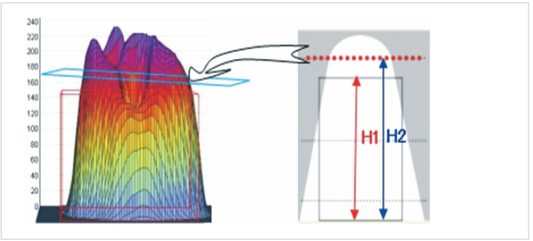
Cross Section Analysis Function

Contribute flexibly to analysis the shape of solder paste.



High Map Cross Section Algorithm

Can effectively detect the” Icicle” of the solder paste.



3 Level Standard Setting

Can effectively monitor the trend of the product quality.

SPC

Provides variety data charts lends the user the flexibility to perform real time traces root cause of defects and quality analysis.