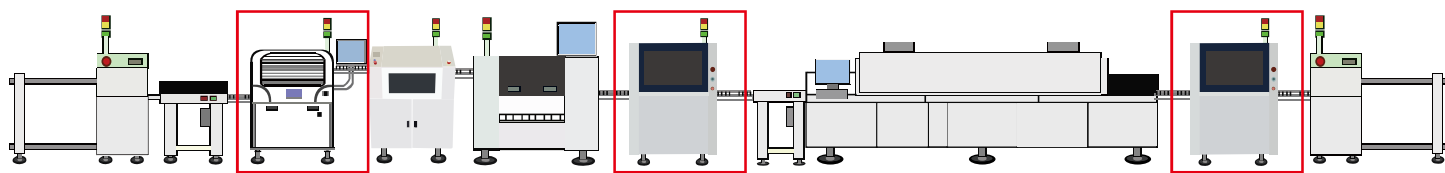


全自动钢网检查机 SVII-H6

Automatic Stencil Inspection System

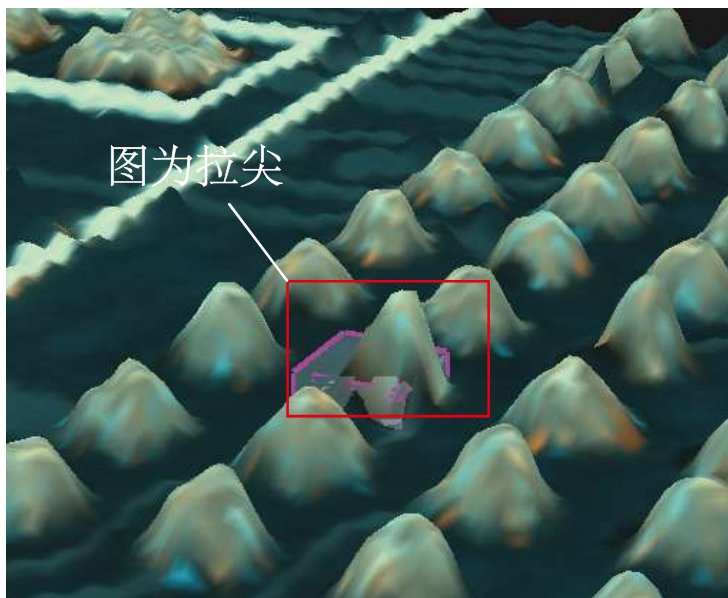
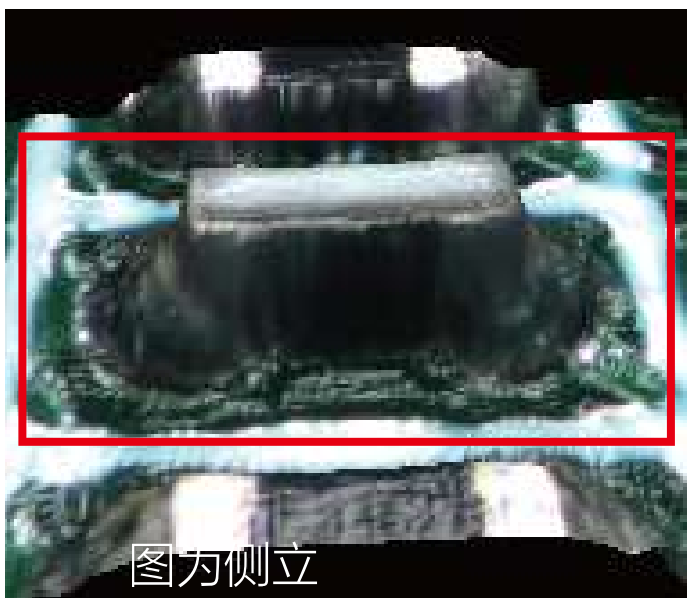


工艺现状



- 目前工艺现状出现的问题多数集中在锡膏的印刷

SPI/AOI检测不良图



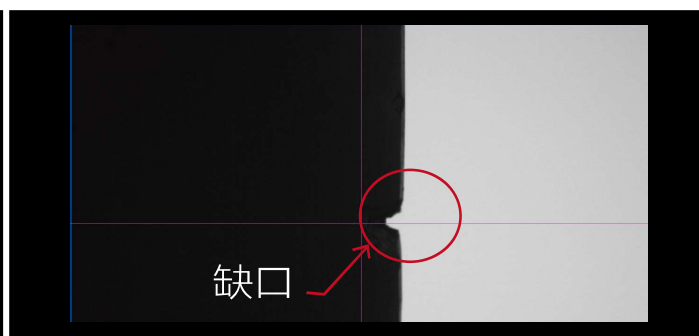
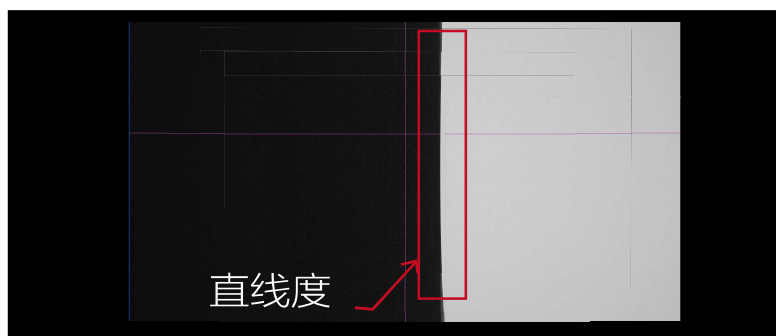
检测不良的原因

● 钢网存在问题

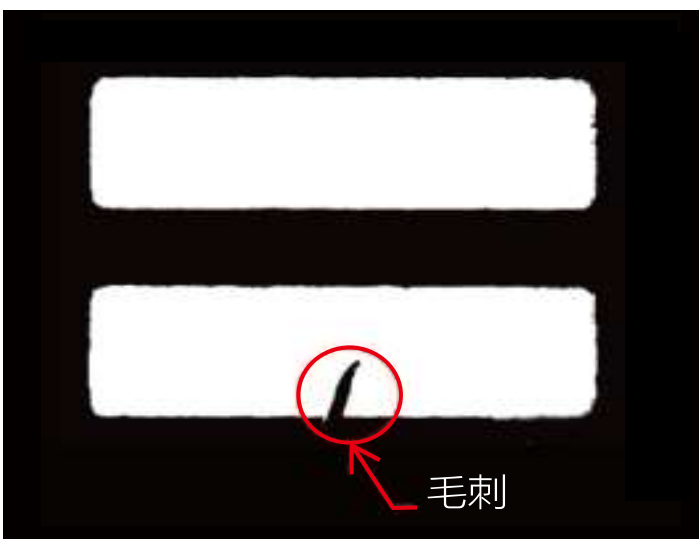
● PCB存在问题

● 刮刀存在问题

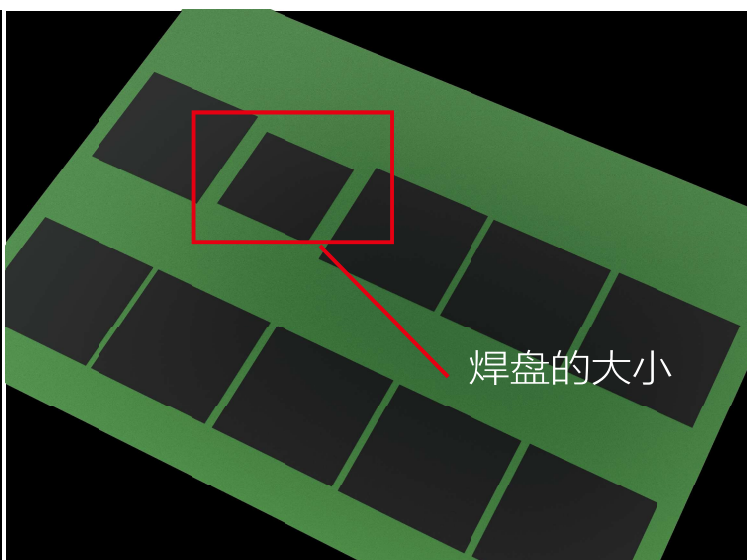
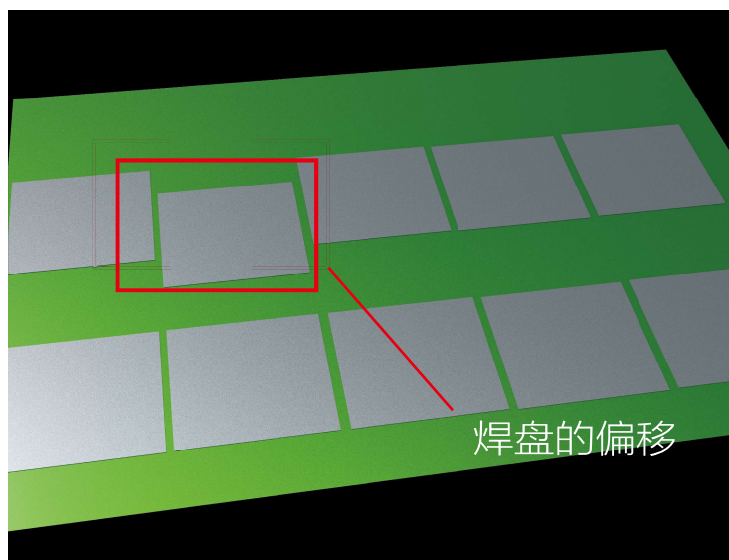
刮刀存在的问题点



钢网存在的问题点

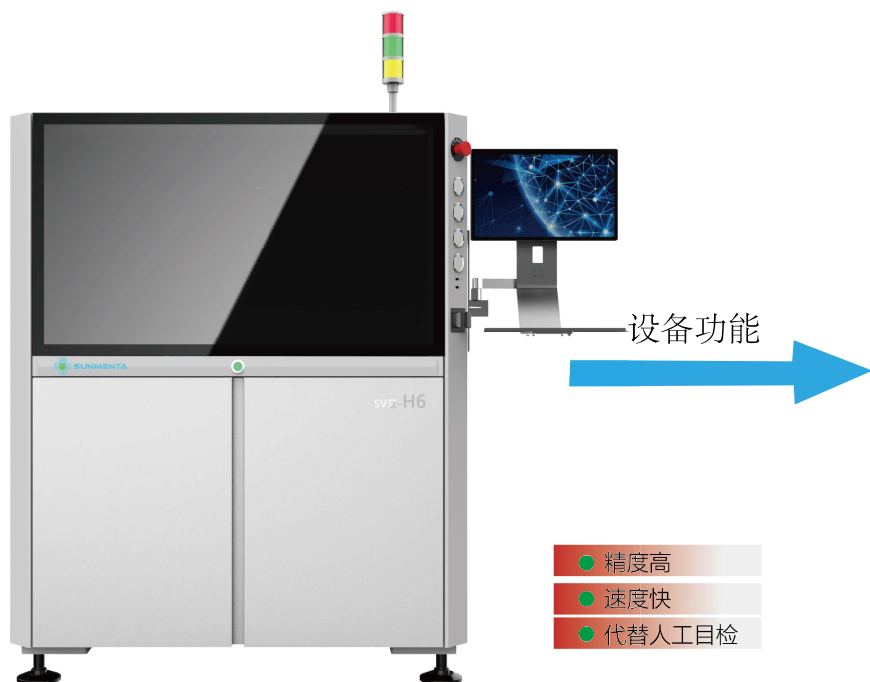


PCB存在的问题点



解决方案

全自动钢网检查机 (SVII-H6)

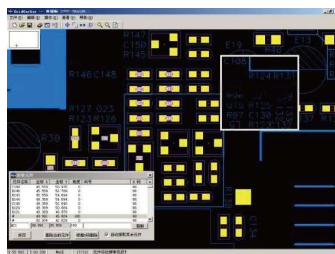


1. 钢网来料及清洗后的检测
2. 对钢网使用多久后的管控
3. 钢网厚度的检测
4. PCB焊盘的检测
5. 钢网开孔设计的优化
6. 钢网的使用寿命
7. 刮刀治具的检测
8. 钢网供应商的筛选

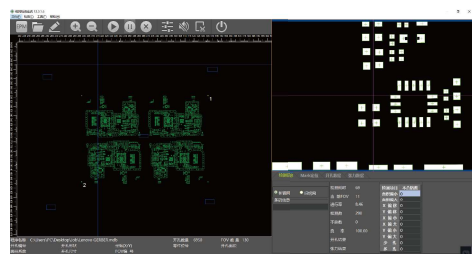
简单的操作流程



推进钢网

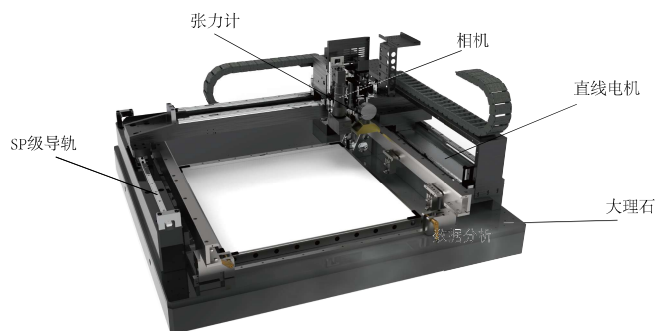


导进Gerber文件编程



进行钢网检测

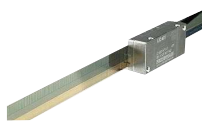
产品结构



精度把控的辅助性工具



二次元



光栅尺



千分表



干涉仪

技术参数

产品型号 Product Model	SVII-H6	
检测用途 (Application)	来料检测或清洗后检测 (For the 1st time inspection of new stencil or inspection after cleaning of cleaned stencil)	
测量项目 (Inspection items)	开孔面积、位置、偏移、大小、异物、毛刺、堵孔、多孔、少孔、张力、锡珠残留 (Area, position, offset, size, foreign objects, burr, hole clogging, miss hole, tension)	
每FOV时间 (Inspection time per FOV)	0.6S/FOV	
开孔面积GRR(GRR of aperture area)	Gage R&R < 3%	
运控精度(Motion control accuracy)	重复(Repeatability): $\pm 1\mu\text{m}$ 定位(Location): $\pm 2\mu\text{m}$	
检测开孔数 (Max. apertures for inspection)	≤ 100 万 ($\leq$ million)	
镜头 (Lens)	双远心镜头 (Dual telecentric)	
照明 (lighting)	特殊白色LED光源 (Special white LED light)	
相机 (Camera)	标配 (Standard):AVT camera,1200万 (12M) 选配 (Options):AVT camera,3100万 (31M)	
相机分辨率 (Camera resolution)	4.9 μm	3.45 μm
最大测量开孔尺寸 (Max. size for apertures)	18.17mm×12.74mm	20.35mm×14.76mm
最小测量开孔尺寸 (Min. size for apertures)	80 μm	100 μm
最小测量开孔间距 (Min. distance between apertures)	160 μm	100 μm
FOV	20.18mm×14.74mm	22.35mm×16.76mm
网框尺寸 (Stencil size)	(736mm×750mm) Max (300mm×300mm) Min	
检测范围 (Inspection area)	500×550mm	
Gerber File	RS-274-X format (Gerber data teaching)	
SPC	Histogram,Xbar-R Chart,Xbar-s Chart,Cp&Cpk, Daily/Weekly/Monthly Report	
远程维护 (Remote maintenance)	TeamViewer software / Anydesk or Sunlogin software	
离线编程 (Offline programming)	离线编程查看 (Offline programming checking)	
计算机 (Computer)	研华工控机或 DELL工作站 (Advantech Industrial personal computer Or Dell workstation)	
计算机系统 (Computer system)	Windows 10 专业版 64位(Windows10 Professional Edition 64 bit)	
电源要求 (Power requirement)	220V,50/60HZ,功耗(Power):3000W	
设备尺寸 (Equipment size)	1300mm(L)×1200mm(W)×1500mm(H)不含三色灯 (Does not contain three-color light)	
气源 (Air supply)	0.4Mpa-0.6Mpa	
设备重量 (Equipment weight)	1000KG	
选配项 (Options)	钢网信息管理系统 (SIMS) (Stencil information management system)	
	定制开发MES模板 (Customized development of MES template)	
	刮刀平行度检测 (Squeegee parallelism test)	
	Gerber文件设计与比对 (Gerber files design and contrast)	
	PCB焊盘检测 (PCB pad inspection)	