

PRODUCT INTRODUCTION

产品介绍

产品—新能源

圆柱锂电池视觉检测包装线
Cylindrical Lithium Battery Vision
Inspection & Packing Line



技术指标/Technical Specifications

检测项目 Inspection Item	压痕、刻痕、异物、污染、腐蚀等外观缺陷 Defects such as indentation, nicks, foreign matter, contamination, corrosion		
检测范围 Inspection Range	18650,21700,4680圆柱锂电池/18650,21700,4680 Batteries		
光学分辨率 Optical Resolution	0.02mm	检测精度 Precision	0.1mm
运行速度 Speed	200PPM	相机数量 Cam Number	8
功率 Power	14KW	电源电压 Voltage	220V,50HZ
尺寸/重量 Size/Weight	12000(L)*2500(W)*2000(H)mm/5000Kg	设备气源 Air Power	0.5 MPa ~ 0.6MPa
系统工作环境 System Working Environment	湿度：5°C-30°C；相对湿度：<70RH 5°C-30°C；Humidity<70RH		
其他特性 Other Features	1、实时显示检测状态及不合格品警报； 2、设备软件具有远程技术支持功能； 3、可扩展连接后端包装线； 4、结构简单，支持一键换型。 1. Real-time display of detection status and NG quantity alarm; 2. The equipment software has remote technical support function; 3. The rear end packaging line body can be extended; 4. The structure is more simple, support one-key transformation.		

圆柱锂电池视觉检测包装线工序

Cylindrical Lithium Battery Vision Inspection & Packing Line Process

自动上料、喷码、静电除尘、外观检测（电池正极、负极、侧面壳体）、电池扫码、自动装盒、CCD复核、内纸盒贴标、条码绑定、自动包装。

Process: Automatic feeding, coding, electrostatic dust removal, appearance detection (positive battery, negative battery, the side shell), battery scanning, automatic packaging, CCD review, carton labeling, bar code binding, automatic packaging.

圆柱锂电池视觉检测包装线特点

Features of Cylindrical Lithium Battery Inspection & Packaging Line

18650电池、21700电池、4680电池等圆柱锂电池检测及包装。

自主研发检测软件：实现圆柱锂电池正负极以及圆柱面的压痕、刻痕、异物、污染、腐蚀等缺陷检测，搭配AI深度学习技术，提高检测准确率。

多重上料方式：根据客户要求对各个模块进行个性化定制，对接不同工厂电池生产末端流程，解决了场地、物流、存储等不同难以适应的问题。

检测效率高：200PPM高速检测线，单线可节省20人左右，工件无需翻转即可完成各端面的检测。

降低生产成本：替代传统检测，减少人工误判，极大提高工厂的生产效率以及产品质量。

Applicable to 18650, 21700,46800 models

Self-development Software:It can realize the detection of indentation, scoring, foreign matter, pollution, corrosion and other defects on the end face and cylindrical surface of the workpieces, improving the accuracy of detection.

Multiple Loading Method:Personalized customization of each module according to the requirements of customers solves the problems during tail flow of manufacturing, such as the coordination between different methods of site, logistics, storage and so on.

High Inspection Efficiency:200PPM high-speed detection line, a single line can save about 20 people, the workpiece does not need to turn over to complete the detection of each end face.

Lower Production Cost:By supplanting the traditional inspection, the misjudgement of manual inspection is reduced, improving the production efficiency and product quality.

电池正极 Cathode



缺失垫片 Missing gasket
多放垫片 Excessive gasket



凹坑 Pit
破套 Broken set



覆盖不良 Poor coverage
凹坑 Pit

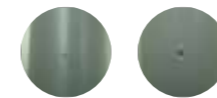


划痕 Scratch
生锈 Rust

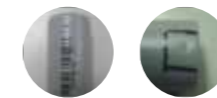


污渍 Stain
焊接不良 Poor welding

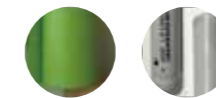
电池外圆面 Cylindrical surface



异物 Foreign matter
破套 Broken set



褶皱 Fold
凹坑 Pit



光圈 Aperture
污渍 Stain

条码 Barcode



粘连 Adhesion
污渍 Stain



波浪 Wave