

# 齿轮外观缺陷光学自动检测设备



齿轮外观缺陷光学自动检测设备专用于检测直径为 10mm~30mm 的齿轮，如小齿轮、斜齿等工件，不仅可以检测外观缺陷还可进行尺寸测量。该设备自动化程度高，性能可靠，经过客户多年的使用验证。

设备主要特点：一是检测效率高，极值检测速度可达 4000 件 / 小时；二是操作便捷，操作人员只需将待测齿轮放入振动盘内，系统即可自行分拣，并可根据客户要求增加储料仓，储存大批量工件；三是智能下料，当振动盘缺料时，储料仓会自动下料到一定位置，以减少工件的加料频率，防止二次损伤；四是新增报警功能，可实时显示监控检测状态及不良品数量。

## Automatic Optical Inspection Equipment for Gear Appearance Defects

Automatic Optical Inspection Equipment for Gear Appearance Defects is especially used for inspecting gears, whose diameter is 10mm~30mm, such as small gears, helical gear and so on. It not only can detect appearance defects but also measure size. The machine is with high-degree automation and reliable performance, which approved by customers' years of use.

Main features: First, high efficiency, the maximum speed of up to 7000 pcs/h; Second, easy to operate. Operators only need to place gears to be detected into the vibrating disk, the system will sort automatically. What' s more, adding a storage bin is feasible on the basis of customers' requirements. Third, intelligently blanking, when lacking of material in the vibrating disk, the storage bin will automatically blank to a certain position to reduce the frequency of feeding workpiece to prevent secondary damage. Finally, adding alarming enables to display monitoring status and the quantity of rejects.

# 技术指标 Technical Specifications

检测项目 Inspection Items	裂缝、崩角、缺齿、毛刺、粘粉、尺寸测量等。 Crack, chipping, less teeth, burr, sticky powder, size measurement etc.		
检测范围 Inspection Range	Φ 10~30mm, H5~15mm	检测要求 Requirements	工件表面干净,无油污 Clean workpiece, grease free
光学分辨率 Optical Resolution	0.03mm	平均无故障时间 MTBF	10,000H
检测速度 Inspecting Speed	4,000pcs/h	设备电源 Voltage	220V, 50HZ
功率 Power	2,000W	设备气源 Air Pressure	0.5MPa ~ 0.8MPa
尺寸 / 重量 Dimension/Weight	2m×0.8m×1.5m /150kg		
系统工作环境 Work Environment	温度：5℃~30℃；相对湿度：<70%RH Temperature：5℃~30℃ Relative Humidity：<70%RH		
其他特性 Other Characteristics	<ul style="list-style-type: none"><li>实时显示检测状态及 NG 品数量报警；</li><li>缺料报警；</li><li>支持远程调试。</li><li>Display real-time status of detection;</li><li>Alarm of the quantity of NG products and lack of material automatically;</li><li>Support remote debugging.</li></ul>		



粘粉 / Sticky Powder

毛刺 / Burr

崩损 / Chip

裂纹 / Crack