

## 扁铜线电机激光焊接机

LASER WELDING MACHINE FOR HAIRPIN

本机采用视觉系统对扁铜线电机的每个PIN进行精准定位，通过先进的图像识别技术，设备能够迅速而准确地锁定焊接点，协同搭载的高速扫描振镜的快速反应，实现了一次性多点焊接功能，使得焊接过程更为高效和精准，从而保证焊接的准确性和稳定性，为电机制造业提供了可靠的焊接解决方案。

This machine adopts Vision System to accurately position each PIN of the hairpin motor, by the advanced image recognition technology, the equipment can quickly and accurately target the welding point, and cooperate with the high-speed response of the high-speed scanning galvanometer, to achieve multi-point welding at one time function, making the process more efficient and precise, so as to ensure the accuracy and stability of the welding, also have provided reliable welding solution for the motor manufacturing industry.

- 焊前测量、监控 pin 线配合的间隙、左右偏差和角度。
- 对小偏差 pin 线智能调用特殊配方进行焊接。
- 等离子体吹散系统保证稳定的激光有效输入能量。
- 位置补偿功能消除边缘视场焊点偏头现象。
- Measurement and monitoring of gap, left and right deviation and angle of the pin wire matching before welding.
- Intelligent invoke special formula for welding of small deviation pin wire.
- Plasma Blowout System ensures stable laser to effectively input energy.
- Position compensation function can eliminate welding deviation at the edge field of view.

广泛应用于新能源汽车扁线电机行业，适用于扁铜线材质激光扫描焊接。  
It is widely used in new energy automobile hairpin motor industry, suitable for hairpin material laser scanning welding.



性能 / 型号	Performance/model	SK-CW6000	SK-CW8000
最大激光功率	Max. laser power	6000W	8000W
激光波长	Wavelength	1030-1090nm	1030-1090nm
光纤适配器	Fiber adapter	QBH, QD/LLK-D, Q5/LLK-B	QBH, QD/LLK-D, Q5/LLK-B
通光孔径	Aperture	Φ30mm	Φ30mm
最大扫描速度	Scanning speed	6000mm/s@f=420	6000mm/s@f=460
扫描精度	Scanning accuracy	≤2μrad	≤2μrad
温度漂移 (连续烤机 8h)	Temperature drift	<30μrad	<30μrad