

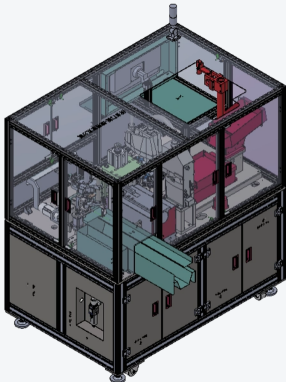
AUTO HARNESS WELDER

KKSH02

全自动超声波线束焊接机

集成 PLC 自动化、气动与视觉定位的全自动线束超声波焊接系统，适合新能源汽车线束等高节拍制造场景。

A fully automatic ultrasonic wire-harness welding system integrating PLC automation, pneumatics and vision positioning for high-throughput manufacturing such as new-energy vehicle harnesses.



技术参数 / TECHNICAL SPECIFICATIONS

| 适用线径<br>Applicable wire size           | 1.5-20 mm²         |
|----------------------------------------|--------------------|
| 切断长度<br>Cutting length                 | 30-9999 mm         |
| 剥皮长度<br>Stripping length               | 0-10 mm            |
| 焊接节拍<br>Welding time                   | 0.6-1.2 s          |
| 生产周期<br>Production cycle               | 3.5-6.5 s/PCS      |
| 整机尺寸<br>Machine dimensions             | 1670×1250×1600 mm  |
| 整机重量<br>Machine weight                 | 约 490 kg           |
| 供电 / 气压<br>Power supply / air pressure | AC 220 V / 0.5 MPa |

设备功能 / EQUIPMENT FEATURES

|                                                     |                                                       |
|-----------------------------------------------------|-------------------------------------------------------|
| <b>01 全流程自动化</b><br>自动完成上料、裁线、剥皮、焊接、检测及良品分选，减少人工干预。 | <b>02 六端子快速切换</b><br>支持最多 6 种端子自动切换，适合多规格线束柔性生产。      |
| <b>03 CCD 与能量监控</b><br>监测线材有无、焊接能量和焊点尺寸，强化过程质量追溯。   | <b>04 高节拍生产</b><br>小线典型周期 3.5-4.5 秒，大线典型周期 5.5-6.5 秒。 |

典型应用 / TYPICAL APPLICATIONS

|                                                                                      |                                                                           |                                                                              |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------|
| <b>01</b><br>新能源汽车线束批量焊接<br>High-volume welding of new-energy vehicle wire harnesses | <b>02</b><br>电池系统内部线缆连接<br>Internal cable connections for battery systems | <b>03</b><br>自动化线束产线集成<br>Automated wire-harness production-line integration |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------|

工程验证流程 / ENGINEERING VALIDATION WORKFLOW

|                                                                                                                                                              |                                                                                                                                            |                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>01 提交资料</b><br/><b>SUBMIT INFORMATION</b></p> <p>提供材料、尺寸、图纸、样件与验收要求。<br/>Provide materials, dimensions, drawings, samples and acceptance criteria.</p> | <p><b>02 样件验证</b><br/><b>SAMPLE VALIDATION</b></p> <p>评估模具方案、工艺窗口、质量与节拍。<br/>Evaluate tooling, process window, quality and cycle time.</p> | <p><b>03 技术确认</b><br/><b>TECHNICAL CONFIRMATION</b></p> <p>确认设备配置、接口、验收范围与交付方案。<br/>Confirm machine configuration, interfaces, acceptance scope and delivery plan.</p> |
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选型所需信息 / SELECTION CHECKLIST

|           |                                                                                                              |
|-----------|--------------------------------------------------------------------------------------------------------------|
| <b>01</b> | <p><b>材料组合与牌号</b><br/>Material combination and grade</p>                                                     |
| <b>02</b> | <p><b>线束截面积、汇流排厚度或工件尺寸</b><br/>Wire cross-section, busbar thickness or workpiece dimensions</p>              |
| <b>03</b> | <p><b>焊区结构、二维图纸与实物样件</b><br/>Joint geometry, 2D drawings and physical samples</p>                            |
| <b>04</b> | <p><b>目标节拍、拉力或电阻等验收要求</b><br/>Target cycle time and acceptance criteria such as pull force or resistance</p> |
| <b>05</b> | <p><b>工作站、自动化产线或 MES 接口需求</b><br/>Workstation, automation-line or MES interface requirements</p>             |

常见问题 / ENGINEERING FAQ

|                                                                         |                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>如何确认该型号是否适用?</b><br/>How is suitability confirmed?</p>            | <p>结合材料、尺寸、焊区结构、节拍及验收要求评估，最终以样件验证和技术确认单为准。<br/>Evaluation covers materials, dimensions, joint geometry, cycle time and acceptance criteria. Final selection is subject to sample validation and technical confirmation.</p> |
| <p><b>能否先进行样件验证?</b><br/>Can samples be validated first?</p>            | <p>支持。建议提供样件、二维图纸和目标焊接标准。<br/>Yes. Please provide samples, 2D drawings and target welding criteria.</p>                                                                                                                     |
| <p><b>是否支持产线或 MES 集成?</b><br/>Is line or MES integration supported?</p> | <p>可按项目评估工作站、自动化产线和 MES 接口。<br/>Workstation, automation-line and MES interfaces can be evaluated per project.</p>                                                                                                           |

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| <p><b>技术确认 / TECHNICAL CONFIRMATION</b><br/>页面及资料中的参数用于前期选型，最终配置以双方确认的技术方案为准。<br/>Parameters in this datasheet are for preliminary selection. Final configuration is subject to the mutually confirmed technical proposal.</p> | <p><b>联系工程团队 / CONTACT ENGINEERING</b><br/>shawn.tang@rykks.com<br/>+86 187 9686 3314<br/>www.metwelder.com</p> |
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