

# SIASUN Robotics Laser Welding Integrated System

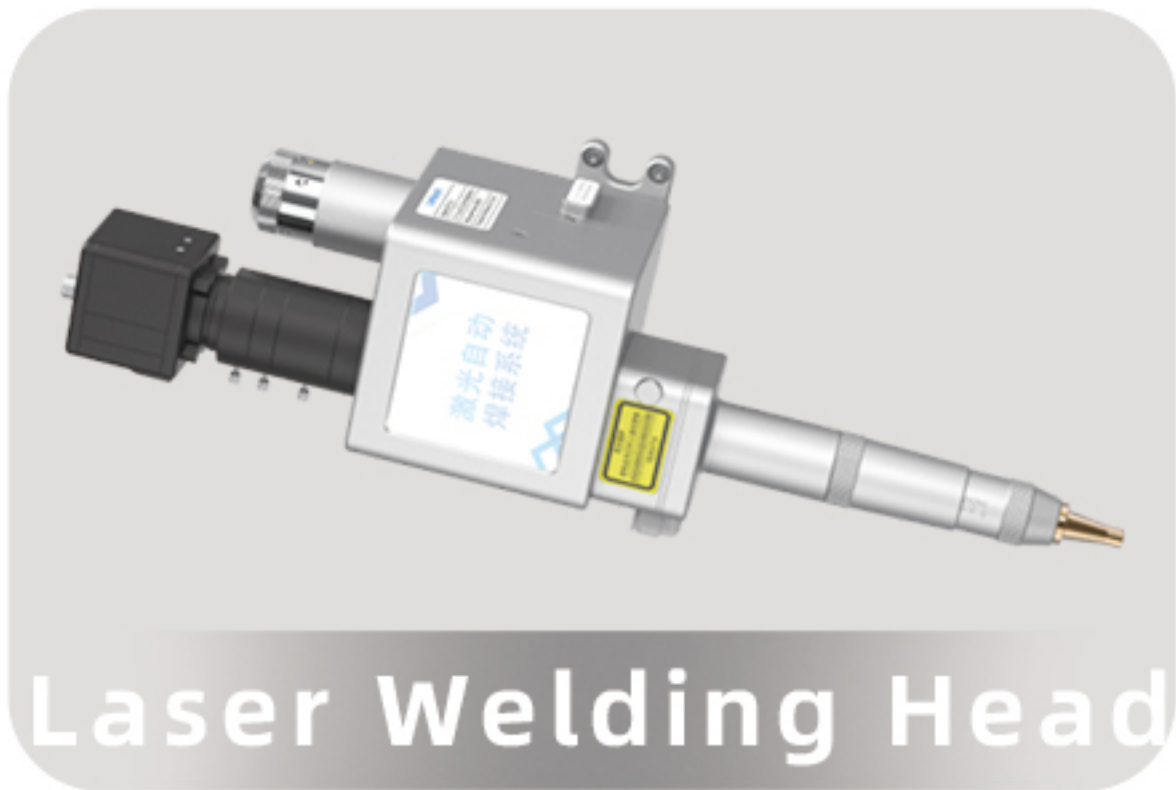


Precision Smart Control · Effortless Welding · Cost-Effective & Practical ·  
Your Most Reliable Laser Welding Partner





# SIASUN Laser Welding Robotic System



Centered on the SR Series Industrial Robots, this automated welding solution integrates laser welding machines, laser welding heads, wire feeding systems, and water cooling systems to deliver a comprehensive and efficient welding workflow.

## INDUSTRIAL ROBOT

Type		SR12A-12/1.46	SR25A-25/1.80
Max payload		12kg	25kg
Repeatability		±0.03mm	±0.05mm
Max.reach		1465mm	1803mm
Motion Range	J1	±180°	±180°
	J2	+ 90°, -170°	+ 90°, -165°
	J3	+ 150°, -90°	+ 160°, -85°
	J4	±180°	±180°
	J5	+ 145°, -160°	±180°
	J6	±360°	±360°
Maximum Speed	J1	200°/s	200°/s
	J2	200°/s	220°/s
	J3	220°/s	220°/s
	J4	400°/s	380°/s
	J5	430°/s	420°/s
	J6	720°/s	550°/s
Moment	J4	23N·m	52N·m
	J5	20N·m	52N·m
	J6	9N·m	32N·m
Inertia	J4	0.4kg·m²	2.4kg·m²
	J5	0.38kg·m²	2.4kg·m²
	J6	0.1kg·m²	1.2kg·m²
Weight		130kg	250kg
Protection (wrist)		IP65	IP65





# LASER WELDING HEAD

Model	SUP25A
Power Supply Voltage	System Power Supply
Installation Environment	No vibration or shock
Operating Temperature	-10 ~ 50℃
Operating Humidity	< 70
Cooling Method	Water-cooled
Applicable Wavelength	1080nm (±10nm)
Max Power	≤3000W
Collimating Lens	D30*4.5 F75
Focusing Lens	D30*4 F250
Protective Lens	D30*3
Max Air Pressure	15Bar
Focus Vertical Adjustment Range	±15mm
Weight	2.2kg



# LASER WELDING HOST

High Gap Tolerance

Beautiful Weld Formation

High Power Density

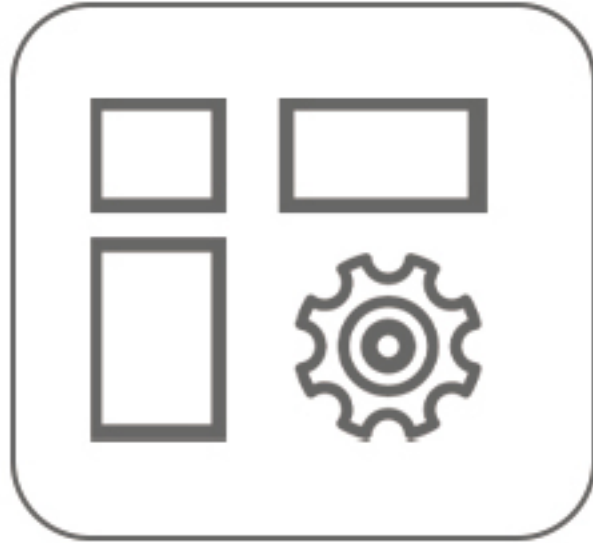
High Efficiency, Low Spatter

Product	X-Series Robot Laser Welding Machine
Model	X-1500R
Laser Power	1500+50w
Control System	Megmeet Robot Laser Control System
Wire Feeding Method	Single Wire Feeding
Positioning Method	Red Light Point-Line Positioning; Optional CCD Positioning & Observation System
Rated Input Voltage	220V 50/60HZ
Rated Input Power	5.4KW
Output Laser Wavelength	1080±5nm
Cable Length	Standard 10m (Extendable to 15m)
Operation Modes	Continuous, Modulated
Cooling Method	Dual-Temperature Dual-Control Industrial Constant-Temperature Water Tank with High-Power Pump & Heat Pump
Operating Temperature	-10℃~40℃
Operating Humidity	<70% (No condensation at Tc=40℃)
Recommended Weld Thickness	0.5-4mm
Workpiece Gap Requirement	≤1mm
Machine Dimensions (L×W×H)	889*543*791mm
Weight	≤88.5kg



# APPLICATION AUTOMATION SOLUTION >

Centered on the SR Series Industrial Robots, Siasun's Laser Welding Integrated Solution integrates high-precision lasers, dedicated laser welding heads, automatic wire feeding systems, and water cooling systems to deliver a comprehensive and efficient automated welding solution. This system not only achieves high-precision and high-speed consistency in laser welding processes but also simplifies operational workflows through innovative design optimizations, significantly enhancing user experience.



*High Integration,  
User-Friendly Opera-  
tion.*



*Precision Wire Feed-  
ing, Anti-Stick Wire  
Delivery.*



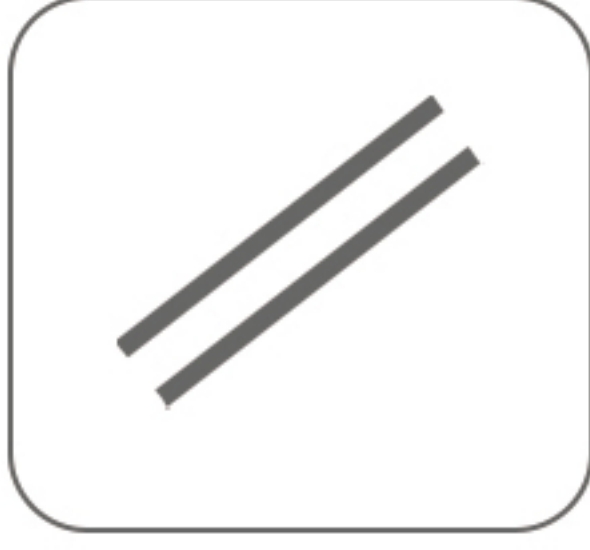
*Intelligent Welding  
Technology, Professional  
Applications.*



*Digital Communica-  
tion, High Efficiency &  
Convenience.*



*Modular Design,  
Easy Maintenance.*



*Stable Output Perfor-  
mance, Beautiful  
Weld Appearance.*

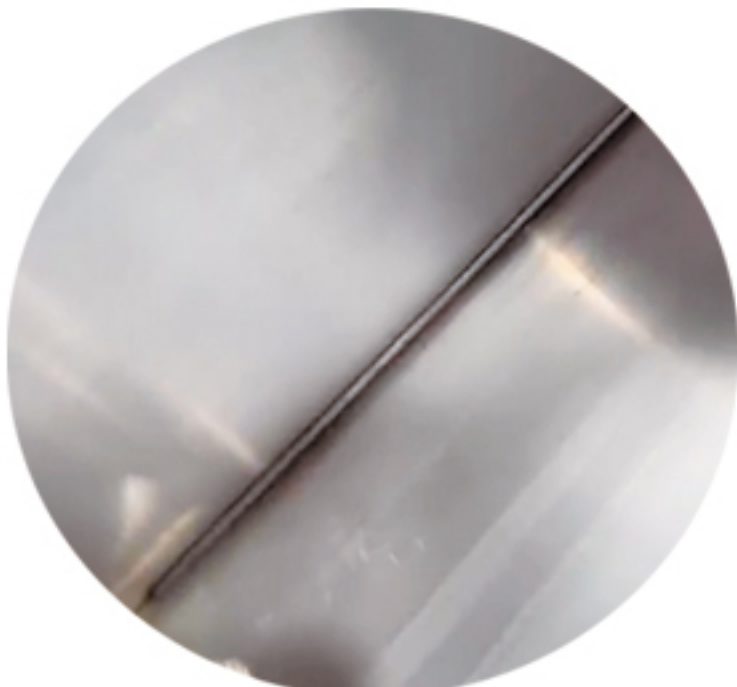
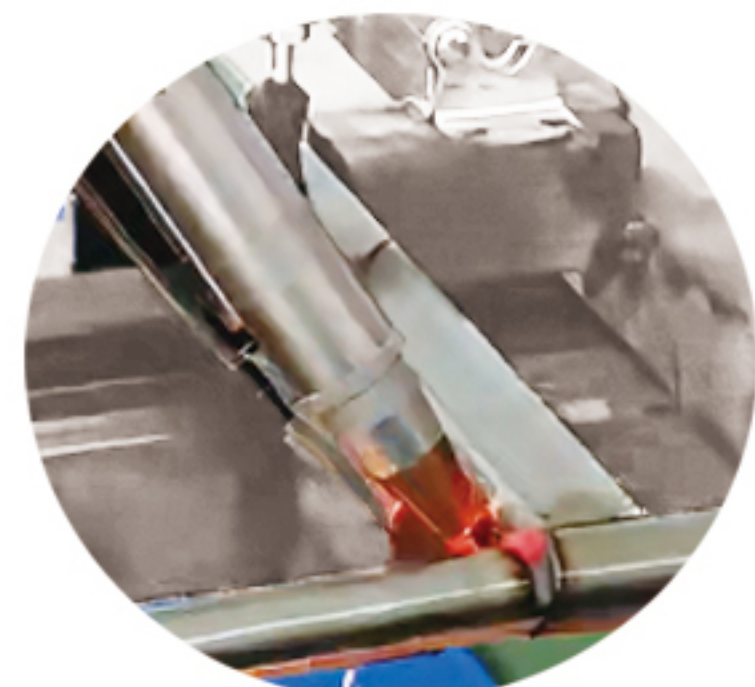
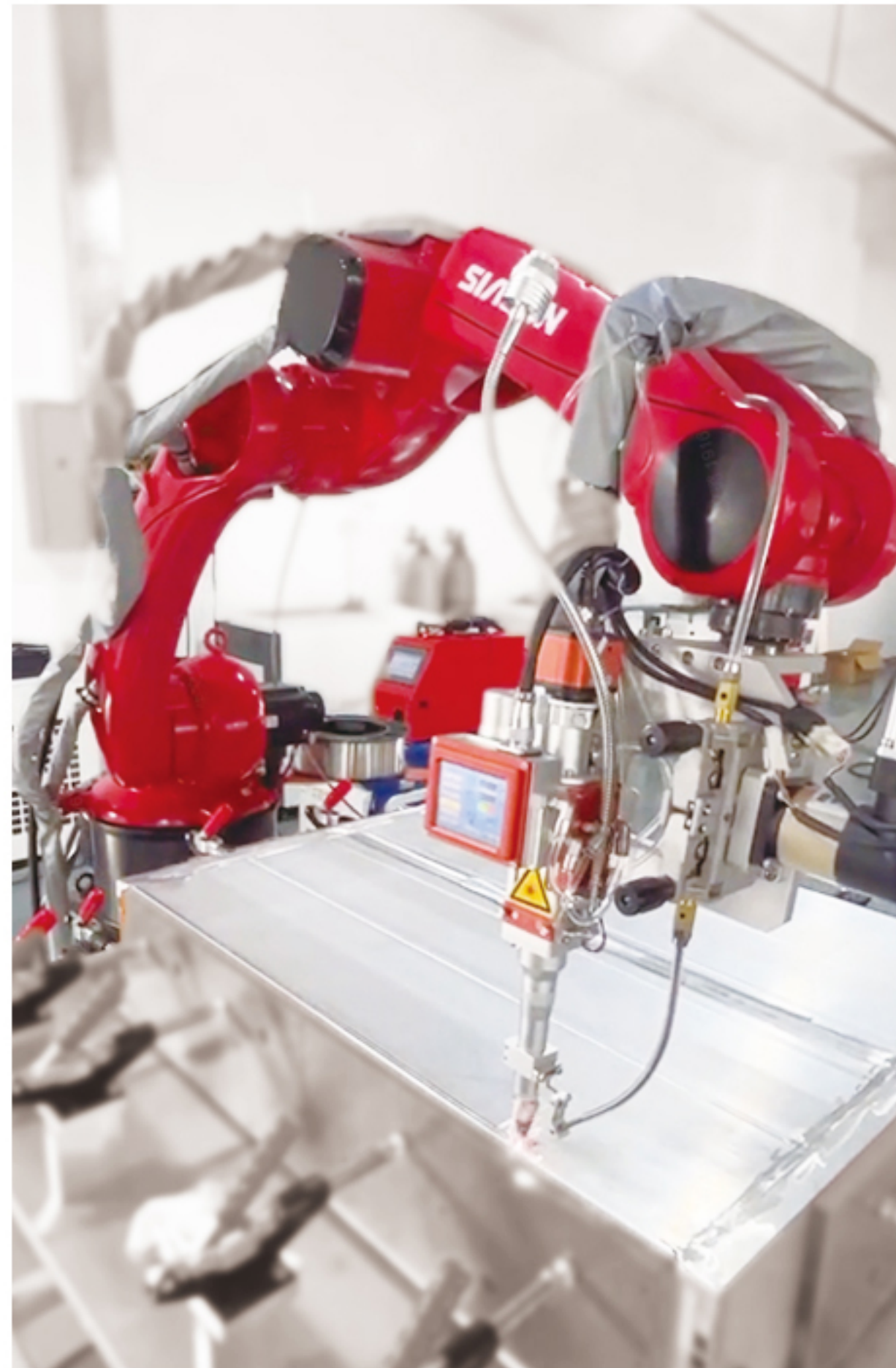
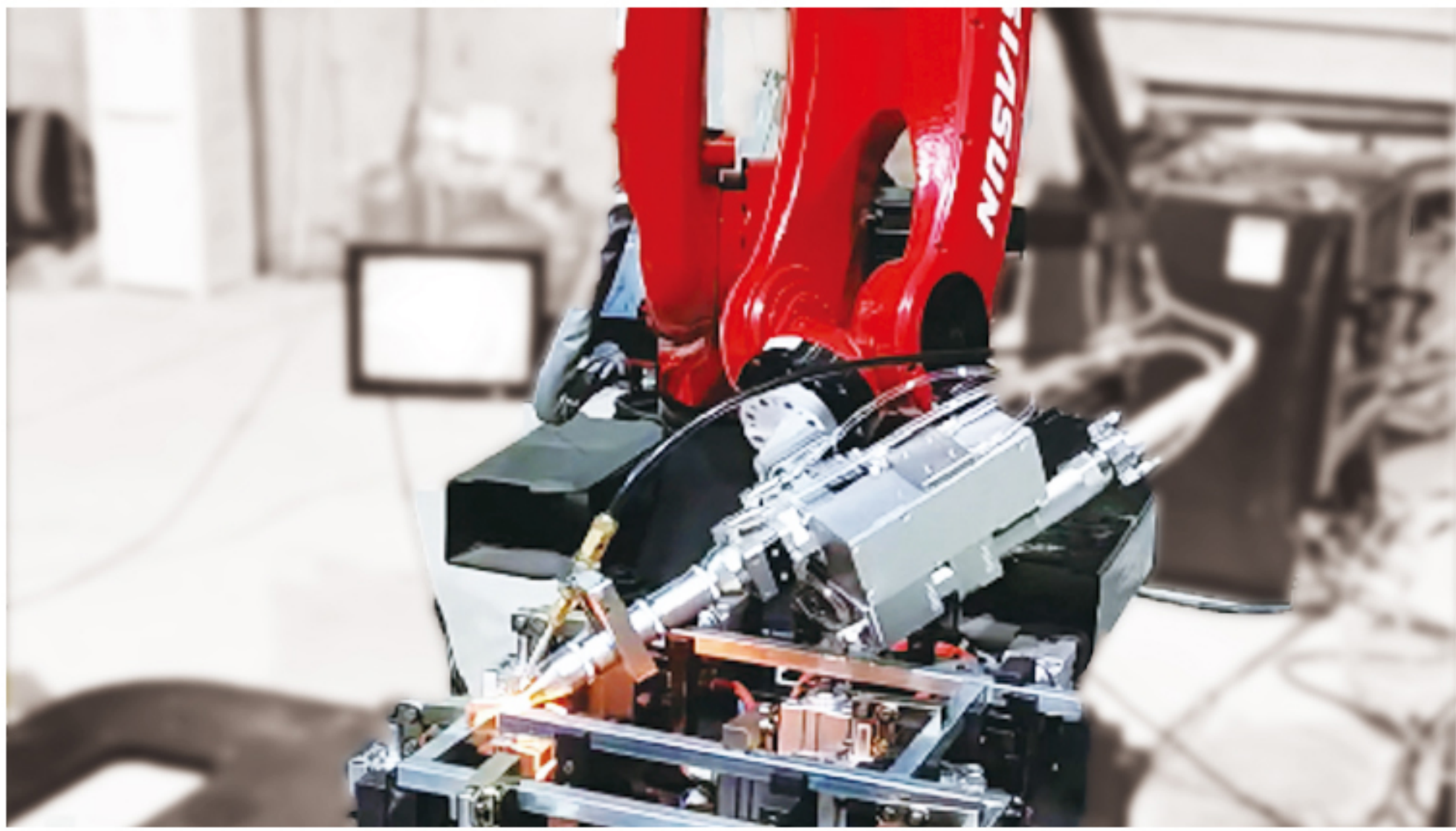
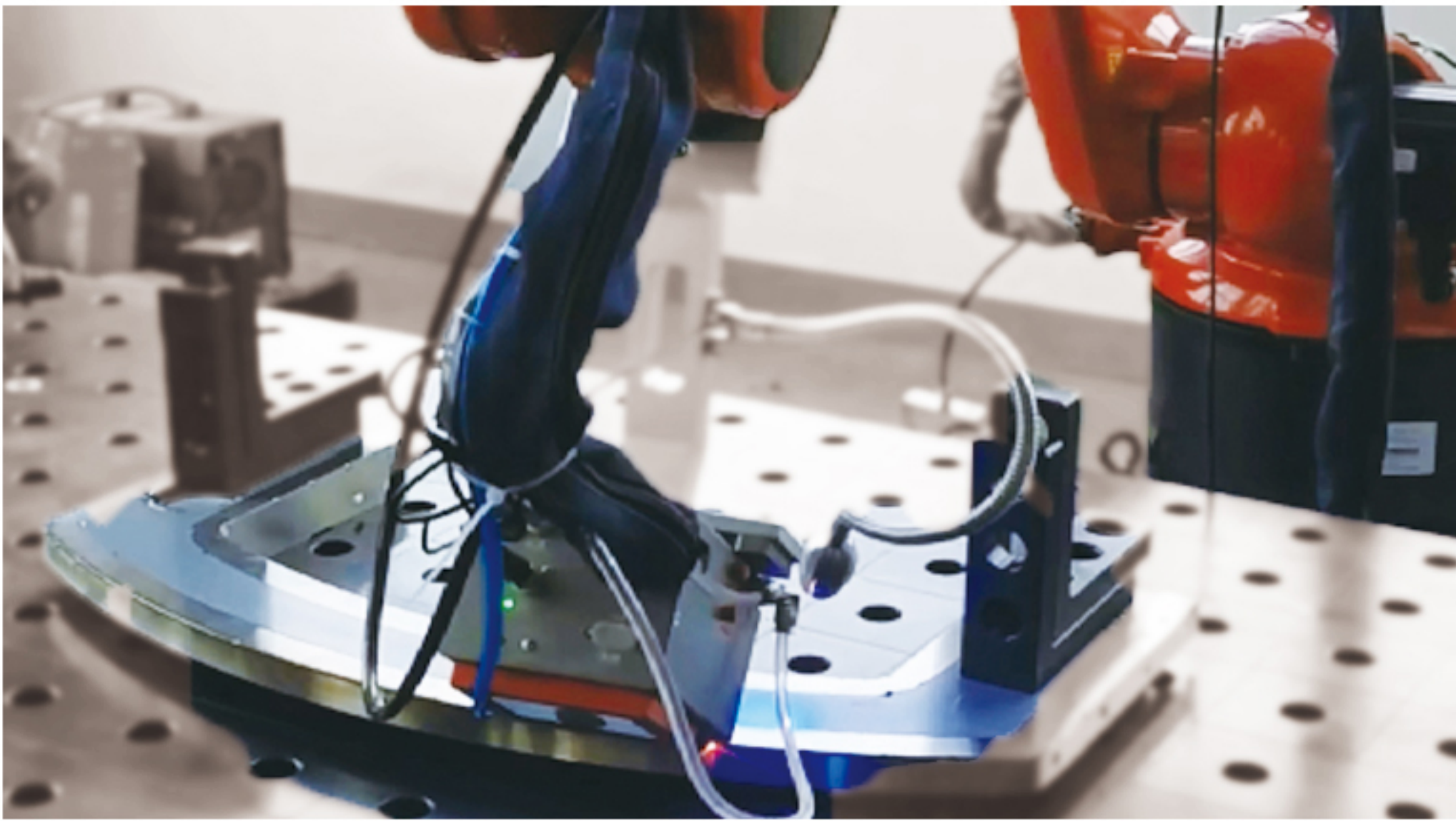
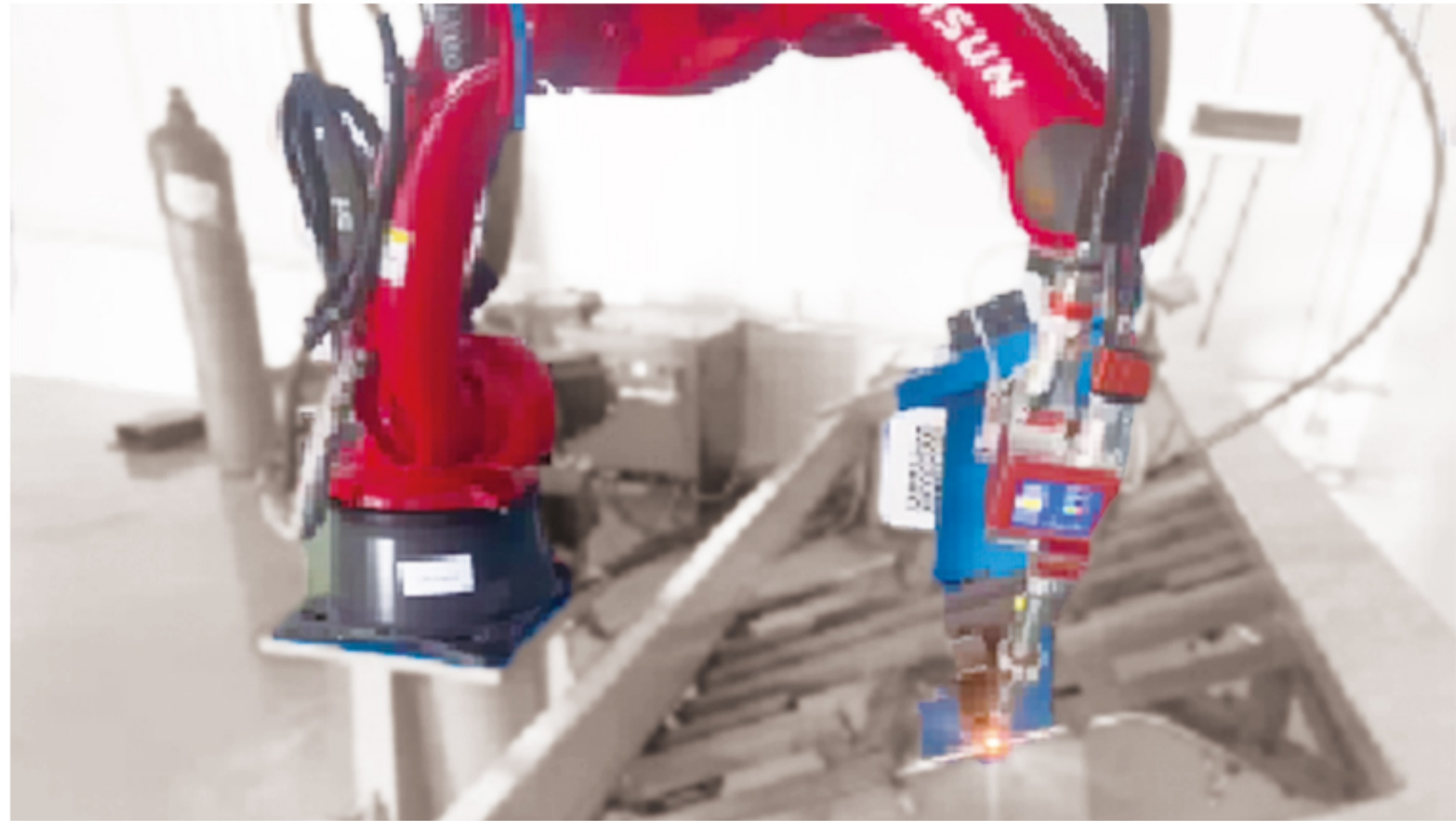


*Safety & Reliability,  
Dynamic Monitoring  
System.*



*Professional Support,  
After-Sales Assurance.*

## Laser Welding Automation Siasun Industrial Robots Standard Model





**All-in-One Integration**  
**Minimize Adaptation Hassles**



**Deep Development**  
**Unlock Laser Welding Process Library**



**Digital Communication, Enable Microsecond-Level Synchronization Between Laser and Robot**



## **ALL-IN-ONE INTEGRATION** >

- Equipped with independently developed SR Series robots, featuring high trajectory accuracy, stable operation, smooth pose transitions, and exceptional motion performance, ensuring optimal condition for each weld point.
- Integrated Product Design enhances communication speed and arc response speed, while boosting the system's integration capability and installation-operational efficiency.
- Strategic partnerships with domestic leading laser manufacturers to deliver mature, comprehensive, and all-in-one solutions for users.

## **DEEP DEVELOPMENT** >

- SIASUN's Laser Welding Software Package features dedicated functional configuration pages and application-specific instruction sets, allowing users to configure laser welding types, communication protocols, and process parameters via the robot teach pendant.
- Through digital and analog signal control, achieve efficient and stable data transmission.
- Supports smooth laser power ramping to enhance welding integrity.

## **DIGITAL COMMUNICATION** >

- Digital Communication: Stable with Strong Anti-Interference, Enabling Efficient and Stable Data Transmission · Users Can Directly Configure Laser Control Parameters via Robot Teach Pendant, Streamlining Workflows for Enhanced Convenience and Efficiency.





***SIASUN***



**新松机器人自动化股份有限公司**  
**SIASUN ROBOT & AUTOMATION CO., LTD.**

Add: NO.33 Quanyun Road, Hunnan District, Shenyang, P.R.China.

Tel: 400 800 8666

E-mail: [market@siasun.com](mailto:market@siasun.com)

WeChat: [siasunrobot](#)

Web: <https://www.siasun.com/>

VER: SR023002-A/0

