Ultra-low splash welding

- The 110KHZ high-frequency hardware system,combined with patented algorithms, achieves precise control, greatly reducing splashes caused by liquid bridge rupture and electromagnetic re-pulsion,making the molten pool smoother and the weld forma- tion more beautiful.
- Soft arc,small splash,and 90%reduction in splash weight com-pared to ordinary DC welding machines.
- Smooth droplet transfer,calm melt pool,low heat input,strong bridging ability,suitable for large gap thin plate welding.
- Wide low splash current area:thin carbon steel,1.2mm diameter welding wire,low splash area can reach 210A.

Welding Quality

Application

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

WeChat：siasunrobot
Web：https://www.siasun.com/

VER：SX023002-V1.0

SIASUN
新松机器人

SIASUN SHEET METAL WELDING MACHINE SET

YOUR BEST WELDING ASSISTANT

M350

SIASUN Welding Engineer System

Controller

Teach pendant

Welding torch
GL350N-HDA,TRM352P

Welding machine
Dex2 350LDR

Wire feeder

Wire box

SIASUN SR-series robot equipped with a new intelligent welding control system,creating exclusive welding equipment for you to easily achieve welding automation

Welding machine parameters

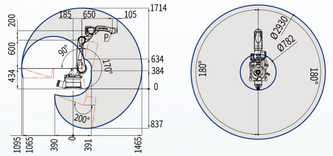
Model	Dex2 350LDR		
Control mode	Digital IGBT control	Efficiency	87%@350A
Input voltage	Three phase AC 380 V(±25%)	Output characteristic	CV
Input frequency	40~70Hz	Wire feeding speed	0.5~28m/min
Inverter switching frequency	110kHz	Parameter channel storage	50 sets
Rated input capacity	13.7KVA/12.6KW	Working temperature	-10℃~40℃(Welding power supply can be started at -39 ℃)
No-load voltage	77V	Appearance size	L*W*H (mm) 647*291*572
Rated output current	350A	Weight	40kg
Rated output voltage	31.5V	Shell protection level	IP23 S
Temporary load rate	100%@350A	Insulation level	H
Power factor	0.92	Cooling method	Forced air cooling

Industrial robot

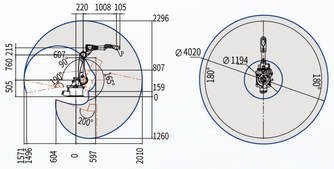
The SIASUN SR series industrial robots are specially designed for the welding field.
Streamlined appearance,high rigidity and lightweight body,combined with strong driving force,achieve ultimate speed and accuracy.

Type		SR12A-12/1.46	SR25A-12/2.01
Max payload		12kg	12kg
Repeatability		±0.03mm	±0.07mm
Max.reach		1465mm	2010mm
Motion Range	J1	±180°	±180°
	J2	+90°, -170°	+90°, -165°
	J3	+180°, -200° (combined)	+190°, -200° (combined)
		+150°, -90° (single)	+160°, -85° (single)
	J4	±180°	±180°
	J5	+145°, -160°	+145°, -160°
	J6	±360°	±360°
Maximun Speed	J1	200°/s	200°/s
	J2	200°/s	220°/s
	J3	220°/s	220°/s
	J4	400°/s	400°/s
	J5	430°/s	430°/s
	J6	720°/s	720°/s
Moment	J4	23N·m	23N·m
	J5	20N·m	17N·m
	J6	9N·m	9N·m
Inertia	J4	0.4kg·m²	0.4kg·m²
	J5	0.38kg·m²	0.35kg·m²
	J6	0.1kg·m²	0.1kg·m²
Weight		120kg	250kg
Protection (wrist)		IP65	IP65
Wiring method		built-in wiring	

SR12A-12/1.46



SR25A-12/2.01



Welding Fuction

Flight welding function:

According to the pre-arcing and pre-arcing time set by the user, the arcing and reversing process is started in advance.

Continuous welding function:

Fish scale welding, reduce welding heat input, forming beautiful, full.

Rotation mirror translation function:

The function of rotating image translation can directly convert the point data of the specified range of the specified job to improve the teaching efficiency. Including job offset, image offset, Angle input offset.

Reservation function:

According to the actual needs of the user to design their own special booking box(multiple, booking boxes need to be equipped with another) corresponding to multiple stations, each booking box has a start button, each start button corresponds to a job, the user can press the start button in the order to start each button corresponding to the job.

Breakpoint recovery function:

In view of the situation that there is an alarm or other reasons to stop the robot welding process, when the welding robot program starts again, the break point recovery function can be performed near the break point for intermittent welding.

Optional function

Locating function:

It is divided into contact sensing and non-contact sensing functions.Ensure that the welding process is not affected by the incoming processing of the workpiece,the weld position deviation caused by the com- bination welding and welding clamp positioning,automatically find the weld position and identify the welding situation to ensure smooth and accurate welding.

Weld tracking function:

When the actual weld trajectory deviates from the track of the teaching program or the workpiece is thermally deformed in the welding process,the robot can realize real-time correction of the motion trajectory in the welding process through data collection and processing in the welding process,so as to ensure that the running trajectory of the end of the welding torch is always on the weld.

Multi-pass welding function:

It only needs to show the position of the root channel weld,and automatically performs the second layer and subsequent welding by setting template parameters,which can reduce the teaching amount and is easy to use.At the same time,the setting of the welding process and the adjustment of the attitude of the welding gun can be applied to the welding of each layer to bring satisfactory welding results to customers.