

SanRex CO<sub>2</sub> semi Automatic Welding machine has always been most favoured among leading manufacturers, with its excellent performance and quality, since the start of sales. SanRex has continued its research and development, based on user's needs, in search of high performance and high quality welding machine. The results are these excellent CO<sub>2</sub> semi automated welders, SANAUTO SD series.

- This equipment has various features which enables any operator to perform high-quality welding operations quite easily.
- The torch is light and easy to use, reliable even after long hours of operation.
- Trouble is minimized and maintenance is readily accessible
- This new SANAUTO SD series employs the solid state control system by thyristor, which includes various features: - good arc start, supply voltage compensation, stabilized arc, etc. This machine can satisfactory help to reduce manpower for welding work in the factory.



### Features

#### Good Arc Start

The new SanRex CO<sub>2</sub> semi automatic welding machine incorporates Sansha Electric's original arc start compensating circuit and control system which prevents beads from generating at the wire end after completion of the welding operation, enabling a better arc start performance.

#### Stable Welding Conditions

A built-in output stabilizer circuit maintains stable welding conditions even when supply voltage and ambient temperature vary. In particular, a thyristor is employed for the main circuit, so the arc has excellent stability in a short arc region, thus creating its outstanding performance in steel sheet welding.

*Allowable range of fluctuation of input voltage is within  $\pm 10\%$  of the rated voltage.*

#### Light, Easy-to-use Curved Torch

The torch is lightweight, well-balanced and can be easily adjusted to all angles, thus producing excellent working efficiency. Additionally, it is constructed so that the inner tube can be easily cleaned and replaced. It's many other features include light and strong cable resisting the severest bending and impulses, etc.

#### High Reliability and Safety Design

In case of open phase operation and overload, the newly designed PCB has built-in over-voltage and thermal protection (a protective device for abnormal temperature rise). To assure satisfactory use of machine, every component part is manufactured under the most strict quality control.

#### Excellent Thyristor Circuit Incorporated

An excellent thyristor circuit developed by Sansha Electric enables the non-contact system, resulting in no operation downtime due to contact wear. Since the control circuit is assembled as unit and arranged at the front of the power source unit, it is readily accessible for maintenance and inspection.

#### Light Weight, Robust Wire Feeder

The wire feeder is compactly designed, lightweight and easy to carry. The wire feeder has a spool shaft which is capable of replacing a wire at touch. A powerful print motor is provided to ensure wire feeder, and this feeder has many other specific features, including a wire correction mechanism for keeping the wire straight.

#### Protective Cover for Wire

This cover prevents dust and dirt from sticking to wire, thus maintaining the wire in an optimum condition.

#### Enable to connect to Robot for Auto Welding (optional)

With this new feature, the welding machine can be connected to robot for auto welding with external control for auto stop, alarm signal and output adjustment signal for current control.

Welder Model	MD-2002CY	MD-3502CY	MD-5002CY	MD-6001CY
Welder Power Source	SD-2002CY	SD-3502CY	SD-5002CY	SD-6001CY
Wire Feeder Type	SWF-2002CY	SWF-3502CY	SWF-5002CY	SWF-6001CY
Welding Torch Type	SanRex200A	SanRex350A	SanRex500A	SanRex600A
CO2 Gas Flow Regulator	394C-25L-110			

### Welder Specification

Model	SD-2002CY	SD-3502CY	SD-5002CY	SD-6001CY
Input Voltage	V AC 380V / 415V			
Phase	3-Phase			
Frequency	Hz 50 / 60			
Rated Input Capacity	kVA 7.9	17.3	31.6	47.6
Output Current	A 50~200	50~350	60~500	60~600
Output Voltage	V 15~27	16~36	16~45	17~44
Rated Duty Cycle	% 60	50	60	60
Type Of Rectification	3-Phase Double Star Commutation by Thyristor			
Cooling System	Forced Air Cooling			
Outline dimensions (W x D x H)	mm 347×655×703 420×673×826 450×680×835			
Weight	kg 94	117	166	245
Insulation Class				

### Wire Feeder Specification

Welder Power Source	SD-2002CY	SD-3502CY	SD-5002CY	SD-6001CY
Wire Feeder Type	SWF-2002CY	SWF-3502CY	SWF-5002CY	SWF-6001CY
Feeder Motor Type	DC Print Motor			
Applicable Wire Diameter	mm $\phi 0.8$	$\phi 1.0$	$\phi 1.2$	$\phi 1.2 \sim 1.6$
Applicable Wire Reel	mm 50			
Shaft Diameter	mm 300			
Outside Diameter	mm 103			
Width	mm 3			
Length Of Cable and Hose	m 14			
Weight	kg			

### Welding Torch Specification

Welder Power Source	SD-2002CY	SD-3502CY	SD-5002CY	SD-6001CY
Welding Torch Type	SanRex200A	SanRex350A	SanRex500A	SanRex600A
Rated Current	A 200	350	500	600
Rated Duty Current	% 60	60	60	60
Applicable Wire Diameter	mm $\phi 0.8 \sim 1.2$		$\phi 1.2 \sim 1.6$	$\phi 1.2 \sim 1.6$
Cooling System	Natural Air Cooling			
Torch Shape	Swan Neck Type			
Cable Length	m 3			
Torch Weight	kg 0.65	0.65	1.6	1.8

### Gas Regulator Specification

Welder Power Source	SD-2002CY	SD-3502CY	SD-5002CY	SD-6001CY
Wire Flow Regulator	394-25L-110			
Maximum Pressure	kgf/cm <sup>2</sup> 250			
Minimum Pressure	kgf/cm <sup>2</sup> 25			
Gas Heater Source	W 110V-190W			
Temperature	°C 65°C $\pm$ 3°C (OFF)			
Flow Meter Range	L/mm 1~25			

### Standard Accessories

Welder Power Source			SD-2002CY	SD-3502CY	SD-5002CY	SD-6001CY
Protection	Type		FGBO 1A FGBO 8A			
Fuse	Rated Current	A	1. 8.			
Gas Hose			1 Length			
Hose Band		mm	φ 11			
Welding Torch Type			SanRex200A	SanRex350A	SanRex500A	SanRex600A
Tip Size		mm	φ 0.8	φ 1.0	φ 1.2	φ 1.2
Nozzle		mm	φ 16	φ 16	φ 19	φ 20 1只
Gas Flow Regulator			394C-25L-110			