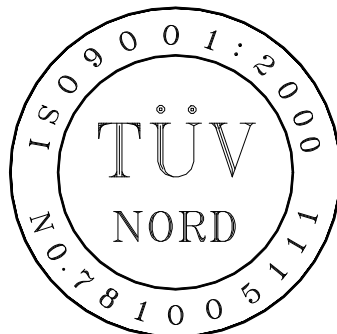


STUD WELDER (RSR SERIES)

SPECIFICATION

Please read carefully before usage



Thank you for using this product of 'h $\wedge$ nwin'! Please read the specification carefully and reserve it to look up.

Warning: dangerous voltage inside machine, do not open the covers unless professional.

Introduction

Our company is one of the professional enterprise that specialize in design, manufacture and sale of welding and cutting equipment, our production have passed the quality certification system of TUV NORD CERT ISO9001: 2000, NO.781005111. Following its core-value concept of “pursuit excellence, quality first”, now our sales and service net have covered most of China, and we are founding overseas sales and service net. It has an annual output capacity of 10,000 sets welding and cutting machine.

The series of 'h $\wedge$ nwin' product as follows

- *DC TIG welding machine series
- *AC/DC TIG welding machine series
- *Semi-auto-CO₂ welding machine series
- *DC MMA welding machine series
- *Air plasma cutting machine series
- *CNC resistance welding machine series

Our corporation will continue it's commitment to make product professional, general, systematic, assure product of excellent function and up to the world's most advanced technology in welding.

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1. Primary use and applicability range

Welcome to choose this series of welder. Stud welder with energy storage capacitor is a sort of equipment that adopts capacitor as the storage element, using the space discharge between the stud and the pieces and forming the unstable arc instantly. It makes use of the heat of arc melting the interface between the stud and the pieces, then form the welding joint.

It is mainly used to weld all kinds of standard component of, mild steel, stainless steel, aluminum alloy, such as the mild steel or stainless steel closet, the meter case, the car case, hardware, aluminum alloy ceiling etc. The welder has the virtue of small spatter, fine welding surface, quick welding speed, especially for sheet metal welding.

2. Working condition and environment

- (1) Height above sea level can't exceed 1000 m.
- (2) Select welding current according to rated duty cycle in the specification and Technical Parameters list.
- (3) No acid or alkaline caustic gases and other toxic industry gases and flammable gases in the welding environment.
- (4) While welding, the environment temperature range should be
 - 10 ~ 40°C (air-cooling)
 - 25 ~ 55 °C (in transmit or in the deposited)
- (5) Power supply
 - The fluctuant range of voltage should be $220 \pm 15\%$
 - The fluctuant range of frequency should be less than $\pm 1\%$

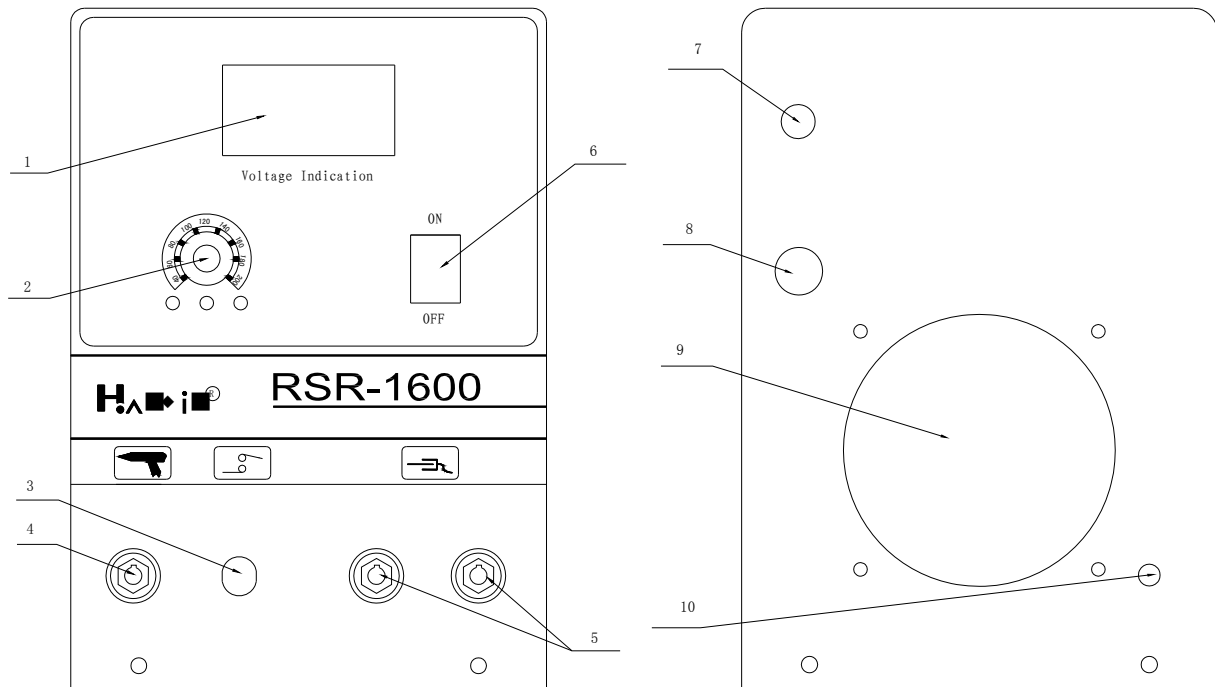
3. Specification and Technical Parameters

Model		RSR-1600	RSR-2500	RSR-4000
Parameter				
Input supply voltage (V)		220±15%	220±15%	220±15%
Input phase		Single	Single	Single
Frequency (Hz)		50/60	50/60	50/60
Input power (KVA)		4.5	4.5	4.5
Charging voltage range (V)		20-190	20-190	20-190
Stud diameter (mm)	Mild steel or Stainless steel	M2-M8	M2-M10	M2-M12
	Aluminum alloy	M2-M6	M2-M8	M2-M10
Capacitor capacity (uF)		66000	99000	165000
Welding throughput (piece/min)		10-15	10-15	10-15
Weight (kg)		24	25	30
Dimension (mm) Length*width*height		460*215*365	460*215*360	460*215*360

Notice: Hereinbefore parameter under the condition of mild steel with 1.5mm thickness.

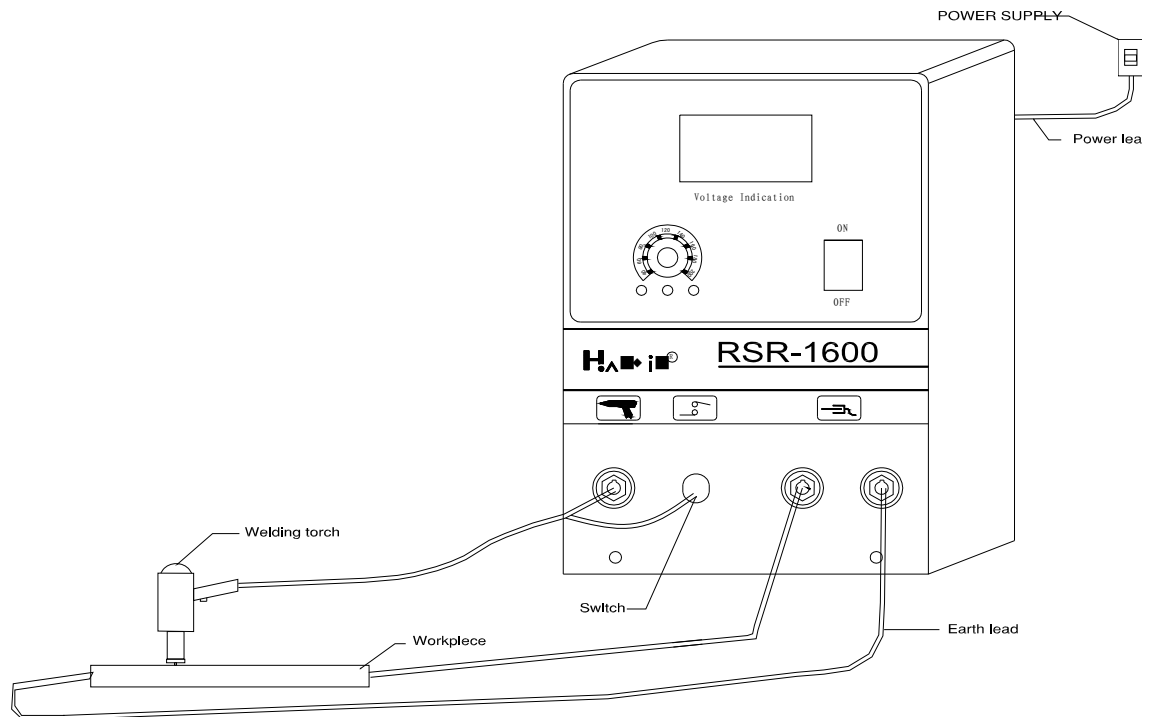
4. Main components of welder

1). Faceplate sketch map



1. Voltage LED indicator
2. Voltage adjust knob Fan
3. Control line terminal
4. Voltage charge knob Welding gun termina
5. Earth leads terminal
6. Power supply switch
7. Fuse
8. Input of Power supply
9. Fan
10. Grounding bolt

2) External install-chart



5. Operating program

1) Installation

1. Connect the stud welder to the single-phase power source of 220V/50Hz
2. According to the electric connecting chart, connect the torch and the earth leads.

2) Operation

1. Check all cables if they contact reliably.
2. Turn on the power source switch, push the Charge button.
3. Adjust the knob of 'Adjust voltage' clockwise, and you can gain the voltage you needed show on the LED indicator.
4. If the voltage higher than the voltage you needed, please push the discharge button to release the voltage, then adjust the knob of 'Adjust voltage' to bottom anticlockwise, repeat the 3 process.
5. Press the torch on the pieces intensely and then push the torch trigger.

6. Operation rule and Maintain

- ① The welder covers should be earth and the cutter should be firm emplaced.
- ② According to the stud, adopt the torch collet.
- ③ Confirm the collet clamps the stud intensely.
- ④ Corrective actions

Malfunction	Causation or phenomena	Corrective action
The power indicator no indicate	1.The power sources abnormality 2.The power fuse broken 3.The power indicator broken	Connect Replace Replace
The work indicator no indicate	1.The work indicator broken 2.The charge button broken 3.The AC contactor broken 4.The charge thyristor broken 5.The control board abnormality	Replace Replace Replace Replace Replace
The stud welder cannot work	1.The torch poor contact pieces 2.The torch trigger broken 3.The discharge button broken 4. The control board abnormality 5.The torch cable open circuit	Press intensely Replace Replace Replace Connect

7. Safely rule

1) Welding environment

- ① Setting arc-shield board on welding table.
- ② The operator should wear helmet, welding gloves, and working clothing etc.
- ③ There are not the flammable gases in welding environment.
- ④ Finger, hair, clothes can't near the air machine.

2) Welder

- ① The welder case should be earth while welding.
- ② The welder can't be put in the environment which contain toxic and flammable gas, and the welder can't be affected with damp and insolation, so it is better put in the place which is ventilated, dry and less dusty.
- ③ No acid or alkaline , caustic gas and other toxic and flammable gas in the welding environment.
- ④ The welder should be well maintain at every turn.

8. Encasement list

- | | |
|--|-------|
| (1) Stud welder machine | 1 set |
| (2) Stud torch | 1 set |
| (3) Earth lead | 2 set |
| (4) Product operation manual | 1 set |
| (5) Leave certificate and guarantee list | 1 s |

Electrical Diagram

