

weldcote 

Operation Manual

STRIKER 160

WELDING INVERTER FOR
MANUAL ARC WELDING

WELDING FOR WELL-BEING



SAFETY WARNING

On the process of welding or cutting, there will be possibility of injury, so please take protection into consideration during operation. For more details please review the Operator Safety Guide, which complies with the preventive requirements of the manufacturer.

Electric shock - May lead to death!!

- Set the earth fitting according to applying standard.
- Do not touch the bare electric parts and electrode with uncovered skin, wet gloves or clothes.
- Make sure you are insulated from the ground and the workshop.
- Make sure you are in safe position.

Gases and fumes - May be harmful to health!!

- Keep your head out of the gases and fumes.
- When arc welding, ventilators or air extractors should be used to avoid breathing gases.

Arc rays - Harmful to your eyes, burn your skin

- Wear suitable protective mask, light filter and protective garment to protect eyes and body.
- Prepare suitable protective mask or curtain to protect looker-on.

Fire

- Welding sparks may cause a fire, make sure there are no flammable objects or chemicals nearby.

Noise - Excessive noises will be harmful to hearing

- Use hearing protection or others means to protect ear.
- Warn looker-on that noise is harmful to hearing.

Having trouble? Connect with authorized professionals

- If trouble happens during installation and operation, please follow this manual instruction to check up.
- If you fail to fully understand the manual, or fail to solve the problem with the instruction, you should contact the suppliers or the service center for professional help.



WARNING!

Thermal Magnetic Auto Circuit Breaker protecting switch should be used with the machine.

1.1 EQUIPMENT

- Repair and maintenance to be performed by authorized personnel only.
- The welding machine is to be maintained in good operational conditions (dry and clean).
- The welding machine is not to be positioned in a closed space or next to a wall while welding in order to avoid problems with venting.
- The welding machine is to be properly connected to the power grid.
- avoid pulling on the power cable when moving the welding machine.
- the welding handle and work cable are to be properly maintained.
- Electricity is dangerous and loose connections can lead to injury and poor welding.

1.2 WORK AREA

The welding arc emits sparks, fumes and radiation

- Remove all flammable materials and items from your work area.
- Ensure proper ventilation at the work area.
- Do not weld tanks or pipes that contain or used to contain flammable liquid or gas (danger of explosion or fire) or were cleaned by chlorine-based detergents (danger of toxic fumes).

1.3 OPERATOR

- Avoid coming in direct contact with the welding circuit. The open circuit voltage between the electrode holder, the work cable and the work piece is dangerous.
- Do not weld when it is raining or in wet or damp places.
- Always use protective equipment DIN 9-10, including long sleeved pants and vest, gloves, welding helmet of proper rating and hat. Avoid exposing the skin to the welding UV radiation.



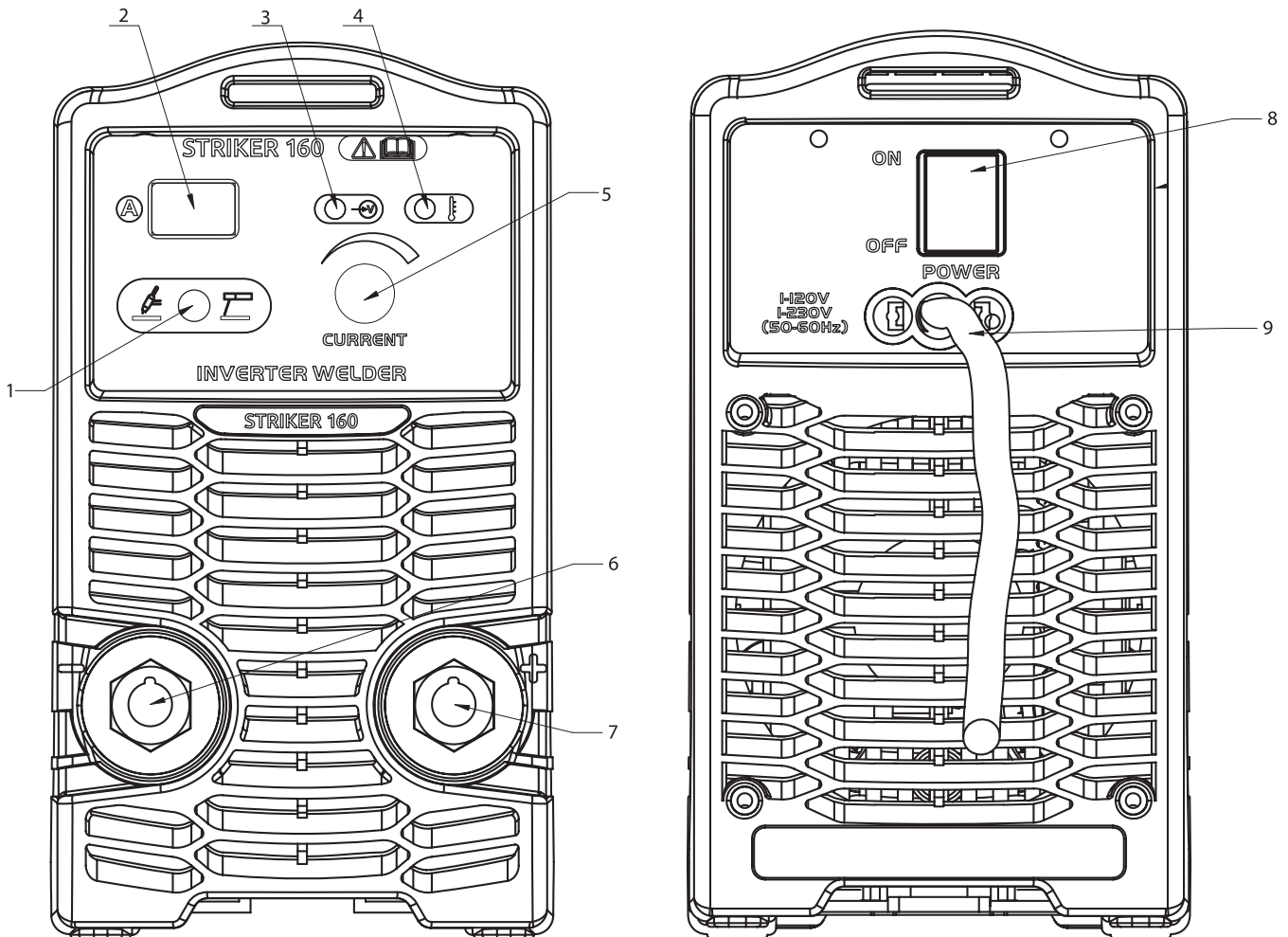
ALWAYS REMEMBER

- The radiation emitted by the welding arc can cause damage to the eyes and burns to the skin.
- The welding arc emits sparks and droplets of molted metal at very high temperatures, these stay hot for a relatively long time.
- The welding fumes produced when welding are dangerous.
- Every electrical shock is dangerous.
- Avoid direct exposure of the skin from the welding arc at a range of 15 meters.
- Take proper precautions to protect yourself and others from the potential dangers of the welding arc.

2.0 GENERAL INFORMATION

2.1 DESCRIPTION

1. Selector Switch between Tig and Stick
2. Digital Display
3. Power On Light
4. Alarm Light
5. Welding Current Adjustment
6. Negative Port
7. Positive port
8. On/Off Switch
9. Input Power Cable



Single phase inverter with voltage reduction for direct current welding using coated electrodes of diameters 1/16" - 1/8".

Current is continuously adjustable using the current adjustment knob (9).

2.2 PARAMETERS

PARAMETERS	STRIKER 160			
	1~120±10%, 50/60Hz		1~230±10%, 50/60Hz	
	TIG	MMA	TIG	MMA
Input power	1~120±10%, 50/60Hz		1~230±10%, 50/60Hz	
Rated Input Current (A)	21.3	34.7	14.4	22.3
Rated input power (KW)	2.2	3.8	3.1	4.7
Power factor	0.99		0.99	
Welding current range (A)	10~125		10~160	
Max no-load voltage (V)	55 (80)			
Efficiency (%)	≥80%		≥80%	
Duty Cycle (A) 104°F, 10 minutes (%)	35% 125A 60% 95A 100% 100A	60% 125A 100% 90A	40% 160A 60% 125A 100% 90A	
Protection class	IP23			
Insulation class	F			
Weight (Lbs)	21.4			
Dimensions of Powersource (length×width×height)	14.8"×5.5"×9.65"			
Dimensions of Carton Box (length×width×height)	20.5"×9"×11.4"			

2.3 SPECIAL FEATURES

- **PFC** - correction and dumping circuits in the machine increase power efficiency, reducing input power requirements, and stabilizing welding current.
- **HOT START** - Easy ignition of the welding arc.
- **ARC FORCE** - Eliminates Electrode Sticking to the Work Piece.
- **VRD** - Reduce voltage at no-load condition for safer work.
- **SMART FAN** - Power saving and reduction of dust as well as improved fan working life.
- **DUAL VOLTAGE** - automatically identify the power grid voltage (110V or 220V) and operates accordingly 110V-220V adapter included.
- **EXCELLENT FOR WORKING WITH GENERATORS** - The machine can work with a wide range of input voltages (98V-265V).

3.0 INSTALLATION

3.1 MAIN CONNECTIONS

Before connecting to the power grid, verify the supply voltage is in range of the machine parameters.

- The power cable plug is to be connected to standard approved socket, with the proper protections.
- The ground line (green & yellow) is to be connected to the grounding pin.

4.0 WELDING ACCESSORIES: CONNECTION AND APPLICATION

4.1 WORK LEAD WITH WORK CLAMP

The work clamp is to be connected directly to the work piece or the work table with good electrical continuity to the work piece.

Careful! Avoid using coated or non-metallic, non-conducting work-benches.

4.2 WELDING LEAD WITH ELECTRODE HOLDER

This cable has a special handle that holds the exposed part of the coated electrode.

4.3 WELDING HELMET

You must always use a welding helmet to protect your eyes from the radiation emitted from the welding arc. Using a welding helmet allows the welder to see the progression of the weld seam, and keeping the correct distance from the electrode tip to the work piece.

5.0 GRAPHIC SYMBOLS AND INDICATIONS

U1: Rated AV input voltage (with tolerance $\pm 10\%$).

I1max: Rated maximum input current.

I1eff: Maximum effective input current.

X: duty cycle. The ratio of given duration time/the full-cycle time.

Note1: This ratio shall be within 0~1, and can be indicated by percentage.

Note2: In this standard, the full-cycle time is 10min. For example, if the duty cycle is 60%, the load-applying time shall be 6min and the following no-load time shall be 4min.

U0: No-load voltage. Open circuit voltage of secondary winding.

U2: Load voltage.

Output voltage of rated load: $U_2 = (20 + 0.04I_2) V$.

A / V—A / V: range of current regulation and corresponding load voltage.

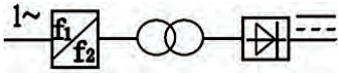
IP: degree of protection, such as IP21S.



Can be used in the environment which has high risk of electric shock.



Read this operation manual carefully before use.



Single-phase static frequency converter-transformer rectifier.



Symbol of single-phase AC power supply and rated frequency.



Symbol of manual metal arc welding with covered electrodes.



Insulation class.



Do not dispose of electric tools together with domestic garbage.



Do not use outdoors.

6.0 OPERATION

Once all the power connections to the power grid and the welding circuit are done, proceed as follows:

- Connect the welding lead with the electrode holder according to the recommendation on the Electrode package you are using (for most electrodes the "+" terminal).
- In case of doubt or when un-clear get in touch with WELDCOTE technical support advisor.
- Turn the machine on using the ON/OFF switch (8), the ON indication light (3) will be lit at this stage and the digital display will show the current the machine is set.
- Adjust the welding current as needed according to the recommendation on the electrode package, using the amperage adjustment dial (5).

Generally, welding current is adequate to welding electrode according with as following:

$\Phi 5/64''$	$\Phi 7/64''$	$\Phi 1/8''$	$\Phi 5/32''$	$\Phi 13/64''$	Electrode Diameter [Inch]
55	80	115	160	190-260	Welding Amperage [A]

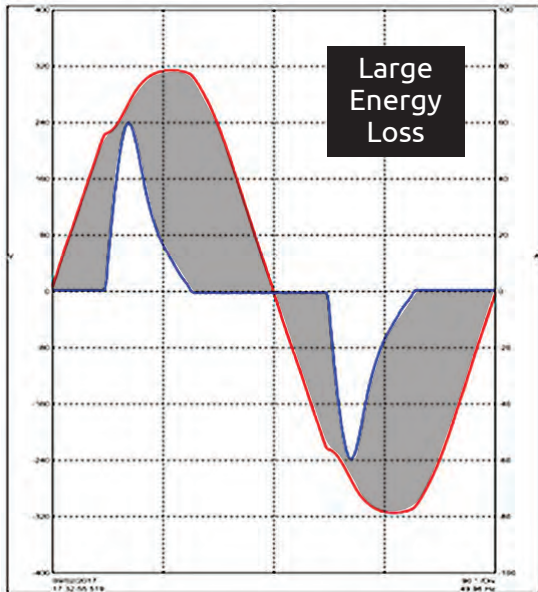
General recommendation based on thickness of the work piece:

$5/64''$	$5/64''-13/64''$	$13/64''-25/64''$	Work Piece thickness
$3/32''$	$5/64''-5/32''$	$1/8''-13/64''$	Electrode Diameter

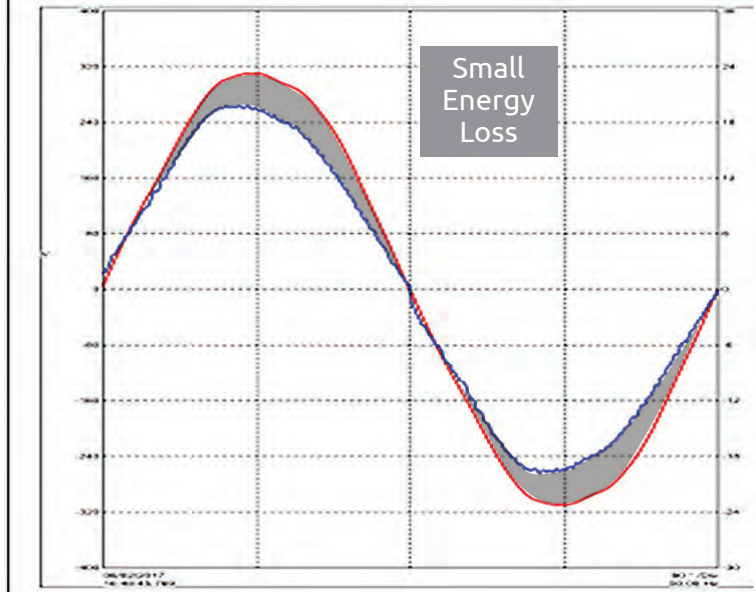
PFC TECHNOLOGY

Reduces energy consumption up to 50% considering the model of conventional type welding machine and enables usage of energy in high efficiency and high quality.

Supply **Voltage** and **Current** over time comparison (under steady load):

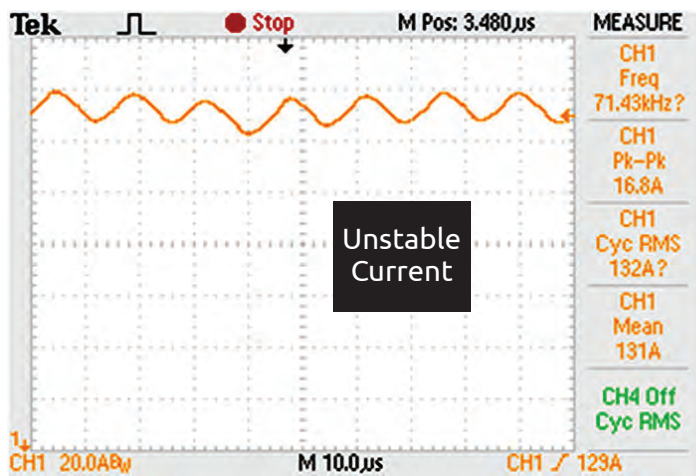


WITHOUT PFC

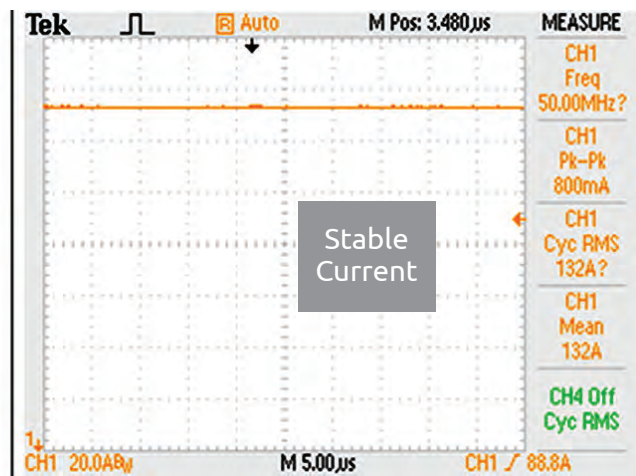


WITH PFC

Welding Current stability comparison (under steady load):



WITHOUT PFC



WITH PFC

WARRANTY CARD

3 years warranty **weldcote** 

Customer Name: _____

Serial Number:

Address: _____

Email: _____

Model Number: _____

Tel Number: _____

Dealers Name: _____

Date Of Purchase: _____

Dealers Signature And Stamp:

WARRANTY TERMS:

1. The warranty is valid for three years for any manufacturing defect.
2. This warranty is canceled if this certificate is not sent immediately upon purchase with tax invoice attached.
3. This warranty is canceled if the machine opened or disassemble not in the company labs.
4. The warranty is not valid if the equipment is maliciously damaged, or by negligence or accident.
5. In any case of use other than according to instructions the manufacturer's warranty is not valid.



Customer Name: _____

Serial Number:

Address: _____

Email: _____

Model Number: _____

Tel Number: _____

Dealers Name: _____

Date Of Purchase: _____

Dealers Signature And Stamp:

weldcote 

Please send this attachment within 14 days of purchase!



Weldcote Metals
842 Oak Grove Road,
Kings Mountain, NC 28086 USA.
Phone: **704-739-4115**
www.weldcotemetals.com

DEAR CONSUMER:
Read before you turn on your device - keep this page

GENERAL INSTRUCTIONS:

We recommend that you attach your warranty card showing date of purchase, to the product and keep for your reference.

Warranty coverage terms:

1. Warranty covers any manufacturing technical defects excluding breakage.
2. Warranty is void if repaired without our consent.
3. The warranty does not cover damage resulting from wrong operation, careless handling, accidents, misuse, entry of water, slurry, powder and other particles inside the machine, wrong installation by using wrong voltage, or in any way tampered with.
4. Only electronic components inside can be repaired for any manufacturing defects during warranty period.



The warranty is valid under the following conditions:

- Stamped and signed by the seller.
- The warranty certificate arrived at the WELDCOTE offices within 14 days of the purchase, together with an invoice.



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