

User manual

Oxyhydrogen welders SR-450 y SR-800





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1. Introduction

1.1. Previous concepts

This instruction manual introduces the safe and proper handling of the TECHNOFLUX SR-450 and SR-800 Range of Oxyhydric Welders. The safety instructions indicated throughout this manual, as well as the general instructions for handling machinery, must be respected. Accident prevention measures and general safety provisions indicated in the workplace and in the jobs associated with this equipment must also be taken into account.

This manual is valid for professional maintenance or after-sales customer service personnel.

To highlight the most important sections of this manual when reading it, these have been highlighted, classifying them into three levels of importance as indicated below:



DANGER!

The sections marked in this way indicate the existence of a source of danger that may cause minor or severe bodily injury or death, as well as material damage, and inform about the corresponding prevention measures.



IMPORTANT

In the sections marked like this, situations are described in which the machine or the devices in its environment can be damaged, and the corresponding prevention measures are indicated.



INFORMATION

The sections with this mark provide application advice, inform about particularities and highlight paragraphs of special importance texts.

This instruction manual is another component of the machine described, so it must be accessible at all times to its users, being located as close as possible to it.



1.2. Brief introduction.

The SR oxyhydrogen range has the following characteristics:

- Made entirely of stainless steel
- Double stainless steel interior tank with capacity for 3 liters of electrolyte (CH SOFT)
- A single external tank for FLUX (SR-2)
- Two adjustable torches with long-lasting copper nozzles
- Electrolyte drain valve
- digital ammeter
- Pressure control manometer.
- Triple anti-recoil security system
- High quality electronic power supply (protected in stainless steel case)
- Equipped with wheels

1.3. Technical parameters

This manual is applicable for the following products

- TECHNOFLUX SR-450 oxyhydrogen welder
- TECHNOFLUX SR-800 oxyhydrogen welder

	MODEL	
	SR-450	SR-800
WEIGHT	20 kg	25 kg
WIDTH	280 mm	330 mm
LENGTH	590 mm	640 mm
HEIGHT	420 mm	480 mm

Technical characteristics:

POWER SUPPLY	220V/230V	220V/230V
POWER	450W	800W
GAS FLOW	120I/h	200I/h
USE PRESSURE	100-500gr/cm ^a	100-500gr/cm ^a

Consumption:

TECHNOFLUX CH SOFT	3 liters initial charge	3 liters initial charge
DISTILLED WATER	38cm ^a Rend. 100%	58cm ^a Rend. 100%
TECHNOFLUX FLUX-SR-2	25cm ^a Rend. 100%	38cm ^a Rend. 100%
AUTONOMY	8h Rend. 100%	8h Rend. 100%

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2. START UP

2.1. Expected use

The SR-450 and SR-800 oxyhydrogen welders have the objective of welding any type of common alloys, without having problems of the structures overheating, with which great precision is obtained at the point of welding. The oxyhydrogen welder generates its own fuel from a first charge of TECHNOFLUX CH SOFT and maintaining the level with distilled water and achieving exceptional results.

With the advantages of a very simple use, freeing us from the use of the traditional torch, protective gloves, oxygen consumption and uncomfortable acetylene bottles. It is suitable for both welding and flame cutting, and replacing other more expensive welding tools.

2.2 Basic safety instructions during use.

In accordance with CE conformity, the machine complies with safety regulations. Likewise, the equipment is automated to ensure safety both in its use and in its maintenance.

To prevent any risk situation, it is necessary to follow the following basic safety instructions: Do not remove screws or covers.

Keep the electrical cabinet closed at all times. Do not expose the machine to water or humidity.

2.3. Equipment parts

In the following sections we will analyze the components of the machine for its start-up.



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2.4. Initial filling of vat and containers

A) Unscrew the tank cap (A).

1° Introduce 3 liters of Technoflux CH SOFT in the main tank, the mouth is located in the upper part of the machine. For filling, use the funnel supplied by the manufacturer.

2° When the level is "optimum" (F), remove the funnel and screw on the tank cap.



ATTENTION: This product is corrosive and can damage people or elements of the appliance if not used correctly.

B) FLUX-SR-2 tank filling (B)

3° Unscrew the tank located at the front, introduce approximately 300 c.c. of Technoflux FLUX Antioxidant SR-2.



ATTENTION: This product is highly flammable, keep it away from any flame.

4° Connect the tube to the gas outlet of the machine (G), including the filter drier and the anti-return filter with the arrow in the direction of the end of the tube where the torch will be mounted.

5° Press the start switch (C) to start, open the torch tap, wait approximately 1-3 minutes to eliminate the air.

The fan starts to work and the ammeter (D) indicates around 65A (450W), 130A (800W);, the barometer (E) indicates 0.02-0.05mpa. (green area)

When closing the torch completely, the gas pressure will rise to more than 0.2mpa (yellow zone) and the ammeter will indicate zero; fully open the torch, the gas pressure will drop and the ammeter will read amps again.

6° Choose the appropriate nozzle for the work to be done, open the torch with the tap fully open and turn it on.



The autonomy of the main tank level (A) will vary depending on the needle size you are working with. With 100% performance, the autonomy is approximately 8 hours.

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BASIC INSTRUCTIONS FOR LEVEL MAINTENANCE:

MAIN TANK (CH SOFT)

- A. When the level of the main tank drops below the optimal level, turn off the machine and open the torch to eliminate the internal pressure of the tank (VERY IMPORTANT).
- B. When gas stops coming out, open the cap of the main tank and introduce pure distilled water until reaching the optimal level. Do not top up with CH SOFT electrolyte to maintain the level.
- C. After 6-8 months from the first charge of Technoflux CH SOFT, empty the main tank using the tap located on the back of the machine and repeat the basic start-up instructions.
- D. To fill liquids, do not use funnels or containers that may have been in contact with any soapy or greasy product. This would contaminate the entire interior of the machine.



FLUX ANTIOXIDANT TANK (FLUX-SR-2)

When the level of the Technoflux FLUX SR-2 tank is at the minimum level (approximately 50 c.c.), discard the content and introduce again 300 c.c. of product.

**WE RECOMMEND CHECKING THE SR-2 FLUX LEVEL
EVERY 8 HOURS OF WORK.**

3. MAINTENANCE

3.1. Basic safety instructions during maintenance.

Take into account the following important safety points when carrying out maintenance operations with the equipment and the contraindicated uses that are detailed based on experience:

- Checks and repairs must be carried out by qualified personnel.
- Always use original spare parts. Otherwise, the warranty may become invalid.
- During inspections, maintenance and repairs, the machine must remain disconnected from the electrical power source.

3.2. Previous operations and general maintenance instructions

Carrying out improper maintenance work can lead to serious personal injury and property damage. For this reason, these works must be carried out exclusively by authorized personnel, trained and familiar with the working methods of the machine, taking into account the safety regulations.

IMPORTANT



Guarantee the disconnection of the plug from the corresponding connection base and check that there are no third parties which can reconnect the machine while it is being intervened on. If necessary, move the equipment to the authorized maintenance area.



From this moment, the essential interventions for the maintenance of the machine can be carried out.

3.3. Possible anomalies and solutions

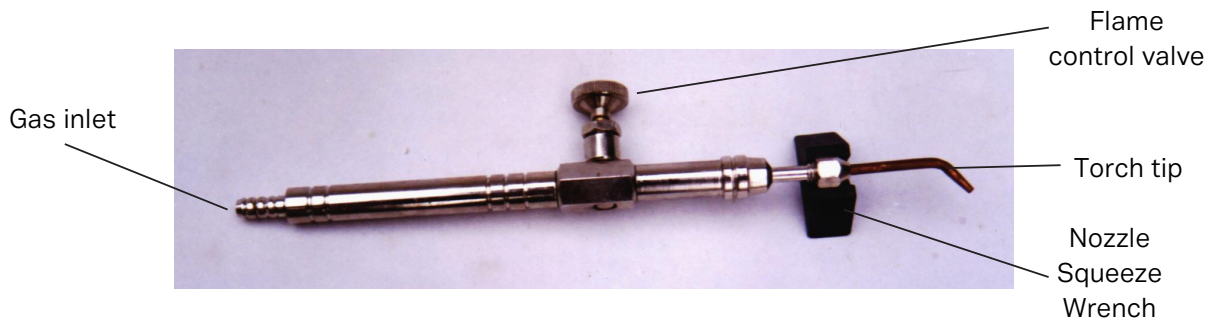
If kickback occurs (even with a small explosion), don't panic. Safety and protection systems can guarantee the safety of the operator. Flame flashback can be caused by improper operation, gas leak, torch malfunction.

Contact the manufacturer before restarting the machine.

4. COMMON PROBLEMS

Problem	Motive	How to solve it
Red/yellow flame.	Low FLUX SR-2 level or in poor condition	Replacing the FLUX SR-2
Weak flame, barometer indicates 0.10 mpa, ammeter indicates correctly	Obstruction of torch, anti-recoil filter or circuit	Replace anti-backflow filter and check torch
Weak flame, the barometer indicates low, ammeter indicates correctly	<ol style="list-style-type: none"> 1. Gas leak 2. Poor condition of the CH SOFT electrolyte 	<ol style="list-style-type: none"> 1. Check the gas circuit 2. Change CH SOFT electrolyte
Barometer and ammeter indicate zero	<ol style="list-style-type: none"> 1. No power or fuse has blown 2. Pressure switch malfunction 3. The electrolyte may have lost effectiveness 4. Power supply malfunction 	<ol style="list-style-type: none"> 1. Check the cable and fuse 2. Contact the manufacturer 3. Change electrolyte 4. Contact the manufacturer.
With pressure but without current	Ammeter malfunction	Contact the manufacturer
Internal explosion	<ol style="list-style-type: none"> 1. Bad anti-reverse filter 2. Poor maintenance or improper handling 	Contact the manufacturer

5. TECHNOFLUX ADJUSTABLE TORCH



Torch body: Use the appropriate nozzle for the gas flow required according to the work to be done. Adjust gas flow and flame (turn clockwise to close).

Torches included MOD. SR-450:

- 2 sets with 4 copper nozzles and 1 hypodermic.
- Maximum number of torches working simultaneously

With A or B or hypodermic nozzle: 2 torches.

With larger nozzle: 1 torch

- Internal diameter of copper nozzles: A : 0,3 mm. - B : 0,4 mm. - C : 0,5 mm. - D : 0,6 mm.

MOD torches included. 800:

- 2 sets with 4 copper nozzles and 1 hypodermic.
- Maximum number of torches working simultaneously:

With A or B or hypodermic nozzle: 3 torches.

With C nozzle: 2 torches.

With larger nozzle: 1 torch.

- Internal diameter copper nozzles: A : 0,3 mm. - B : 0,4 mm. - C : 0,5 mm. - D : 0,6 mm.

It is advisable to check the equipment every 18-24 months as the internal parts of the machine, as well as tubes and gaskets, may deteriorate. This deterioration can cause internal leaks that cause breakdowns in the power supply and safety of the machine.

The complete revision of the machine must be carried out only and exclusively by technicians from the company Benmayor S.A.

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6. WARNINGS



Carefully read the hazard labels of TECHNOFLUX products before use.



Do not use funnels or bottles to fill liquids that may have been in contact with any soapy product. This would contaminate the entire interior of the machine.



Do not disassemble or manipulate side covers or internal protection elements.



Do not bring any type of flame close to external or internal parts, which could cause an explosion.



Do not disassemble filters from the external elements (mini torch) or anti-return filter, to avoid flame flashback.



The machine must be located in a ventilated and clean area, thus allowing good air circulation inside.

7. WARRANTY

The Technoflux SR-450 and Technoflux SR-800 Oxyhydric Welders have a one-year warranty. If you use other types of liquids or non-compatible torches, BENMAYOR S.A. is not responsible for any breakdowns that may occur.

If the machine arrives hit or manipulated by the customer, the warranty will be lost.



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