

## GOXAWEE MIG-250

# GOXAWEE 3-in-1 Portable Inverter Welder (MIG-250) User Manual

Model: MIG-250

## 1. INTRODUCTION

This manual provides essential information for the safe and effective operation of your GOXAWEE 3-in-1 Portable Inverter Welder, model MIG-250. This versatile machine supports MMA (Manual Metal Arc), MIG (Gas Metal Arc), and LIFT TIG (Tungsten Inert Gas) welding processes, making it suitable for various metal materials including copper, iron sheets, steel pipes, galvanized pipes, and stainless steel.

The welder is designed for both professional and home use, accommodating welding rods from 1.6 mm to 3.2 mm.

## 2. SAFETY PRECAUTIONS

**WARNING: Welding can be dangerous. Always follow safety guidelines to prevent injury or damage.**

- Always wear appropriate Personal Protective Equipment (PPE) when operating the welding machine. This includes a welding helmet with a suitable shade lens, welding gloves, protective clothing, and safety shoes.
- Ensure the welding area is well-ventilated to avoid inhaling fumes.
- To ensure product longevity and prevent overheating, allow the machine to rest for 10-15 minutes after 20-30 minutes of continuous operation. Regularly check the machine's performance.
- Do not operate the welder in damp or wet conditions.
- Keep children and unauthorized personnel away from the welding area.
- Ensure proper grounding of the welding machine.

## 3. PRODUCT OVERVIEW AND COMPONENTS

### 3.1 Key Features

- **Three-in-One Welding Modes:** Supports MMA, MIG (Gasless Flux-cored), and LIFT TIG welding.
- **Synergic and Manual Control:** MIG mode offers automatic wire feed speed and voltage adjustment based on wire diameter, alongside manual control for experienced users.
- **User-Friendly Control Panel:** Features a clear digital current display and voltage adjustment knob for simple operation.
- **Advanced IGBT Inverter Technology:** Provides stable output current, smooth welding arc, and protection against overload or short circuit.
- **Efficient Heat Dissipation:** Equipped with a high-power cooling fan and built-in protection against overcurrent, overvoltage, and overheating.
- **Portable Design:** Weighs approximately 4.6 kg (10 lbs) with a compact body and carrying handle for easy transport.

### 3.2 Included Components

The following items are included with your GOXAWEE MIG-250 Welder:

- 1 x MIG Welding Machine (MIG-250)
- 1 x 175mm MIG Welding Torch
- 1 x 164mm Electrode Holder (MMA Clamp)
- 1 x 118mm Earth Clamp
- 1 x Pair of Welding Gloves
- 1 x 0.8mm / 0.5kg Flux-cored Welding Wire
- 1 x Welding Mask
- 1 x Welding Mask Lens
- 2 x Brushes (e.g., wire brush, chipping hammer)
- 5 x Conductive Nozzles (3 x 0.8mm, 2 x 1.0mm)
- 5 x Electrodes (various sizes)

*Note: A TIG argon arc welding torch is required for LIFT TIG welding and is not included in this package. It must be purchased separately.*

# TAMAÑO Y ACCESORIOS



Image 1: GOXAWEE MIG-250 Welder showing overall dimensions and a visual representation of the included accessories such as the MIG torch, earth clamp, electrode holder, welding wire, gloves, mask, and various nozzles and electrodes.

## 4. SPECIFICATIONS

<b>Manufacturer</b>	GOXAWEE
<b>Model</b>	MIG-250
<b>Power Source</b>	Electric
<b>Input Voltage</b>	110V
<b>Input Current Range</b>	20A - 250A
<b>Rated Input Capacity</b>	6.6 KVA
<b>Welding Methods</b>	MIG (Flux-cored), LIFT TIG, MMA (ARC)
<b>Applicable Welding Wire Diameter</b>	0.8 mm - 1.0 mm (MIG)

<b>Applicable Electrode Size</b>	1.6 mm - 3.2 mm (MMA)
<b>Maximum Welding Thickness</b>	6 mm
<b>Product Dimensions (L x W x H)</b>	36 cm x 16 cm x 18.5 cm
<b>Product Weight</b>	4.6 kg (approx. 10 lbs)
<b>Batteries Required</b>	No

## 5. SETUP

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Before beginning any welding operation, ensure the machine is placed on a stable, level surface in a well-ventilated area, away from flammable materials.

### 5.1 Initial Inspection

- Unpack all components and verify against the "Included Components" list.
- Inspect the welder and all accessories for any signs of damage during shipping. Do not use if damaged.
- Ensure the power cord and plug are intact.

### 5.2 Connecting the Earth Clamp

Connect the earth clamp cable to the appropriate terminal on the front panel of the welder. Securely attach the earth clamp to the workpiece or welding table, ensuring good electrical contact. The workpiece must be clean and free of rust, paint, or grease.

### 5.3 Power Connection

Plug the welder's power cord into a grounded 110V power outlet. Ensure the power supply meets the welder's requirements (110V, 20A-250A capacity).

### 5.4 Wire Feed Mechanism (MIG Mode)



Image 2: Internal structure of the welder illustrating the wire feed mechanism, including the spool lock, spring, spool, and spool spacer, designed for easy adjustment of wire feeding speed.

1. Open the side panel of the welder to access the wire feed compartment.
2. Place the 0.8mm / 0.5kg flux-cored welding wire spool onto the spool holder. Ensure it is seated correctly and secured with the spool lock and spacer.
3. Feed the welding wire through the guide tube and into the drive roller mechanism.
4. Close the drive roller tension arm and adjust the tension according to the wire diameter. The tension should be firm enough to feed the wire without slipping, but not so tight as to deform the wire.
5. Connect the MIG welding torch to the appropriate connector on the front panel.
6. With the welder powered on (but not in welding mode), press the wire feed button on the control panel or torch to feed the wire through the MIG torch liner and out of the nozzle. Trim any excess wire.

## 6. OPERATING INSTRUCTIONS

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Image 3: Visual representation of the three welding modes: MMA (stick welding), MIG Gasless (flux-cored welding), and LIFT TIG, demonstrating the versatility of the GOXAWEE MIG-250 welder.

## 6.1 Control Panel Overview

The front panel features a digital display for current, a voltage adjustment knob, and mode selection switches. Familiarize yourself with these controls before operation.

# SEGURO Y CONFIABLE



Tecnología IGBT avanzada



Ventilador de refrigeración de alta velocidad



Sobrecalentamiento /sobrecarga Protección



Protección térmica



Bajo nivel de ruido



Image 4: The GOXAWEE MIG-250 welder's control panel with digital display and adjustment knobs, highlighting features like IGBT technology, high-speed cooling fan, and various protections.

## 6.2 MMA (ARC) Welding

1. Connect the electrode holder to the positive (+) terminal and the earth clamp to the negative (-) terminal (or vice-versa, depending on electrode type).
2. Select MMA mode on the control panel.
3. Insert an appropriate electrode (1.6mm - 3.2mm) into the electrode holder.
4. Adjust the welding current (Amperage) using the control knob based on the electrode type and thickness of the material.
5. Strike an arc by lightly touching and quickly lifting the electrode from the workpiece. Maintain a consistent arc length and travel speed.

## 6.3 MIG (Flux-cored) Welding

# ESTRUCTURA DE DISEÑO INNOVADORA

La velocidad de alimentación del alambre se puede ajustar fácilmente

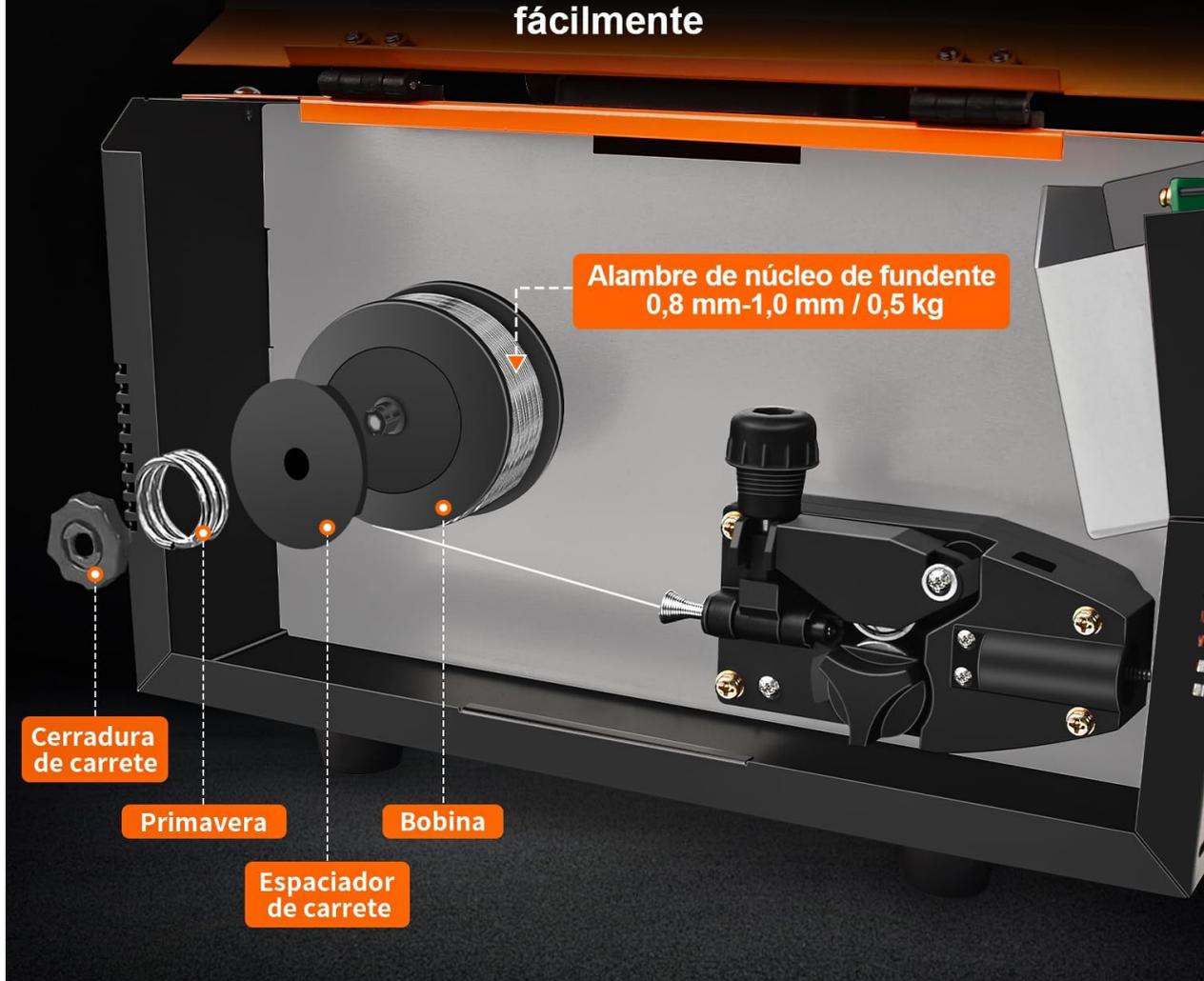


Image 5: An example of MIG Fluxcore welding in progress, suitable for automotive bodywork and general fabrication, demonstrating the machine's capability for spot welding.

1. Ensure the flux-cored wire is correctly loaded as per Section 5.4.
2. Connect the MIG torch to the appropriate terminal and the earth clamp to the workpiece.
3. Select MIG mode on the control panel.
4. Choose between Synergic Control (automatic adjustment of wire feed speed and voltage based on wire diameter) or Manual Control (adjust current and voltage independently).
5. Adjust the current and voltage settings according to the material thickness and wire type.
6. Press the trigger on the MIG torch to start welding. Maintain a consistent torch angle and travel speed.

## 6.4 LIFT TIG Welding

*Note: A separate TIG torch and argon gas cylinder are required for LIFT TIG welding.*

1. Connect the TIG torch to the negative (-) terminal and the earth clamp to the positive (+) terminal.
2. Connect the argon gas hose from the regulator to the TIG torch.
3. Select LIFT TIG mode on the control panel.
4. Adjust the welding current (Amperage) for the material being welded.
5. Initiate the arc by gently touching the tungsten electrode to the workpiece and then lifting it slightly. The

arc will start without high-frequency interference.

6. Maintain a short arc length and feed filler rod manually if required.



Image 6: A welder using the GOXAWEE MIG-250 machine, demonstrating its application in a typical welding environment.

## 7. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your welding machine.

- **Cleaning:** Periodically clean the exterior of the machine with a dry, soft cloth. Use compressed air to blow out dust and debris from the cooling vents. Ensure the machine is unplugged before cleaning.
- **Torch and Cable Inspection:** Regularly inspect the welding torch, electrode holder, earth clamp, and all cables for wear, cuts, or damage. Replace damaged components immediately.
- **Wire Feed Mechanism (MIG):** Clean the drive rollers and wire guide tubes to prevent wire feeding issues. Check the tension of the drive rollers.
- **Nozzle and Contact Tip (MIG):** Clean or replace the MIG nozzle and contact tip as needed to ensure proper wire feeding and gas flow (if using gas).
- **Electrode Holder (MMA):** Ensure the electrode holder jaws are clean and provide good electrical

contact.

- **Storage:** Store the welder in a dry, clean environment when not in use.

## 8. TROUBLESHOOTING

This section addresses common issues you might encounter. For problems not listed here, contact customer support.

Problem	Possible Cause	Solution
Welder does not power on.	No power supply; faulty power cord/plug; internal fuse blown.	Check power outlet and circuit breaker. Inspect power cord. Contact customer support if fuse is suspected.
No arc in MMA/TIG mode.	Poor earth connection; incorrect current setting; faulty electrode/tungsten.	Ensure earth clamp has good contact. Adjust current. Replace electrode/tungsten.
Wire feeding issues in MIG mode.	Incorrect drive roller tension; clogged liner; wrong contact tip size; wire tangled.	Adjust drive roller tension. Clean or replace liner. Use correct contact tip. Untangle wire spool.
Machine overheats and shuts down.	Exceeded duty cycle; blocked cooling vents; prolonged continuous use.	Allow machine to cool down. Clear cooling vents. Adhere to recommended rest periods (10-15 min after 20-30 min use).
Poor weld quality (e.g., porosity, spatter).	Incorrect settings (current/voltage/wire speed); dirty workpiece; improper technique.	Adjust settings. Clean workpiece thoroughly. Review welding technique.

## 9. WARRANTY AND SUPPORT

If you have any questions or require assistance with your GOXAWEE MIG-250 Welder, please do not hesitate to contact our customer service team. We are committed to providing support and will respond to your inquiries within 24 hours to offer a solution.

Please refer to your purchase documentation for specific warranty terms and conditions.

### Contact Information:

*(Specific contact details such as email or phone number would be listed here if available, but are not provided in the source data.)*

For general inquiries, please visit the official GOXAWEE store on Amazon: [GOXAWEE Amazon Store](#)