

ANDELI MIG-250ME

ANDELI MIG-250ME 135 Amp Multi-Process Welder User Manual

Model: MIG-250ME | Brand: ANDELI

1. INTRODUCTION

This manual provides essential information for the safe and effective operation, setup, and maintenance of your ANDELI MIG-250ME Multi-Process Welder. Please read this manual thoroughly before using the equipment to ensure proper function and to prevent injury or damage.

2. SAFETY INSTRUCTIONS

Welding can be dangerous. Always follow safety precautions to prevent electric shock, fire, burns, and other serious injuries. Keep this manual for future reference.

- **Electric Shock:** Always ensure the machine is properly grounded. Do not touch live electrical parts. Wear dry welding gloves and protective clothing.
- **Fumes and Gases:** Ensure adequate ventilation. Welding fumes and gases can be hazardous to your health.
- **Arc Rays:** Protect your eyes and skin from arc rays. Use a welding helmet with appropriate shade and wear protective clothing.
- **Fire and Explosion:** Keep flammable materials away from the welding area. Have a fire extinguisher readily available.
- **Overheating:** The machine features automatic protection against overheating. Allow the machine to cool down if the overload indicator illuminates.
- **Overvoltage/Overcurrent:** The machine is equipped with protection against overvoltage and overcurrent. Do not exceed specified input voltage or current limits.



Image: Front panel of the ANDELI MIG-250ME welder highlighting its safety features, including IP21 rating for water and splash resistance, automatic shutdown for overheating, and automatic shutdown for overload conditions. It also shows reasonable heat dissipation capacity.

3. PACKAGE CONTENTS

Upon unpacking, verify that all items listed below are present and undamaged. If any items are missing or damaged, contact your supplier immediately.

- 1 x ANDELI MIG-250ME LED Welder
- 1 x MIG Torch
- 1 x Earth Clamp
- 1 x Electrode Holder
- 2 x Nozzles
- 5 x Contact Tips
- 5 x Welding Electrodes
- 1 x User Manual

Note: The Lift TIG torch and MMA electrode holder may need to be purchased separately, as they are not included in the standard package.

4. PRODUCT FEATURES

The ANDELI MIG-250ME is a versatile multi-process welding machine designed for various applications.

- **Multi-Process Capability:** Supports MIG (Flux-cored, gasless), Lift TIG, and Stick (MMA) welding modes.
- **Dual Voltage Input:** Operates on both 110V and 220V power supplies, offering flexibility for different work environments.
- **IGBT Inverter Technology:** Ensures stable arc, high efficiency, and reliable performance.
- **135 Amp Output:** Provides sufficient power for welding mild steel up to 10mm thickness.
- **LED Digital Display:** Clear display for monitoring welding parameters such as current and wire feed speed.
- **Intuitive Synergy Control:** Simplifies parameter adjustments, making it user-friendly for both beginners and

experienced welders.

- **Safety Protections:** Built-in protection against overheating, overvoltage, and overcurrent.
- **Compact and Portable Design:** Lightweight and easy to transport for on-site jobs or storage.

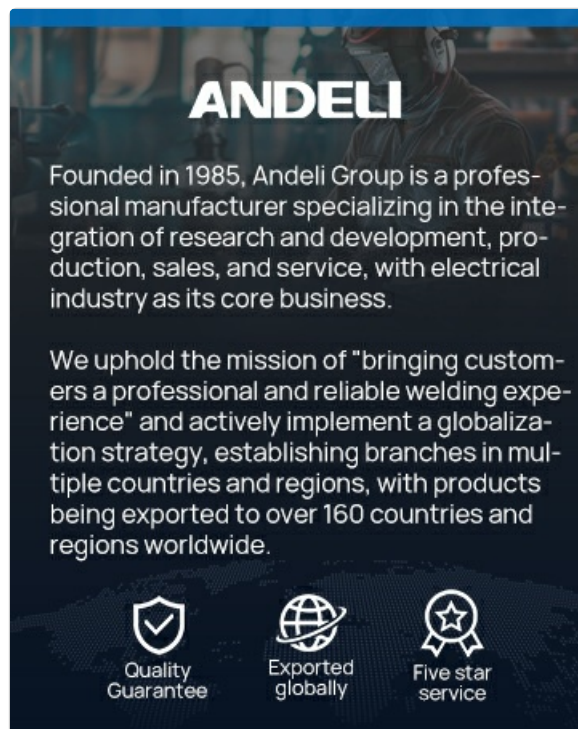


Image: Close-up of the ANDELI MIG-250ME welder's LED digital display, illustrating current adjustment and automatic thickness matching features for precise control during welding operations.

5. SETUP

5.1 Power Connection

The MIG-250ME supports dual voltage input (110V/220V). Ensure the correct power cable is used and connected to a suitable power outlet with proper grounding.

- For 110V operation, connect to a standard 110V outlet.
- For 220V operation, connect to a standard 220V outlet.



Image: Visual representation of the ANDELI MIG-250ME welder's dual voltage feature, indicating compatibility with both 110V and 230V power sources for versatile use.

5.2 Wire Installation (MIG Flux)

1. Open the wire feed compartment.
2. Place the 0.9 kg flux-cored wire spool (0.8mm or 0.9mm diameter) onto the spindle.
3. Thread the wire through the guide tube and into the drive rollers.
4. Close the drive roller tension arm and adjust the tension appropriately.
5. Feed the wire through the MIG torch liner until it exits the contact tip.

5.3 Electrode Holder and Earth Clamp Connection (Stick/MMA)

1. Connect the electrode holder cable to the positive (+) terminal on the welder.
2. Connect the earth clamp cable to the negative (-) terminal on the welder.
3. Securely attach the earth clamp to the workpiece or welding table.

5.4 TIG Torch Connection (Lift TIG)

(Note: Lift TIG torch is sold separately.)

1. Connect the TIG torch cable to the appropriate terminal (usually negative for DC TIG).
2. Connect the earth clamp to the positive (+) terminal.
3. Ensure the tungsten electrode is properly installed in the torch.

6. OPERATING INSTRUCTIONS

Always wear appropriate personal protective equipment (PPE) including a welding helmet, gloves, and protective clothing before operating the welder.

6.1 Selecting Welding Mode

Use the mode selection button on the control panel to choose between MIG (Flux), Lift TIG, or Stick (MMA) welding modes.

6.2 Adjusting Parameters

The LED digital display allows for precise adjustment of welding parameters. In MIG mode, the synergistic control automatically adjusts wire feed speed based on current settings. Fine-tune settings as needed for your specific material and application.

- **Current (Amperage):** Adjust according to material thickness and type.
- **Wire Feed Speed (MIG):** Automatically adjusted in synergistic mode, but can be manually overridden.

6.3 Welding Process Overview



Image: A composite image demonstrating the three welding processes supported by the ANDELI MIG-250ME: Flux MIG welding with visible sparks, Lift TIG welding with a focused arc, and Stick welding producing a bright arc and slag.

MIG (Flux-Cored, Gasless) Welding

- Ensure flux-cored wire is loaded and the machine is set to MIG mode.
- Connect the earth clamp to the workpiece.
- Position the MIG torch nozzle close to the workpiece.

- Press the trigger to start the arc and feed the wire.
- Maintain a consistent travel speed and arc length for optimal results.

Lift TIG Welding

- Ensure a TIG torch with tungsten electrode is connected and the machine is set to Lift TIG mode.
- Connect the earth clamp to the workpiece.
- Lightly touch the tungsten electrode to the workpiece and then lift it slightly to initiate the arc.
- Maintain a short arc length and feed filler rod manually if required.

Stick (MMA) Welding

- Ensure the electrode holder is connected with a suitable electrode and the machine is set to Stick mode.
- Connect the earth clamp to the workpiece.
- Strike the electrode against the workpiece to initiate the arc.
- Maintain a consistent arc length and travel speed, moving the electrode along the joint.

7. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your welder.

- **Cleaning:** Periodically clean the machine's exterior and ventilation openings to prevent dust and debris buildup. Use compressed air to clear internal components if necessary, ensuring the machine is unplugged.
- **Torch and Cables:** Inspect welding cables, torch, and earth clamp for damage, fraying, or loose connections before each use. Replace damaged parts immediately.
- **Contact Tips and Nozzles (MIG):** Replace worn contact tips and clean or replace clogged nozzles regularly to ensure consistent wire feed and gas flow (if applicable).
- **Tungsten Electrodes (TIG):** Sharpen or replace tungsten electrodes as needed for optimal arc stability.
- **Electrode Holder (Stick):** Ensure the electrode holder jaws are clean and provide a secure grip on the electrode.
- **Storage:** Store the welder in a dry, clean environment away from direct sunlight and extreme temperatures.

8. TROUBLESHOOTING

This section provides solutions to common issues. For problems not listed here, contact customer support.

Problem	Possible Cause	Solution
No arc/Poor arc initiation	<ul style="list-style-type: none"> ◦ Loose connections ◦ Incorrect settings ◦ Damaged electrode/contact tip ◦ Poor earth clamp connection 	<ul style="list-style-type: none"> ◦ Check all cable connections. ◦ Verify welding mode and parameters. ◦ Replace electrode or contact tip. ◦ Ensure earth clamp has good contact with clean metal.
Welder stops during operation (Overheat/Overload)	<ul style="list-style-type: none"> ◦ Exceeded duty cycle ◦ Insufficient ventilation ◦ Overvoltage/Overcurrent 	<ul style="list-style-type: none"> ◦ Allow machine to cool down. ◦ Ensure clear airflow to ventilation openings. ◦ Check input voltage and current.

Problem	Possible Cause	Solution
Inconsistent wire feed (MIG)	<ul style="list-style-type: none">◦ Incorrect drive roller tension◦ Clogged liner or contact tip◦ Wrong wire size	<ul style="list-style-type: none">◦ Adjust drive roller tension.◦ Clean or replace liner/contact tip.◦ Ensure correct wire diameter is used.

9. SPECIFICATIONS

Feature	Detail
Model Number	MIG-250ME
Input Voltage	110V/220V (Dual Voltage)
Output Current	135 Amps (Max)
Welding Processes	MIG (Flux-cored), Lift TIG, Stick (MMA)
Technology	IGBT Inverter
Wire Spool Capacity (MIG)	0.9 kg
Wire Diameter (MIG)	0.8mm, 0.9mm (Flux-cored)
Max Welding Thickness (Mild Steel)	10 mm
Dimensions (Package)	46 x 37 x 27 cm
Weight (Product)	9.1 kg

10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your purchase or contact ANDELI customer service. Keep your purchase receipt as proof of purchase.

Manufacturer: ANDELI

Contact: Refer to the official ANDELI website or your retailer for support contact details.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question