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› [INGCO Inverter MMA Welding Machine 130 Amp \(Model ING-MMA1302\) - User Manual](#)

## INGCO ING-MMA1302

# INGCO Inverter MMA Welding Machine 130 Amp

MODEL: ING-MMA1302 - USER MANUAL

## 1. Introduction and Overview

Thank you for choosing the INGCO Inverter MMA Welding Machine 130 Amp, Model ING-MMA1302. This machine is designed for reliable and efficient welding of steel and iron, featuring advanced IGBT inverter technology and an anti-stick function for a smoother welding experience. This manual provides essential information for safe operation, setup, maintenance, and troubleshooting to ensure optimal performance and longevity of your welding machine.

### Key Features:

- IGBT Inverter Technology for stable arc and efficient power usage.
- Anti-stick function to prevent electrode sticking.
- LCD display for precise current adjustments.
- Compact and portable design for easy transport and storage.
- Suitable for continuous and durable welding of iron and steel.

## 2. Safety Instructions

**WARNING: Welding can be dangerous. Always follow safety precautions to prevent injury or death.**

- **Personal Protective Equipment (PPE):** Always wear a welding helmet with appropriate shade, flame-resistant clothing, welding gloves, and safety shoes.
- **Ventilation:** Ensure adequate ventilation to remove welding fumes and gases, which can be hazardous to health.
- **Fire Hazards:** Keep flammable materials away from the welding area. Have a fire extinguisher readily available.
- **Electrical Safety:** Ensure the machine is properly grounded. Do not operate in wet conditions. Inspect cables for damage before each use.
- **Eye and Skin Protection:** Welding arc rays can cause severe burns to eyes and skin. Never look at the arc without proper eye protection.
- **Work Area:** Keep the work area clean and free of clutter. Ensure stable footing.
- **Children and Bystanders:** Keep children and unauthorized persons away from the welding area.

### 3. Product Components and Features

Familiarize yourself with the various parts of your INGCO welding machine:



Image 3.1: Front Panel Features of the INGCO Welding Machine

- **LCD Display:** Shows the current welding amperage.
- **Welding Current Adjustment Knob:** Used to set the desired output current (15-130 Amps).
- **Power Indicator:** Illuminates when the machine is powered on.
- **Overheat/Overload Protection Indicator:** Illuminates if the machine overheats or is overloaded, indicating a temporary shutdown for protection.
- **High Ventilation System:** Ensures efficient cooling during operation.
- **Negative Output Terminal:** Connect the electrode holder cable here.
- **Positive Output Terminal:** Connect the earth clamp cable here.

## PRODUCT DIMENSIONS



Image 3.2: Product Dimensions of the INGCO Welding Machine

The machine measures approximately 11.0 inches in width and 7.5 inches in height, making it a compact and manageable unit for various workspaces.

### 4. Setup

Before operating the welding machine, ensure it is properly set up:

1. **Unpacking:** Carefully remove the welding machine and all accessories from the packaging. Check for any damage during transit.
2. **Placement:** Place the machine on a stable, level surface in a well-ventilated area, away from moisture and flammable materials.
3. **Connecting Cables:**
  - Connect the electrode holder cable to the negative output terminal.
  - Connect the earth clamp cable to the positive output terminal.



Image 4.1: Connecting the Earth Clamp and Electrode Holder

Ensure the connections are secure. The earth clamp should be firmly attached to the workpiece (base metal) to ensure a good electrical circuit.

4. **Electrode Installation:** Insert the appropriate electrode (1.6-3.2mm diameter) into the electrode holder.
5. **Power Connection:** Connect the machine's power cord to a suitable 1~220-240V, 50/60Hz power outlet. Ensure the power supply can handle the machine's requirements.

## 5. Operating Instructions

Follow these steps for safe and effective welding:

1. **Power On:** Turn on the welding machine using the power switch. The power indicator light will illuminate.
2. **Set Current:** Use the welding current adjustment knob to set the desired amperage. The LCD display will show the selected current. Start with a lower current and adjust as needed based on the electrode size and material thickness.
3. **Prepare Workpiece:** Clean the workpiece thoroughly to remove rust, paint, or grease, which can affect weld quality.
4. **Attach Earth Clamp:** Securely attach the earth clamp to the workpiece, ensuring good electrical contact.

## 5. Welding:

- Put on all required PPE, especially your welding helmet.
- Strike an arc by lightly tapping or scratching the electrode against the workpiece.
- Maintain a consistent arc length and travel speed. The anti-stick function helps prevent the electrode from fusing to the workpiece if it gets too close.
- Weld in a well-ventilated area.

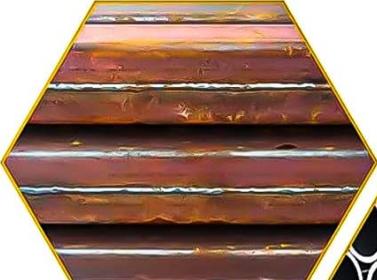
6. **Post-Welding:** After welding, turn off the machine. Allow the workpiece to cool before handling. Use the included wire brush to clean slag from the weld.

## FLAWLESS RESULTS

### Indoor and Outdoor





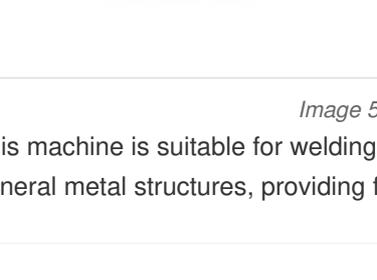
**CAST IRON**



**MILD STEEL**



**SHEET METAL**



**METAL CAGE**



**SQUARE PIPE**



Image 5.1: Materials Compatible with the INGCO Welding Machine

This machine is suitable for welding various materials such as cast iron, mild steel, sheet metal, square pipes, and general metal structures, providing flawless results for both indoor and outdoor applications.

## 6. Maintenance

Regular maintenance ensures the longevity and safe operation of your welding machine:

- **Cleaning:** Regularly clean the machine's exterior with a dry cloth. Use compressed air to blow out dust from the ventilation openings. Ensure the machine is unplugged before cleaning.
- **Cable Inspection:** Periodically inspect all cables (power, electrode holder, earth clamp) for cuts, fraying, or damaged insulation. Replace damaged cables immediately.
- **Terminal Connections:** Check that all terminal connections are tight and free from corrosion.
- **Storage:** Store the welding machine in a dry, clean, and dust-free environment when not in use. Protect it from extreme temperatures.

## 7. Troubleshooting

If you encounter issues with your welding machine, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Machine does not power on	No power supply, faulty power cord, machine switch off	Check power outlet, inspect power cord, ensure machine switch is ON
No welding arc	Poor earth clamp connection, incorrect current setting, faulty electrode holder	Ensure earth clamp is secure, adjust current, check electrode holder connection
Machine overheats (Overheat/Overload indicator on)	Exceeded duty cycle, poor ventilation, prolonged use at high current	Allow machine to cool down, ensure proper ventilation, reduce welding time or current
Electrode sticks to workpiece	Low current setting, improper arc striking technique	Increase current, practice proper arc striking, utilize anti-stick feature
Poor weld quality	Incorrect current, wrong electrode, dirty workpiece, improper technique	Adjust current, use correct electrode, clean workpiece, refine welding technique

If problems persist after attempting these solutions, please contact INGCO customer support or a qualified service technician.

## 8. Specifications

Detailed technical specifications for the INGCO Inverter MMA Welding Machine 130 Amp (Model ING-MMA1302):

Specification	Value
Manufacturer	INGCO
Model Number	ING-MMA1302
Technology	IGBT Inverter
Input Voltage	1~220-240V

Specification	Value
Frequency	50/60Hz
Output Current Range	15-130A
Duty Cycle	130A at 30%
Display	LCD
No-load Voltage	75V
Max Output Current	130A
Electrode Diameter	1.6-3.2mm
Power Source Type	DC
Item Weight	500 g
Product Dimensions	28 x 18 x 8 cm
Included Components	1 x Welding Machine, 1 x Electrode Holder with Cable, 1 x Earth Clamp with Cable, 1 x Wire Brush, 1 x Helmet
Batteries Required	No
Date First Available	February 5, 2023

## 9. Warranty and Support

For warranty information, please refer to the documentation included with your purchase or visit the official INGCO website. Keep your purchase receipt as proof of purchase.

If you require technical assistance, have questions about operation, or need to report a defect, please contact INGCO customer support through their official channels. Provide your product model number (ING-MMA1302) and a detailed description of the issue for faster service.

