

Pin Brazing Machine

The Pin Brazing Machine (also known as a Soldering Machine for cathodic protection applications) is a specialized portable welding device used to create safe, low-resistance electrical connections between copper cables and steel structures such as pipelines, storage tanks, ships, and rebar.

Unlike traditional arc welding or exothermic (thermite) welding, pin brazing uses a silver-based alloy solder that melts at approximately 650°C (1200°F), bonding the cable lug to the steel surface without melting or damaging the base material. The process is battery-powered, making it ideal for remote field locations and hazardous environments where open flames are prohibited.

This technology is widely used in the cathodic protection (CP) industry for attaching test station cables, sacrificial anodes, grounding connections, and pipeline bonding jumpers.



KEY FEATURES

1. No Open Flame
2. No Damage to Pipeline
3. Portable & Easy to Use
4. All-Weather Operation
5. Fast & Efficient

APPLICATIONS

1. Pipeline CP Cables
2. Sacrificial Anodes
3. Pipe Joint Bonding
4. Tank & Structure Grounding
5. Offshore Applications
6. Rail & Grounding Systems

PRODUCT SPECIFICATIONS

Input Power: 30 kVA (peak)

Welding Current: 300 A (peak)

Welding Time: 0.1-2.5 seconds (typically 1–2 seconds)

Battery Capacity: 40-500 brazes per full charge (depends on model)

Charging Time: 5 hours (max)

Welding Rate: 5-8 connections per minute

Protection Class: IP23 (weather-resistant)

Operating Temperature: -20°C to +80°C (-40°F to +176°F)

Relative Humidity: Up to 95% at +25°C