

# E6013 Mild Steel Welding Electrode

This E6013 welding electrode is designed for welding mild steel. It offers excellent welding performance with a stable arc, minimal spatter, and easy slag removal.



## ADDITIONAL IMAGES



## Product Overview



**MT-12**

CORRESPONDING TO **AWS E6013**  
**E6013**

**ELECTRODE FOR WELDING MILD STEEL**

**Description:**  
MT-12 is low carbon steel type electrode with flux coating. It has excellent welding performance. The arc is stable and the spatter rate is negligible. The slag is fluid and easy to remove. It is suitable for all position welding of steel joints and irregular joints under various conditions.

**Applications:**  
For welding structure of steel sheets, vessels, machinery, automobile and other applications.

**Chemical Composition of Weld Metal (%)**

	C	Mn	Si	S	P
MINIMUM	0.050	0.20	0.100	0.005	0.005
TYPICAL	0.04	0.20	0.05	0.005	0.005

**Mechanical Properties of Weld Metal**

Tensile Strength	Yield Strength	Elongation	Impact Energy	Hardness	Brazing
420	235	22	27	120	200
420	235	22	27	120	200

\*Hardness is based on HRC method, consisting of minimum 5 J for size 3.2mm and minimum 10 J for other sizes. These values are minimum values for the lowest carbon.



Technical overview and performance characteristics of the E6013 welding electrode.

## High-Performance Mild Steel Welding Electrode

This E6013 welding electrode features a titania coating designed for superior performance in mild steel welding applications. It ensures a stable arc with negligible spatter, resulting in smooth, professional-grade weld appearances. The fluid slag is easily removed after hardening, making it ideal for all-position welding, including irregular joints and challenging conditions.

## Standards & Certifications

### International Approvals

ABS • BV • CCS • DNV • GL • LR • NK

### Compliance Standards

AWS A 5.1 E6013, GB/T5117 E4313, JIS Z3211 E4313

## Technical Specifications

### Chemical Composition of Weld Metal (%)

Element	Typical Value
Carbon (C)	0.09
Manganese (Mn)	0.40
Silicon (Si)	0.20
Sulfur (S)	0.015
Phosphorus (P)	0.019

### Mechanical Properties

**400 MPa**  
Yield Strength

**490 MPa**  
Tensile Strength

**29 %**  
Elongation

**70 J**  
Charpy V Impact (0°C)

## Operational Guidelines

### Recommended Current

- DC: 80-120 A
- AC: 90-130 A

### Storage Requirements

Keep dry and protect from humidity to maintain electrode integrity.

## Logistics

### Packaging

Cartons of 20kg net each. Configuration: 8 boxes x 2.5kg (for 2.5mm size) or 4 boxes x 5kg (for other sizes). Pallet options available upon request.