

# Welding Electrodes

Welding electrodes are designed for general purpose welding applications and are suitable for both AC and DC welding processes. These electrodes provide a stable arc, low spatter, and excellent weld bead appearance, making them suitable for various welding positions and materials.



## ADDITIONAL IMAGES



## Product Overview

WELDING ELECTRODE

**TJWELD BRAND**      CORRESPONDING TO **AWS E6013**  
**JIS D4313**

**ELECTRODE FOR WELDING MILD STEEL**

**Description:**  
A low carbon steel wire electrode designed with excellent mechanical properties for general purpose welding applications. It provides a stable arc, low spatter, and excellent weld bead appearance, making it suitable for various welding positions and materials.

**Applications:**  
For general purpose mild steel, carbon steel, stainless steel, and various industrial structures.

Chemical Composition of Weld Metal (%)					
Element	Min	Max	Min	Max	Min
C	0.05	0.10	0.05	0.10	0.05
Mn	0.30	0.50	0.30	0.50	0.30
P	0.010	0.020	0.010	0.020	0.010
S	0.005	0.010	0.005	0.010	0.005
Si	0.01	0.03	0.01	0.03	0.01
Fe	98.8	99.2	98.8	99.2	98.8

**Mechanical Properties of Weld Metal**

Property	Min	Max	Min	Max
Tensile Strength (MPa)	420	560	420	560
Yield Strength (MPa)	235	355	235	355
Elongation (%)	18	22	18	22
Reduction of Area (%)	40	50	40	50

For more information, please refer to the technical data sheet or contact our sales department.

Technical data sheet and application summary for mild steel welding electrodes.

## High-Performance Mild Steel Welding Electrode

This low carbon steel welding electrode is engineered for exceptional welding technological performance across all positions. It features a stable arc with minimal spatter loss and creates a compact, easily removable slag. The resulting welds exhibit a smooth, high-quality appearance suitable for diverse industrial structures.

## Technical Specifications

### Recommended Amperage

130 A

Flat Welding Max

120 A

Vertical Up Max

### Standards Compliance

AWS E6013, JIS D4313, ISO 9001:2000

## Chemical Composition

### Typical Chemical Composition

Element	Typical (%)
Carbon (C)	0.09
Manganese (Mn)	0.35
Silicon (Si)	0.2
Sulfur (S)	0.02
Phosphorus (P)	0.014

## Mechanical Properties

### Typical Mechanical Properties

- Yield Strength: 410 Mpa
- Tensile Strength: 470 Mpa
- Elongation: 29%
- Charpy V Impact (0°C): 75J
- Bend Test: 180 Degrees

## Logistics and Handling

Handling Precautions	Yes
Standard Packaging	20kg net cartons (8 x 2.5kg boxes for 2.5mm size; 4 x 5kg boxes for others). Palletized or non-palletized delivery options available.