

# 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**      CONFORMS TO AWS E6013  
JIS D4313

**ELECTRODE FOR WELDING MILD STEEL**

**Description:**  
A low carbon steel wire electrode designed with excellent mechanical properties for all positions. It offers excellent arc stability, low spatter, and excellent weld bead appearance. The electrode has a smooth appearance, is suitable for gas metal arc welding of steel plates and pipe joints.

**Applications:**  
For structural steel, boiler, vessel, bridge, vessel, reaction-heat-treatment and other products.

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	0.010	0.030	0.010	0.030	0.010
Fe	98.80	99.00	98.80	99.00	98.80

**Mechanical Properties of Weld Metal**

Property	Min	Max	Min	Max
Yield Strength (MPa)	420	490	420	490
Tensile Strength (MPa)	510	580	510	580
Elongation (%)	22	28	22	28
Reduction of Area (%)	40	50	40	50
Impact Energy (J)	27	34	27	34

NOTE: In case of other grades, the values of yield strength, tensile strength and reduction of area may vary. Please refer to the technical data sheet for the specific grade.

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.