

# E7018 Welding Electrode

This welding electrode is designed for welding ordinary low alloy steel. It exhibits high efficiency and is suitable for all welding positions using DC and AC.



## ADDITIONAL IMAGES



## Product Overview

### High-Efficiency Welding Electrode

This low-hydrogen welding electrode is formulated with iron powder, designed specifically for welding ordinary low alloy steel. It offers high operational efficiency with a melting rate of approximately 110%, ensuring consistent and reliable performance. The deposited metal provides excellent plasticity, toughness, and crack resistance, making it suitable for critical structural applications including ships and bridges.

## Technical Specifications

**WELDING ELECTRODE**

**MT-48**      CORRESPONDING TO AWS E7018

**LOW HYDROGEN ELECTRODE FOR WELDING HIGH TENSILE STEEL**

**Description:**  
This electrode is designed for welding ordinary low alloy steel. It offers high operational efficiency with a melting rate of approximately 110%, ensuring consistent and reliable performance. The deposited metal provides excellent plasticity, toughness, and crack resistance, making it suitable for critical structural applications including ships and bridges.

**Applications:**  
This electrode is suitable for welding ordinary low alloy steel. It is used for all positions and is suitable for critical structural applications including ships and bridges.

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

	C	Mn	P	S	Si
Weld Metal	0.05	0.02	0.015	0.01	0.02
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**Mechanical Properties of Weld Metal**

	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	Charpy Impact Energy (J)	Hardness (HV)
Weld Metal	420	560	22	270	180
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**Welding Precautions:**  
Welding should be performed in accordance with the instructions of AWS E7018. The heat input should be controlled to avoid excessive heat input.

**Storage:**  
This electrode should be stored in a dry container at a temperature of 30°C or below. It should be kept in a dry container and should not be exposed to moisture.

Technical specifications and performance data for the E7018 welding electrode.

<b>Welding Positions</b>	All Positions
<b>Current Type</b>	DC, AC (Open circuit voltage e70V)
<b>Melting Rate</b>	110 %
<b>Baking Requirements</b>	350°C for 1 hour before use

## Chemical Composition

### Chemical Composition of Weld Metal (%)

Element	Standard Max (%)	Typical (%)
Carbon (C)	d0.15	0.08
Manganese (Mn)	d1.60	1
Silicon (Si)	d0.75	0.5
Sulfur (S)	d0.035	0.014
Phosphorus (P)	d0.035	0.02

## Mechanical Properties

### Mechanical Properties

Property	Standard	Typical
Yield Strength (MPa)	e400	480
Tensile Strength (MPa)	e490	570
Elongation (%)	>22	30
Charpy V Impact (-30 )	e27	127J
Bend Test (Degree)	N.S.	180

## Logistics & Packaging

### Packaging Details

- 20kg net carton weight
- 8 boxes x 2.5kg (for 2.5mm electrodes)
- 4 boxes x 5kg (for other sizes)
- Pallet options available upon request

## Certifications

### Industry Approvals

ABS • BV • DNV • GL • LR • NK