

MT-B52 Carbon Steel Welding Electrode

The MT-B52 is a carbon steel electrode with a rutile coating suitable for all-position welding. It is designed for welding low carbon steel structures, especially for intermittent welding with small welding machines and short thin plates.



ADDITIONAL IMAGES



Product Overview

WELDING ELECTRODE

永火牌 MT-B52 CORRESPONDING TO AWS E7016

ELECTRODE FOR WELDING HIGH-TENSILE CLASS HIGH TENSILE STEEL

Description:
This is a low hydrogen potassium type electrode, covering excellent plasticity, impact toughness and crack resistance. It is the most popular electrode for shipbuilding and high tensile steel.

Applications:
It is suitable for welding of shipbuilding, steel tank, boiler and other thick plates of the steel with tensile strength up to 50kg/mm² class, especially for intermittent welding of the steel.

Chemical Composition of Weld Metal (%)

	W	C	Mn	P	S
Weld Metal	0.05	0.10	0.02	0.005	0.005

Mechanical Properties of Weld Metal

	Yield Point (MPa)	Tensile Strength (MPa)	Elongation (%)	Impact Energy (J)
Weld Metal	450	550	22	27

Note: All data are based on the test results of the electrode. © 2016 Merhein. Product is subject to change without notice. All rights reserved. Please refer to the technical drawing for the detailed dimensions. The data are subject to change without notice.

Technical overview and application guidelines for the welding electrode.

High-Performance Welding Electrode

This low hydrogen potassium type welding electrode is engineered for high tensile steel applications, specifically for the 50kg/mm² class. It offers superior plasticity, impact toughness, and crack resistance, making it an ideal choice for critical structural welding. The electrode is widely utilized in the fabrication of ship structures, boilers, pipelines, and essential components for vehicles, buildings, and bridges.

Standards & Compliance

Compliance Standards

AWS E7016, BS EN E42 3B, JIS D5016, ABS

Mechanical Properties

Mechanical Properties

Property	Standard Requirement	Typical Value
Yield Strength (Mpa)	e400	520
Tensile Strength (Mpa)	e490	580
Elongation (%)	e22	28
Charpy V Impact (-30°C)	e27	150J
Bend Test (Degree)	N.S.	180

Chemical Composition

Weld Metal Composition (%)

Element	Max Content	Typical
Carbon (C)	d0.15	0.06
Manganese (Mn)	d1.60	1.35
Silicon (Si)	d0.75	0.50
Sulfur (S)	d0.035	0.010
Phosphorus (P)	d0.035	0.020

Usage & Handling

Usage Instructions

- Dry electrodes at 300-350°C for 30-60 minutes before use
- Short arc technique is recommended

Packaging

Packaging Specifications

20 kg

Net Weight per Carton

2.5 kg

Box Size (Small)

5 kg

Box Size (Large)