

CHE508

Covered Welding Rod for High Tensile Steels

AWS A5.1 E7018

BS EN ISO 2560-B-E 49 18-1 A

CSA W48-06 E4918

JIS Z3212 D5016

GB/T 5117 E5018

Type of Covering: Low hydrogen, potassium, iron powder

Welding Position: F, H, HF, OH, V

Type of Current: DCEP or AC

Features & Applications

It is used for structures fabricated by equivalent tensile strength mild steels or low alloy steels, such as boilers, high pressure vessels, bridges, pipes and so on. The weld metal has good low temperature toughness and high crack resistance.

Chemical Composition of Deposited Metal (%)

	C	Mn*	Si	S	P	Cr*	Ni*	Mo*	V*
Standard	≤0.15	≤1.60	≤0.75	≤0.035	≤0.035	≤0.20	≤0.30	≤0.30	≤0.08
Typical	0.068	1.38	0.41	0.012	0.015	0.011	0.035	0.001	0.002

The total amount of elements with * one should be ≤1.75%

Mechanical Properties of Deposited Metal (AW)

	Tensile Strength	Yield Strength	Elongation	Impact Value (J)
	Rm (MPa)	ReL (MPa)	A4 (%)	-30°C
Standard	≥490	≥400	≥22	≥27
Typical	560	465	29	130

X-ray radiographic inspection: Grade I

Moisture content: ≤0.60%

Sizes & Recommended Current (DC⁺ or AC open circuit voltage ≥70V)

Size (mm)		2.5x300	3.2x350	4.0x400	5.0x400
Current (A)	F, H	70-110	100-140	140-180	190-240
	V, OH	60-90	80-120	120-160	—

- Notice:**
- 1) The rod should be baked at 350°C for 1 hour before use.
 - 2) The surfaces to be welded must be cleaned away impurities of oil contamination, rust, moisture and so on.
 - 3) Short arc and narrow-gap welding is recommended.