

CHE506

Covered Welding Rod for High Tensile Steels

AWS A5.1 E7016

BS EN ISO 2560-B-E 49 16 A

CSA W48-01 E4916

JIS Z3212 D5016

GB/T 5117 E5016

Type of Covering: Low hydrogen, potassium

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

Type of Current: DCEP or AC

Features & Applications

It is used for fabricating important structures made by equivalent tensile strength mild steels or low alloy steels, such as bridges, lifts, vehicles, constructions, heavy machineries and so on. The weld metal has good performance of mechanical properties and 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	0.069	1.11	0.53	0.007	0.020	0.037	0.013	0.002	0.01

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)
	R _m (MPa)	R _{eL} (MPa)	A ₄ (%)	-30°C
Standard	≥490	≥400	≥22	≥27
Typical	550	440	31	170

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	5.8x400	
Current (A)	F, H	70-110	100-140	150-180	180-230	220-260
	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.