

K-12018M

For 830MPa high tensile steel

Classifications

EN 757:1997 : E 69 3 Z B 32 H10
 AWS A5.5-06 : E12018-M

JIS Z 3211 : E8318-N4C2M2

Description

- Covering is low hydrogen, iron powder type for welding of 890MPa class high tensile steel in bridge, pressure vessels, penstocks and machinery.
- Excellent mechanical properties especially in notch toughness.
- Good radiographic soundness.
- Redry the electrode at 300~400°C for 1~2 hours prior to use.

Welding positions



Typical chemical composition of all-weld metal (%)

C	Si	Mn	P	S	Ni	Cr	Mo	V
0.08	0.30	1.46	0.014	0.013	1.86	0.95	0.41	0.01

Typical mechanical properties of all-weld metal

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J)		Remarks
				-30°C	-50°C	
AWS A5.5	745~830	min. 830	min. 18		≥ 27	
EN 757	min. 690	760~960	min. 17	≥ 47		
Example	800	940	20	70	40	AW

* AW : As-Welded

Sizes available and recommended currents (AC or DC +)

Dia.	(mm)	2.6	3.2	4.0	5.0	6.0
Length	(mm)	350	350	400	400	450
Amp. (A)	F V · OH	70~100 60~90	90~130 70~100	150~190 120~160	180~230 140~180	220~300 —

Approvals

JIS, CE