TC-11

AWS A5.1 E6011
EN ISO 2560-B-E4311 A
JIS Z 3211 E4311

Characteristics and Applications:

TC-11 is a cellulose type electrode. It features deep penetration, stable arc, no slag inclusion, good porosity resistance and slag detachability due to the gas pressure generated from the electrode coating while welding. It provides excellent performance in vertical and overhead positions on root pass welding especially on X-ray result. It is suitable for heat transfer pipes, oil tanks, ships, and boilers.

Notes on usage:

1. Use lower currents.
2. Dry the electrodes at 60~70℃ for 30 minutes since high cellulose type electrode is easy to get moisture.

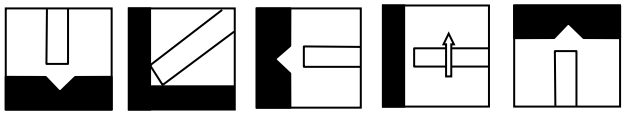
Typical chemical composition of weld metal (wt%):

	C	Mn	Si	P	S	Ni	Cr	Mo	V
AWS	≦0.20	≦1.20	≦1.00	-	-	≦0.30	≦0.20	≦0.30	≦0.08
EN ISO	≦0.20	≦1.20	≦1.00	-	-	≦0.30	≦0.20	≦0.30	≦0.08
Typical value	0.12	0.32	0.18	0.015	0.009	0.01	0.023	0.002	0.005

Typical mechanical properties of weld metal:

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -30°C (-20°F)
AWS	≧330(48)	≧430(60)	≧22	≧27(20)
EN ISO	≧330(48)	≧430(60)	≧20	≧27(20)
Typical value	470(68)	570(83)	25	40(30)

Welding position:



Sizes and recommended current range (AC or DC＜+＞):

Diameter (mm)	2.6	3.2	4.0	4.8
Length (mm)	350	350	350	350
Amps	60-80	80-130	110-160	140-180

COVERED ELECTRODES

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