Inweld
Welding Alloys and Supplies

Datasheet

Chemical Composition of AWS A5.18 E70C-6M

Fe	C	Cr	Ni	Mo	Mn	Si	P	S	V	Cu
Balance	0.12	0.20	0.50		1.75	0.90	0.03	0.03	0.08	0.50

Single values are maximum unless otherwise specified.

Description and Application

Electrodes of the E70C-6 classifications are composite stranded or metal cored electrodes intended for both single and multi-pass applications. They are characterized by a spray arc and excellent bead wash characteristics. The electrodes may be classified with either CO2 or 75-80% Ar / Balance CO2.

Features: general purpose metal core; where high quality, weld productivity, and weld appearance are extremely important; welding over mill scale with low spatter requirement; low fume (up to 40% less smoke); high deposition rate (95% and greater).

Typical Weld Metal Properties

	AWS Spec	Inweld Typical
Tensile Strength:	70,000 psi	89,000 psi
Yield Strength:	58,000 psi	77,000 psi
Elongation:	22%	27%
Charpy V-Notch at -20°F:	20 ft. lbs. min.	29 ft. lbs.

Recommended Parameters

FCAW

Wire Diameter	Voltage	Amperage	Wire Feed IPM	Stickout	Ar/Co CFH
0.035”	29-35	180-315	350-700	3/8-3/4”	35-40
0.045”	27-33	165-345	220-600	1/2-1”	35-45
0.052”	25-35	220-460	220-625	1/2-1”	40-50
1/16”	26-38	230-500	150-490	1/2-1.25”	40-50