Inweld
Welding Alloys and Supplies

Datasheet

Chemical Composition of AWS A5.18 ER70S-3

C	Mn	Si	P	S	Ni	Cr	Mo	V	Cu	Fe
0.06-015	0.90-1.40	0.45-0.75	0.025	0.035	0.15	0.15	0.15	0.03	0.50	Balance

Single values are maximum unless otherwise specified.

Description and Application

Inweld 70S-3 is intended for welding a wide selection of carbon steels like sheet metal, plate and automotive components. This wire has moderate levels of Mn and Si which is great for most applications on clean or uncoated materials. It can also function on some light scale or rust, but this should be avoided in most cases.

Inweld 70S-3 is well suited for pressure vessels, sheet steel, pipe and steel buildings. The varied sheet metal applications include air conditioner compressors and frames, ventilation ductwork, steel furniture and many others. For the most part, try to avoid welding on scale or other types of oxidations or potential contamination.

Typical Weld Metal Properties

	AWS Spec
Tensile Strength:	70,000 psi
Yield Strength:	58,000 psi
Elongation:	22%

Recommended Parameters

GMAW (DCEN) - Argon (100) or Argon/CO2 (85/15)

Wire Diameter	Voltage	Amperage
0.035”	26	200
0.045”	27	300

GTAW (DCEN) - Spray Transfer - Argon/Oxygen (95/5)

GTAW (DCEN) - Globular Transfer - CO2 (100) or Argon/CO2 (80/20)

Wire Diameter	Voltage	Amperage
3/32”	13-16	220-250
1/8”	16-19	250-280