Inweld 80S-Ni1

AWS A5.28 ER80S-Ni1

Chemical Composition of Inweld 80S-Ni1

C	Mn	Si	P	S	Ni	Cr	Mo	V	Cu	Other
0.12	1.25	0.40-0.80	0.025	0.025	0.80-1.10	0.15	0.35	0.05	0.35	0.50

Single values are maximum unless otherwise specified.

Description and Applications

Inweld 80S-Ni1 deposits weld metal similar to E8018-C3 coated electrodes, and are used for welding low-alloy, high-strength steels requiring good toughness at temperatures as low as -50ºF (-45ºC).

Typical Weld Metal Properties

	AWS Spec (psi)
Tensile Strength:	80,000
Yield Strength:	68,000
Elongation:	24%

Recommended Welding Parameters:**

GMAW (DC Reverse Polarity) Electrode Positive Spray transfer:

Wire Dia.	Amps	Volts	Gas
.035	180-230	25-28	98Ar/2O2
.045	250-350	25-30	75Ar/25CO2
1/16	280-400	26-36	75Ar/25CO2

GTAW (DCSP) 2 % Thoriated Tungsten Electrode negative

Wire Dia.	Amps	Volts	Gas
1/16”	50-120	7-13	Argon
3/32”	120-200	10-16	Argon
1/8”	150-220	12-18	Argon

** All parameters are suggested as basic guidelines and will vary depending on joint design number of passes, and other factors.

Standard Sizes

MIG: .035” (.9mm), .045” (1.2mm)

TIG: 1/16” (1.6mm), 3/32” (2.4mm), 1/8” (3.2mm)

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