Inweld 70S-A1

AWS A5.28 ER70S-A1

Chemical Composition of Inweld 70S-A1

Fe	C	Cr	Ni	Mo	Mn	Si	P	S	Cu	Other
Balance	0.12		0.20	0.40-	1.30	0.30-	0.025	0.025	0.35	0.50
				0.65		0.70				

Single values are maximum unless otherwise specified.

Description and Applications

ER70S-A1 classification is similar to many other Inweld Carbon Steels under the AWS A5.18 classification, except that 0.5 percent molybdenum has been added. The addition of Mo increses the strength of the weld metal, especially at elevated temperatures and provides some increase in corrosion resistance; however, it will likely reduce the notch toughness of the weld metal. Typical applications include the welding of C-Mo base metals such as ASTM 204 plate and A335-P1 pipe.

Typical Weld Metal Properties

AWS Spec

Tensile Strength: 75,000 psi Yield Strength: 58,000 psi

Elongation: 19%

Recommended Parameters

GTAW (DCSP) 2% Thoriated Tungsten Electrode Negative

Material	Tungsten Dia.	<u>Amperage</u>	Argon (CFH)
3/32"	1/16"	120-150	20
1/8"	3/32"	150-300	25