Tigrod ER90S-B9

Tigrod ER90S-B9 is a solid wire for TIG welding of creep resisting, modified 9% chromium steels, such as ASTM A335 Grade P91 or ASTM A213 T91. Tigrod products are embossed on opposite ends (E2) with the alloy identification.

Classifications	AWS A5.28 : ER90S-B9 ASME SFA 5.28
Industry	Petrochemical Pipeline Power Generation Process

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
Stress Relieved 1hr 690°C (1275°F)	552 MPa (80 ksi)	649 MPa (94 ksi)	27 %
Stress Relieved 1hr 705°C (1300°F)	524 MPa (76 ksi)	642 MPa (93 ksi)	25 %

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Al
0.08-0.12	0.35-1.0	0.15-0.50	max 0.010	max 0.010	max 0.50	8.5-9.35	0.85-1.15	0.18-0.25	max 0.015

Typical Wire Composition %

Cu	N	Nb	Sb	X-bar
max 0.10	0.040-0.070	0.030-0.050	30 PPM max	max 12

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Cr	Mo	X-bar
0.10	0.60	0.50	0.01	0.01	8.9	0.90	< 15

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