

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.

Specifications

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

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
Stress Relieved 1 hour(s) 690 °C (1275 °F)	552 MPa (80 ksi)	649 MPa (94 ksi)	27 %
Stress Relieved 1 hour(s) 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 ppm

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 ppm