

Tigrod ER80S-B6

Tigrod ER80S-B6 is a Chrome-Moly TIG rod for joining 5% Cr - 0.5% Mo steels such as ASTM A200-T5, A335-P5 and A387-Gr5. These non-copper-coated rods are primarily used to fabricate and repair power piping, pressure vessels, heat exchangers, and boilers used in the power generation industry. All ESAB ER80S-B6 Tigrod is embossed on both ends with the alloy identification. This grade of rod was previously classified as ER502.

Classifications	ASME SFA 5.28 AWS A5.28: ER80S-B6
Industry	Petrochemical Process

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
Stress Relieved 1hr 732°C (1350°F)	566 MPa (82 ksi)	656 MPa (95 ksi)	24 %
Stress Relieved 1hr 746°C (1375°F)	552 MPa (80 ksi)	642 MPa (93 ksi)	26 %

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Cu	X-bar
0.05-0.10	0.40-0.70	0.15-0.50	max 0.025	max 0.012	max 0.3	4.5-6.0	0.45-0.65	max 0.03	max 0.20	max 12 ppm

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Cr	Mo	X-bar
0.08	0.50	0.40	0.01	0.007	5.80	0.50	< 15 ppm