TIG rods, unalloyed

Brand Standard AWS Standard EN ISO	Chemical Composition (%) Typical Values	Mechanical Properties Typical Values	Ø x L (mm)	Approvals	Characteristics and Applications
BOHLER N ER 70 S-2 AWS A5.18: ER70S-2	C: 0.05 Si: 0.50 Mn: 1.20 Ti: + Zr: + Al: +	Heat treatment: As welded UTS: ≥520 MPa YS: ≥420 MPa El: ≥23% CVN Impact: +20°C: ≥80J -30°C: ≥27J	1.6 x 1000 2.0 x 1000 2.4 x 1000 3.2 x 1000	-	BOHLER N ER 70 S-2 is a copper coated GTAW rod containing Al, Ti and Zr as strong deoxidants in addition to Mn and Si and is often referred to as triple deoxidized copper coated wire with very low impurity levels. This has advantages when rimming or semi-killed mild steels are welded or where joint preparations are rusty or contaminated. BOHLER N ER 70 S-2 is primarily used for single pass welding. For applications involving single and multipass GTAW and/ or low temperature toughness requirements down to –30°C we recommend our GTAW rod BOHLER N ER 70 S-2.

TIG rods, low alloyed

Brand Standard AWS Standard EN ISO	Chemical Composition (%) Typical Values	Mechanical Properties Typical Values	Ø x L (mm)	Approvals	Characteristics and Applications
BOHLER DMO-IG AWS A5.28: ER70S-A1 (ER80S-G) EN ISO 636-A / 21952-A: W W2Mo / W MoSi	C: 0.1 Si: 0.6 Mn: 1.1 Mo: 0.5	Heat treatment : 620°C / 1h UTS: 570 MPa YS: 480 MPa El: 27% CVN Impact: +20°C: 230J	1.6 x 1000 2.0 x 1000 2.4 x 1000 3.0 x 1000 3.2 x 1000	TÜV, DB, KTA, BV, DNV GL, CRS, CE, NAKS	GTAW rod for welding of low alloy and creep resistant steels. Application area includes boiler, pressure vessel, tanks, pipeline, and crane constructions as well as in structural steel engineering. Approved in long-term service up to 550 °C.
UNION I CrMo AWS A5.28: ER80S-G [ER80S-B2(mod.)] EN ISO 21952-A: W CrMo1Si	C: 0.10 Si: 0.60 Mn: 1.00 Cr: 1.10 Mo: 0.50	Heat treatment: 620°C / 1h UTS: 560 MPa YS: 450 MPa El: 22% CVN Impact: +20°C: 90J	2.0 x 1000 2.5 x 1000 3.2 x 1000	TÜV, DB, CE	Welding rod / wire for the welding with argon. Suitable for manufacturing creep resistant steels in boiler, tank, pipeline and nuclear reactor construction.
UNION I 1,2 Ni AWS A5.28: ER80S-G EN ISO 636-A: W 46 6 W3Ni1	C: 0.10 Si: 0.70 Mn: 1.40 Ni: 1.30	Heat treatment: As welded UTS: 600 MPa YS: 470 MPa El: 25% CVN Impact: +20°C: 150J -60°C: 47J	2.0 x 1000 2.4 x 1000 3.2 x 1000	TÜV, DB, DNV, KTA 1408.1, CE	Ni-alloyed welding rod/wire. Good flow characteristics in out of position welding. Very good impact toughness of weld metal at low temperatures. Tested according to KTA 1408.