

IABCO ER80S-Ni1 TIG

TIG/GTAW wire for low alloy steels

Product name	IABCO ER80S-Ni1 TIG
Classification EN ISO	636-A: W 3Ni1 / W 46 6 3Ni1
Material No.	-
Classification AWS	A5.28: ER80S-Ni1
Approvals	TÜV 12699.00, CE.
Applications	TIG/GTAW rod for welding steels where impact properties are required at -50°C. Applications include structural, oil & gas and offshore steelwork.
Base materials	For cryogenic construction steels and Ni bearing low temperature steels. ASTM: A333/A334 grades 1/6, A350 grades LF2/LF6, A352 grades LCB/LCC. API: 5L X65 11MnNi5-3, 13MnNi6-3, S275NL-S460NL, S275ML-S460ML, P275NL2-P460NL2, P355ML2-P460ML2.
Typical analysis of wire, weight %	C: 0.09 Si: 0.50 Mn: 1.05 Ni: 0.90
Typical heat treatment ⁽¹⁾	Preheat and PWHT are often not necessary but actual requirements will depend on the grade and thickness of material being welded and any design codes that apply.
Mechanical properties of weld deposit ⁽²⁾	0.2% proof stress Rp0.2%: ≥470MPa. Tensile strength Rm: ≥550MPa. Elongation 4d/5d: ≥24/20%. Impact ISO-V, -60°C: ≥47J.
Other products	SAW: S2Ni1. MIG/GMAW: ER80S-Ni1.

Notes (1) Application codes and project specifications should always be referred to for specific requirements.

(2) Actual mechanical properties will be dependent on specific welding procedure (including shielding gas, flux, PWHT etc) and should always be confirmed by approval of an appropriate welding procedure.