

## IABCO NiCu TIG

### TIG/GTAW wire for low alloy steels

Product name	IABCO NiCu TIG
Classification EN ISO	636-A: W 42 4 Z
Material No.	-
Classification AWS	A5.28: ER80S-G
Approvals	CE.
Applications	TIG/GTAW rod for weathering steels. Weathering steels, with controlled additions of Cu, provide improved corrosion resistance compared to CMn steels. The improved resistance to atmospheric corrosion means these steels find use for architectural applications and also for welding CMn steels to prevent preferential corrosion of the weld.
Base materials	For weather resistant construction steels, commonly referred to as weathering steels. ASTM: A242 grades 1/2, A588 grades A/B/C/K, A606, A709 grade 50W. S235J0W-S355J0W, S235J2W-S355J2W, S355J0WP, S355J2WP, S355K2W.
Typical analysis of wire, weight %	C: 0.08 Si: 0.80 Mn: 1.40 Ni: 0.80 Cu: 0.40
Typical heat treatment <sup>(1)</sup>	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 <sup>(2)</sup>	0.2% proof stress Rp0.2%: ≥450MPa. Tensile strength Rm: ≥550MPa. Elongation 4d/5d: ≥22/20%. Impact ISO-V, -40°C: ≥47J.
Other products	SAW: S2NiCu1. MIG/GMAW: NiCu.

**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.