

ENi3 TIG & MIG

MIG/GMAW and TIG/GTAW wire for low alloy steels

Product name	IABCO ENi3 TIG / MIG
Classification EN ISO	14171-A: S2Ni3 636-B: Nearest WN7
Material No.	-
Classification AWS	A5.23: ENi3 A5.28: ER80S-G
Approvals	-
Applications	Welding wire for fine grain structural steels where high impact values are required.
Base materials	For cryogenic construction steels and Ni bearing low temperature steels. ASTM: A203 grades D/E/F, A333/A334 grades 3/7, A350 grade LF3/LF5, A352 grade LC3. 12Ni14.
Typical analysis of wire, weight %	C: 0.09 Si: 0.17 Mn: 1.05 Ni: 3.20
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: ≥20/17%. Impact ISO-V, -75°C: ≥27J.
Other products	SAW: ENi3.

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.