

IABCO SD3 1Ni½Mo

TIG/GTAW wire for low alloy steels

Product name	IABCO SD3 1Ni½Mo
Classification EN ISO	16834-A: W Z (nearest Mn3Ni1Mo) 16834-B: W 0 (nearest N2M3)
Material No.	-
Classification AWS	A5.28: ER90S-G A5.23: EF3
Approvals	-
Applications	Copper coated TIG/GTAW wire for high strength low alloy steels where good impact properties are required down to -60°C.
Base materials	For high strength low alloy fine-grained steels with yield strengths up to ~620MPa (90ksi). ASTM: A182 grade F36, A335 grade P36, A517, A533, A537. P460NL2, P460ML2, S500QL-S620QL, S500QLN-S620QLN, P500QL1, 500QL2. 15NiCuMoNb5-6-4 (1.6368).
Typical analysis of wire, weight %	C: 0.12 Si: 0.20 Mn: 1.75 Ni: 0.90 Mo: 0.55
Typical heat treatment ⁽¹⁾	Welding procedure (including preheat temperature, interpass temperature and PWHT) will be dependent on the base material being welded, including its thickness, and any applicable design codes.
Mechanical properties of weld deposit ⁽²⁾	0.2% proof stress Rp0.2%: ≥640MPa. Tensile strength Rm: ≥740MPa. Elongation 4d/5d: ≥20%. Impact ISO-V, -60°C: ≥100J.
Other products	MIG/GMAW: A31, FK 2. TIG/GTAW: A31. SAW: S3NiMo1.

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.