

IABCO S3 1Ni¼Mo TIG

TIG/GTAW wire for mild and low alloy steels

Product name	IABCO S3 1Ni¼Mo TIG
Classification EN ISO	636-A: W 0 636-B: W 0 (nearest WN1)
Material No.	-
Classification AWS	A5.28: ER80S-G A5.23: ENi5
Approvals	-
Applications	TIG/GTAW wire for high strength quenched and tempered structural steels. Applications will be found in the offshore industry, shipbuilding and general structural fabrication.
Base materials	For high strength low alloy fine-grained steels with yield strengths up to ~500MPa (72ksi). API: 5L grades X60-X70. S450J2, S460N, P460QL1-P500QL1, P460QL2-P500QL2, S460QL-S500QL, S460QLN-S500QLN, P460QL1-P500QL1, P460QL2-P500QL2.
Typical analysis of wire, weight %	C: 0.10 Si: 0.22 Mn: 1.45 Ni: 0.90 Mo: 0.25
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%: ≥460MPa. Tensile strength Rm: ≥550MPa. Elongation 4d/5d: ≥20%. Impact ISO-V, -40°C: ≥100J.
Other products	MIG/GMAW: A31 TIG/GTAW: A31 SAW: S3 1Ni¼Mo

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.