

IABCO S2

SAW wire for mild steel

Product name	IABCO S2
Classification EN ISO	14171-A: S2
Material No.	1.0494
Classification AWS	A5.17 / A5.23: EM12
Approvals	TÜV 12686.00, CE.
Applications	Submerged arc welding wire for standard CMn structural steels. Typical applications include shipbuilding, pressure vessels and general construction.
Base materials	For CMn and mild steels with yield strength up to ~380MPa (56ksi). ASTM: A36, A106 grades A/B/C, A139, A210 grades A1/C, A216 grades WCA/WCB/WCC, A234 grade WPB, A266 grades 1/2/4, A283 grades A/B/C/D, A285 grades A/B/C, A299 grades A/B, A515 grades 60, A516 grades 55, A656 grade 50. API: 5L grades X42-X56. S185-E360, S235JR-S355JR, S235J0-S355J0, S235J2-S355J2, S275N-S355N, S275M-S355M, P235GH-P355GH, P275N-P355N, P355M, P355Q. Pipeline steels L210-360. Shipbuilding grades A-E, AH36, DH36.
Typical analysis of wire, weight %	C: 0.09 Si: 0.08 Mn: 1.05
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⁾	Mechanical properties will be dependent on the welding procedure and flux.
Other products	SAW: S1, S2Si, S3, S3Si. MIG/GMAW: ER70S-2, ER70S-3, ER70S-6, SG 3. TIG/GTAW: ER70S-2, ER70S-3, ER70S-6, SG 3. Gas welding: A1, A2.

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.