

I.A.Barnes & Co Ltd Unit 21, Gunnels Wood Park Gunnels Wood Road Stevenage, Hertfordshire SG1 2BH, UK

Tel: +44 (0)1438 354972 Fax: +44 (0)1438 741530 www.iabco.co.uk

IABCO ER70S-2 MIG

MIG/GMAW wire for mild and low alloy steels

Product name	IABCO ER70S-2 MIG
Classification EN ISO	14341-A: G2Ti / G 46 A M21 2Ti
Material No.	-
Classification AWS	A5.18: ER70S-2
Approvals	-
Applications	MIG/GMAW wire for welding standard CMn structural steels. Typical applications would include shipbuilding, pressure vessels and construction.
Base materials	For steels up to a yield strength of 460MPa (65ksi). ASTM: A27, A36, A106 grades A/B/C, A139, A210 grades A1/C, A214, A216 grades WCA/WCB/WCC, A234 grade WPB, A334 grade 1. API: 5L grades X42-X60. S185-E360, S235JR-S355JR, S235J0-S450J0, S235J2-S355J2, S275N-S460N, S275M-S460M, S460Q, P235GH-P355GH, P275N-P460N, P355M-P460M, P355Q-P460Q.
Typical analysis of wire, weight %	C: 0.04 Si: 0.55 Mn: 1.20 Ti: 0.10 Al: 0.10 Zr: 0.07
Typical heat treatment (1)	Preheat and PWHT are generally 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)	M21/SG-AC-25 shielding gas: 0.2% proof stress, Rp0.2%: ≥460MPa. Tensile strength, Rm: ≥530MPa. Elongation, 4d/5d: ≥22/20%. Impact ISO-V, room temperature: ≥47J and -30°C: ≥27J.
Other products	SAW: S1/S2/S2Si/S3/S3Si. MIG/GMAW: ER70S-3/ER70S-6/SG 3. TIG/GTAW: ER70S-2/ER70S-3/ER70S-6/SG3. Gas welding: U 39/U 40/U 40 Ni.

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.

Directors: I.A.Barnes, P.A.Barnes, A.C.Barnes Registered in Cardiff No: 1654903