

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 FK1000 MIG

MIG/GMAW wire for low alloy high strength steels

Product name	IABCO FK1000 MIG
Classification EN ISO	16834-A: G Mn4Ni2CrMo G 89 6 M21 Mn4Ni2CrMo
Material No.	-
Classification AWS	A5.28: ER120S-G
Approvals	TÜV 12690.00, CE.
Applications	MIG/GMAW wire for welding high strength low alloy steels. Used for welding high strength steels in many high stress, critical applications; also exhibiting excellent toughness down to -60°C. Typical applications can be found in the mining, shipbuilding, automotive and pressure vessel industries.
Base materials	For high strength fine-grained structural steels up to yield strength 890MPa (129ksi). HY80, Q1(N), HY100, Q2(N) S690Q-S890Q, S690QL-S890QL, S690QLN-S890QLN.
Typical analysis of wire, weight %	C: 0.09 Si: 0.80 Mn: 1.80 Cr: 0.31 Ni: 2.20 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 and any applicable design codes.
Mechanical properties of weld deposit (2)	M21 shielding gas: 0.2% proof stress Rp0.2%: ≥890MPa. Tensile strength Rm: ≥940MPa. Elongation 4d/5d: ≥15%. Impact ISO-V, -60°C: ≥47J.
Other products	-

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