

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 FK1 TIG

TIG/GTAW wire for low alloy high strength steels

| Product name | IABCO FK1 TIG |
|--|--|
| Classification EN ISO | 16834-A: W Mn3Ni1CrMo / W 69 4 Mn3Ni1CrMo |
| Material No. | - |
| Classification AWS | A5.28: ER100S-G / ER110S-G |
| Approvals | CE. |
| Applications | TIG/GTAW wire for welding high strength low alloy steels. Used for many structural and construction applications including: pipelines, tankers and containers. |
| Base materials | For high strength fine-grained steels with yield strength up to 690MPa (100ksi). ASTM: A514. HY80, HY100, Q1(N). S500Q-S690Q, S500QL-S690QL, P500Q-P690Q, P500QL1-P690QL1. |
| Typical analysis of wire, weight % | C: 0.09 Si: 0.52 Mn: 1.57 Cr: 0.30 Ni: 1.40 Mo: 0.25 V: 0.09 |
| 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%: ≥690MPa. Tensile strength, Rm: ≥790MPa. Elongation, 4d/5d: ≥17%. Impact ISO-V, -40°C: ≥47J. |
| Other products | SAW: S3 NiCrMo2.5 MIG/GMAW: FK1. |

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.