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# ERNiCrMo-10

## MIG/GMAW and TIG/GTAW nickel base wire

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|---|---|
| Product name | IABCO ERNiCrMo-10 |
| Classification EN ISO | 18274: SNi6022 (NiCr21Mo13Fe4W3) |
| Material No. | 2.4635 |
| Classification AWS | A5.14: ERNiCrMo-10 |
| Applications | Nickel base wire, commonly referred to as alloy C22, which is used for a wide range of applications.<br>Uses include welding matching, and other similar nickel base alloys, for applications in the paper, offshore, chemical and petrochemical industries.<br>Other applications include: Dissimilar welds between nickel base alloys and low alloy or stainless steels. Welding of corrosion resistant alloys to provide overmatching weld metal eg. 6-7%Mo superaustenitic base materials. Surfacing of CMn and low alloy steels. |
| Base materials | Nickel base alloy C22: N06022, 2.4602, Hastelloy™ C22 (Haynes International), Nicrofer™ 5621 hMoW (Outokumpu VDM), Inconel™ 622 (Special Metals).<br>Dissimilar welds: nickel alloys to low alloy and stainless steel.<br>Superaustenitic alloys: 6-7%Mo, S31254, S32654, S34565 and similar alloys.<br>Cladding: surfacing a wide range of steels. |
| Typical analysis of wire, weight % | C: <0.01 Si: 0.05<br>Mn: 0.2 Cr: 21.0<br>Ni: Balance Mo: 13.5<br>Fe: 4.0 W: 3.0 |
| Typical heat treatment (1) | Requirements for preheat and PWHT will be dependent on the base material being welded. |
| Typical mechanical properties of weld (2) | 0.2% proof stress Rp0.2%: 500MPa<br>Tensile strength Rm: 720MPa<br>Elongation 4d/5d: 35%<br>Impact ISO-V, +20°C: 150J |
| 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.