

## IABCO ER90S-B3 MIG

### MIG/GMAW wire for low alloy steels

Product name	IABCO ER90S-B3 MIG
Classification EN ISO	21952-B: G 62 M 2C1M
Material No.	-
Classification AWS	A5.28: ER90S-B3
Approvals	CE.
Applications	MIG/GMAW wire for high temperature creep resistant 2.25%Cr-1%Mo ferritic steel. These steels are used for creep resisting applications up to ~600°C. Typical applications in power generation plant include steam piping, turbines and boilers; the alloy also finds applications in the chemical and petro-chemical industries. The wire has low levels of tramp elements (eg. Sn, As, Sb & P) providing a low Bruscato (X) Factor for temper embrittlement resistant applications.
Base materials	For matching 2.5%Cr-1%Mo creep resisting ferritic steels. ASTM: A182 grade F22, A199/A200 grades T21/T22, A213 grade T22, A217 grade WC9, A234 grade WP22, A335 grade P22, A387 grades 21/22. 10CrMo 9-10, G-17CrMo 9-10.
Typical analysis of wire, weight %	C: 0.09 Si: 0.55 Mn: 0.55 Cr: 2.50 Mo: 1.05
Typical heat treatment <sup>(1)</sup>	Preheat temperature: 200°C. Interpass temperature: 300°C. PWHT: 690°C.
Mechanical properties of weld deposit <sup>(2)</sup>	0.2% proof stress Rp0.2%: ≥540MPa. Tensile strength Rm: ≥620MPa. Elongation 4d/5d: ≥17%.
Other products	SAW: EB3. MIG/GMAW: A33. TIG/GTAW: A33, ER90S-B3.

**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.