

IABCO ERNiCrMo-3

MIG/GMAW, TIG/GTAW and SAW nickel base wire

Product name	IABCO ERNiCrMo-3	
Classification EN ISO	18274:	S Ni6625 (NiCr22Mo9Nb)
Material No.	2.4831	
Classification AWS	A5.14:	ERNiCrMo-3
Approvals	CE.	
Applications	<p>Nickel base wire, commonly referred to as alloy 625, which is used for an extensive scope of applications over a wide range of service temperatures from -269°C to over 1000°C.</p> <p>Uses include welding matching, and other heat-resisting nickel base alloys (eg. alloy 800) for applications in furnaces and other high temperature equipment. Other applications include: Dissimilar welds between nickel base alloys and stainless, low alloy or CrMo steels. Welding of corrosion resistant alloys to provide overmatching weld metal eg. 825 & 6%Mo base materials. Surfacing of CMn and low alloy steels. Welding of 9% Ni steels for service down to -196°C, in refineries, petrochemical and LNG.</p>	
Base materials	<p>Nickel base alloy 625: N06625, 2.4856, Inconel™ 625 (Special Metals). Dissimilar welds: nickel alloys to low alloy/CrMo/stainless steel. High temperature welds: creep resisting CrMo to stainless steel. High temperature alloys: alloy 800, N08800, N08810, 1.4876, 1.4958. Superaustenitic alloys: 6%Mo, S31254 and similar alloys. Corrosion resistant alloys: N08825, N08904 and similar alloys. Low temperature welds: 9% Ni steels. Cladding: surfacing a wide range of steels.</p>	
Typical analysis of wire, weight %	<p>C: 0.01 Mn: 0.05 Ni: Balance Nb: 3.6 Ti: 0.2</p>	<p>Si: 0.05 Cr: 22.0 Mo: 8.6 Fe: 0.5 Al: 0.1</p>
Typical heat treatment ⁽¹⁾	Requirements for preheat and PWHT will be dependent on the base material being welded.	
Typical mechanical properties of weld ⁽²⁾	<p>0.2% proof stress Rp0.2%: 500MPa Tensile strength Rm: 750MPa Elongation 4d/5d: 40% Impact ISO-V, +20°C: 150J -196°C: 75J</p>	
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.