

ERNiCrCoMo-1

MIG/GMAW and TIG/GTAW nickel base wire

Product name	IABCO ERNiCrCoMo-1	
Classification EN ISO	18274:	SNi6617 (NiCr22Co12Mo9)
Material No.	2.4627	
Classification AWS	A5.14:	ERNiCrCoMo-1
Applications	<p>Nickel base wire, commonly referred to as alloy 617, which is used for a range of high temperature applications up to ~1100°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, heat resistant alloys and high carbon heat resisting castings. Surfacing of CMn and low alloy steels.</p>	
Base materials	<p>Nickel base alloy 617: N06617, 2.4663, NiCr22Co12Mo9, Nicrofer 5520 Co (Outokumpu VDM), Inconel™ 617 (Special Metals).</p> <p>High temperature nickel base alloys: 625, 601, N06625, N06601, N06333, 2.4851, 2.4856.</p> <p>Dissimilar welds: nickel alloys to low alloy/CrMo/stainless steel.</p> <p>High temperature alloys: heat resisting alloys, high carbon heat resistant castings, alloy 800, HP40Nb, N08800, N08810, 1.4852, 1.4853, 1.4857, 1.4958, 1.4876, 1.4889.</p> <p>Cladding: surfacing a wide range of steels.</p>	
Typical analysis of wire, weight %	<p>C: 0.08</p> <p>Mn: 0.1</p> <p>Ni: Balance</p> <p>Co: 12.0</p> <p>Al: 1.1</p>	<p>Si: 0.1</p> <p>Cr: 22.0</p> <p>Mo: 9.0</p> <p>Fe: 0.5</p> <p>Ti: 0.3</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</p> <p>Tensile strength Rm: 750MPa</p> <p>Elongation 4d/5d: 40%</p> <p>Impact ISO-V, +20°C: 100J</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.