

IABCO ERNiFeCr-1

MIG/GMAW and TIG/GTAW wire for 825

Product name	IABCO ERNiFeCr-1		
Classification EN ISO	18274:	SNi8065	
Material No.	--		
Classification AWS	A5.14:	ERNiFeCr-1	
Applications	<p>The IABCO ERNiFeCr-1 has excellent corrosion resistance to a range of acids and also very good resistance to stress corrosion cracking in chloride and H₂S environments.</p> <p>The 825 alloy finds widespread use in chemical processing and offshore oil & gas. Typical applications include vessels, heat exchangers, pipework, pumps, valves and overlays.</p> <p>The welding wire is also known as filler metal 65.</p>		
Base materials	<p>For matching, and similar, composition steels such as:</p> <p>ASTM: UNS N08825. EN: 2.4858. Proprietary: Incoloy 825 (Special Metals), VDM Alloy 825 / Nicrofer 4221 (VDM).</p>		
Typical analysis of wire, weight %	C: 0.02 Mn: 0.5 Ni: 40 Cu: 2.0 Al: 0.1	Si: 0.3 Cr: 22 Mo: 3.0 Ti: 0.8 Fe: Balance	
Typical heat treatment ⁽¹⁾	Typically no preheat is required, interpass temperature is kept to 150°C maximum and no PWHT is required.		
Mechanical properties of weld deposit ⁽²⁾	<p>0.2% proof stress, Rp0.2%: ~350Pa. Tensile strength, Rm: ~480MPa. Elongation, 4d/5d: ~25%.</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.