

## IABCO ERTi-2

### TIG/GTAW commercially pure titanium wire

Product name	IABCO ERTi-2
Classification EN ISO	24034: S Ti 0120 (Ti99.6)
Classification AWS	A5.16: ERTi-2
Applications	<p>Commercially pure (CP) titanium filler wire. ERTi-2, commonly referred to as 'grade 2', is the most widely used of the commercially pure grades.</p> <p>Commercially pure titanium is used where good corrosion resistance is required and also where its good strength:weight ratio is an advantage. Grade 2 titanium is most widely used because of its good combination of strength, ductility and weldability. Typical applications include piping systems, vessels and heat exchanges in the petrochemical and chemical industries.</p>
Base materials	<p>Commercially pure titanium, for example:</p> <p>ASTM grade 2 3.7035 UNS R50400</p>
Typical analysis of wire, weight %	<p>Ti: Balance C: 0.015 O: 0.13 H: 0.004 N: 0.003 Fe: 0.02</p>
Welding procedure <sup>(1)</sup>	<p>The most critical concerns when welding titanium are to ensure the component is clean before welding and secondly to ensure adequate inert gas shielding. Because of the high reactivity of titanium at high temperatures trailing shields may be required or small components may be welded in a chamber.</p>
Typical mechanical properties of weld <sup>(2)</sup>	<p>0.2% proof stress Rp0.2%: 295MPa Tensile strength Rm: 450MPa 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.