

## Classifications

<b>EN ISO 24034</b>	<b>AWS A5.16</b>	
S Ti 0120 (Ti99,6)	ERTi-2	

## Characteristics and typical fields of application

GTAW rod for welding pure Titanium and Titanium alloys with similar chemical composition. Titanium can be tungsten arc welded employing techniques similar to those used for welding of stainless steel. However, Titanium requires a greater cleanliness and the use of auxiliary gas shielding to protect the molten puddle and cooling weld zone from atmospheric contamination.

## Base materials

Pure Titanium and Titanium alloys with a similar composition.  
ASTM Grade 1-4  
UNS R50400H

## Typical analysis of the TIG rods (wt.-%)

	C	Ti	Fe	O	H	N
wt-%	< 0.03	bal.	< 0.12	0.10	< 0.008	< 0.015

## Mechanical properties of all-weld metal

Condition	Yield strength R <sub>e</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact work ISO-V KV J
	MPa	MPa	%	+20 °C
u	<b>295*</b>	<b>500*</b>	<b>42*</b>	<b>76*</b>

u untreated, as welded – shielding gas 100 % Argon  
\* depend of the pollutants in the weld metal

## Operating data

	<b>Polarity:</b> DC ( - )	<b>Shielding gas:</b> 100 % Argon	<b>ø (mm)</b>
			1.6
			2.0
			2.4
			3.0