

Standard

EN ISO 24034	S Ti 0120 (Ti99.6)
Material number:	3.7035
AWS A5.16	ERTi2
UNS	R50120

Area of application

TIG filler rod for welding pure titanium and titanium alloys. The quality has high impact strength and is easily weldable and corrosion resistant in strongly oxidizing as well as medium reducing environments, saltwater-proof.

Because of the high affinity to oxygen great care and the greatest possible cleanliness must be observed when welding. Additional gas shielding is to be ensured also during the cool down phase (trailing nozzle).

Special hints

Composition of the filler rod (typical data in %)

Ti	Fe	C	N				
Bal.	0.12	0.08	0.05				

Important base materials

Titanium alloys

Material properties

Welding process	TIG	Mechanical properties of the weld metal according to EN ISO 15792-1
Heat treatment	untreated	
Test temperature	20C°	
Yield strength R_p	[MPa]	275
Tensile strength R_m	[MPa]	450
Elongation A ($L_0 = 5d_0$) %	[%]	40
Impact strength A_v	[J]	80
Modulus of elasticity	10^6 [psi]	14.9

Applicable shielding gases (EN ISO 14175)

TIG: argon I1

Approval

(Request current scope if required)

Product forms (other dimensions available on request)

Rod	Ø mm x 1000 mm	1.5	2.0	2.5	3.0		
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