Inweld Ti Grade 5

AWS A5.16 ERTi-5

Chemical Composition of Inweld Ti Grade 5

Fe	C	O	H	Al	V	Y	P	S	N	Ti	Other
---	0.050	0.180	0.015	5.5-6.7	3.5-4.5	0.005	---	---	0.030	Balance	---

Single values are maximum unless otherwise specified.

Description and Applications

This alloy is commonly referred to as "6-4" titanium and is probably the most widely used titanium alloy. Its high strength, ability to be heat treated, and weldability are excellent for industrial uses. Grade 5 Titanium is the excellent choice for industrial fans, pressure valves, aircraft components, compressor blades, and automotive jet engine parts.

Typical Weld Metal Properties

	AWS Spec
Tensile Strength:	130,000 psi
Yield Strength:	120,000 psi
Elongation:	10%

Recommended Parameters

GMAW (DCEP – Electrode+)

Wire Diameter	Voltage	Amperage
0.030"	16-20	100-195
0.035"	18-27	165-285
0.045"	31-35	250-360

GTAW (DCEM – Electrode-)

Filler Wire Size	Tungsten Dia.	Voltage	Amperage	Argon (CFH)
1/16"	1/16"	9-12	100-185	20
3/32"	3/32"	11-15	150-250	25
1/8"	1/8"	11-15	200-375	30