ERTi-1

PEAK

Titanium Wire

(AWS ERTi-1)

ERTi-1 is the lowest strength unalloyed grade. It's used in applications where ductility is paramount, such as explosive cladding, loose linings, expanded metal, and deep drawing applications. It is also used in electrolytic applicatios like coated anode substrates for production of chlorine and sodium chlorate.

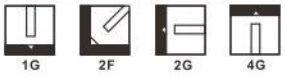
Classification

AWS A5.16	ERTi-1
ASME SFA 5.16	UNS R50100

Physical Properties

Yield Strength	170MPa/mm^2
Tensile Strength	240MPa/mm^2
Elongation	24%

Welding Positions



Shielding Gas

Argon
Helium
Argon/Helium-mixtures

Polarity

MIG	Direct current (DC)
TIG	Alternating current (AC)

Chemical Composition

	C%	O%	N%	H%	Fe%	Al%	V%	Pd%	Ru%	Ni%
AWS Requirements	0.03	0.03-0.10	0.012	0.005	0.08	—	—	—	—	—
Typical Results	0.01	0.053	0.010	0.002	0.03	—	—	—	—	—

Diameter

	0.8mm	0.9mm	1.2mm	1.6mm	2.0mm	2.4mm	3.2mm	4.0mm
MIG Wire	...	...	...	...				
TIG Rod				...	...	...	...	...

Packaging

	D100	D200	D300	K300	KS300	Box
MIG Wire			5-10Kgs			
TIG Rod						2.5-10Kgs

ERTi-2

PEAK

Titanium Wire

(AWS ERTi-2)

ERTi-2 is the “workhorse” of the industrial corrosion market and most common unalloyed grade. This grade is generally most readily available in all product forms and has the lowest cost. It’s used for process equipment like pressure vessels,columns,tanks,heat excahngers,shafts,blowers and fans, condenser tubing,valves,fittings,and pipe.

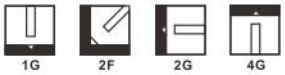
Classification

AWS A5.16	ERTi-2
ASME SFA 5.16	UNS R50120

Physical Properties

Yield Strength	275MPa/mm^2
Tensile Strength	345MPa/mm^2
Elongation	20%

Welding Positions



Shielding Gas

Argon
Helium
Argon/Helium-mixtures

Polarity

MIG	Direct current (DC)
TIG	Alternating current (AC)

Chemical Composition

	C%	O%	N%	H%	Fe%	Al%	V%	Pd%	Ru%	Ni%
AWS Requirements	0.03	0.03-0.16	0.015	0.008	0.12	—	—	—	—	—
Typical Results	0.02	0.09	0.011	0.002	0.04	—	—	—	—	—

Diameter

	0.8mm	0.9mm	1.2mm	1.6mm	2.0mm	2.4mm	3.2mm	4.0mm
MIG Wire	...	...	...	...				
TIG Rod				...	...	...	...	...

Packaging

	D100	D200	D300	K300	KS300	Box
MIG Wire			5-10Kgs			
TIG Rod						2.5-10Kgs

ERTi-5

PEAK

Titanium Wire

(AWS ERTi-5)

ERTi-5 is commonly called “6-4", is the most common and widely used alloy grade due to its relatively low cost and good availability. It has a UTS of 895MPa minimum, good weldability, and can be heat treated to a higher strength or toughness. Grade 5 is used in aircraft components such as landing gear, wing spars, and compressor blades. It’s often used in corrosion service where higher strength is required, particularly in shafts, high strength bolting,and keys.

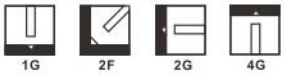
Classification

AWS A5.16	ERTi-5
ASME SFA 5.16	UNS R56400

Physical Properties

Yield Strength	830MPa/mm^2
Tensile Strength	895MPa/mm^2
Elongation	10%

Welding Positions



Shielding Gas

Argon
Helium
Argon/Helium-mixtures

Polarity

MIG	Direct current (DC)
TIG	Alternating current (AC)

Chemical Composition

	C%	O%	N%	H%	Fe%	Al%	V%	Pd%	Ru%	Ni%
AWS Requirements	0.05	0.12-0.20	0.030	0.015	0.22	5.5-6.7	3.5-4.5	—	—	—
Typical Results	0.02	0.16	0.010	0.001	0.15	6.13	4.11	—	—	—

Diameter

	0.8mm	0.9mm	1.2mm	1.6mm	2.0mm	2.4mm	3.2mm	4.0mm
MIG Wire	. . .	. . .	. . .	. . .				
TIG Rod				. . .	. . .	. . .	. . .	. . .

Packaging

	D100	D200	D300	K300	KS300	Box
MIG Wire			5-10Kgs			
TIG Rod						2.5-10Kgs