BAOJI TITANIUM WIRE INDUSTRY CO., LTD.

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TIG/MIG SOLID TITANIUM WELDING WIRES/RODS

ERTi-12

American Welding Society

Type:	Solid drawn Titanium Grade 12 welding wire
Applications:	This alloy finds his applications in chemical industry and offers excellent Weldabillity. Often recommended for pressure vessels and piping for its superior strength alone.
Properties:	ER Ti-12. Grade 12 (Ti 0.8Ni0.3Mo) is an intermediate strength grade originally developed to provide enhanced crevice-corrosion resistance in high temperature brines, but at lower cost than Grade 7. The improved performance is believed to be the result of Ni++ and Mo++ ions that alter the surface electrochemistry of the material in the crevice or under a surface deposit. Grade 12 has better elevated temperature properties than Grade 2 or 3 and is sometimes specified for pressure vessels or piping for its superior strength alone.
Classification:	AWS A 5.16: ER Ti 12 UNS: R53401 EN ISO 24034: STi-3401 DIN: W.Nr. 3.7105 DIN 1737:
Suitable for:	Titanium grade 12, grade 7, grade 2, grade 3.
Welding Positions:	

WELD DEPOSIT WEIGHT %

C	O	N	H	Fe	Al	V	Pd	Mo	Ni
<0.03	0.08-0.16	<0.015	<0.008	<0.15	–	–	–	0.2-0.4	0.6-0.9

MECHANICAL PROPERTIES

Heat Treatment	RP 0.2 (N/mm2)	Rm (N/mm2)	A5 (%)	Impact Energy (J) ISO-V			Hardness
				-20°C	-40°C	-60°C	HRc/HV
as welded	275	400	20	–	–	–	–

WELDING PARAMETERS/PACKING

Welding Parameters			Packing
Dia. (mm)	Length (mm)	Current (A)	kg/tube
1.0	1000		5
1.2	1000		5
1.6	1000		5
2.0	1000		5
2.4	1000		5
3.0	1000		5

Note: Also available as spooled wire :0.8 mm, 1.0 mm and 1.2 mm (D-100 / D-200 / D-300)