

TITANIUM GR.12

TITANIUM ALLOY

CORROSION RESISTING ALLOYS WITH LOW DENSITY

Titanium Alloy Grade 12 is lightly alloyed near-alpha alloy offering improved strength at elevated temperatures and optimum ASME Code design allowables. The material is readily weldable, and has superior crevice corrosion resistance. This material is very corrosion resistant in highly oxidizing and mildly reducing environments. The alloy is available as wire, plate, sheet, strip, forgings, bar, and billet.

Chemical Properties

C	Fe	O	H	N	Mo	Ni	Ti
0.08 Max	0.30 Max	0.25 Max	0.015 Max	0.03 Max	0.2-0.4	0.6-0.9	Balance

Minimum Mechanical Properties

Yield strength	Tensile strength	Elongation	Reduction
Min 0.2% Mpa	Min Mpa	Min %	Min %
345	483	18	25

Typical Mechanical Properties

Yield strength	Tensile strength	Elongation	Reduction
Min 0.2% Mpa	Min Mpa	Min %	Min %
462	607	22	--

Specification:

Product Form:

AMS 4902	
ASME B861 (Grade 12)*	Seamless Pipe
ASME B862 (Grade 12)*	Welded Pipe
ASME SB-381	Forgings
ASME SB-348	Bars and Billets
ASTM B265 (Grade 12)	Sheet, Strip, and Plate
ASTM B338	
ASTM B348 (Grade 12)	Bars and Billets
ASTM B337 (Grade 12)	Welded and Seamless Pipe
ASTM B381 (Grade 12)	Forgings
ASTM B861	
ASTM B862	
AWS A5.16 (ERTi-12)	Weld Wire
*replacing ASTM B337	

Equivalent Designation

UNS R50350
W.Nr. 3.7105
Italian(UNI 10221) TiNiMo-Type 12

CUSTOMER ASSISTANCE : customer@TorqBolt.com