

# TITANIUM GR.11

# TITANIUM ALLOY

CORROSION RESISTING ALLOYS WITH LOW DENSITY

Titanium Grade 11 is the equivalent of Grade 1 but with a palladium addition which imparts a significant improvement in resistance to general and localized crevice corrosion in a wide range of reducing acid environments, including chlorides, and where low pH and high temperatures above 180° F (83° C) to 500° F (260° C) are prevalent. The alloy is available as castings, wire, bar, plate, sheet, forgings, pipe, tubing and billet.

### Chemical Properties

C	Fe	O	H	N	Pd	Ti
0.08 Max	0.20 max	0.18 Max	0.015 max	0.03 Max	0.12-0.25	Balance

### Minimum Mechanical Properties

Yield strength	Tensile strength	Elongation	Reduction
Min 0.2% Mpa	Min Mpa	Min %	Min %
138	240	24	30

### Typical Mechanical Properties

Yield strength	Tensile strength	Elongation	Reduction
Min 0.2% Mpa	Min Mpa	Min %	Min %
221	345	37	--

### Specification:

ASME SB-265

ASME SB-337

ASME SB-338

ASME SB-348

ASTM B265 (Grade 11)

ASTM B348 (Grade 11)

ASTM B367 (Grade 11)

ASTM B861 (Grade 11) \* Seamless Pipe

ASTM B862 (Grade 11) \* Welded Pipe

AWS A5.16 (ERTi-11) Weld Wire

AWS A5.16 (ERTi-17) Weld Wire

\* Replacing ASTM B337

### Product Form:

Sheet, Strip, and Plate

Pipe, Seamless and Welded

Tube, Seamless and Welded

Bar and Billet

Strip, Sheet and Plate

Bar and Billet

Castings.

### Equivalent Designation

UNS R50350

W.Nr. 3.7225

Italian(UNI 10221) Ti1Pd-Type 11

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