

Titanium Wire Corporation

ABOUT TI WIRE

Titanium Wire Corporation, commonly called Ti Wire, is an operating unit of Wah Chang a subsidiary of Allegheny Technologies, Incorporated has been producing titanium bar and wire since 1956. The division's 55,000-square-foot manufacturing facility, located in Frackville, Pennsylvania, supplies mill products worldwide. Titanium bar and fine wire products are drawn, cleaned and annealed in an enclosed 22,000-square-foot section of the Frackville facility.

Ti Wire assists customers with the development and implementation of specifications designed for unique applications. Products meet all specifications for commercially pure and alloy titanium grades.

CAPABILITIES AND EQUIPMENT

Ti Wire's state-of-the-art equipment produces superior surface finishes and tight tolerances on various bar sizes. Equipment progressively draws the titanium to its proper size through intermediate annealing stages. Several restricted-range straighten and cut machines allow a variety of size groupings to be cut simultaneously.

Ti Wire's sophisticated equipment enables the division to produce large diameter bar (0.510" to 0.156") with tolerances as tight as ± 0.0005 and produces small diameter bar (0.125" to 0.032") with tolerances as close as ± 0.002 . Standard finish is 16RMS.

Because of titanium's affinity for contamination gases at elevated temperatures, Ti Wire uses a vacuum furnace capable of operating at 10-8 TORR at 2700°C for annealing, stress relief, and aging. Ti Wire can meet the stringent requirements of AMS, ASTM and custom specifications.

To meet high quality standards, Ti Wire's quality control technicians and inspectors perform mechanical testing on all incoming semi-finished material. Sample material from each lot is analyzed to verify the material meets the latest specification revisions. Ti Wire's sophisticated software allows infinite traceability of mechanical testing.

ABOUT TITANIUM

Titanium's unique corrosion-resistance, great strength-to-weight ratio, excellent toughness and freedom from contamination, have made it a material-of-choice for aerospace systems and aircraft structural components for decades. Titanium is readily available for cost-effective use in an every widening range of industries. Titanium wire applications include lead wires for pacemakers, wool for bonding prostheses to bone, pins, fasteners, and screens for medical and dental products, aircraft and automotive springs, and on-board fuel filtration systems in satellites. In addition, titanium wire is used as brush spines for cleaning heat exchangers, cloth filters, corrosion resistant rod is used for supports.

PRODUCT LIST

Commercially Pure Titanium	ASTM B 348 Grades 1,2,3,4 AWS A5.16 ERTi 1,2,3,4 AMS 4951 AMS 4921 ASTM F 67 Grades 1,2,3,4
Titanium Alloy 6Al 4V	ASTM B 348 Grade 5 AWS A5.16 ERTi 5 AMS 4954
Titanium Alloy 6Al 4V	ELI ASTM F 136 AMS 4956 AWS A5.16 ERTi 5 ELI
Titanium Alloy Ti 0.2Pd	ASTM B 348 Grades 7 & 11 AWS A5.16 ERTi 7
Titanium Alloy Ti 0.3 Mo .8Ni	ASTM B 348 Grade 12 AWS A5.16 ERTi 12
Titanium Alloy 5Al 2.5Sn	AMS 4953 AWS A5.16 ERTi 6 ASTM B 348 Grade 6
Titanium Alloy 3Al 2.5V	ASTM B 348 Grade 9 AWS A5.16 ERTi 9
Titanium Alloy TiNiobium	ASTM F 1295

Lengths supplied: 18 inches – 20 feet

Spools: 2 inches to 12 inches

Diameters: .0015 inches – .500 inches

SALES AND SERVICE

TiWire Sales

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