

VBC Alloy 0070 CP Ti – Grade 2 Welding Wire

Description: CP Ti – Grade 2 Solid Welding Wire

Specification / Cross Reference: AMS 4951, MSRR 9500/70, OMAT 366A,
 AWS A5.16 ER Ti-2, UNS R50550, DIN 3.7035

Approvals: MSRR 9500/70, OMAT 366A

Metallurgical Background Information

VBC Alloy 0070 CP-Ti weld wire is a commercially pure grade (Grade 2) of titanium with controlled oxygen content and impurity levels. It is specially cleaned to remove metal oxides and trace contaminants. It has excellent weldability and gives good strength and weld ductility.

Melting range (approx.) 1660°C Density 4.51gm/cc Hardness 57 HV

Composition (wt. %)

Titanium	Balance	Hydrogen	0.005% max
Iron	0.12% max	Yttrium	0.005% max
Oxygen	0.08 – 0.16%	Other Elements (Each)	0.05% max
Carbon	0.03% max	Other Elements (Total)	0.20% max
Nitrogen	0.015% max		

Materials To Be Welded, Applications and Advice

AMS 4941, 4942, 4901, 4921, 4900, 4902. ASTM B348, B265, 337, 338, 467, 468, 367. MSRR 8607, 8608, 8609, 8620.

Widely used to fabricate all CP-Ti Grades. Also used to fabricate other Ti alloy grades where ductility is more important than joint strength. CP-Ti can be used to join 6-4Ti to Ti-2.5Cu.

Pure argon gas shielding and ultra clean weldment conditions are required and a trailing gas shield and underside shielding is necessary. Avoid iron contamination. Thin sheet butt welds must have a very clean interface.

Forms of Supply

- Straight Length: 2.2 kg Packs, 36" / 914mm lengths, wide range of diameters, flag-tagged
- Spooled Wire: Precision layer wound with controlled cast and helix, 300mm diameter standard
- Wide range of diameters

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