



VBC Alloy 0073 6Al-4V Ti

Designation and Description	GTAW Solid Welding Wire Titanium Base		Issued: 06/2015	MSRR: 9500/73	AMS: 4954 J
			Revision: 01		
Cross Reference/ Conformance Specification	MSRR 9500/73 AMS 4954 J Omat 3/145A MSRR 8632		BS 2TA10:1973 AWS A5.A6 ER Ti 6-Al-4V AWS A5.16 ER Ti-5 UNS R56400		
Metallurgical Background Information	<p>Alloy 6Al-4V Ti is a solid welding wire produced conventionally and the surface cleaned to remove standard metal working lubricants.</p> <p>6Al-4V Ti is a duplex, alpha-beta alloy filler metal used for welding alloys of similar composition. Widely used in turbine engine components – fan and compressor sections.</p> <p>EL1 Version available. High strength alloy. Good weldability</p> <p>The most widely used titanium alloy welding wire</p>				
Materials To Be Welded, Applications and Advice	AMS 4965, 4928, 4967, 4985, 4991, 4934, 4935, 4920, 4905, 4932, 4911. MSRR 8610, 861, 9629, 8632. ASTM Grade 5 – L65, 348, 367, 381, 467, 468. BSTA 11, 12, 28, 56. DTD 5363				
Wire Chemistry WT% (as per AMS)	Aluminium – 5.50 – 6.75%		Yttrium – 0.005% max		
	Vanadium – 3.50 – 4.50%		Hydrogen – 0.015% max		
	Iron – 0.22% max		Other Elements (each) – 0.05%		
	Oxygen – 0.12 – 0.18%		Other Elements (total) – 0.20%		
	Carbon – 0.05% max		Titanium - Balance		
	Nitrogen – 0.03% max				
Weld Properties	Melting range (approx) 1604 - 1671°C Hardness 330 – 390 HV		Density 4.54gm/cc		
Sizes and Forms of Supply	Straight Length: 2.2 kg Packs 36" / 914mm lengths 18" / 457mm 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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