

VBC Alloy 0074 6-2-4-2 Ti

Designation and Description	GTAW Solid Welding Wire Titanium Base		Issued: Oct/2015 Revision: 01	MSRR: 9500/74	AMS:4952 E
Cross Reference/ Conformance Specification	MSRR 9500/74 AMS 4952 Omat 3/250		MSRR 8661 UNS R54620		
Metallurgical Background Information	Alloy 6-2-4-2 Ti is a solid welding wire produced conventionally and the surface cleaned to remove standard metal working lubricants and oxides This alloy is an alpha-beta high temperature, heat treatable material used in gas turbine component manufacture. The beta content is low, giving good weldability				
Materials To Be Welded, Applications and Advice	AMS 4975, 4976, 4919, 4981. Pure argon gas shielding and ultra pure weldment conditions are necessary for solid joints.				
Wire Chemistry WT% (as per AMS)	Aluminium – 5.50 – 6.50%		Oxygen – 0.15% max		
	Zirconium – 3.60- 4.40%		Nitrogen – 0.04% max		
	Tin – 1.80 – 2.20%		Hydrogen – 0.0125% max		
	Molybdenum – 1.8 – 2.2%		Boron – 0.003% max		
	Silicon – 0.10% max		Yttrium – 0.005% max		
	Iron – 0.10% max		Residual Elements each – 0.1%		
	Carbon – 0.04% max		Residual Elements total – 0.4%		
	Copper – 0.10% max		Titanium – Balance		
Weld Properties	Melting range (approx.) 1704°C Hardness 57 HV Good weldability		Density 4.54gm/cc Beta transus 993°C		
Sizes and 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		
Disclaimer: All information regarding our products is based on applied experience and extensive research work. We provide these technical data in good faith that they are accurate; this does not exempt the user from the obligation to check the information contained herein, especially if the application and process has not been expressly approved by us in writing. We make no guarantees or warranties (express or implied) about the contents of this datasheet. Any changes to processes must be approved by your organisations own quality department. VBC cannot be held responsible for any errors, omissions or inaccuracies published. We may change this datasheet from time to time without notice or obligation to the users. No part of this datasheet or any of its contents may be reproduced, copied, modified or adapted, without the prior written consent of VBC Group					