

## UNITED STATES WELDING CORPORATION

USW ALLOY DESIGNATION AND BRIEF DESCRIPTION	C.P. Ti GTAW SOLID BARE WELDING WIRE TITANIUM BASE	ISO 9001 AS 9100 Revision A	DATA SHEET 4951
CROSS-REFERENCE CONFORMANCE SPECIFICATIONS	MSRR 9500/70 AWS A5.16 ER Ti-2 AMS 4951 UNS R50550 C.P. Ti OMAT 366A 99% Ti Min.		
METALLURGICAL BACKGROUND INFORMATION	C.P. Ti is a solid welding wire produced c onventionally and then surface cleaned to remove standard drawing lubricants.  C.P. Ti Commercially pure titanium is a Ti-O 2 alloy designed for welding similar alloys. It is environmentally packaged for extended shelf life.  C.P. Ti has an alpha CPH structure. It has excellent weldability and gives good weld ductility.		
MATERIALS TO BE WELDED APPLICATION AND ADVICE	Grade 2 is the most widely used C.P. Ti specification in all forms.  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 C.P. grades. Also us ed to fabricate alloy grades where ductility is more important than joint strength.		
WIRE CHEMISTRY WT%	Oxygen	ther elements -	each total
WELD PROPERTIES	Melting Point 3020° F Excellent weldability. Strength varies with oxygen content.		
SIZES AND FORMS OF SUPPLY PACKAGING	STRAIGHT LENGTHS  5 lbs. (2.2kg) packs 36" (914mm) lengths Flag tagged for traceability. (Double tagging and other lengths on request) Wide range of diameters.  Sealed, air-evacuated, argon filled Vapor Barrier	SPOOLED WIRE Precision layer wound, with controlled cast and helix 12" (300mm) diameter spools standard 8" (200mm), 4" (100mm) and proprietary spool sizes on request. Wide range of diameters and spool weights.	
DFARS Compliant	atmospheric contamination and prolonged shelf-life.  www.usweldingcorp.com		