UNITED STATES WELDING CORPORATION

USW ALLOY DESIGNATION AND BRIEF DESCRIPTION	**15-3-3-3 Ti** **GTAW SOLID BARE WELDING WIRE TITANIUM BASE**	**ISSUED** JANUARY 2007 REVISION NO. A	**DATA SHEET** 4914 (1)

CROSS-REFERENCE CONFORMANCE SPECIFICATIONS

AMS 4914
UNS R58153
USWC 4914 (C)

15 V 3 Cr 3 Al 3 Sn

METALLURGICAL BACKGROUND INFORMATION

Alloy 15-3-3-3 Ti is a solid welding wire produced conventionally and then surface cleaned to remove standard drawing lubricants.

This metastable beta Ti alloy is a high strength, heat-treatable material used in aerospace applications.

MATERIALS TO BE WELDED APPLICATION AND ADVICE

AMS 4914, 4922

Pure argon gas shielding and ultra clean weldment conditions are required.
A trailing gas shield and underside shielding is necessary.

WIRE CHEMISTRY WT%

Aluminum	2.50	3.50	Nitrogen	-	0.05	(500ppm)
Vanadium	14.0	16.0	Hydrogen	-	0.015	(150ppm)
Iron	-	0.25	Other elements	-	0.10	each
Oxygen	-	0.13	Other elements	-	0.40	total
Carbon	-	0.05	Titanium		Balance	
Chromium	2.50	3.50				
Tin	2.50	3.50				

WELD PROPERTIES

Beta transus 1400° F

Density 4.77 gr/cc

SIZES AND FORMS OF SUPPLY

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.

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.

PACKAGING

Sealed, air-evacuated, argon filled Vapor Barrier containers with desiccants ensure full protection from atmospheric contamination and prolonged shelf-life.

DISTRIBUTED BY:

3579 HIGHWAY 50 EAST #104 □ CARSON CITY, NEVADA 89701-2826
775/883-7878 □ 800/423-5964 □ FAX: 775/883-7776