

UNITED STATES WELDING CORPORATION

USW ALLOY DESIGNATION AND DESCRIPTION	GTAW SOLID BA	C-GRADE	DING WIR		ISO 900 AS 9100 Revision)	DATA SHEET 5826
CROSS-REFERENCE CONFORMANCE SPECIFICATIONS	AMS 5826 15Cr 5.1Ni 0.3Cb 3.2Cu UNS \$15500 AMS 5659 (Chemistry only) 15-5 PH Available in HQ-GRADE USWC 5826 (V)						
METALLURGICAL BACKGROUND INFORMATION	TURBALOY [®] 15-5 VM is produced by vacuum induction melting and remelting techniques. The final wire is manufactured by special lubricant-free, roller-die forming followed by surface abrasion and cleaning processes. These manufacturing processes ensure consistent metallurgical integrity of the alloy with regard to control of trace elements and physical purity of the welding wire surface. TURBALOY [®] 15-5 VM is a martensitic, precipitation hardening stainless engineering alloy giving excellent strength and toughness in thick section weldments together with corrosion resistance equivalent to 304SS. This high grade wire is used to weld alloys of similar composition where optimum weld properties are required.						
MATERIALS TO BE WELDED AND APPLICATIONS	AMS 5659, 5348, 5347, 5346, 5356, 5357, 5400, 5862. UNS S15500. ASTM A564, A 693, A705 (XM - 12 grades). Non-air hardening, preheat generally not needed. May be substituted for AMS 5659, AMS 5825 and AMS 5803.						
WIRE CHEMISTRY WT%	Carbon Manganese Silicon Sulfur Phosphorus Chromium Nickel	0.025 0.25 - - 14.40 4.75	0.050 0.75 0.60 0.010 0.020 15.30 5.50	Columbiu Copper Molybder Aluminur Nitrogen Oxygen Hydrogen Iron	3.00 num - n -	0.40 3.50 0.30 0.025 0.040 0.01 0.000 Balan	(400ppm) (100ppm) 6 (6ppm)
WELD PROPERTIES	Hardness of base alloy Hardened: 43 HRC Annealed: 27 HRC	y:				Den	sity: 7.8gm /cc
SIZES AND FORMS AVAILABLE	STRAIGHT LENGTHS 5 lb. (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. rier e nvelopes with desiccants ensure full protection from			
PACKAGING	sealed, air-evacuated, atmospheric contamin				es with desicea	ants ensui	re full protection from
DFARS Compliant					www	uswel	dingcorp.com