UNITED STATES WELDING CORPORATION

USW ALLOY DESIGNATION AND DESCRIPTION	**TURBALOY® 300 M** **MC-GRADE** **GTAW SOLID BARE WELDING WIRE** **IRON BASE**	**ISSUED** JANURAY 2007 REVISION NO. A	**DATA SHEET** 6419 (11)

CROSS-REFERENCE CONFORMANCE SPECIFICATIONS

AMS 6419
UNS K44220
300M
USWC 6419(V)

MIL-S-8844
1.6Si 0.82Cr 1.8Ni 0.4Mo 0.08V (0.40 - 0.45C)

METALLURGICAL BACKGROUND INFORMATION

TURBALOY® 300M 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®300M is a high strength, low alloy steel filler material for use for welding similar composition materials.

MATERIALS TO BE WELDED AND APPLICATIONS

UNS K44315, K44220.
AMS 6416, 6417, 6419.
MIL-S-8844 Class B MS - 7 -26
CPS - 4911

WIRE CHEMISTRY WT%

Carbon	0.40	0.45	Nickel	1.65	2.00
Manganese	0.60	0.90	Molybdenum	0.30	0.50
Silicon	1.45	1.80	Vanadium	0.05	0.10
Sulfur	-	0.010	Copper	-	0.35
Phosphorus	-	0.010	Iron		Balance
Chromium	0.70	0.95			

WELD PROPERTIES

Melting Point: 2740°F
Hardness, aged 600°F :56 HRC
Density: 7.84 gm/cc

SIZES AND FORMS AVAILABLE

STRAIGHT LENGTHS	SPOOLED WIRE
5 lb. (2.2kg) packs 36” (914mm) lengths Flag tagged for traceability. (Double tagging and other lengths on request) Wide range of diameters.	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 purged Vapor Barrier e nvelopes 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