

UNITED STATES WELDING CORPORATION

USW ALLOY DESIGNATION AND DESCRIPTION	TURBALOY® 625 MC-GRADE GTAW SOLID BARE WELDING WIRE NICKEL BASE	ISO 9001 AS 9100 Revision A	DATA SHEET 5837
CROSS-REFERENCE CONFORMANCE SPECIFICATIONS	MSRR 9500/237 AFNOR NC 22D Cb AMS 5837 OMAT 3/127A UNS N06625 USWC 5837 (A) Alloy 625		
METALLURGICAL BACKGROUND INFORMATION	TURBALOY® 625 is produced by vacuum induction melting and remelting techniques. The final wire is manufactured by special lubricant-free, roller-die forming following 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® 625 is a single phase Ni-Cr-Mo high temperature alloy.		
MATERIALS TO BE WELDED AND APPLICATION	TURBALOY® 625 is used principally for gas shielded arc welding of INCONEL 625, 601 and similar materials. Frequently used in dissimilar metal welding applications for complex superalloy welds. MSRR 7080, 7101, 7150; MAR-M002 (Hole sealing only) AMS 5666, 5879, 5599, 5581, 5402, 5401. BS 3072, 3074, 3076. Pure argon required for GTAW		
WIRE CHEMISTRY WT%	Manganese - 0.50 Cobal	mbium 3.15 4.15 fum - 0.40 inum - 0.40 - 5.0) ;)
WELD PROPERTIES	Typical all metal properties - as welded. Hardness: 16/22 HV Proof Stress: 70ksi Tensile Strength 110ksi Elongation: 30% Reduction in Area: 37%		
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 standards 8" (200mm), 4" (100mm) and proprietary spool sizes on request. Wide range of diameters and spool weights.		
PACKAGING	Sealed polyethylene envelopes. (Desiccants optional)		
DFARS Compliant www.usweldingcorp.com			