



UNITED STATES WELDING CORPORATION

USW ALLOY DESIGNATION AND DESCRIPTION	TURBALOY® 67 HQ-GRADE GTAW SOLID BARE WELDING WIRE COPPER BASE		ISSUED JANUARY 2007	DATA SHEET 1416 (1)
			REVISION NO. A	
CROSS-REFERENCE CONFORMANCE SPECIFICATIONS	USW 1416 Monel 67 AWS A5.7 ER Cu Ni BS 2901 C18	MIL-E-21562D Amend 7 EN/RN 67	70Cu 30Ni UNS C71580 USWC 1416 (A)	
METALLURGICAL BACKGROUND INFORMATION	<p>TURBALOY® 67 undergoes a series of proprietary abrading and cleaning processes to remove all surface contaminants. These manufacturing processes ensure a consistent ultra-clean weld wire surface.</p> <p>TURBALOY® 67 is a 70 copper 30 nickel single phase filler metal for welding base materials of similar composition and other Cu-Ni combinations. This alloy system has a high resistance to sea water corrosion and has many marine applications. USW is a qualified supplier to Navy spec. MIL-E-21562D.</p>			
MATERIALS TO BE WELDED AND APPLICATIONS	<p>ASTM B111, B122, B151, B171, B359, B395, B432, B466, B467, B543, B552. UNS C71580. MIL-T-150055, MIL-C-15726.</p> <p>Sea water condensers, evaporators, tube plates, distiller tubes, desalinization equipment, heat exchangers (shipping components). Weld with ultra clean conditions and avoid all sources of sulfur in order to minimize hot cracking susceptibility.</p>			
WIRE CHEMISTRY WT%	Nickel 29.00 32.00 Manganese - 1.00 Iron 0.40 0.75 Silicon - 0.25	Phosphorus - 0.02 Lead - 0.02 Titanium 0.20 0.50 Other elements - 0.50 total max Copper Balance		
WELD PROPERTIES	Melting range 2138 - 2264°F		Density 8.91 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 polyethylene envelopes. (Desiccants optional)			
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