

UNITED STATES WELDING CORPORATION

USW ALLOY DESIGNATION AND DESCRIPTION	TURBALOY® 450 MC-GRADE GTAW SOLID BARE WELDING WIRON BASE	VIRE	A	SO 900 AS 9100 evision)	DATA SHEET 5763	
CROSS-REFERENCE CONFORMANCE SPECIFICATIONS	AMS 5763 15Cr 6.5Ni 0.75Mo 0.5Cb 1.5Cu UNS \$45000 XM - 25						
METALLURGICAL BACKGROUND INFORMATION	TURBALOY [®] 450 wire is manufactured by special lubricant-free, roller-die forming and surface abrasion and cleaning processes. These manufacturing processes ensure integrity of the alloy and surface physical purity of the welding wire. TURBALOY [®] 450 is a martensitic age-hardening stainless engineering alloy with a strength three times greater than 304SS and comparable corrosion resistance. TURBALOY [®] 450 is used to weld alloys of similar base composition. The MC-GRADE weld wire produces excellent ductility and lower yield stress values.						
MATERIALS TO BE WELDED AND APPLICATIONS	AMS 5859, 5863, 5617, 5860, 5578, 5773, 5763. UNS S45000. (Substitutes for 17-4PH, 15-5PH, 410, 420, 431.) ASTM 564, 705, 693 (as XM - 25) ASM 5348, 5347, 5862. UNS J92110. (Note: AMS 5825 filler metal is sometimes used to substitute for AMS 5763.) Although martensitic, generally no PH is required.						
WIRE CHEMISTRY WT%	Carbon - 0.05 Manganese - 1.00 Silicon - 1.00 Sulfur - 0.03 Phosphorus - 0.03 Chromium 14.00 16.00		bdenum nbium	6.00 0.50 8xC 1.25	7.00 1.00 0.75 1.75 Balan	ce	
WELD PROPERTIES	Hardness annealed: 28 HRC Maximum hardness: 42 HRC Excellent weldability Often	used AS WI	ELDED		Der	nsity: 7.93 gm/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 reque Wide range of diameters. Sealed, air-evacuated, argon purged Vapor.	12 8' est) or W	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	atmospheric contamination and prolonged s		————	in desieca	into ciisu.	to fair protection from	
DFARS Compliant				www	.uswel	dingcorp.com	