



UNITED STATES WELDING CORPORATION

USW ALLOY DESIGNATION AND DESCRIPTION	TURBALOY® 62 HQ-GRADE GTAW SOLID BARE WELDING WIRE NICKEL BASE	ISSUED JANUARY 2007	DATA SHEET 5679 (3)																														
		REVISION NO. A																															
CROSS-REFERENCE CONFORMANCE SPECIFICATIONS	MSRR 9500/206 AMS 5679 FM 62 UNS N06062 USWC 5679 (A)	73Ni 15.5Cr 2.2Cb 8.0Fe AWS A5.14 E2 Ni Cr Fe-5 MIL-R-5031-8A MIL-E-21562 Type RN62, EN62 OMAT 3/218																															
METALLURGICAL BACKGROUND INFORMATION	<p>TURBALOY® 62 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® 62 is a single phase Ni-Cr-Fe alloy containing Cb to offset hot cracking in thick section joints.</p>																																
MATERIALS TO BE WELDED AND APPLICATIONS	<p>AMS 5540, 5580, 5665. (Alloy IN 600 variants). ASTM B163, 166, 167, 168. ASME SB 516, 517, 564. MIL-N-23229 Turbine engine exhaust components. Use argon gas shielding and ultra clean conditions for welding.</p>																																
WIRE CHEMISTRY WT%	<table> <tr> <td>Carbon</td> <td>-</td> <td>0.08</td> <td>Nickel + Cobalt</td> <td>70.00</td> <td>-</td> </tr> <tr> <td>Manganese</td> <td>-</td> <td>1.00</td> <td>Columbium</td> <td>1.50</td> <td>3.00</td> </tr> <tr> <td>Silicon</td> <td>-</td> <td>0.35</td> <td>Copper</td> <td>-</td> <td>0.50</td> </tr> <tr> <td>Sulfur</td> <td>-</td> <td>0.015</td> <td>Iron</td> <td>6.00</td> <td>10.00</td> </tr> <tr> <td>Chromium</td> <td>14.00</td> <td>17.00</td> <td>Cobalt</td> <td>-</td> <td>1.00</td> </tr> </table>			Carbon	-	0.08	Nickel + Cobalt	70.00	-	Manganese	-	1.00	Columbium	1.50	3.00	Silicon	-	0.35	Copper	-	0.50	Sulfur	-	0.015	Iron	6.00	10.00	Chromium	14.00	17.00	Cobalt	-	1.00
Carbon	-	0.08	Nickel + Cobalt	70.00	-																												
Manganese	-	1.00	Columbium	1.50	3.00																												
Silicon	-	0.35	Copper	-	0.50																												
Sulfur	-	0.015	Iron	6.00	10.00																												
Chromium	14.00	17.00	Cobalt	-	1.00																												
WELD PROPERTIES	<p>Annealed deposit: HB 89</p> <p style="text-align: right;">Density: 8.45 gm/cc</p>																																
SIZES AND FORMS AVAILABLE	<table> <tr> <td style="text-align: center;">STRAIGHT LENGTHS</td> <td style="text-align: center;">SPOOLED WIRE</td> </tr> <tr> <td>5 lb. (2.2kg) packs</td> <td>Precision layer wound, with controlled cast and helix</td> </tr> <tr> <td>36" (914mm) lengths</td> <td>12" (300mm) diameter spools standard</td> </tr> <tr> <td>Flag tagged for traceability.</td> <td>8" (200mm), 4" (100mm) and proprietary spool sizes</td> </tr> <tr> <td>(Double tagging and other lengths on request)</td> <td>on request.</td> </tr> <tr> <td>Wide range of diameters.</td> <td>Wide range of diameters and spool weights.</td> </tr> </table>			STRAIGHT LENGTHS	SPOOLED WIRE	5 lb. (2.2kg) packs	Precision layer wound, with controlled cast and helix	36" (914mm) lengths	12" (300mm) diameter spools standard	Flag tagged for traceability.	8" (200mm), 4" (100mm) and proprietary spool sizes	(Double tagging and other lengths on request)	on request.	Wide range of diameters.	Wide range of diameters and spool weights.																		
STRAIGHT LENGTHS	SPOOLED WIRE																																
5 lb. (2.2kg) packs	Precision layer wound, with controlled cast and helix																																
36" (914mm) lengths	12" (300mm) diameter spools standard																																
Flag tagged for traceability.	8" (200mm), 4" (100mm) and proprietary spool sizes																																
(Double tagging and other lengths on request)	on request.																																
Wide range of diameters.	Wide range of diameters and spool weights.																																
PACKAGING	Sealed polyethylene envelopes. (Desiccants optional)																																

DISTRIBUTED BY:

3579 HIGHWAY 50 EAST # 104 □ CARSON CITY, NEVADA 89701-2826
775/883-7878 □ 800/423-5964 □ FAX: 775/883-7776