



# UNITED STATES WELDING CORPORATION

<b>USW ALLOY DESIGNATION AND DESCRIPTION</b>	<b>RR250</b> <b>GTAW SOLID WELDING WIRE</b> <b>ALUMINUM BASE</b>	<b>ISSUED</b> JANUARY 2007	<b>DATA SHEET</b>  <b>1323</b> (9)																														
		<b>REVISION NO.</b> A																															
<b>CROSS-REFERENCE CONFORMANCE SPECIFICATIONS</b>	MSRR 9500/34 RR 250 USW 1323 <span style="float: right;">USWC 1323 (C) OMAT 335 A</span>																																
<b>METALLURGICAL BACKGROUND INFORMATION</b>	ALLOY 1323 is a solid welding wire produced conventionally and then surface cleaned to remove standard metal working lubricants.  ALLOY 1323 is an Al-Cu-Ni-Mn-Sb-Co heat treatable alloy used for welding similar composition sand casting materials.																																
<b>MATERIALS TO BE WELDED AND APPLICATIONS</b>	RR 250 BS L119 MSRR 8040, 8009, 8010  Casting refurbishment, repair, reclaim. Beware of Antimony fumes when fabricating castings.																																
<b>WIRE CHEMISTRY WT%</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>Copper</td> <td style="text-align: center;">4.5 - 5.5</td> <td>Iron</td> <td style="text-align: center;">-</td> <td style="text-align: center;">0.50</td> </tr> <tr> <td>Silicon</td> <td style="text-align: center;">- 0.30</td> <td>Nickel</td> <td style="text-align: center;">0.8</td> <td style="text-align: center;">1.2</td> </tr> <tr> <td>Manganese</td> <td style="text-align: center;">0.2 0.3</td> <td>Titanium</td> <td style="text-align: center;">0.15</td> <td style="text-align: center;">0.25</td> </tr> <tr> <td>Antimony</td> <td style="text-align: center;">0.1 0.4</td> <td>Aluminum</td> <td></td> <td style="text-align: center;">Balance</td> </tr> <tr> <td>Cobalt</td> <td style="text-align: center;">0.1 0.4</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Co + Antimony</td> <td style="text-align: center;">0.2 0.6</td> <td></td> <td></td> <td></td> </tr> </table>			Copper	4.5 - 5.5	Iron	-	0.50	Silicon	- 0.30	Nickel	0.8	1.2	Manganese	0.2 0.3	Titanium	0.15	0.25	Antimony	0.1 0.4	Aluminum		Balance	Cobalt	0.1 0.4				Co + Antimony	0.2 0.6			
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<b>WELD PROPERTIES</b>	Melting range (approx) 1015° - 1202°F Hardness 85 HV <span style="float: right;">Density 2.84gm/cc</span>																																
<b>SIZES AND FORMS AVAILABLE</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; vertical-align: top;"> <b>STRAIGHT LENGTHS</b>            2.2 kg ( 5 lb) packs.            914 mm (36") lengths.            Flag tagged for traceability.            (Double tagging and other lengths on request).            Wide range of diameters.         </td> <td style="text-align: center; vertical-align: top;"> <b>SPOOLED WIRE</b>            Precision layer wound &amp; with controlled cast &amp; helix.            300 mm (12") diameter spools standard.            200 mm, 100 mm and proprietary spool sizes on request            Wide range of diameters and spool weights.         </td> </tr> </table>			<b>STRAIGHT LENGTHS</b> 2.2 kg ( 5 lb) packs. 914 mm (36") lengths. Flag tagged for traceability. (Double tagging and other lengths on request). Wide range of diameters.	<b>SPOOLED WIRE</b> Precision layer wound & with controlled cast & helix. 300 mm (12") diameter spools standard. 200 mm, 100 mm and proprietary spool sizes on request Wide range of diameters and spool weights.																												
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<b>PACKAGING</b>	Sealed, air-evacuated, argon purged Vapor Barrier envelopes with desiccants ensure full protection from atmospheric contamination and prolonged shelf-life.																																
<b>DISTRIBUTED BY:</b>																																	