



UNITED STATES WELDING CORPORATION

<p align="center">USW ALLOY DESIGNATION AND DESCRIPTION</p>	<p align="center">TURBALOY® 69 HQ-GRADE GTAW SOLID BARE WELDING WIRE NICKEL BASE</p>	<p align="center">ISO 9001 AS 9100</p>	<p align="center">DATA SHEET 5778</p>																																										
<p align="center">CROSS-REFERENCE CONFORMANCE SPECIFICATIONS</p>	<table border="0"> <tr> <td>MSRR 9500/209</td> <td>72Ni 15.5Cr 1.0Cb 2.4Ti 0.70Al 7.0Fe</td> </tr> <tr> <td>AMS 5778</td> <td>OMAT 3/167A</td> </tr> <tr> <td>UNS N07069</td> <td>RN69</td> </tr> <tr> <td>FM 69</td> <td>MIL-R-5031 Class 14 (Alloy X - 750)</td> </tr> </table>			MSRR 9500/209	72Ni 15.5Cr 1.0Cb 2.4Ti 0.70Al 7.0Fe	AMS 5778	OMAT 3/167A	UNS N07069	RN69	FM 69	MIL-R-5031 Class 14 (Alloy X - 750)																																		
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<p align="center">METALLURGICAL BACKGROUND INFORMATION</p>	<p>TURBALOY® 69 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® 69 is a Ni-Cr-Cb-Ti-Al precipitation hardening alloy used for welding similar composition base metal.</p>																																												
<p align="center">MATERIALS TO BE WELDED AND APPLICATION</p>	<p>IN 722, IN X - 750. AMS 5747, 5542, 5582, 5583, 5598. AMS 5667, 5668, 5669. AMS 5341 ASTM B637.</p> <p>Gas turbine components - blades, vanes, bellows, brackets, turbine discs. Use argon gas shielding and ultra clean conditions for welding.</p>																																												
<p align="center">WIRE CHEMISTRY WT%</p>	<table border="0"> <tr> <td>Carbon</td> <td>-</td> <td>0.08</td> <td>Columbium</td> <td>0.70</td> <td>1.20</td> </tr> <tr> <td>Manganese</td> <td>-</td> <td>1.00</td> <td>Titanium</td> <td>2.00</td> <td>2.75</td> </tr> <tr> <td>Silicon</td> <td>-</td> <td>0.50</td> <td>Aluminum</td> <td>0.40</td> <td>1.00</td> </tr> <tr> <td>Sulfur</td> <td>-</td> <td>0.01</td> <td>Cobalt</td> <td>-</td> <td>1.00</td> </tr> <tr> <td>Chromium</td> <td>14.00</td> <td>17.00</td> <td>Copper</td> <td>-</td> <td>0.50</td> </tr> <tr> <td>Nickel</td> <td>70.00</td> <td></td> <td>Iron</td> <td>5.00</td> <td>9.00</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Tantalum</td> <td></td> <td>0.05</td> </tr> </table>			Carbon	-	0.08	Columbium	0.70	1.20	Manganese	-	1.00	Titanium	2.00	2.75	Silicon	-	0.50	Aluminum	0.40	1.00	Sulfur	-	0.01	Cobalt	-	1.00	Chromium	14.00	17.00	Copper	-	0.50	Nickel	70.00		Iron	5.00	9.00				Tantalum		0.05
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<p align="center">PACKAGING</p>	<p>Sealed polyethylene envelopes. (Desiccants optional)</p>																																												
<p>DFARS Compliant</p>		<p align="right">www.usweldingcorp.com</p>																																											