



UNITED STATES WELDING CORPORATION

<p align="center">USW ALLOY DESIGNATION AND DESCRIPTION</p>	<p align="center">TURBALOY® W HQ-GRADE GTAW SOLID BARE WELDING WIRE NICKEL BASE</p>	<p align="center">ISO 9001 AS 9100</p>	<p align="center">DATA SHEET 5786</p>																																				
<p align="center">CROSS-REFERENCE CONFORMANCE SPECIFICATIONS</p>	<table border="0"> <tr> <td>MSRR 9500/213</td> <td>UWS N10004</td> </tr> <tr> <td>AMS 5786</td> <td>USWC 5786A</td> </tr> <tr> <td>Alloy W</td> <td>OMAT 333A</td> </tr> <tr> <td>62.5Ni 5.0Cr 24.5Mo 5.5Fe</td> <td>(Commercial Grade AWS A5.14 ER Ni Mo-3)</td> </tr> </table>			MSRR 9500/213	UWS N10004	AMS 5786	USWC 5786A	Alloy W	OMAT 333A	62.5Ni 5.0Cr 24.5Mo 5.5Fe	(Commercial Grade AWS A5.14 ER Ni Mo-3)																												
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<p align="center">METALLURGICAL BACKGROUND INFORMATION</p>	<p>TURBALOY® W 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® is a single phase Ni-Mo high temperature alloy.</p>																																						
<p align="center">MATERIALS TO BE WELDED AND APPLICATIONS</p>	<p>TURBALOY® W is used to join dissimilar metal combinations including A286 (AMS 6532), L-605(AMS 5796). It is used for combustor repair and manufacture for welding turbine blades to rotor hubs. shroud rings, etc.</p> <p>Used to repair difficult-to-weld alloys. AMS 5755 : RPS 184 Group 5 and 63 Use pure argon gas shielding and ultra clean conditions.</p>																																						
<p align="center">WIRE CHEMISTRY WT%</p>	<table border="0"> <tr> <td>Carbon</td> <td>-</td> <td>0.12</td> <td>Chromium</td> <td>4.00</td> <td>6.00</td> </tr> <tr> <td>Manganese</td> <td>-</td> <td>1.00</td> <td>Molybdenum</td> <td>23.00</td> <td>26.00</td> </tr> <tr> <td>Silicon</td> <td>-</td> <td>1.00</td> <td>Cobalt</td> <td>-</td> <td>2.50</td> </tr> <tr> <td>Sulfur</td> <td>-</td> <td>0.030</td> <td>Iron</td> <td>4.00</td> <td>7.00</td> </tr> <tr> <td>Phosphorus</td> <td>-</td> <td>0.040</td> <td>Vanadium</td> <td>-</td> <td>0.60</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Nickel</td> <td></td> <td>Balance</td> </tr> </table>			Carbon	-	0.12	Chromium	4.00	6.00	Manganese	-	1.00	Molybdenum	23.00	26.00	Silicon	-	1.00	Cobalt	-	2.50	Sulfur	-	0.030	Iron	4.00	7.00	Phosphorus	-	0.040	Vanadium	-	0.60				Nickel		Balance
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<p align="center">WELD PROPERTIES</p>	<p align="right">Density: 9.03 gm/cc</p> <p>Tensile strength: 127ksi</p>																																						
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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>																																					