



UNITED STATES WELDING CORPORATION

<p align="center">USW ALLOY DESIGNATION AND DESCRIPTION</p>	<p align="center">TURBALOY® 309L HQ-GRADE GTAW SOLID BARE WELDING WIRE IRON BASE</p>	<p align="center">ISO 9001 AS 9100</p>	<p align="center">DATA SHEET 1439</p>																														
<p align="center">CROSS-REFERENCE CONFORMANCE SPECIFICATIONS</p>	<p>USWC 1439 24Cr 13 Ni UNS S30980 AWS A5.9 ER309L</p>																																
<p align="center">METALLURGICAL BACKGROUND INFORMATION</p>	<p>TURBALOY® 309L 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® 309L is used to weld similar and dissimilar metals such as joining type 304 to carbon steels.</p>																																
<p align="center">MATERIALS TO BE WELDED AND APPLICATIONS</p>	<p>Type 304 and dissimilar metals</p>																																
<p align="center">WIRE CHEMISTRY WT%</p>	<table border="0"> <tr> <td>Carbon</td> <td align="center">-</td> <td align="center">0.12</td> <td>Chromium</td> <td align="center">23.00</td> <td align="center">25.00</td> </tr> <tr> <td>Manganese</td> <td align="center">1.00</td> <td align="center">2.50</td> <td>Nickel</td> <td align="center">12.00</td> <td align="center">14.00</td> </tr> <tr> <td>Silicon</td> <td align="center">0.30</td> <td align="center">0.65</td> <td>Molybdenum</td> <td></td> <td align="center">.75</td> </tr> <tr> <td>Sulfur</td> <td align="center">-</td> <td align="center">0.030</td> <td>Copper</td> <td align="center">-</td> <td align="center">0.75</td> </tr> <tr> <td>Phosphorus</td> <td align="center">-</td> <td align="center">0.030</td> <td>Iron</td> <td></td> <td align="center">Balance</td> </tr> </table>			Carbon	-	0.12	Chromium	23.00	25.00	Manganese	1.00	2.50	Nickel	12.00	14.00	Silicon	0.30	0.65	Molybdenum		.75	Sulfur	-	0.030	Copper	-	0.75	Phosphorus	-	0.030	Iron		Balance
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<p align="center">PACKAGING</p>	<p>Sealed polyethylene envelopes. (Desiccants optional)</p>																																
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