



UNITED STATES WELDING CORPORATION

<p align="center">USW ALLOY DESIGNATION AND DESCRIPTION</p>	<p align="center">TURBALOY® 310 HQ-GRADE GTAW SOLID BARE WELDING WIRE IRON BASE</p>	<p align="center">ISO 9001 AS 9100</p>	<p align="center">DATA SHEET 5694</p>																														
<p align="center">CROSS-REFERENCE CONFORMANCE SPECIFICATIONS</p>	<table border="0"> <tr> <td>AMS 5694</td> <td>27Cr 21.5Ni</td> </tr> <tr> <td>UNS S31080</td> <td>AWS A5.9 ER310</td> </tr> <tr> <td>310 SS</td> <td>BS 2901, Part 2 310S94</td> </tr> </table>			AMS 5694	27Cr 21.5Ni	UNS S31080	AWS A5.9 ER310	310 SS	BS 2901, Part 2 310S94																								
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<p align="center">METALLURGICAL BACKGROUND INFORMATION</p>	<p>TURBALOY® 310 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® 310 is a fully austenitic stainless alloy with excellent oxidation resistance up to 2000°F continuous service; used for fabricating alloys of similar composition. This is a zero ferrite alloy and is therefore suitable for thermal cycling application.</p> <p><i>NOTE:</i> There is no high carbon grade of 310SS in the form of an AMS release.</p>																																
<p align="center">MATERIALS TO BE WELDED AND APPLICATIONS</p>	<p>UNS S31000: ASTM A167, 213, 249, 312, 276, 314, 473. CK-20 castings.</p> <p>Dissimilar metal joints between stainless steels, e.g..310 and 330SS. Apply stringer beads with minimum heat input and use ultra clean weldment conditions. Fill craters and minimize residual stress.</p>																																
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<p align="center">WELD PROPERTIES</p>	<p align="right">Density: 7.9gm/cc</p> <p>Melting Point: 2650°F Hardness annealed sheet: 85 HRB</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>																															