



# CEWELD 347Si Tig

TYPE	Filler metal for welding stabilized stainless austenitic steels 18/8. ( Type 19 9 Nb, 347Si )																				
APPLICATIONS	CEWELD® 347Si Tig is designed for welding 18/8 steels, particularly types 321 and 347. It is also compatible with non-stabilized grades such as 304/304L. Typical operating temperatures range from -100 °C to approximately 400 °C. Main application areas include the food processing industry, breweries, pharmaceutical plants, construction, general engineering, and nuclear technology.																				
PROPERTIES	CEWELD® 347Si Tig is suitable for low-temperature applications where a low carbon content and controlled ferrite content are recommended. This is demonstrated by its excellent impact strength values of <b>≥200 J at -50 °C</b> (>47 J down to -110°C). CEWELD® 347Si can be welded without preheating at a maximum interpass temperature of 250 °C. Post-weld heat treatment (PWHT) is not necessary. However, CEWELD® 347Si Tig is not recommended for high-temperature structural components where a carbon content between 0.04% and 0.08% is required for creep resistance. In this case, welding consumables from the 347H series are recommended (see CEWELD® 347H Tig).																				
CLASSIFICATION	<table border="0"> <tr> <td>AWS</td> <td>A 5.9: ER347Si</td> </tr> <tr> <td>EN ISO</td> <td>14343-A: W 19 9 Nb Si</td> </tr> <tr> <td>F-nr</td> <td>6</td> </tr> <tr> <td>FM</td> <td>5</td> </tr> <tr> <td>W.Nr.</td> <td>1.4551</td> </tr> </table>	AWS	A 5.9: ER347Si	EN ISO	14343-A: W 19 9 Nb Si	F-nr	6	FM	5	W.Nr.	1.4551										
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SUITABLE FOR	<p><b>ISO 15608: 8.1 (no Mo ) 347, 19 9 Nb, 1.4551</b></p> <p>1.4000, 1.4001, 1.4002, 1.4003, 1.4006, 1.4301, 1.4303, 1.4306, 1.4308, 1.4310, 1.4311, 1.4312, 1.4319, 1.4541, 1.4543, 1.4546, 1.4550, 1.4552, 1.4561, 1.4878</p> <p>X 6 NiTi 18 10, X 6CrNiNb 18 10, G-X 5CrNiNb 18 9, X 5CrNi 18 7, X 2CrNi 19 11, G-X 2CrNi 18 9, X 5CrNi 18 10, X 5CrNi 18 12 G-X, 6CrNi 18 9, X 12CrNi 17 7, G-X 10CrNi 18 8</p> <p>UNS S30400, S30403, S30453, S32100, S34700</p> <p>AISI 347, 321, 302, 304, 304L, 304LN, CF8C</p>																				
APPROVALS	TÜV ((12392)) CE																				
WELDING POSITIONS																					
TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)	<table border="1"> <thead> <tr> <th>C</th> <th>Si</th> <th>Mn</th> <th>P</th> <th>S</th> <th>Cr</th> <th>Ni</th> <th>Mo</th> <th>Nb</th> <th>Cu</th> </tr> </thead> <tbody> <tr> <td>0.04</td> <td>0.7</td> <td>1</td> <td>0.007</td> <td>0.01</td> <td>20</td> <td>10</td> <td>0.05</td> <td>0.4</td> <td>0.07</td> </tr> </tbody> </table>	C	Si	Mn	P	S	Cr	Ni	Mo	Nb	Cu	0.04	0.7	1	0.007	0.01	20	10	0.05	0.4	0.07
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ALL WELD MECHANICAL PROPERTIES	<table border="1"> <thead> <tr> <th rowspan="2">Heat Treatment</th> <th rowspan="2">R<sub>p0.2</sub> MPa</th> <th rowspan="2">R<sub>m</sub> MPa</th> <th rowspan="2">A<sub>5</sub> (%)</th> <th colspan="2">Impact Energy (J) ISO-V</th> </tr> <tr> <th>-110°C</th> <th>-60°C</th> </tr> </thead> <tbody> <tr> <td>As Welded /</td> <td>450</td> <td>610</td> <td>35</td> <td>150</td> <td>200</td> </tr> </tbody> </table>	Heat Treatment	R <sub>p0.2</sub> MPa	R <sub>m</sub> MPa	A <sub>5</sub> (%)	Impact Energy (J) ISO-V		-110°C	-60°C	As Welded /	450	610	35	150	200						
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REDRYING TEMPERATURE	Not required																				
GAS ACCORDING EN 14175	I1																				



# CEWELD 347Si Tig

347SI TIG 1,0 X 1000MM

Type	KG/unit	EANCode
Tube	5	8720663412843

347SI TIG 1,2 X 1000MM

Type	KG/unit	EANCode
Tube	5	8720663412850

347SI TIG 1,6 X 1000MM

Type	KG/unit	EANCode
Tube	5	8720663412881

347SI TIG 2,0 X 1000MM

Type	KG/unit	EANCode
Tube	5	8720663412898

347SI TIG 2,4 X 1000MM

Type	KG/unit	EANCode
Tube	5	8720663412904

347SI TIG 3,2 X 1000MM

Type	KG/unit	EANCode
Tube	5	8720663412911