


308 LSi Tig

CATEGORY	GMAW-GTAW Solid wires																																								
TYPE	Stainless steel Tig filler metal for welding CrNi 18/10 types.																																								
APPLICATIONS	Boilers, agriculture, liquid storage tanks, food machinery, furniture.																																								
PROPERTIES	308LSi has good general corrosion resistance. The alloy has a low carbon content, making it particularly recommended where there is a risk of intergranular corrosion. The higher silicon content improves the welding properties such as wetting.																																								
CLASSIFICATION	AWS	A 5.9: ER 308LSi																																							
	EN ISO	14343-A: W 19 9 L Si																																							
	DIN: W.Nr.	1.4316																																							
	DIN	8556: SG X2CrNi 19 9																																							
SUITABLE FOR	W.Nr: 1.4306, 1.4301, 1.4541, 1.4550, 1.4311, 1.4546, 1.4312, 1.4300, 1.4312, 1.4371, 1.4541, 1.4543, 1.4550, 1.4452 DIN X2CrNi 19 11 (TP), X4CrNi 18 10 (TP), X6CrNiTi 18 10 (TP), X6CrNiNb 18 10 (TP), X2CrNiN 18 10 (TP), X5CrNiNb 18 10, G-X10CrNi 18 8 (TP), AISI 202, 302, 304L, 304, 305, 321, 347, 304 LN ASTM A320 Grade B8C/D, 302																																								
APPROVALS	TUV (12387.00), DB (43.206.02), CE approved																																								
WELDING POSITIONS:																																									
WELD METAL WEIGHT %	<table border="1"> <thead> <tr> <th>C</th> <th>Mn</th> <th>Si</th> <th>Cr</th> <th>Ni</th> <th>Mo</th> <th>P</th> <th>S</th> </tr> </thead> <tbody> <tr> <td><0.03</td> <td>1.0-2.5</td> <td>0.65-1.0</td> <td>19.5-22.0</td> <td>9.0-11.0</td> <td><0.75</td> <td><0.03</td> <td><0.03</td> </tr> </tbody> </table>		C	Mn	Si	Cr	Ni	Mo	P	S	<0.03	1.0-2.5	0.65-1.0	19.5-22.0	9.0-11.0	<0.75	<0.03	<0.03																							
C	Mn	Si	Cr	Ni	Mo	P	S																																		
<0.03	1.0-2.5	0.65-1.0	19.5-22.0	9.0-11.0	<0.75	<0.03	<0.03																																		
MECHANICAL PROPERTIES	<table border="1"> <thead> <tr> <th rowspan="2">Heat Treatment</th> <th rowspan="2">R_{p0,2} (N/mm²)</th> <th rowspan="2">R_m (N/mm²)</th> <th rowspan="2">A₅ (%)</th> <th colspan="3">Impact Energy (J) ISO-V</th> <th rowspan="2">Hardness HRc / HV</th> </tr> <tr> <th>20°C</th> <th>-60°C</th> <th>-196°C</th> </tr> </thead> <tbody> <tr> <td>AW</td> <td>480</td> <td>630</td> <td>37</td> <td>170</td> <td>150</td> <td>75</td> <td></td> </tr> </tbody> </table>		Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRc / HV	20°C	-60°C	-196°C	AW	480	630	37	170	150	75																					
Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)					A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRc / HV																														
			20°C	-60°C	-196°C																																				
AW	480	630	37	170	150	75																																			
AW: as welded																																									
WELDING PARAMETERS / PACKING	<table border="1"> <thead> <tr> <th rowspan="2">D (mm)</th> <th colspan="2">Welding Parameters</th> <th colspan="2">Packing</th> </tr> <tr> <th colspan="2">Current (A) DC-</th> <th>single</th> <th>master</th> </tr> </thead> <tbody> <tr> <td>1.0 x 1000</td> <td colspan="2">20-50</td> <td>5</td> <td>25</td> </tr> <tr> <td>1.2 x 1000</td> <td colspan="2">30-70</td> <td>5</td> <td>25</td> </tr> <tr> <td>1.6 x 1000</td> <td colspan="2">50-80</td> <td>5</td> <td>25</td> </tr> <tr> <td>2.0 x 1000</td> <td colspan="2">70-110</td> <td>5</td> <td>25</td> </tr> <tr> <td>2.4 x 1000</td> <td colspan="2">110-180</td> <td>5</td> <td>25</td> </tr> <tr> <td>3.2 x 1000</td> <td colspan="2">150-250</td> <td>5</td> <td>25</td> </tr> </tbody> </table>		D (mm)	Welding Parameters		Packing		Current (A) DC-		single	master	1.0 x 1000	20-50		5	25	1.2 x 1000	30-70		5	25	1.6 x 1000	50-80		5	25	2.0 x 1000	70-110		5	25	2.4 x 1000	110-180		5	25	3.2 x 1000	150-250		5	25
D (mm)	Welding Parameters			Packing																																					
	Current (A) DC-		single	master																																					
1.0 x 1000	20-50		5	25																																					
1.2 x 1000	30-70		5	25																																					
1.6 x 1000	50-80		5	25																																					
2.0 x 1000	70-110		5	25																																					
2.4 x 1000	110-180		5	25																																					
3.2 x 1000	150-250		5	25																																					
REDRYING TEMPERATURE	not required																																								
GAS ACC. EN ISO 14175:	I1																																								