


327 Tig

CATEGORY	GMAW-GTAW Solid wires																											
TYPE	Solid stainless steel welding wire for high temperature applications																											
APPLICATIONS	Cap layers for joining refractory Cr-Al-Si steels, cladding corrosion resistant overlays, cladding heat resistant overlays up to 1100°C, cladding components in a sulphurous environment.																											
PROPERTIES	High chromium-alloyed welding wire (ER 327-ER 329) based on a 25% Chromium and 4% Nickel deposit for cladding and joining components against corrosion, high-heat and wear resistance Excellent weld metal quality and X-ray soundness, stable arc at high currents and good machinable deposit.																											
CLASSIFICATION	AWS	A 5.9: ER 327 (~329)																										
	EN ISO	14343-A: W 25 4																										
	DIN: W.Nr.	1.4820																										
	DIN	8556: X 12 CrNi 25 4																										
SUITABLE FOR	W.Nr:	EN ASTM/ACI	W.Nr:	EN ASTM/ACI																								
	1.4710	G-X30CrSi6	1.4724	X10CrAl13 TP405-CA15																								
	1.4745	G-X40CrSi23 TP433	1.4820	G-X12 CrSi 26 5																								
	1.4712	X10CrSi6 502	1.4729	G-X40CrSi13																								
	1.4762	X10CrAl24 TP443	1.4821	X20 CrNiSi 25 4 TP329																								
	1.4713	X10CrAl7 502	1.4740	G-X40CrSi17																								
	1.4773	X8Cr30	1.4822	G-X40CrNi 25 4 TP329																								
	1.4722	X10CrSi13	1.4742	X10CrAl18 430B-TP430																								
	1.4776	G-X40CrSi29	1.4823	G-X40CrNiSi 27 4 TP329HC																								
APPROVALS	CE approved																											
WELDING POSITIONS:																												
TYPICAL DEPOSIT WEIGHT %	<table border="1"> <thead> <tr> <th>C</th> <th>Si</th> <th>Mn</th> <th>Cr</th> <th>Ni</th> </tr> </thead> <tbody> <tr> <td>0.10</td> <td>0.6</td> <td>1.0-2.5</td> <td>24-27</td> <td>4-6</td> </tr> </tbody> </table>				C	Si	Mn	Cr	Ni	0.10	0.6	1.0-2.5	24-27	4-6														
C	Si	Mn	Cr	Ni																								
0.10	0.6	1.0-2.5	24-27	4-6																								
MECHANICAL PROPERTIES	<table border="1"> <thead> <tr> <th rowspan="2">Shielding gas Acc. EN 439</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>-40°C</th> <th>-60°C</th> </tr> </thead> <tbody> <tr> <td>I1</td> <td>450</td> <td>650</td> <td>15</td> <td>50</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Shielding gas Acc. EN 439	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRC / HV	+20°C	-40°C	-60°C	I1	450	650	15	50								
Shielding gas Acc. EN 439	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V					Hardness HRC / HV																			
				+20°C	-40°C	-60°C																						
I1	450	650	15	50																								
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>1.6 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>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	1.6 x 1000	50-80		5	25	2.0 x 1000	70-110		5	25	3.2 x 1000	150-250		5	25
D (mm)	Welding Parameters		Packing																									
	Current (A) DC-		Single	Master																								
1.6 x 1000	50-80		5	25																								
2.0 x 1000	70-110		5	25																								
3.2 x 1000	150-250		5	25																								
REDRYING TEMPERATURE	Not required																											