



CEWELD AA 2101 (Lean Duplex)

TYPE	Rutile fluxcored wire for welding lean duplex stainless steel. (Typ 2101, E2307)																		
APPLICATIONS	Very well suited for the chemical industries (e.g. bio fuel), the pulp and paper industry and also the food industry.																		
PROPERTIES	AA 2101 has excellent welding properties and was developed especially for the steel grade 1.4162/UNS S 32101. Due to the higher Mn and N – content of the Lean duplex base material, the slag viscosity and therefore the flow behaviour is changing and the welding bead is liquid for a longer time. The result is a very smooth seam.																		
CLASSIFICATION	<table border="0"> <tr> <td>AWS</td> <td>A 5.22: E2307T1-1</td> </tr> <tr> <td>EN ISO</td> <td>17633-A: T 23 7 N L P M21 2</td> </tr> <tr> <td>W.Nr.</td> <td>1.4162</td> </tr> <tr> <td>F-nr</td> <td>6</td> </tr> <tr> <td>FM</td> <td>5</td> </tr> </table>	AWS	A 5.22: E2307T1-1	EN ISO	17633-A: T 23 7 N L P M21 2	W.Nr.	1.4162	F-nr	6	FM	5								
AWS	A 5.22: E2307T1-1																		
EN ISO	17633-A: T 23 7 N L P M21 2																		
W.Nr.	1.4162																		
F-nr	6																		
FM	5																		
SUITABLE FOR	1.4162, 1.4362, 1.4482, 1.4062 X2CrMnNiN21-5-1, X2CrMnNiN22-5-2, X2CrMnNi 22-5-2, X2CrNiN23-4, X2CrMnNiMoN21-5-3, X2CrNiN23-4 UNS S32101, S32001, S32304, LEAN DUPLEX UNS S32304, LEAN DUPLEX UNS S32001, SAF 2304, 2001 ASME SA 240, ASME SA 790, Case 2418 LDX2101® (Avesta), Valbruna V234N, SS LD24																		
APPROVALS	CE																		
WELDING POSITIONS																			
TYPICAL CHEMICAL ANALYSIS OF WELD 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>N</th> </tr> </thead> <tbody> <tr> <td>0.03</td> <td>0.45</td> <td>1.25</td> <td>0.02</td> <td>0.003</td> <td>24.5</td> <td>8</td> <td>0.2</td> <td>0.15</td> </tr> </tbody> </table>	C	Si	Mn	P	S	Cr	Ni	Mo	N	0.03	0.45	1.25	0.02	0.003	24.5	8	0.2	0.15
C	Si	Mn	P	S	Cr	Ni	Mo	N											
0.03	0.45	1.25	0.02	0.003	24.5	8	0.2	0.15											
MECHANICAL PROPERTIES	<table border="1"> <thead> <tr> <th rowspan="2">Heat Treatment</th> <th rowspan="2">R_{p0,2} (MPa)</th> <th rowspan="2">R_m (MPa)</th> <th rowspan="2">A₅ (%)</th> <th colspan="2">Impact Energy (J) ISO-V</th> <th rowspan="2">Hardness</th> </tr> <tr> <th colspan="2">-40°C</th> </tr> </thead> <tbody> <tr> <td>As Welded</td> <td>571</td> <td>750</td> <td>29</td> <td colspan="2">50</td> <td>HRc</td> </tr> </tbody> </table>	Heat Treatment	R _{p0,2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V		Hardness	-40°C		As Welded	571	750	29	50		HRc		
Heat Treatment	R _{p0,2} (MPa)					R _m (MPa)	A ₅ (%)		Impact Energy (J) ISO-V		Hardness								
		-40°C																	
As Welded	571	750	29	50		HRc													
REDRYING	140°C / 24 hr																		
GAS ACC. EN ISO 14175	M21																		