



CEWELD Ultra Clean ER 110 Ti

TYPE	Copper free solid high strength welding wire. (ER 110, 69 6)																								
APPLICATIONS	CEWELD® Ultra Clean ER 110 Ti is a very pure, non-copper-plated solid wire. This wire has a high tensile strength and yield strength. CEWELD® Ultra Clean ER 110 Ti is used for welding steel with a tensile strength between 770 and 940 MPa. Used for welding in crane construction, trailer construction, lifting equipment, drilling rigs, pipelines, platforms, heavy machinery construction, etc.																								
PROPERTIES	CEWELD® Ultra Clean ER 110 Ti is an extremely crack-resistant and extremely clean non-copper-plated solid wire with high mechanical properties and excellent welding properties as well as high impact strength (>100J@-60°C). The best mechanical properties are achieved with the shielding gas M21.																								
CLASSIFICATION	<table border="0"> <tr> <td>AWS</td> <td>A 5.28: ER 110S-G</td> </tr> <tr> <td>EN ISO</td> <td>16834-A: G 69 6 M21 Mn3Ni1CrMo</td> </tr> <tr> <td>F-nr</td> <td>6</td> </tr> <tr> <td>FM</td> <td>2</td> </tr> </table>	AWS	A 5.28: ER 110S-G	EN ISO	16834-A: G 69 6 M21 Mn3Ni1CrMo	F-nr	6	FM	2																
AWS	A 5.28: ER 110S-G																								
EN ISO	16834-A: G 69 6 M21 Mn3Ni1CrMo																								
F-nr	6																								
FM	2																								
SUITABLE FOR	<p>Reh ≤ 690 MPa ISO 15608: 3.1 (460 < Reh ≤ 690 MPa) 1.8914, 1.8927, 1.8931, 1.8928, 1.7147, 1.7149, 1.8734 S620Q, S620QL, S690Q, S690QL, S620QL1-S690QL1, 20MnCr65, 28CrMn4-3 L480 - L550, X65, X80, X90, X100 ASTM A 514 Gr. F, H, Q; A 709 Gr. 100 Type B, E, F, H, Q; A 709 Gr. HPS 100W Weldox 700, Dillimax 690, Hardox, Naxtra 63, Naxtra 70, Optim 700 mc plus, Weldox 500, Hardox, Domex 460 MC, Domex 500 MC, Domex 550 MC, Domex 600 MC, Domex 650 MC, Domex 700 MC, Hardox 400, XAR 400, Dillidur 400, Oceanfit 100, Oceanfit 690, alform plate 620 M, 700 M, aldur 620 Q, 620 QL, 620 QL1, aldur 700 Q, 700 QL, 700 QL1</p>																								
APPROVALS	CE TÜV ((20387))																								
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>V</th> <th>Cu</th> <th>Al</th> <th>Ti+Zr</th> </tr> </thead> <tbody> <tr> <td>0.07</td> <td>0.6</td> <td>1.6</td> <td>0.012</td> <td>0.015</td> <td>0.35</td> <td>1.35</td> <td>0.3</td> <td>0.053</td> <td>0.075</td> <td>0.005</td> <td>0.014</td> </tr> </tbody> </table>	C	Si	Mn	P	S	Cr	Ni	Mo	V	Cu	Al	Ti+Zr	0.07	0.6	1.6	0.012	0.015	0.35	1.35	0.3	0.053	0.075	0.005	0.014
C	Si	Mn	P	S	Cr	Ni	Mo	V	Cu	Al	Ti+Zr														
0.07	0.6	1.6	0.012	0.015	0.35	1.35	0.3	0.053	0.075	0.005	0.014														
ALL WELD 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> </tr> <tr> <th>-40°C</th> <th>-60°C</th> </tr> </thead> <tbody> <tr> <td>As Welded /</td> <td>750</td> <td>870</td> <td>18</td> <td>120</td> <td>100</td> </tr> </tbody> </table>	Heat Treatment	R _{P0,2} MPa	R _m MPa	A ₅ (%)	Impact Energy (J) ISO-V		-40°C	-60°C	As Welded /	750	870	18	120	100										
Heat Treatment	R _{P0,2} MPa					R _m MPa	A ₅ (%)	Impact Energy (J) ISO-V																	
		-40°C	-60°C																						
As Welded /	750	870	18	120	100																				
REDRYING TEMPERATURE	Not required																								
GAS ACCORDING EN 14175	M21, M20																								



CEWELD Ultra Clean ER 110 Ti

certilas® THE FILLER METAL SPECIALIST

ULTRA CLEAN ER 110 TI
1,0MM

Type	KG/unit	EANCode
BS-300	16	8720682051504
Drum	250	8720682051498

ULTRA CLEAN ER 110 TI
1,2MM

Type	KG/unit	EANCode
BS-300	16	8720682051474
Drum	250	8720682051481