



# CEWELD AA R690

TYPE	Seamless rutile flux-cored welding wire for high strength S690-HY100 steels																
APPLICATIONS	Shipbuilding, steel and vessel construction, mechanical engineering and pipe work, offshore, crane building, lifting, platforms. Steels with yield strength up to 690 MPa (100 ksi).																
PROPERTIES	CEWELD® AA R690 was one of "The first seamless rutile FCW with extreme low hydrogen for S690" Excellent for use in positional welding where high deposition rate is required, suitable for temperatures down to -60 °C ( with offshore Approval down to -40°C). Excellent for use on ceramic backing and MAG orbital welding in all positions. Extreme low spatter properties and excellent arc stability with fast freezing slag. All quality values are dependent on compliance with the correct t8/5 time																
CLASSIFICATION	<table border="0"> <tr> <td>AWS</td> <td>A 5.29: E 111T1-GM-J H4</td> </tr> <tr> <td>EN ISO</td> <td>18276-A: T 69 6 Z P M21 1 H5</td> </tr> <tr> <td>F-nr</td> <td>6</td> </tr> <tr> <td>FM</td> <td>2</td> </tr> </table>	AWS	A 5.29: E 111T1-GM-J H4	EN ISO	18276-A: T 69 6 Z P M21 1 H5	F-nr	6	FM	2								
AWS	A 5.29: E 111T1-GM-J H4																
EN ISO	18276-A: T 69 6 Z P M21 1 H5																
F-nr	6																
FM	2																
SUITABLE FOR	<p><b>Reh &lt; 690 MPa Iso 15608: 2.2 u 3.2 ( 460 &lt; Reh ≤ 690(700) MPa )</b>            1.8914, 1.8927, 1.8931, 1.8928, 1.8974, 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, Strenx 700; 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, Salzgitter S700MC, Ympress Steel E690 TM, S700MC, Armstrong Ultra 650MC, 650 Mct, 700 MC.....</p>																
APPROVALS	CE, Lloyds, DNV																
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> </tr> </thead> <tbody> <tr> <td>0.06</td> <td>0.4</td> <td>1.6</td> <td>0.015</td> <td>0.015</td> <td>0.3</td> <td>2.2</td> <td>0.3</td> </tr> </tbody> </table>	C	Si	Mn	P	S	Cr	Ni	Mo	0.06	0.4	1.6	0.015	0.015	0.3	2.2	0.3
C	Si	Mn	P	S	Cr	Ni	Mo										
0.06	0.4	1.6	0.015	0.015	0.3	2.2	0.3										
MECHANICAL PROPERTIES	<table border="1"> <thead> <tr> <th rowspan="2">Heat Treatment</th> <th rowspan="2">Rp0,2 (MPa)</th> <th rowspan="2">Rm (MPa)</th> <th rowspan="2">A5 (%)</th> <th colspan="2">Impact Energy (J) ISO-V</th> <th rowspan="2">Hardness</th> </tr> <tr> <th>-40°C</th> <th>-60°C</th> </tr> </thead> <tbody> <tr> <td>As Welded</td> <td>705</td> <td>850</td> <td>20</td> <td>75</td> <td>50</td> <td>HRc</td> </tr> </tbody> </table>	Heat Treatment	Rp0,2 (MPa)	Rm (MPa)	A5 (%)	Impact Energy (J) ISO-V		Hardness	-40°C	-60°C	As Welded	705	850	20	75	50	HRc
Heat Treatment	Rp0,2 (MPa)					Rm (MPa)	A5 (%)		Impact Energy (J) ISO-V		Hardness						
		-40°C	-60°C														
As Welded	705	850	20	75	50	HRc											
REDRYING	Not required																
GAS ACC. EN ISO 14175	M21																



# CEWELD AA R690

AA R690 1,2MM

Packaging	KG/unit	EanCode
BS-300	16	8720663423733
D-200	20 (4x5)	8720663423726