



# CEWELD AA M550SR

TYPE	Seamless metal cored wire without slag for M21																							
APPLICATIONS	Crane, steel, vessel and apparatus construction, offshore, lifting, drilling platforms etc.																							
PROPERTIES	Seamless metal cored wire with remarkable stable arc and no spatters. Excellent for use in automated welding applications such as orbital Mag or robotic welding. This wire offers a unique welding deposit with less than 1% nickel to full fill NACE requirements and cover more procedures up to 500 MPa yield strength steels. CEWELD AA M500 can also be used for constructions that needs post weld heat treatment after welding and still offers mechanical properties confirming 5Y46 class. Due to the seamless production process the hydrogen content is below 3ml/100gr weld metal even after long storage in unconditioned condition.																							
CLASSIFICATION	<table border="0"> <tr> <td>AWS</td> <td>A 5.36: E91T15-M21P4-K1-H4</td> </tr> <tr> <td>EN ISO</td> <td>18276-A: T 55 6 1NiMo M 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 5.36: E91T15-M21P4-K1-H4	EN ISO	18276-A: T 55 6 1NiMo M M21 1 H5	F-nr	6	FM	2															
AWS	A 5.36: E91T15-M21P4-K1-H4																							
EN ISO	18276-A: T 55 6 1NiMo M M21 1 H5																							
F-nr	6																							
FM	2																							
SUITABLE FOR	<p><b>Reh ≤ 550 MPa ISO 15608: 1.3, ~3.1, ~2.2, 2.1,</b>            1.0580 to 1.0070, 1.8900 to 1.8905, 1.8930 to 1.8935, 1.8910 to 1.8915, 1.6217, 1.6210, 1.0481, 1.0482, 1.0551, 1.0553.</p> <p>S275N-S460N, S275NL-S460NL, S275M-S460M, S275ML-S460ML, P355N, P355NH, P460N, P460NH, P275NL1-P460NL1, P275NL2- P460NL2, L360NB, L415NB, L360MB-L450MB, L360QB-L450QB</p> <p><b>20MnMoNi4-5, 15NiCuMoNb5-6-4</b></p> <p>ASTM A 203 Gr. D, E; A 350 Gr. LF1, LF2, LF3; A 420 Gr. WPL3, WPL6; A 516 Gr. 60, 65, 70; A 572 Gr. 42, 50, 55, 60, 65; A 633 Gr. A, D, E; A 662 Gr. A, B, C; A 707 Gr. L1, L2, L3; A 738 Gr. A; A 841 A, B, C; API 5 L X52, X60, X65, X52Q, X60Q, X65Q</p> <p>Oceanfit 52, Oceanfit 60, Oceanfit 65, Oceanfit 355, Oceanfit 420, Oceanfit 460, PAS 460-550, alform® 500 M, 550 M, aldur 500 Q, 500 QL, aldur 550 Q, 550 QL</p>																							
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>Ni</th> <th>Mo</th> </tr> </thead> <tbody> <tr> <td>0.05</td> <td>0.5</td> <td>1.3</td> <td>0.015</td> <td>0.015</td> <td>0.9</td> <td>0.35</td> </tr> </tbody> </table>	C	Si	Mn	P	S	Ni	Mo	0.05	0.5	1.3	0.015	0.015	0.9	0.35									
C	Si	Mn	P	S	Ni	Mo																		
0.05	0.5	1.3	0.015	0.015	0.9	0.35																		
MECHANICAL PROPERTIES	<table border="1"> <thead> <tr> <th rowspan="2">Heat Treatment</th> <th rowspan="2">R<sub>P0,2</sub> (MPa)</th> <th rowspan="2">R<sub>m</sub> (MPa)</th> <th rowspan="2">A<sub>5</sub> (%)</th> <th colspan="2">Impact Energy (J) ISO-V</th> <th rowspan="2">Hardness</th> </tr> <tr> <th colspan="2">-60°C</th> </tr> </thead> <tbody> <tr> <td>As Welded</td> <td>600</td> <td>740</td> <td>20</td> <td colspan="2">60</td> <td>HRc</td> </tr> <tr> <td>580°C±15°C 2h</td> <td>580</td> <td>640</td> <td>25</td> <td colspan="2">50</td> <td>HRc</td> </tr> </tbody> </table>	Heat Treatment	R <sub>P0,2</sub> (MPa)	R <sub>m</sub> (MPa)	A <sub>5</sub> (%)	Impact Energy (J) ISO-V		Hardness	-60°C		As Welded	600	740	20	60		HRc	580°C±15°C 2h	580	640	25	50		HRc
Heat Treatment	R <sub>P0,2</sub> (MPa)					R <sub>m</sub> (MPa)	A <sub>5</sub> (%)		Impact Energy (J) ISO-V		Hardness													
		-60°C																						
As Welded	600	740	20	60		HRc																		
580°C±15°C 2h	580	640	25	50		HRc																		
REDRYING	Not required																							
GAS ACC. EN ISO 14175	M21																							