



CEWELD AlMg 4.5Mn Tig

TYPE	Tig aluminium welding wire with high corrosion resistance																
APPLICATIONS	Filler metal for Magnesium and Manganese alloyed Aluminium with a maximum Magnesium content of 5%. This alloy shows very good mechanical properties that make it ideal for applications in shipyards, in car and railway industry and constructions of reservoirs and tanks.																
PROPERTIES	Excellent weldability and good mechanical strength combined with good corrosion resistance against seawater are typical for this alloy. The weld deposit is free from porosity due to the special shaving process and cleaning method during production. AlMg4,5Mn is one of the highest grades within the range of aluminum alloys and covers a huge range of alloys. Thicker sections should be preheated (150°C) prior to welding.																
CLASSIFICATION	<table border="0"> <tr> <td>AWS</td> <td>A 5.10: ER5183</td> </tr> <tr> <td>EN ISO</td> <td>18273: S Al 5183 (AlMg4,5Mn0,7(A))</td> </tr> <tr> <td>F-nr</td> <td>22</td> </tr> </table>	AWS	A 5.10: ER5183	EN ISO	18273: S Al 5183 (AlMg4,5Mn0,7(A))	F-nr	22										
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SUITABLE FOR	Aluminium alloys: AlMg4,5Mn, AlMg5, AlMg2Mn0,8, AlZnMg1, AlZnMgCu0,5, AlMgSi0,5, AlMgSi1, G-AlMg10, G-AlMg5, G-AlMg3Si, G-AlMg5Si, 3.3545, 3.3547, 3.3535, 3.3555, 3.3206, 3.3210, 3.2315, 3.3211, 3.4335, EN AW 5086, EN AW 5083, EN AW 5019, EN AW 5019, EN AW 6060, EN AW 6005A, EN AW 6082, EN AW 6061, EN AW 7020, EN AC 51300, EN AC 51400,																
APPROVALS	CE																
WELDING POSITIONS																	
TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 25%;">Mn</td> <td style="width: 25%;">Cr</td> <td style="width: 25%;">Al</td> <td style="width: 25%;">Mg</td> </tr> <tr> <td>0.7</td> <td>0.1</td> <td>Rem.</td> <td>4.5</td> </tr> </table>	Mn	Cr	Al	Mg	0.7	0.1	Rem.	4.5								
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MECHANICAL PROPERTIES	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <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">RT</th> </tr> <tr> <td>As Welded</td> <td>140</td> <td>300</td> <td>18</td> <td colspan="2">30</td> <td>HRC</td> </tr> </table>	Heat Treatment	R _{P0,2} (MPa)	R _m (MPa)	A ₅ (%)	Impact Energy (J) ISO-V		Hardness	RT		As Welded	140	300	18	30		HRC
Heat Treatment	R _{P0,2} (MPa)					R _m (MPa)	A ₅ (%)		Impact Energy (J) ISO-V		Hardness						
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REDRYING	Not required																
GAS ACC. EN ISO 14175	11, 13																