



CEWELD AlMg 4.5Mn

TYPE	Mig 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 weight range of alloys. Thicker sections should be preheated (150°C) prior to welding. Qualified by Lloyds for manual and (semi)automatic 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> <tr> <td>W.Nr.</td> <td>3.3548</td> </tr> </table>	AWS	A 5.10: ER5183	EN ISO	18273: S Al 5183 (AlMg4,5Mn0,7(A))	F-nr	22	W.Nr.	3.3548							
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SUITABLE FOR	<p>Aluminium alloys:</p> <p>AlMg4,5Mn, AlMg5, AlMg2Mn0,8, AlZnMg1, AlZnMgCu0,5, AlMgSi0,5, AlMgSi1,AlMgSi0,5, G-AlMg10, G-AlMg5, G-AlMg3Si, G-AlMg5Si, 3.2315, 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,EN AW-6082</p>															
APPROVALS	CE Lloyds (MATS/NTH-1043/7/1)															
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%;">Ti</td> <td style="width: 25%;">Al</td> <td style="width: 25%;">Mg</td> </tr> <tr> <td>0.7</td> <td>0.1</td> <td>0.15</td> <td>Rem.</td> <td>4.5</td> </tr> </table>	Mn	Cr	Ti	Al	Mg	0.7	0.1	0.15	Rem.	4.5					
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ALL WELD MECHANICAL PROPERTIES	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 15%;">Heat Treatment</td> <td style="width: 10%;">R_{p0,2}</td> <td style="width: 10%;">R_m</td> <td style="width: 10%;">A₅</td> <td style="width: 50%;">Impact Energy (J) ISO-V</td> </tr> <tr> <td>As Welded /</td> <td>MPa</td> <td>MPa</td> <td>(%)</td> <td>RT</td> </tr> <tr> <td></td> <td>140</td> <td>300</td> <td>18</td> <td>30</td> </tr> </table>	Heat Treatment	R _{p0,2}	R _m	A ₅	Impact Energy (J) ISO-V	As Welded /	MPa	MPa	(%)	RT		140	300	18	30
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REDRYING TEMPERATURE	Not required															
GAS ACCORDING EN 14175	11, 13															