

<div>Data Sheet</div> <div>EN AW 6082 – Rods and bars</div> <div>Alumeco A/S</div>				<div>Internal alloy name: 6082</div> <div>International alloy name: EN AW 6082</div> <div>Chemical Symbol: EN AW – AlSi1MgMn</div> <div>DIN-Werkstoff no.: 3.2315</div> <div>Alloy type: Heat treatable alloy</div>																																																			
<div>Main usage</div> <div><ul style="list-style-type: none">• Machining• Machinery• Heavy duty structures• Marine and offshore</div>		<div>Main properties</div> <div><ul style="list-style-type: none">• Very good atmospheric corrosion resistance• Very good workability• Good machinability• Heat treatable alloys (Soft T4 temper)• A special anodizing quality is available by request</div>		<div>Important norms and literature</div> <div><div>Extrusion: EN 755-1: Technical conditions for inspection and delivery EN 755-2: Mechanical properties EN 755-9: Tolerances on dimensions and forms for different extrusions</div><div>Usages: EN 13195: Specifications for wrought products for marine applications EN 602: Usage in the food industry</div><div>Chemical composition: EN 573-3: Chemical composition</div></div>																																																			
<div>Chemical composition EN 573-3:2009</div> <table><tr><td>Si</td><td>Fe</td><td>Cu</td><td>Mn</td><td>Mg</td><td>Cr</td><td>Zn</td><td>Ti</td><td colspan="2">Other elements</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Each</td><td>together</td></tr><tr><td>0.7-1.3</td><td>0.5</td><td>0.1</td><td>0.4-1.0</td><td>0.6-1.2</td><td>0.25</td><td>0.2</td><td>0.1</td><td>0.05</td><td>0.15</td></tr></table>								Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other elements										Each	together	0.7-1.3	0.5	0.1	0.4-1.0	0.6-1.2	0.25	0.2	0.1	0.05	0.15																		
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<div>Typical mechanical properties EN 755 – 2 (Extruded profiles)</div> <table><tr><td>Product group</td><td>Temper</td><td>Rm</td><td>Rp0,2</td><td>A</td><td>Hardness*</td></tr><tr><td>Dimension (mm)</td><td></td><td>MPa</td><td>MPa</td><td>%</td><td>HB</td></tr><tr><td>Rod/bar ≤ 200</td><td>O, H111</td><td>Max. 160</td><td>Max. 110</td><td>14</td><td>35</td></tr><tr><td>Rod/bar ≤ 200</td><td>T4</td><td>Min. 205</td><td>Min. 110</td><td>14</td><td>70</td></tr><tr><td>Rod/bar ≤ 20</td><td>T6</td><td>Min. 295</td><td>Min. 250</td><td>8</td><td>95</td></tr><tr><td>Rod/bar 20 <D ≤ 150</td><td>T6</td><td>Min. 310</td><td>Min. 260</td><td>8</td><td>95</td></tr><tr><td>Rod/bar 150 <D ≤ 200</td><td>T6</td><td>Min. 280</td><td>Min. 240</td><td>6</td><td>95</td></tr><tr><td>Rod/bar 200 <D ≤ 250</td><td>T6</td><td>Min. 270</td><td>Min. 200</td><td>6</td><td>95</td></tr></table>								Product group	Temper	Rm	Rp0,2	A	Hardness*	Dimension (mm)		MPa	MPa	%	HB	Rod/bar ≤ 200	O, H111	Max. 160	Max. 110	14	35	Rod/bar ≤ 200	T4	Min. 205	Min. 110	14	70	Rod/bar ≤ 20	T6	Min. 295	Min. 250	8	95	Rod/bar 20 <D ≤ 150	T6	Min. 310	Min. 260	8	95	Rod/bar 150 <D ≤ 200	T6	Min. 280	Min. 240	6	95	Rod/bar 200 <D ≤ 250	T6	Min. 270	Min. 200	6	95
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<div>Properties and information (3 high/good; 2 medium; 1 poor/bad)</div> <table><tr><td><div><u>Resistance</u> Corrosion index, general: 3 Marine atm. corr. index: 3</div><div><u>Hot workability</u> Extrusion: 3 Forging: 3</div><div><u>Cold formability</u> Cold formability general: 2 Deep drawing: 1 Bending: 2 – 3 (Depending on the temper)</div></td><td><div><u>Weldability</u> TIG welding: 2 MIG welding: 2</div><div><u>Solderability</u> 1</div></td><td><div><u>Machinability</u> Machinability index: 3</div></td><td><div><u>Anodizing</u> Decorative anodizing surface treatment: 2 Protective anodizing index: 3 Hard anodizing: 3 Color anodizing: 2</div><div><u>General information</u> Decorative anodizing can be a challenge due to crystal growth in the material. A special anodizing quality is available by request.</div></td></tr></table>								<div><u>Resistance</u> Corrosion index, general: 3 Marine atm. corr. index: 3</div> <div><u>Hot workability</u> Extrusion: 3 Forging: 3</div> <div><u>Cold formability</u> Cold formability general: 2 Deep drawing: 1 Bending: 2 – 3 (Depending on the temper)</div>	<div><u>Weldability</u> TIG welding: 2 MIG welding: 2</div> <div><u>Solderability</u> 1</div>	<div><u>Machinability</u> Machinability index: 3</div>	<div><u>Anodizing</u> Decorative anodizing surface treatment: 2 Protective anodizing index: 3 Hard anodizing: 3 Color anodizing: 2</div> <div><u>General information</u> Decorative anodizing can be a challenge due to crystal growth in the material. A special anodizing quality is available by request.</div>																																												
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