

Data Sheet EN AW 3003 – Painted coils Alumeco A/S					Internal alloy name: 3003 International alloy name: EN AW 3003 Chemical Symbol: EN AW – Al Mn1Cu DIN-Werkstoff no.: 3.0517 Alloy type: Non heat treatable alloy																																														
Main usage • Facade panels • Covers • Deep-drawn parts • Pre-painted coils/sheets		Main properties • Very good atmospheric corrosion resistance • Very good workability • Very good weld ability • Low mechanical properties			Important norms and literature Cold rolled products: EN 485-1: Technical conditions for inspection and delivery EN 485-2: Mechanical properties EN 485-4: Tolerances on dimensions and form cold rolled products Chemical composition: EN 573-3: Chemical composition EN 1396: Coil coated sheet and strip for applications - Specifications																																														
Chemical composition (%) EN 573-3 <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 Each together</td></tr><tr><td>0.6</td><td>0.7</td><td>0.05 – 0.20</td><td>1.0 – 1.5</td><td>-</td><td>-</td><td>0.10</td><td>0.05</td><td>0.05</td><td>0.15</td></tr></table>										Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other elements Each together		0.6	0.7	0.05 – 0.20	1.0 – 1.5	-	-	0.10	0.05	0.05	0.15																						
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Typical mechanical properties EN 1396 <table><tr><td rowspan="2">Thickness range (mm)</td><td rowspan="2">Temper</td><td rowspan="2">Rm MPa</td><td rowspan="2">Rp_{0,2} MPa</td><td rowspan="2">A₅₀ %</td><td rowspan="2">Hardness* HB</td><td colspan="2">Bend radius**</td></tr><tr><td>180°</td><td>90°</td></tr><tr><td>0.5 < t < 1.5</td><td>H44</td><td>140 – 185</td><td>Min. 110</td><td>4</td><td>-</td><td>2.0t</td><td>1.5t</td></tr><tr><td>t > 3.0</td><td>H44</td><td>140 – 185</td><td>Min. 110</td><td>5</td><td>-</td><td>2.0t</td><td>1.5t</td></tr><tr><td>0.5 < t < 1.5</td><td>H45</td><td>150 – 205</td><td>Min. 130</td><td>4</td><td>-</td><td></td><td></td></tr><tr><td>t > 3.0</td><td>H45</td><td>150 – 205</td><td>Min. 130</td><td>4</td><td>-</td><td>-</td><td>2.0t</td></tr></table> ** Information values only										Thickness range (mm)	Temper	Rm MPa	Rp _{0,2} MPa	A ₅₀ %	Hardness* HB	Bend radius**		180°	90°	0.5 < t < 1.5	H44	140 – 185	Min. 110	4	-	2.0t	1.5t	t > 3.0	H44	140 – 185	Min. 110	5	-	2.0t	1.5t	0.5 < t < 1.5	H45	150 – 205	Min. 130	4	-			t > 3.0	H45	150 – 205	Min. 130	4	-	-	2.0t
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Typical Alumeco products with this alloy • Painted sheets in standard colors and thicknesses 1,0; 1,5; 1,8 and 2 mm (1000x2000; 1250x2500; 1500x3000) • Standard polyester wet painted sheets app. 20 my in white, black and grey																																																			
Properties and information (3 high/good; 2 medium; 1 poor/bad) <table><tr><td> Resistance Corrosion index, general: 3 Marine atm. corr. index: 3 Hot workability Extrusion: 3 Forging: 3 Cold formability Cold formability general: 2 Deep drawing: 1 Bending: 2 </td><td> Weldability TIG welding: 3 MIG welding: 3 The painting needs to be removed before welding. Solderability 3 The painting needs to be removed before soldering. </td><td> Machinability Machinability index: 1 Tips regarding machining Tools for aluminum processing: High-usable cutting speeds, possibly> 2000 m / min. </td><td> Anodizing Decorative anodizing surface treatment: - Protective anodizing index: - Hard anodizing: - Color anodizing: - </td></tr></table>										Resistance Corrosion index, general: 3 Marine atm. corr. index: 3 Hot workability Extrusion: 3 Forging: 3 Cold formability Cold formability general: 2 Deep drawing: 1 Bending: 2	Weldability TIG welding: 3 MIG welding: 3 The painting needs to be removed before welding. Solderability 3 The painting needs to be removed before soldering.	Machinability Machinability index: 1 Tips regarding machining Tools for aluminum processing: High-usable cutting speeds, possibly> 2000 m / min.	Anodizing Decorative anodizing surface treatment: - Protective anodizing index: - Hard anodizing: - Color anodizing: -																																						
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