

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			Main properties			Important norms and literature									
<ul style="list-style-type: none"> <li>• Facade panels</li> <li>• Covers</li> <li>• Deep-drawn parts</li> <li>• Pre-painted coils/sheets</li> </ul>			<ul style="list-style-type: none"> <li>• Very good atmospheric corrosion resistance</li> <li>• Very good workability</li> <li>• Very good weld ability</li> <li>• Low mechanical properties</li> </ul>			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															
Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other elements							
0.6	0.7	0.05 – 0.20	1.0 – 1.5	-	-	0.10	0.05	Each	together	0.05	0.15				
Typical mechanical properties EN 1396															
Thickness range (mm)	Temper	Rm MPa	Rp0,2 MPa	A50 %	Hardness* HB	Bend radius**									
0.5 < t < 1.5	H44	140 – 185	Min. 110	4	-	180°	90°								
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								
** Information values only															
Physical properties															
Density g/cm <sup>3</sup>	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity W/m K	Thermal expansion (µm m <sup>-1</sup> K <sup>-1</sup> )	Annealing temperature °C	E - modulus (N / mm <sup>2</sup> )									
2.73	640 - 655	42	160	23.1	350 - 400	69,500									
Typical Alumeco products with this alloy															
<ul style="list-style-type: none"> <li>• Painted sheets in standard colors and thicknesses 1,0; 1,5; 1,8 and 2 mm (1000x2000; 1250x2500; 1500x3000)</li> <li>• Standard polyester wet painted sheets app. 20 my in white, black and grey</li> </ul>															
Properties and information (3 high/good; 2 medium; 1 poor/bad)															
<u>Resistance</u> Corrosion index, general: 3 Marine atm. corr. index: 3  <u>Hot workability</u> Extrusion: 3 Forging: 3  <u>Cold formability</u> Cold formability general: 2 Deep drawing: 1 Bending: 2			<u>Weldability</u> TIG welding: 3 MIG welding: 3  The painting needs to be removed before welding.  <u>Solderability</u> 3 The painting needs to be removed before soldering.			<u>Machinability</u> Machinability index: 1  <u>Tips regarding machining</u> Tools for aluminum processing: High-usable cutting speeds, possibly > 2000 m / min.			<u>Anodizing</u> Decorative anodizing surface treatment: - Protective anodizing index: - Hard anodizing: - Color anodizing: -						