

Data Sheet					Internal alloy name: 3003				
EN AW 3003 – Painted coils					International alloy name: EN AW 3003				
Alumeco A/S					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				
• Facade panels • Covers • Deep-drawn parts • Pre-painted coils/sheets		• Very good atmospheric corrosion resistance • Very good workability • Very good weld ability • Low mechanical properties			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	
								Each	together
0.6	0.7	0.05 – 0.20	1.0 – 1.5	-	-	0.10	0.05	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/cm³	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity W/m K	Thermal expansion (µm m ⁻¹ K ⁻¹)	Annealing temperature °C	E - modulus (N / mm²)			
2.73	640 - 655	42	160	23.1	350 - 400	69,500			
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)									
<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: -		