

Data Sheet					Internal alloy name: 3003				
EN AW 3003 – Rolled products					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				
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 485 - 2									
Thickness range (mm)		Temper	Rm MPa	Rp0,2 MPa	A50 %	Hardness* HB	Bend radius**		
							180°	90°	
0.5 up to 1.5		H14	145 – 185	Min. 125	2	46	2.0t	1.0t	
1.5 up to 3.0		H14	145 – 185	Min. 125	3	46	2.0t	1.0t	
3.0 up to 6.0		H14	145 – 185	Min. 125	4	46	-	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									
• Coils in width of 1000 mm in thicknesses 0,63; 0,75; 0,88; 1,00 mm. • Materials are typically Continuously Cast (CC) materials									
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: 3 Deep drawing: 2 Bending: 3 Be aware that the formability categorizations depend on the temper of the alloy.		<u>Weldability</u> TIG welding: 3 MIG welding: 3 <u>Solderability</u> 3		<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: 3 (CC cast materials 1) Protective anodizing index: 3 Hard anodizing: 3 Color anodizing: 3 (CC cast materials 1) <u>General information</u> Decorative anodizing cannot be recommended for continuously cast (CC) materials		