

Data Sheet: EN AW 3105 Alumeco A/S		Internal alloy name: 3105 International alloy name : EN AW 3105 Chemical Symbol: EN AW – Al Mn0,5Mg0,5 DIN-Werkstoff no.: 3.0505 Alloy type: Non heat treatable alloy								
Main usage: <ul style="list-style-type: none"> • Facade panels • Covers • Deep-drawn parts • Pre-painted coils/sheets 	Main properties: <ul style="list-style-type: none"> • Very good atmospheric corrosion resistance • Very good workability • Suitable for decorative anodizing* • Very good weld ability. • Low mechanical properties. 	Important norms and literature: Cold rolled products: EN485-1: Technical conditions for inspection and delivery EN485-2: Mechanical properties EN485-4: Tolerances on dimensions and form cold rolled products EN1396: Coil coated sheet and strip for applications - Specifications Chemical composition: EN573-3: Chemical composition Deep-drawn parts: EN1669: Earing test for sheet and strip								
		Finstock: EN683-1: Technical conditions for inspection and delivery EN683-2: Mechanical properties EN683-3: Tolerances on dimensions and form Foil: EN546-1: Technical conditions for inspection and delivery EN546-2: Mechanical properties EN546-3: Tolerances on dimensions and form EN546-4: Special property requirements								
Chemical composition. EN573-3:2013										
Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Remark s	Other elements Each together	
0,6	0,7	0,30	0,30 - 0,8	0,20 – 0,8	0,20	0,40	0,10	-	0,05	0,15
Typical mechanical properties. EN485 - 2										
Thickness range (mm)	Temper	Rm MPa	Rp _{0,2} MPa	A ₅₀ %	Hardness* HB	Bend radius**				
						180°	90°			
0,5 up to 1,5	0	100 – 155	Min. 40	15	29	0t				
0,5 up to 1,5	H14	150 – 200	Min. 130	2	48	2,5t				
1,5 up to 3,0	H14	150 – 200	Min. 130	2	46	2,5t				
** Information values only;										
Physical properties:										
Density g/cm ³	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity W/m K	Thermal expansion (µm m ⁻¹ K ⁻¹)	Annealing temperature °C	E - modulus (N / mm ²)				
2,72	635 - 655	42	160	23,3	330 - 400	69.500				
Typical Alumeco products with this alloy <ul style="list-style-type: none"> • Sheets in the size of 0,5 – 6 mm in three different sizes (1000x2000; 1250x2500; 1500x3000) and tempers H14 • 1 – 3 mm warehouse materials (Continuously Cast) • Deep-drawn sheets in the size of 1 – 2 mm • Strips/Coils 										
Properties and information's (3 high/good; 2 Middle; 1 Poor/bad)										
Resistance: Corrosion index, general: 3 Marine Atm. Corr index: 3 Hot workability: Extrusion: 3 Forging: 3 Cold formability: Cold formability general: 2 Deep drawing: 2 Bending: 2		Weldability TIG welding: 3 MIG welding: 3 Solderability Brazability index: 3 Solderability index: 3		Machinability Machinability index: 2 Tips on machinability: Tools for aluminum processing: high-usable cutting speeds, possibly > 2000 m / min.			Anodizing: Decorative anodizing surface treatment: 2 Protective anodizing index: 2 Hard anodizing: 2 Color anodizing: 2 General Information: -			