

Data Sheet EN AW 5005A – Rolled products Alumeco A/S		Internal alloy name: 5005A International alloy name: EN AW 5005A Chemical Symbol: EN AW – AlMg1 DIN-Werkstoff no.: 3.3535 Alloy type: None heat treatable alloy
Main usage <ul style="list-style-type: none"> • Molds • Machines and machines parts • Marine applications • Application for bending • Facade and building industry • Can be used in the food industry 	Main properties <ul style="list-style-type: none"> • High corrosion resistance • Good weld abilities • Special anodizing quality can be obtained on request 	Important norms and literature Rolled products: EN 485-1: Technical conditions for inspection and delivery EN 485-2: Mechanical properties EN 485-3: Tolerances on dimensions and form hot rolled products EN 485-4: Tolerances on dimensions and form cold rolled products Chemical composition: EN 573-3: Chemical composition Usages: EN 13195: Specifications for wrought products for marine applications EN 602: Usage in the food industry

Chemical composition (%) EN 573-3

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other elements	
								Each	together
0.30	0.45	0.05	0.15	0.7-1.1	0.10	0.20	-	0.05	0.15

Typical mechanical properties EN 485-2

Thickness range (mm)	Temper	Rm MPa	Rp0,2 MPa	A _{50 mm} %	Hardness* HB	Bend radius*	
						180°	90°
0.5 up to 1.5	H14	145 - 185	Min. 120	Min. 2	48	2.0t	1.0t
1.5 up to 3.0	H14	145 - 185	Min. 120	Min. 3	48	2.5t	1.0t
3.0 up to 6.0	H14	145 - 185	Min. 120	Min. 4	48		2.0t

* 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)
2.70	630 - 655	52	201	23.5	350 – 400	69,000

Typical Alumeco products with this alloy

- sheet and plates (1 – 3 mm thickness)
- Foil coated materials
- Cut to length is possible
- Special anodizing quality plates (AQ)

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: 2 – 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> 2	<u>Machinability</u> Machinability index: 1	<u>Anodizing</u> Decorative anodizing surface treatment: 2** Protective anodizing index: 3 Hard anodizing: 3 Color anodizing: 2 <u>General information</u> ** A special anodizing quality is available by request.
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