

Data Sheet EN AW 5754 – Rolled products and tread plates Alumeco A/S		Internal alloy name: 5754 International alloy name: EN AW 5754 Chemical Symbol: EN AW – AlMg3 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 • Etc. 	Main properties <ul style="list-style-type: none"> • High corrosion resistance • Good weld abilities 	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 EN 1386: Tread plate - Specifications Usages: EN 13195: Specifications for wrought products for marine applications EN 602: Chemical composition of semi-finished products for the used for the fabrication of articles for use in contact with foodstuff Chemical composition: EN 573-3: Chemical composition

Chemical composition (%) EN 573-3

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Remarks	Other elements Each together	
0.40	0.4	0.10	0.5	2.6-3.6	0.30	0.20	0.15	Mn + Cr 0.1 - 0.6	0.05	0.15

Typical mechanical properties EN 485 – 2 and EN 1386 (Tread Plates)

Thickness range (mm)	Temper	Rm MPa	Rp0,2 MPa	A _{50 mm} %	Hardness* HB	Bend radius*	
						180°	90°
0.5 up to 1.5	H111	190 - 240	Min. 80	Min. 14	52	0.5t	0.5t
1.5 up to 3.0	H111	190 - 240	Min. 80	Min. 16	52	1.0t	1.0t
3.0 up to 6.0	H111	190 - 240	Min. 80	Min. 18	52	1.0t	1.0t
0.5 up to 1.5	H22	220 - 270	Min. 130	Min. 8	63	1.5t	1.0t
1.5 up to 3.0	H22	220 - 270	Min. 130	Min. 10	63	2.0t	1.5t
1.5 up to 3.0**	H114	190 - 260	Min. 80	Min. 10	-	-	2.0t
3.0 up to 6.0**	H114	190 - 260	Min. 80	Min. 12	-	-	2.0t

* Information values only
 ** EN1386 – Tread Plates

Physical properties

Density g/cm ³	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity W/m K	Thermal expansion ($\mu\text{m m}^{-1} \text{K}^{-1}$)	Annealing temperature °C	E - modulus (N / mm ²)
2.66	610 - 640	32.5	132	23.7	350 – 400	70,500

Typical Alumeco products with this alloy

- Sheets and plates
- 3/5 and 5/7 tread plate

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: 2 Forging: 2 <u>Cold formability</u> Cold formability general: 2 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> 1	<u>Machinability</u> Machinability index: 2	<u>Anodizing</u> Decorative anodizing surface treatment: 1 Protective anodizing index: 3 Hard anodizing: 3 Color anodizing: 2 <u>General information</u> Decorative anodizing can be a challenge due to the composition of the alloy.
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