

EN AW-5754

Alloy's characteristics

Alloy:	EN AW-5754 [AlMg3]
Type of Alloy:	non heat treatable
Temper:	H111
Surface:	rolled skin

Mechanical Properties ¹⁾

Yield strength $R_{p0,2}$	[MPa]	80
Ultimate tensile strength R_m	[MPa]	190 – 240
Elongation A_{50}	[%]	17 – 18
Hardness HBW		52

Physical Properties ¹⁾

Density	[g/cm ³]	2,67
Module of elasticity	[GPa]	70
Electrical conductivity	[M/Ω · mm ²]	20 – 23
Coeffic. of thermal expansion	[K ⁻¹ · 10 ⁻⁶]	23,9
Thermal conductivity	[W/m · K]	140 – 160
Specific heat capacity	[J/kg · K]	900

Processing Characteristics ²⁾

Dimensional stability	3 – 4
Machinability	4
Erodability	1
Weldability (Gas / TIG / MIG / Resistance / EB)	2 / 1 / 1 / 3 / 1
Corrosion resistance (seawater / weather/ stress cracking)	1 / 1 / 4
Use at temperatures (max °C long/short terms) ³⁾	120 / 180
Anodising (technical / decorative / hard-) ⁴⁾	1 / 2 / 1
Polishability	1 – 2
Etching	4 – 5
Contact with food (according to EN 602)	yes

Tolerances

Thickness in [mm]	Flatness [mm/m]	Thickness [mm]	Length & width [mm]
5 - 50	EN 485-3	EN 485-3	EN 485-3
Cuttings			DIN ISO 2768-1m

Standard Lieferprogramm

Plate Dimension [mm]	1.520 x 3.020	in thickness of 5 – 50 mm
Plate Thickness [mm]	5; 6; 8; 10; 12;	
	15; 20; 25; 30; 35; 40; 50	

Other dimension upon request

Characteristics:

- ✓ seawater resistant
- ✓ very good anodizing properties
- ✓ very good weldability

Applications:

- ✓ Shipbuilding
- ✓ mechanical engineering
- ✓ welded constructions
- ✓ Container and plant construction

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1) Typical values at room temperature

2) Ratings evaluation rating from 1 (very good) to 6 (inapplicable)

3) Without loss of strength after cooling down..

4) Technical anodising only - no warranty towards optical demands