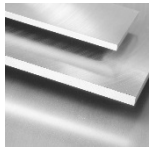


Alloy Designation

ALUMINIUM Quality according to DIN EN 573-3	PREMIUM EN AW-5754
Chem. Designation according to DIN EN 573-3	EN AW-AMg3
Abbreviation according to DIN 1712-3	AMg3
Material No. / Werkstoff-Nr. according to DIN 1712-3	3.3535

Specification



ALU-Präz® [ALU]
L: 500 mm
L: 1,000 mm



Round aluminium [RA]
pressed
L: 500 mm
L: 1,000 mm

Chemical composition EN AW 5754 (reference values as weight percent)

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Annotation
0 – 0.4	0 – 0.4	0 – 0.1	0 – 0.5	2.6 – 3.6	0 – 0.3	0 – 0.2	0 – 0.15	0.1 – 0.6 Mn + Cr

Mecanical properties (ambient temperatur / thickness dependent)

Tensile strength R_m	ca. 190 - 240 [N/mm ²]
Yield strength $R_{p0.2}$	80 [MPa]
Elongation A_{50}	16 - 17 [%]
Hardness (delivery condition)	max. 50 [HB]

Physical properties (ambient temperatur / characteristic values)

Density	2.67 [g/cm ³]
Modulus of elasticity	~ 70 [GPa]
Electrical conductivity	20 - 23 [m/Ω · mm ²]
Thermal expansion coefficient	23.9 [K ⁻¹ · 10 ⁻⁶]
Thermal conductivity	140 - 160 [W/m · K]
Specific thermal capacity	900 [J/kg · K]

Technical properties

The alloy EN AW 5754 (here cast version*) has a medium strength even in soft condition. The very good corrosion resistance, especially against seawater, should be emphasized. Furthermore, it is easily weldable and suitable for use at an elevated work piece temperature.

* applies to flat material only

Applications

Vehicle construction, naval construction, metal- and container construction, apparatus engineering, architecture, food industry, mechanical engineering.

