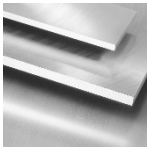


Alloy Designation

ALUMINIUM Quality according to DIN EN 573-3	PREMIUM EN AW-7075
Chem. Designation according to DIN EN 573-3	EN AW-AlZn5.5MgCu
Abbreviation according to DIN 1712-3	AlZnMgCu1.5
Material No. / Werkstoff-Nr. according to DIN 1712-3	3.3465

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 7075 (reference values as weight percent)

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
0 – 0.4	0 – 0.5	1.2 – 2.0	0 – 0.3	2.1 – 2.9	0.18 – 0.28	5.1 – 6.1	0 – 0.2

Mecanical properties (ambient temperatur / thickness dependent)

Tensile strength R_m	ca. 360 - 540 [N/mm ²]
Yield strength $R_{p0.2}$	240 - 460 [MPa]
Elongation A_{50}	2 - 8 [%]
Hardness (delivery condition)	max. 140 [HB]

Physical properties (ambient temperatur / characteristic values)

Density	2.8 [g/cm ³]
Modulus of elasticity	71 [GPa]
Electrical conductivity	19 - 23 [m/Ω · mm ²]
Thermal expansion coefficient	23.4 [K ⁻¹ · 10 ⁻⁶]
Thermal conductivity	130 - 160 [W/m · K]
Specific thermal capacity	862 [J/kg · K]

Technical properties

This hardenable material is characterised by its good dimensional stability and high strength. To achieve the potential of strength a heat treatment such as solution heat treatment and subsequently artificial ageing is recommended.

Applications

Aviation, mechanical engineering, tool making, jigs and fixtures, mould making, machine casing, reference plates, robotic arms, defence technology.

