

## EN AW 7075

Alloy's Characteristics	
Alloy	EN AW 7075 [AlZn5,5MgCu]
Temper	T6 / T651 / T6511
Surface	pressed finish

Mechanical Properties <sup>1)</sup>		Typical values
Yield strength $R_{p0,2}$	[MPa]	400 - 500
Ultimate tensile strength $R_m$	[MPa]	470 - 560
Elongation $A_5$	[%]	5 - 7
Hardness HBW	[2,5/62,5]	150

Physical Properties <sup>1)</sup>		Text	Typical values
Density	[g/cm <sup>3</sup> ]		2,80
Module of elasticity	[GPa]		~ 70
Electrical conductivity	[m/Ω · mm <sup>2</sup> ]		19 - 23
Coefficient of thermal expansion	[K <sup>-1</sup> · 10 <sup>-6</sup> ]		23,4
Thermal conductivity	[W/m · K]		130 - 160
Specific heat capacity	[J/kg · K]		896

Processing Characteristics <sup>2)</sup>		
Dimensional stability		4 - 5
Machinability		2
Erodability		1
Weldability (Gas / TIG / MIG / Resistance / EB)		6 / 6 / 6 / 2 / 5
Corrosion resistance (seawater / weather/ stress cracking)		5 / 5 / 3
Use at temperatures (max °C long/short terms) <sup>3)</sup>		90 / 120
Anodising (technical / decorative / hard-) <sup>4)</sup>		3 / 6 / 2
Polishability		1
Etching		1
Contact with food (according to EN 602)		nein

Tolerances			
Thickness in [mm]	Flatness [mm] <sup>5)</sup>	Thickness [mm]	Width & Length [mm]
EN 755-3, EN 754-3	EN 755-3, EN 754-3	EN 755-3, EN 754-3	EN 755-3, EN 754-3
Sawing in length/width [mm]	-0 / +5		

Standard Stock Sizes	
Dimension [mm]	3.000 in thickness of 10 - 300 mm
Other dimension upon request	

Date: 12.07.2016

- 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.
- 5) Surface flatness for whole plates is measured with a special, 1 meter long, digital flatness ruler.