

HABA Alu7075

As-rolled or milled, high-tensile aluminium rolled plates cut to size

DIN Material no.	3.4365
Designation	EN AW-7075 EN AW-AlZn5.5MgCu
Material code	AlZnMgCu1.5
State	T6/T651

Alu7075 is an artificially aged rolled plate with very high tensility and hardness. The material can be easily machined. Slight bending is possible.

FINISHES

Thickness
Tolerance
Protective film
Cardboard
Parallelism
Evenness

MILLED ROLLED BLANKS

milled Ra0.8 (N6)
+/-0.1 mm
two-sided
one-sided
≤0.1 mm
≤0.2 mm

AS-ROLLED BLANKS

Thickness
Tolerance
Parallelism

Parallelism

as-rolled
EN 485-3/4
≤1 mm on the plate or ≤0.2/100 mm
or EN 485-3/4
≤0.5 mm or EN 485-3/4

MILLED AND AS-ROLLED BLANKS

Length/width
Customer-specific tolerance
Kundenspezifische Toleranz

Ra3.2-6.3 cut with a
precision circular saw
nominal size +0.8/+0.3 mm
within a tolerance field of 0.4 mm

We also produce other thicknesses and tolerances on request.

TECHNICAL SPECIFICATIONS

Thickness (mm)	<50	50-100	>100
Tensile strength R_m (N/mm ²)	≥500	≥480-500	≥400
Yield strength $R_{p0.2}$ (N/mm ²)	≥450	≥390-430	≥280
Breaking strain ($L_o = 5 d_o$)			
A_5	3-8%	≥2%	≥2%
Brinell hardness (HBS)	≥140	≥130	≥120
Density	2.81 kg/dm ³		
E-module	~71.000 N/mm ²		
Thermal conductivity coefficient	130-160 W/mK		
Thermal expansion coefficient	23.4 x 10 ⁻⁶ /K		
Electrical conductivity	19-23 m/Ω mm ²		
State	T6	<10 mm	
	T651	>10 mm	

CHEMICAL COMPOSITION

Magnesium	Mg	2.10-2.90 %	Copper	Cu	1.20-2.00 %
Manganese	Mn	≤0.30 %	Titanium	Ti	≤0.20 %
Chromium	Cr	0.18-0.28 %	Zinc	Zn	5.10-6.10 %
Iron	Fe	≤0.50 %	Ti + Zr		≤0.25 %
Silizium	Si	≤0.40 %	Rest		≤0.15 %

MATERIAL IN USE

Vehicle construction
Jig manufacturing
Mechanical engineering
Toolmaking
Mould construction
Aircraft construction

APPLICATIONS

Base plates
Pattern plates
Punches

PROPERTIES

machinability	very good
weldability	limited
tensility	very high
hardness	very high
Contact with foodstuffs	no

SURFACE TREATMENT

Decorative anodisation	unsuitable
Protective anodisation	good
Paintwork, coating	good
Galvanic coating	good
Chemical nickel coating	good

INSTRUCTIONS

Decreasing rigidity and hardness in the core of thick plates. Above 150 mm thickness, change to G-Alu340 or a naturally hardened 5083 plate.

We declare that our products are not suitable for any other applications and purposes, other than those specified here and do not have other product properties than those specified here.

