

# 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 <sup>2</sup> )	≥500	≥480-500	≥400
Yield strength $R_{p0.2}$ (N/mm <sup>2</sup> )	≥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 <sup>3</sup>		
E-module	~71.000 N/mm <sup>2</sup>		
Thermal conductivity coefficient	130-160 W/mK		
Thermal expansion coefficient	23.4 x 10 <sup>-6</sup> /K		
Electrical conductivity	19-23 m/Ω mm <sup>2</sup>		
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.

