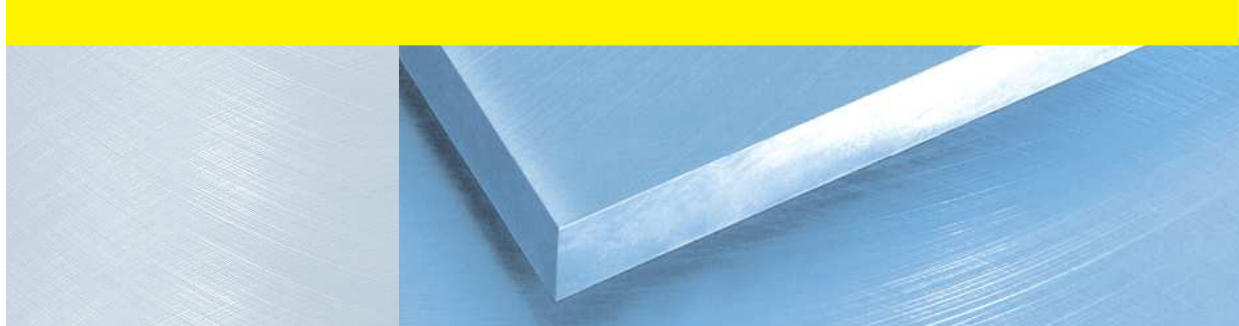


# HABA Alu50

EN AW-7022  
EN AW-AlZn5Mg3Cu  
Material code: AlZnMgCu0.5  
Material no.: 3.4345  
State: T6/T651

Milled, high-tensile aluminium rolled plates  
cut to size



## Finishes

### Thickness

precisely milled  $\leq Ra0.8$  (N6)  
tolerance  $+0.2/0$  mm  
one-sided protective film  
one-sided cardboard

### Parallelism

$\leq 0.1$  mm

### Evenness

$\leq 0.2$  mm

### Length/width

Ra3.2-6.3

cut with a precision circular saw

### HABA standard tolerance

nominal size  $+0.8/+0.3$  mm

### Customer-specific tolerance

within a tolerance field of 0.4 mm

## Surface treatment

Decorative anodisation: moderate  
Protective anodisation: good  
Paintwork, coating: good  
Galvanic coating: good  
Chemical nickel coating: excellent

We also produce other thicknesses and tolerances on request.

## Technical specifications

Thickness (mm)	<50	50-100	>100
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### Tensile strength

$R_m$ (N/mm <sup>2</sup> )	$\geq 450$	$\geq 430$	$\geq 410$
typical values	$\sim 520$	$\sim 490$	$\sim 470$

### Yield strength

$R_{p0.2}$ (N/mm <sup>2</sup> )	$\geq 370$	$\geq 350$	$\geq 330$
typical values	$\sim 460$	$\sim 430$	$\sim 400$

### Breaking strain ( $L_0 = 5 d_0$ )

$A_5$	$\geq 7\%$	$\geq 5\%$	$\geq 3\%$
typical values	$\sim 9\%$	$\sim 8\%$	$\sim 5\%$

### Brinell hardness

(HBS)	$\geq 125$	$\geq 110$	$\geq 100$
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Density 2.78 kg/dm<sup>3</sup>

E-module  $\sim 71.000$  N/mm<sup>2</sup>

### Thermal conductivity coefficient

130-160 W/mK

### Thermal expansion coefficient

$23.6 \times 10^{-6}/K$

### Electrical conductivity

19-23 m/ $\Omega$  mm<sup>2</sup>

### State

<10 mm T6  
>10 mm T651

## Chemical composition

Mg	2.6-3.7 %	Si	$\leq 0.50$ %
Mn	0.1-0.4 %	Cu	0.5-1.0 %
Cr	0.1-0.3 %	Ti+Zr	$\leq 0.2$ %
Fe	$\leq 0.50$ %	Zn	4.3-5.2 %

## Material in use

Special purpose machinery  
Jig manufacturing  
Prototype construction  
Mechanical engineering  
Toolmaking  
Mould construction  
Plant construction

## Applications

Base plates  
Rotary tables  
Pattern plates  
Machined and engineered parts of all kinds

## Properties

very good machinability  
good dimensional stability  
high tensility and hardness

## Instructions

HABA Alu50 is well suited for machining. Use tools for working aluminium with a cutting speed  $>2000$  m/min.  
Decreasing rigidity in the core of thick plates.

