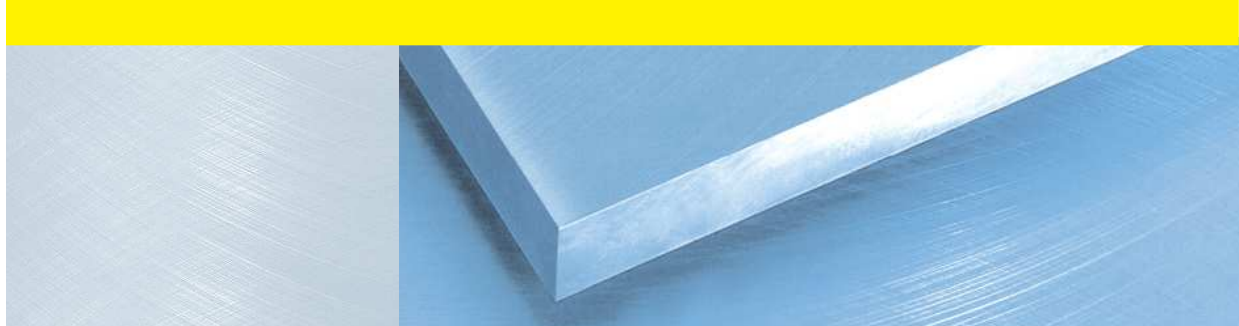


HABA Alu50

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

≤ 0.1 mm

Evenness

≤ 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 ²)	≥ 450	≥ 430	≥ 410
typical values	~ 520	~ 490	~ 470

Yield strength

$R_{p0.2}$ (N/mm ²)	≥ 370	≥ 350	≥ 330
typical values	~ 460	~ 430	~ 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)	≥ 125	≥ 110	≥ 100
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Density 2.78 kg/dm³

E-module ~ 71.000 N/mm²

Thermal conductivity coefficient

130-160 W/mK

Thermal expansion coefficient

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

Electrical conductivity

19-23 m/ Ω mm²

State

<10 mm T6
>10 mm T651

Chemical composition

Mg	2.6-3.7 %	Si	≤ 0.50 %
Mn	0.1-0.4 %	Cu	0.5-1.0 %
Cr	0.1-0.3 %	Ti+Zr	≤ 0.2 %
Fe	≤ 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.

