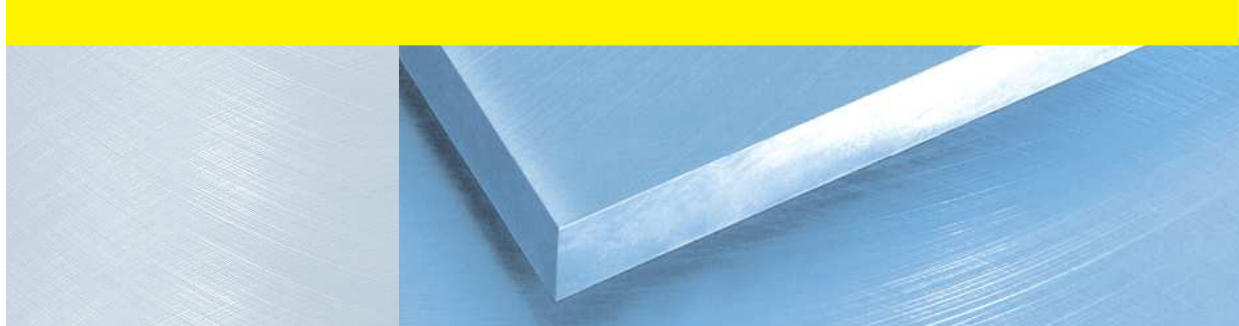


HABA Alu28

EN AW-5083
EN AW-AMg4.5Mn0.7
Material code: AlMg4.5Mn
Material no.: 3.3547
State: H111

Milled rolled aluminium plates
cut to size



Finishes

Thickness

precisely milled $\leq Ra0.8$ (N6)
tolerance ± 0.1 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
cut edges deburred

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:	excellent
Paintwork, coating:	good
Galvanic coating:	good
Chemical nickel coating:	excellent

Instructions

HABA Alu28 is well suited for machining.

Use tools for working aluminium with a cutting speed >2000 m/min. Threads are produced favourably with thread moulders.

Technical specifications

Tensile strength

R_m 255-350 (N/mm²)

Yield strength

$R_{p0.2}$ ≥ 105 (N/mm²)
typical values 140-200 (N/mm²)

Breaking strain ($L_0 = 5 d_0$)

A_5 ≥ 12 %
typical values 17-22 %

Brinell hardness

(HBS) ≥ 70

Density

2.66 kg/dm³

E-module

~ 70.000 N/mm²

Thermal conductivity coefficient

110-140 W/mK

Thermal expansion coefficient

24.2×10^{-6} /K

Electrical conductivity

16-19 m/ Ω mm²

State

H111 (soft)

Chemical composition

Mg 4.0-4.9 %	Cu ≤ 0.10 %
Mn 0.4-1.0 %	Ti ≤ 0.15 %
Cr 0.05-0.25 %	Zn ≤ 0.25 %
Fe ≤ 0.40 %	other elements
Si ≤ 0.40 %	single < 0.05 %
	together < 0.15 %
	rest alu

We also produce other thicknesses and tolerances on request.

Material in use

Plant and apparatus construction
Vehicle construction
Jig manufacturing
Prototype construction
Mechanical engineering
Toolmaking and mould construction
Ship and offshore construction
Low-temperature technology

Applications

Base plates
Rotary tables
Side walls
Machined and engineered parts of all kinds
Foam and sample moulds

Properties

consistent strength in the core of thicker plates
good machinability
good dimensional stability
good MIG/TIG weldability
excellent corrosion resistance against weather and seawater
high tenacity and elongation

