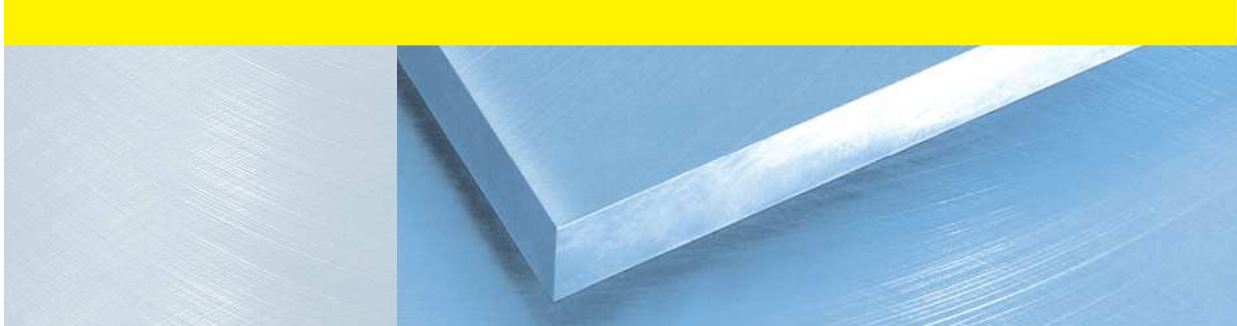


# HABA Alu35

Grinded rolled aluminium plates  
cut to size

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



## Finishes

### Thickness

grinded Ra1.6 (N7)  
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:	excellent
Paintwork, coating:	good
Galvanic coating:	good
Chemical nickel coating:	excellent

## Instructions

HABA Alu35 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/mm<sup>2</sup>)

### Yield strength

$R_{p0.2}$  ≥105 (N/mm<sup>2</sup>)  
typical values 140-200 (N/mm<sup>2</sup>)

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

$A_5$  ≥12 %  
typical values 17-22%

### Brinell hardness

(HBS) ≥ 70

### Density

2.66 kg/dm<sup>3</sup>

### E-module

~70.000 N/mm<sup>2</sup>

### Thermal conductivity coefficient

110-140 W/mK

### Thermal expansion coefficient

24.2 x 10<sup>-6</sup>/K

### Electrical conductivity

16-19 m/Ω mm<sup>2</sup>

### 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  
very good dimensional stability  
good MIG/TIG weldability  
excellent corrosion resistance against weather and seawater  
high tenacity and elongation

