

# HABA G-Alu340

Sawn or milled aluminium casting plates  
cut to size

G-Alu340 is an aluminium casting plate with significantly higher dimensional stability than naturally hardened casting plates. We achieve the persistent equal strength with a multi-stage process of heat-treating and natural aging. The material stands out for its excellent machinability and great stability.

## FINISHES

Thickness  
tolerance  
Parallelism  
Evenness

## SAWN BLANKS

cut by band saw Ra25 (N11)  
+1/0 mm  
≤0.3 mm  
≤0.5 mm

## PRECISELY MILLED BLANKS

Thickness  
tolerance  
protective film  
cardboard  
Parallelism  
Evenness

precisely milled Ra0.8 (N6)  
+/-0.1 mm  
one-sided  
one-sided  
≤0.05 mm  
≤0.2 mm

## MILLED AND SAWN BLANKS

Length/width

Ra3.2-6.3  
cut with a precision circular saw

HABA standard tolerance  
Customer-specific tolerance

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

Tensile strength  $R_m$  ≥340 (N/mm<sup>2</sup>)  
Yield strength  $R_{p0.2}$  ≥300 (N/mm<sup>2</sup>)  
Breaking strain ( $L_o = 5 d_o$ )  $A_5$  ≥5 %  
Brinell hardness (HBS) ≥110  
Density 2.77 kg/dm<sup>3</sup>  
E-module ~70.000 N/mm<sup>2</sup>  
Thermal conductivity coefficient 110-120 W/mK  
Thermal expansion coefficient  $24 \times 10^{-6}/K$   
Electrical conductivity 20-27 m/Ω mm<sup>2</sup>

## GAS IMPERMEABILITY

Suitable for vacuum applications up to 20 mbar.

## CHEMICAL COMPOSITION

Magnesium	Mg	0.70-1.30 %	Copper	Cu	≤0.055 %
Manganese	Mn	0.001-0.125 %	Titanium	Ti	0.009-0.16 %
Chromium	Cr	0.080-0.24 %	Zinc	Zn	4.90-5.90 %
Iron	Fe	0.070-0.20 %	Other elements together		-
Silicium	Si	≤0.10 %	Other elements individually		-

DIN Material no.	-
Designation	7xxx
Material code	(AlZn5Mg1)
State	Casting plate

## MATERIAL IN USE

Material in use  
Mechanical engineering  
Special purpose machinery  
Jig manufacturing  
Toolmaking  
Mould construction  
Apparatus construction

## APPLICATIONS

Base plates  
Rotary tables  
Table tops  
Foam, deep-draw and sample moulds  
Machined and engineered parts of all kinds

## PROPERTIES

machinability very good  
dimensional stability good  
MIG/TIG weldability good  
Weatherproofness good  
Seawater resistance good

## SURFACE TREATMENT

Decorative anodisation good  
Protective anodisation good  
Paintwork, coating good  
Galvanic coating good  
Chemical nickel coating good

## INSTRUCTIONS

HABA G-Alu340 is well suited for machining. The chippings are short and break well. Use tools for working aluminium with a cutting speed >2000 m/min. Threads are produced favourably with thread moulders.

