

HABA Horizontal Cast 5754

Sawn or milled aluminium casting plates | cut to size

Horizontal Cast 5754 is a naturally hardened aluminium casting plate which fulfils the most demanding machinability and dimensional stability requirements. G-Almg3 is excellent suited for decorative and technical anodizing. The special casting process is the guarantee for the homogenous join and the vacuum tightness.

FINISHES

(on request)

Thickness
Tolerance

SAWN BLANKS

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

FINELY MILLED BLANKS

Thickness
tolerance
protective film
Parallelism
Evenness

precisely milled Ra0.8 (N6)
+/-0.05 mm
on both sides
≤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

Ultimate tensile strength	R_m	190-230 (N/mm ²)
Yield tensile strength	$R_{p0.2}$	≥80 (N/mm ²)
Elongation at break (guaranteed)	($L_0 = 5 d_0$) A_5	≥12 %
Elongation at break (typical)	($L_0 = 5 d_0$) A_5	≥20 %
Brinell hardness	(HBS)	~50
Density		2.66 kg/dm ³
Elastic modulus		70.500 N/mm ²
Thermal conductivity		140-160 W/mK
Thermal expansion coefficient		24 x 10 ⁻⁶ /K
Electrical conductivity		20-23 m/Ω mm ²
State		homogenised, O3

CHEMICAL COMPOSITION

Magnesium	Mg	2.60-3.60 %	Copper	Cu	≤0.10 %
Manganese	Mn	≤0.50 %	Titanium	Ti	≤0.15 %
Chromium	Cr	≤0.30 %	Zinc	Zn	≤0.20 %
Iron	Fe	≤0.40 %	Other elements together		≤0.15 %
Silicium	Si	≤0.40 %	Other elements individually		≤0.05 %

DIN Material no.	3.3535
Designation	Cast plate, similar: EN AW-5754 EN AW-AMg3
Material code	AlMg3
State	homogenised, O3

MATERIAL IN USE

Plant and apparatus construction
Jig manufacturing
Prototype construction
Mechanical engineering

APPLICATIONS

Base plates
Rotary tables
Side walls

PROPERTIES

machinability	very good
dimensional stability	great
MIG/TIG weldability	good
Weatherproofness	excellent
Seawater resistance	excellent
technical anodisation	very good
decorative anodisation	very good
Contact with foodstuffs	yes

SURFACE TREATMENT

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

INSTRUCTIONS

Horizontal Cast 5754 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.

We declare that our products are not suitable for any other applications and purposes, other than those specified here and do not have other product properties than those specified here.

