HABA HC7021

Milled aluminium casting plates | cut to size

DIN Material no.	-
Designation	EN AW-7021
Material code	AlZn5.5Mg1.5
State	T73

HABA HC7021 is a age-hardened, horizontally cast aluminum plate that meets the most stringent requirements for strength and machining properties. The special manufacturing process is according to strict HABA factory standards. These standards apply to all process steps and are a guarantee for the excellent properties, homogeneous microstructure, and gas- and vacuum tightness. Temper T73 ensures the best corrosion resistance.

FINISHES

Thickness	precisely milled Ra0.8 (N6)
Tolerance	+/-0.1 mm
Protective film	on both sides
Cardboard	one-sided
Parallelism	≤0.05 mm
Flatness	≤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

We also produce other thicknesses, tolerances and plates cut by band saw on request.

TECHNICAL SPECIFICATIONS

Tensile strength	R_m	340-390 (N/mm²)
Yield strength	$R_{p0.2}$	280-340 (N/mm²)
Breaking strain	($L_o = 5\ d_o$) A_5	> 3 %
Brinell hardness	(HBS)	≥125
Density		2.80 kg/dm³
E-module		~70.000 N/mm²
Thermal conductivity coefficient		125-155 W/mK
Thermal expansion coefficient		22-24 x 10^{-6}/K
Electrical conductivity		21-24 m/Ω mm²

INSTRUCTIONS

HABA HC7021 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.

CHEMICAL COMPOSITION

Magnesium	Mg	1.20-1.80 %	Copper	Cu	≤0.25 %
Manganese	Mn	≤0.10 %	Titanium	Ti	≤0.10 %
Chromium	Cr	≤0.05 %	Zinc	Zn	5.00-6.00 %
Iron	Fe	≤0.40 %	Other elements together		≤0.15 %
Silicium	Si	≤0.25 %	Other elements individually		≤0.05 %

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

PROPERTIES

Machinability	very good
Dimensional stability	very good
Weldability (WIG/MIG)	very good
Weatherproofness	good
Seawater resistance	good
Contact with foodstuffs	no

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

GAS IMPERMEABILITY

Suitable for vacuum applications

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.

HABA Solutions in plates

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