

McBasic

Milled aluminium cast plates
cut to size

McBasic is a naturally hardened casting plate with good machinability and dimensional stability. Ideally suited for price-sensitive products in larger quantities.

FINISHES

Thickness	precisely milled Ra0.8 (N6)
Tolerance	+/-0.1 mm
Protective film	on both sides
Parallelism	≤0.1 mm
Evenness	≤0.4 mm
Length/width	Ra3.2-6.3 cut with precision circular saw
HABA standard tolerance	nominal size +1/0 mm

TECHNICAL SPECIFICATIONS

Tensile strength R_m	≥250 (N/mm ²)
Yield strength $R_{p0.2}$	≥115 (N/mm ²)
Breaking strain ($L_o = 5 d_o$) A_5	6-10 %
Brinell hardness (HBS)	≥70
Density	2.66 kg/dm ³
E-module	~70.000 N/mm ²
Thermal conductivity coefficient	110-140 W/mK
Thermal expansion coefficient	24 x 10 ⁻⁶ /K
Zustand	homogenised (O3)

INSTRUCTIONS

McBasic 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	4.00-4.90 %	Copper	Cu	≤0.10 %
Manganese	Mn	0.40-1.00 %	Titanium	Ti	≤0.15 %
Chromium	Cr	0.05-0.25 %	Zinc	Zn	≤0.25 %
Iron	Fe	≤0.40 %	Other elements together		≤0.15 %
Silicium	Si	≤0.40 %	Other elements individually		≤0.05 %

DIN Material no.	3.3547
Designation	Cast plate, similar: EN AW-5083 EN AW-AMg4.5Mn0.7
Material code	AMg4.5Mn
State	homogenised (O3)

MATERIAL IN USE

Plant and apparatus construction
Vehicle construction
Jig manufacturing
Mechanical engineering
Low-temperature technology

APPLICATIONS

Base plates
Rotary tables
Side walls

PROPERTIES

machinability	good
dimensional stability	good
MIG/TIG weldability	good
Weatherproofness	excellent
Seawater resistance	excellent
Contact with foodstuffs	yes

SURFACE TREATMENT

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

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.

