McBasic

Milled aluminium cast plates cut to size

DIN Material no.	3.3547
Designation	Cast plate, similar:: EN AW-5083 EN AW-AlMg4.5Mn0.7
Material code	AlMg4.5Mn
State	homogenised

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

MATERIAL IN USE

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

APPLICATIONS

Base plates
Rotary tables
Side walls
Machined and engineered parts of all kinds

TECHNICAL SPECIFICATIONS

Tensile strength R_m	≥250 (N/mm²)
Yield strength $R_{p0.2}$	≥115 (N/mm²)
Breaking strain (L_o = 5 d_o) A_5	6-10 %
Brinell hardness (HBS)	≥70
Density	2.66 kg/dm³
E-module	~70.000 N/mm²
Thermal conductivity coefficient	110-140 W/mK
Thermal expansion coefficient	24 x 10^{-6}/K
Zustand	homogenised

PROPERTIES

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

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.

SURFACE TREATMENT

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

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 %

HABA Solutions in plates

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