

# HABA Planalu N & G

Rolled aluminium plates  
cut to size

Planalu is a naturally hard rolled plate with good machinability and good dimensional stability. It is easy to weld, is extremely corrosion-resistant and suitable for metallic coatings.

## FINISHES PLANALU N & G

Thickness	rolled EN 485-3/4
Parallelism	EN 485-3/4 ( $\leq 0.2/100$ )
Evenness	EN 485-3/4
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

## PLANALU G

is additionally low-tension annealed

## TECHNICAL SPECIFICATIONS

Tensile strength $R_m$	255-350 (N/mm <sup>2</sup> )
Yield strength $R_{p0.2}$	$\geq 105$ (N/mm <sup>2</sup> )
typical values	140-200 (N/mm <sup>2</sup> )
Breaking strain ( $L_o = 5 d_o$ ) $A_5$	$\geq 12$ %
typical values	17-22%
Brinell hardness (HBS)	$\geq 70$
Density	2.66 kg/dm <sup>3</sup>
E-module	$\sim 70.000$ N/mm <sup>2</sup>
Thermal conductivity coefficient	110-140 W/mK
Thermal expansion coefficient	$24.2 \times 10^{-6}/K$
Electrical conductivity	16-19 m/ $\Omega$ mm <sup>2</sup>
State	H111 (soft)

## INSTRUCTIONS

HABA Planalu N and G are well suited for machining. 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	$\leq 0.10$ %
Manganese	Mn	0.40-1.00 %	Titanium	Ti	$\leq 0.15$ %
Chromium	Cr	0.05-0.25 %	Zinc	Zn	$\leq 0.25$ %
Iron	Fe	$\leq 0.40$ %	Other elements together		$\leq 0.15$ %
Silicium	Si	$\leq 0.40$ %	Other elements individually		$\leq 0.05$ %

DIN Material no.	3.3547
Designation	EN AW-5083 EN AW-AMg4.5Mn0.7
Material code	AMg4.5Mn
State	H111

## MATERIAL IN USE

Plant and apparatus construction  
Vehicle construction  
Jig manufacturing  
Prototype construction  
Mechanical engineering  
Toolmaking and mould construction  
Ship and offshore construction  
Low-temperature technology

## APPLICATIONS

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

## PROPERTIES

strength in the core	
of thicker plates	consistent
machinability	good
dimensional stability	good
MIG/TIG weldability	good
Weatherproofness	excellent
Seawater resistance	excellent
Contact with foodstuffs	yes
tenacity	high
elongation	high

## SURFACE TREATMENT

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

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