

# HABA K52 (Konstrukta52)

Engineering steel

Grinded plates cut to size

Material no.	1.0577
Steel quality	Engineering steel
Designation	S355J2+N

Extremely low-tension engineering steel which is specially low-tension annealed at HABA and is easy to weld. It is used for intensively processed machine components of all kinds where a high degree of dimensional stability is required.

## FINISHES

Thickness	grinded $\leq$ Ra1.6 (N7)
Tolerance	+0.25/0 mm
Parallelism	$\leq$ 0.05 mm
Evenness	$\leq$ 0.2 mm
Length/width	Ra6.3-12.5 cut with a precision circular saw
HABA standard tolerance	nominal size +1.0/0 mm
Customer-specific tolerance	within a tolerance field of 0.4 mm
Surface refinement	All metallic and non-metallic coatings

We also manufacture rolled and milled blanks on request as well as special thicknesses and tolerances.

## TECHNICAL SPECIFICATIONS

Tensile strength $R_m$	470-630 (N/mm <sup>2</sup> )
Yield strength $R_{eH}$	295-355 (N/mm <sup>2</sup> )
Breaking strain $(L_o = 5 d_o) A_5$	17-22 %
Impact energy $A_V$ (J)	$\geq$ 27, test temp. -20°C
Density	7.85 kg/dm <sup>3</sup>
E-module	$\sim$ 210 kN/mm <sup>2</sup>
Thermal conductivity coefficient	35-45 (W/mK)
Thermal expansion coefficient	11-14 (10 <sup>-6</sup> /K)

## MATERIAL IN USE

Apparatus construction  
 Specialised mechanical engineering  
 Jig manufacturing  
 Prototype construction  
 Mechanical engineering  
 Toolmaking  
 Mould construction  
 Plant construction

## APPLICATIONS

Base plates  
 Mounting plates  
 Table tops  
 Machined and engineered parts of all kinds

## PROPERTIES

machinability	very good
dimensional stability	very good
weldability	good

## CHEMICAL COMPOSITION

Carbon	C	$\leq$ 0.20 %	Chromium	Cr	-
Silicium	Si	$\leq$ 0.55 %	Molybdenum	Mo	-
Manganese	Mn	$\leq$ 1.60 %	Nickel	Ni	-
Phosphor	P	$\leq$ 0.035 %	Vanadium	V	-
Sulfur	S	$\leq$ 0.035 %	Nitrogen	N	-

