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 Ra1.6 (N7)
Tolerance	+0.25/0 mm
Parallelism	≤0.05 mm
Flatness	≤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/mm²)
Yield strength	R_{eH}	295-355 (N/mm²)
Breaking strain	(L_o = 5 d_o) A_5	17-22 %
Impact energy	A_V (J)	≥27, test temp. -20°C
Density		7.85 kg/dm³
E-module		~210 kN/mm²
Thermal conductivity coefficient		35-45 (W/mK)
Thermal expansion coefficient		11-14 (10^{-6}/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

PROPERTIES

machinability	very good
dimensional stability	very good
weldability	good

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.

CHEMICAL COMPOSITION

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

HABA Solutions in plates

V. 2025_03