

HABA PLANSTAHL

Engineering steel

Grinded plates cut to size

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

Normalised heat-treated steel well suited for welding and for basic machine components. Planstahl comes mainly into use in mechanical engineering, vehicle and tool construction.

FINISHES

Thickness	grinded $\leq Ra1.6$ (N7)
Tolerance	+0.3/0 mm
Parallelism	≤ 0.1 mm
Evenness	≤ 0.3 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 ²)
Yield strength	R_{eH}	295-355 (N/mm ²)
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/dm ³
E-module		~ 210 kN/mm ²
Thermal conductivity coefficient		35-45 (W/mK)
Thermal expansion coefficient		11-14 (10 ⁻⁶ /K)

MATERIAL IN USE

Apparatus construction
Jig manufacturing
Mould construction
Mechanical engineering
Toolmaking

APPLICATIONS

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

PROPERTIES

machinability good
dimensional stability good
weldability good

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	-

