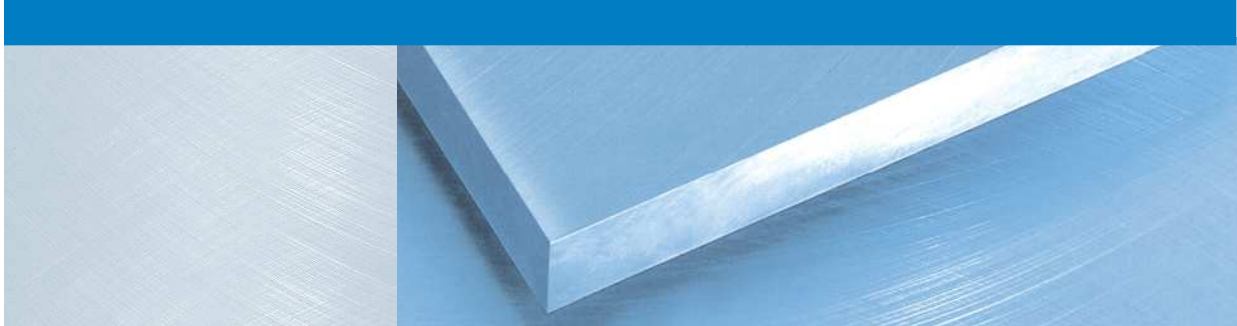


HABA EC80

1.7131 / 16MnCr5

Case-hardened steel

Grinded plates cut to size



Finishes

Thickness

grinded Ra1.6 (N7)
tolerance +0.4/+0.3 mm

Parallelism

≤0.05 mm

Evenness

≤0.15 mm

Length/width

Ra6.3-12.5
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

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 ca. 700 (N/mm²)

Yield strength

R_e ca. 550 (N/mm²)

Breaking strain ($L_0 = 5 d_0$)

A_5 9-11 %

Impact energy

A_V (J) ≥34

Density

7.85 kg/dm³

E-module

~210 kN/mm²

Thermal conductivity coefficient

(W/mK) 35-45

Thermal expansion coefficient

(10⁻⁶/K) 11-14

Brinell hardness

HB 138-187

Chemical composition

C 0.14-0.19 % P ≤0.035 %

Si ≤0.40 % S ≤0.035 %

Mn 1.0-1.3 % Cr 0.8-1.1 %

Material in use

Mechanical engineering
Special purpose machinery
Mould construction
Prototype construction
Jig manufacturing
Toolmaking
Plant construction
Apparatus construction

Applications

Feeders
Gear-wheels
Piston rods
Sliding rods
Equipment base plates
Clamping and hole grid systems
Bending beams
Edging tool

Properties

very good machinability
very good dimensional stability
hardenable: case hardening
nitriding