

HC220B+ZE

Steels with high yield strength
for cold forming – bake hardening

Material no.	1.0396
according to	DIN EN 10268:2006

Surface finish

Thickness range

03	0,50 – 1,50
05 ¹⁾	0,50 – 1,50

¹⁾ By agreement

Chemical composition¹⁾

(in percent by weight)

	min.	max.
C		0,06 %
Si		0,5 %
Mn		0,7 %
P		0,08 %
S		0,030 %
Al	0,015 %	

Mechanical properties (transverse)

Yield strength $R_e^{1)}$
220 – 270 MPa

Tensile strength R_m
320 – 400 MPa

Total elongation $A_{80}^{2)}$
≥ 32 %

Hardening exponent n_{90}
≥ 0,16

Anisotropy r_{90}
≥ 1,5

Bake Hardening BH_2
≥ 35 MPa

The samples for the tensile test are taken at right angles to rolling direction unless the product is opposed to this.

¹⁾ $R_{eL}/R_{p0,2}$

²⁾ Reduced minimum values of elongation are valid for thicknesses ≤ 0,5 mm (minus 4 units) and for thicknesses > 0,5 mm and ≤ 0,7 mm (minus 2 units).

Available dimensions

Thickness in mm	Width in mm
0,50 – 0,59	900 – 1.685
0,60 – 2,00	900 – 1.850
2,01 – 3,00 ¹⁾	900 – 1.850

¹⁾ Surface A only