



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

O3	0,50 - 1,50
O5 ¹⁾	0,50 - 1,50

1) By agreement

Chemical composition¹⁾

(in percent by weight)

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

2) Heat analysis

Mechanical properties (transverse)

Yield strength $R_e^{3)}$ in MPa
220 - 270
Tensile strength R_m in MPa
320 - 400
Total elongation $A_{80}^{4)}$ in %
≥ 32

Hardening exponent n_{90}
≥ 0,16

Anisotropy r_{90}
≥ 1,5

Bake Hardening BH_2 in MPa
≥ 35

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

3) $R_{eL}/R_{p0,2}$

4) 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 ⁵⁾	900 - 1.850

5) Surface A only