



## HC220B

Steels with high yield strength  
for cold forming - bake hardening

Material no.	1.0396
according to	DIN EN 10268

### Surface finish

Thickness range

O3	0.50 - 3.00
O5 <sup>1)</sup>	0.50 - 2.00

1) By agreement

### Chemical composition<sup>2)</sup>

(in percent by weight)

	min. in %	max. in %
C		0.06
Si		0.5
Mn		0.7
P		0.08
S		0.025
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
0.60 - 2.00	900 - 1,850

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