



## HC180B+ZE

Steels with high yield strength  
for cold forming - bake hardening

Material no.	1.0395
according to	DIN EN 10268:2006

### Surface finish

Thickness range

O3	0,50 - 2,00
O5 <sup>1)</sup>	0,50 - 2,00

1) By agreement

### Chemical composition<sup>1)</sup>

(in percent by weight)

	min. in %	max. in %
C		0,05
Si		0,5
Mn		0,7
P		0,06
S		0,030
Al	0,015	

2) Heat analysis

### Mechanical properties (transverse)

<b>Yield strength <math>R_e^{3)}</math> in MPa</b>
180 - 230

<b>Tensile strength <math>R_m</math> in MPa</b>
290 - 360

<b>Total elongation <math>A_{80}^{4)}</math> in %</b>
$\geq 34$

<b>Hardening exponent <math>n_{90}</math></b>
$\geq 0,17$

<b>Anisotropy <math>r_{90}</math></b>
$\geq 1,6$

<b>Bake Hardening <math>BH_2</math> in MPa</b>
$\geq 35$

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  $\leq 0,5$  mm (minus 4 units) and for thicknesses  $> 0,5$  mm and  $\leq 0,7$  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 <sup>5)</sup>	900 - 1.850

5) Surface A only