



HC180B

Steels with high yield strength
for cold forming – bake hardening

Material no.	1.0395
according to	DIN EN 10268

Surface finish

Thickness range

O3	0.50 – 3.00
O5 ¹⁾	0.50 – 2.00

1) By agreement

Chemical composition²⁾

(in percent by weight)

	min. in %	max. in %
C		0.05
Si		0.5
Mn		0.7
P		0.06
S		0.025
Al	0.015	

2) Heat analysis

Mechanical properties (transverse)

Yield strength Re³⁾ in MPa
180 – 230

Tensile strength R_m in MPa
300 – 360

Total elongation A₈₀⁴⁾ in %
≥ 34

Hardening exponent n₉₀
≥ 0.17

Anisotropy r₉₀
≥ 1.6

Bake Hardening BH₂ 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	900 – 1,850

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