



HC420LA

Micro-alloyed steel grades
with high yield strength for cold forming

Material no.	1.0556
according to	DIN EN 10268, Edition 10/06

Chemical composition¹⁾ (in percent by weight)

	min. in %	max. in %
C		0.1
Si		0.5
Mn		1.6
P		0.025
S		0.025
Al	0.015	
Nb		0.09 ²⁾
Ti		0.15 ²⁾

1) Heat analysis

2) These additional elements may be added single or in combination, if they are contained in the specification of the steel grade and the mass fraction being within the permissible limits. Vanadium can also be added. The total of the mass fractions of all three elements shall not exceed 0.22%.

Mechanical properties (transverse)

Yield strength $R_{eL}/R_{p0.2}$ in MPa
400 – 500
Tensile strength R_m in MPa
470 – 590
Total elongation A_{80} in %
≥18

Products according to this European Standard must meet the requirements for transverse test pieces as given in table 2.

It may be agreed that the requirements for longitudinal test pieces, as given in table 3, shall be valid instead of those for transverse test pieces.

Available dimensions

Thickness in mm	Width in mm
0.60 – 0.69	1,000 – 1,500
0.70 – 1.39	900 – 1,600
1.40 – 2.00	900 – 1,700
2.01 – 2.35	900 – 1,600
2.36 – 3.00	900 – 1,500

Surface finish

The steel grade is available in the surface finishes A and O3.

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