

16MnCr5

Case-hardened steels

Material no.	1.7131
according to	DIN EN 10084
Tensile strength class	B

Usage

When either hot- or cold-rolled, casehardened steels are predominantly used for transmission parts (plate springs, clutch disks). The hot-rolled steels offer good punching quality and formability. After case-hardening, the finished components have a very strong core, whereas the surface is characterised by good wear resistance.

As the melting and hot-rolling conditions have an effect on further treatment at the customer, the customer should always state the intended use when placing an order.

Chemical composition ¹⁾

(in percent by weight)

	min.	max.
C	0,14%	0,19%
Si		0,40%
Mn	1,0%	1,3%
P		0,025%
S		0,025%
Cr	0,80%	1,10%

1) Heat analysis

Available dimensions

Hot-rolled coils unpickled, mill edge

Thickness in mm	Width in mm
2,00 – 2,24	900 – 1400
2,25 – 2,49	900 – 1450
2,50 – 2,99	900 – 1500
3,00 – 3,99	900 – 1680
4,00 – 12,70	900 – 1750

Thicknesses > 12,70 mm on request

Hot-rolled slit strip

Thickness in mm	Width in mm
2,00 – 2,24	100 – 690
2,25 – 2,49	100 – 715
2,50 – 2,99	100 – 740
3,00 – 4,50	100 – 800
4,50 – 6,00	116 – 800
6,01 – 7,00	175 – 800
7,01 – 8,00	233 – 800

Widths < 100 mm on request

Condition of delivery, scope of testing and certificate

The provisions of EN 10084, chapters 6.4.1 and 7 shall apply for delivery and inspection. All case-hardened steels are delivered in a hot-rolled and untreated condition.