

C45

Medium-Carbon Engineering Steel

W.-Nr. 1.0503

AISI/SAE 1045

EN 10083-2

Delivery +A, +N, +QT

Density 7.85 g/cm³

CHEMICAL COMPOSITION

ELEMENT	WEIGHT %
C	0.42–0.50
Si	≤ 0.40
Mn	0.50–0.80
P	≤ 0.030
S	≤ 0.035
Cr	≤ 0.40
Mo	≤ 0.10
Ni	≤ 0.40

INTERNATIONAL EQUIVALENTS

EN	C45	JIS	S45C
W.-Nr. (DIN)	1.0503	GOST	45
AISI/SAE	1045	BS 970 (UK)	≈ 080M46 / EN8
ASTM	A29 / A576 (1045)	GB (China)	45

TYPICAL APPLICATIONS

- Shafts, axles and spindles
- Gears and sprockets
- Pins, studs and bolts
- Hydraulic cylinder components
- Die and mold base plates
- Agricultural and construction machinery parts

Values are given per the relevant standard and are for information only; they do not replace the order specification. They may vary with section size, delivery condition and heat treatment. Binding values are those of the order confirmation and inspection document (EN 10204 3.1).

Quotation and stock

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