

Technical data sheet – C60 (1.0601)

- Unalloyed quality steel

Applications: High-stressed components in vehicle and mechanical engineering, axles, shafts, bolts

Chemical composition (acc. DIN EN ISO 683-1 (09/2018))

mass fraction in %				
C60	C [%]	Si [%]	Mn [%]	Cr [%]
	0,57 – 0,65	0,10 - 0,40	0,60 - 0,90	≤ 0,40
	P [%] max.	S [%] max.	Mo [%]	Cu [%]
	0,045	0,045	≤ 0,10	≤ 0,30
	Ni [%]	≤ 0,44		

Heat treatment

(acc. DIN EN ISO 683-1 (09/2018))

Normalizing
820 - 860 °C

Hardening
800 - 840 °C water >= 30 minutes
800 - 840 °C oil >= 30 minutes

Tempering
550 - 650 °C >= 1 hour

ISO 9001: 2015 TÜV NORD certified.

Mechanical properties (acc. DIN EN ISO 683-1 (09/2018))

Flat products (QT):

Dimensions

<= 8 mm
8 - 20 mm
20 - 60 mm

Yield strength (Re)

>= 580 MPa
>= 520 MPa
>= 450 MPa

Dimensions

<= 8 mm
8 - 20 mm
20 - 60 mm

Tensile strength (Rm)

850 - 1.000 MPa
800 - 950 MPa
750 - 900 MPa

Dimensions

<= 8 mm
8 - 20 mm
20 - 60 mm

Elongation (A 5,65)

>= 11%
>= 13 %
>= 14 %

Dimensions

<= 8 mm
8 - 20 mm
20 - 60 mm

Constriction (Z)

>= 25 %
>= 30 %
>= 35 %

Round products (QT):

Dimensions

<= 16 mm
16 - 40 mm
40 - 100 mm

Yield strength (Re)

>= 580 MPa
>= 520 MPa
>= 450 MPa

Dimensions

<= 16 mm
16 - 40 mm
40 - 100 mm

Tensile strength (Rm)

850 - 1.000 MPa
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