



STANDARD

CLASSIFICATION

FEATURES

UNI EN ISO 683-1: 2018

Steel rods, bars and wire for cold heading and cold extrusion - steels for quenching and tempering

Alloy special steel

C40E - Nr. 1.1186

Cr, Cr-B

CHEMICAL ANALYSIS

C	Si	Mn	P	S	Cr	Other
from 0,37 to 0,44	from 0,10 to 0,40	from 0,50 to 0,80	0,025 max	0,035 max	0,40 max	Cr+Mo+Ni = < 0,63
Mo	Ni	B	Cu	Al	Pb	
0,10 max	0,40 max	-	0,30 max	-	-	

MECHANICAL PROPERTIES

Diameter		As Hot Rolled (+U) or Rolled and peeled (+U +PE)		Annealed (+AC) or Annealed + Peeled (+AC +PE)		Cold Drawn (+U +C)		Cold Drawn and Annealed (+U +C +AC)		Cold Drawn then Annealed and Skin passed (+U +C +AC + LC)		Annealed and Cold Drawn (+AC +C)	
from	to	Rm (Mpa) max	Z (%) min	Rm (Mpa) max	Z (%) min	Rm (Mpa) max	Z (%) min	Rm (Mpa) max	Z (%) min	Rm (Mpa) max	Z (%) min	Rm (Mpa) max	Z (%) min
2	16	-	-	580	16	-	-	-	-	-	-	-	-
16	100	-	-	550	17	-	-	-	-	-	-	-	-

In case of specific needs, contact our sales offices to evaluate feasibility and agree on the values of Rm.

EQUIVALENT STEEL GRADES

EUROPE (EN)	GERMANY (DIN, WNr)	FRANCE (AFNOR)	ITALY (UNI)	CHINA (GB)	FINLAND (SFS)	INTERN (ISO)
C40E	CK40	XC42H1	C40	40	-	C40E4
USA (SAE)	JAPAN (JIS)	UK (BS)	SPAIN (UNE)	SWEDEN (SS)	RUSSIA (GOST)	
1040	S40C	080M40	F.1141	-	40	

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