



STANDARD

CLASSIFICATION

FEATURES

UNI EN 10269: 2013

Non Alloy Steel Wire Rod For Conversion to Wire - wire rod for specials applications

Non Alloy Steel

C45E - Nr. 1.1191

Structural pressure vessel and engineering steels with C < 0,5%

CHEMICAL ANALYSIS

C	Si	Mn	P	S	Cr	Other
from 0,42 to 0,50	0,40 max	from 0,50 to 0,80	0,030 max	0,015 max	0,40 max	Cr+Mo+Ni = < 0,63
Mo	Ni	B	Cu	Al	Pb	
0,10 max	0,40 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	60	-	-	-	-	-	-	-	-	-	-	-	-

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)
C45E	Ck45	XC48H1	C45	45	C45	C45E4
USA (SAE)	JAPAN (JIS)	UK (BS)	SPAIN (UNE)	SWEDEN (SS)	RUSSIA (GOST)	
1045	S45C	080M46	F.1140	1672	45	

Data contained in this document are intended for reference only and may be subject to continuous changes.

Giuseppe & F. lli Bonaiti SRL declines any and all responsibility for the consequences that may arise from their use.