

STANDARD REFERENCE:

EN 10088-3: 2005 (Hot-rolled and bright products)

RODACCIAI REFERENCES AND COMPARABLE STANDARDS

EUROPE		ITALY	GERMANY		FRANCE	UK	USA
EN 10088-3: 2005		(UNI 6900: 71)	(DIN 17440 - 85)		(NF A 35-574-90)	(BS 970 pt. 3-91)	AISI
Grade	N°		Werkstoff	N°			
X46Cr13	1.4034	(X 40 Cr 14)	X46Cr13	1.4034	Z 44 C 14	-	420

CHEMICAL COMPOSITION (CAST ANALYSIS) (%)

C	Si / max	Mn / max	P / max	S / max	Cr
0,43÷0,50	1,00	1,00	0,040	0,030	12,5÷14,5

MECHANICAL PROPERTIES - Cold drawn wire and coils (2H)

Tensile strength levels R _m (MPa)	+C 500	+C 650	+C 800	+C900
	500÷700	650÷850	800÷1000	900÷1100

Note: the desired tensile strength level shall be evaluated depending on diameter required

MECHANICAL PROPERTIES - Cold drawn wire and coils in the solution annealed condition (2D)

Size	0,50 ≤ d ≤ 1,00	1,00 ≤ d ≤ 3,00	3,00 ≤ d ≤ 5,00	5,00 ≤ d ≤ 16,00
R _m (MPa) max	1100	1050	1000	950
A (%) max	10	10	10	15

 Note: If skin passed, R_m might be increased by up to 50 MPa

WORKING TEMPERATURES RECOMMENDED

Operation	Hot forgings deformation	Annealing (furnace, air)	Quenching (air, oil)	Tempering (QT 850)
°C	900÷1100	750÷850	950÷1050	650÷700

