

STANDARD REFERENCE:
 EN 10095: 1999

RODACCIAI REFERENCES AND COMPARABLE STANDARDS

EUROPE		ITALY	GERMANY		FRANCE	UK	USA
EN 10095: 1999		(UNI 6900: 71)	-		(NF A 35-578-91)	(BS 1501 pt. 3-80)	AISI
Grade	N°		Werkstoff	N°			
X15CrNiSi25-21	1.4841	X 16 CrNiSi 25 20	-	-	Z 15 CNS 25 - 20	-	314

CHEMICAL COMPOSITION (CAST ANALYSIS) (%)

C / max	Si	Mn / max	P / max	S / max	N / max	Cr	Ni
0,20	1,50÷2,50	2,00	0,045	0,015	0,11	24,0÷26,0	19,0÷22,0

MECHANICAL PROPERTIES - Rough turned (1X) in the annealed condition

Size max (mm)	Hardness HB max***	R _{p0.2} (MPa) min	R _{p1} (MPa) min*	R _m (MPa)**	A ₅ (%) min**
100	223	230	270	550÷750	30

* Only for guidance ** The maximum HB values may be raised by 100HB or the tensile strength value may be raised by 200 MPa and the minimum A% value may be lowered to 20% for bars of ≤35 mm

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

Tensile strength levels	+C 600	+C 700	+C 800	+C 900	+C 1000	+C 1100	+C 1200	+C 1400	+C 1600
R _m (MPa)	600÷800	700÷900	800÷1000	900÷1100	1000÷1250	1100÷1350	1200÷1450	1400÷1700	1600÷1900

*for reference only

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	0,10 ≤ d ≤ 0,20	0,20 ≤ d ≤ 0,50	0,50 ≤ d ≤ 1,00	1,00 ≤ d ≤ 3,00	3,00 ≤ d ≤ 5,00	5,00 ≤ d ≤ 16,00
R _m (MPa) max	1050	1000	950	900	850	800
A (%) min	20	30	30	30	35	35

*for reference only

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

WORKING TEMPERATURES RECOMMENDED

Operation	Hot forgings deformation	Solution annealing (water, air)
°C	950÷1200	1050÷1150

