

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°			
X6CrMoS17	1.4105	X 10 CrS 17	X6CrMoS17	1.4105	Z 8 CF 17	-	430F

CHEMICAL COMPOSITION (CAST ANALYSIS) (%)

C / max	Si / max	Mn / max	P / max	S	Cr	Mo
0,08	1,50	1,50	0,040	0,15÷0,35	16,0÷18,0	0,20÷0,60

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

Size max (mm)	Hardness HB max*	Rp _{0.2} (MPa) min	R _m (MPa)	A ₅ (%) min	Resistance to intergranular corrosion	
					in the delivery condition	in the welded condition
100	200	250	430÷630	20	NO	NO

**only for guidance*
MECHANICAL PROPERTIES - Cold drawn (2H, 2B) and ground bars (2G) in the solution annealed condition

Size max (mm)	Rp _{0.2} (MPa) min	R _m (MPa)	A ₅ (%) min*
≤ 10	330	530÷780	7
> 10 ≤ 16	310	500÷780	7
> 16 ≤ 40	250	430÷730	12
> 40 ≤ 63	250	430÷730	12
> 63 ≤ 100	250	430÷630	20

** Values valid only for size ≥ 5 mm*
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	0,10 ≤ 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	900	850	850	800	750	700
A (%) max	10	15	15	15	15	20

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

Operation	Hot forgings deformation	Annealing (air)
°C	800÷1100	750÷850