

RODACCIAI REFERENCES AND COMPARABLE STANDARDS

EUROPE		ITALY	GERMANY		FRANCE	UK	USA
EN 10088-3: 2005		(UNI 6900: 71)	(DIN 1654-5: 89)		(NF A 35-574-90)	(BS 3111 pt.2 -79)	AISI
Grade	N°	-	Werkstoff	N°	-	-	-
-	-	-	-	-	-	-	-

CHEMICAL COMPOSITION (CAST ANALYSIS) (%)

	C	Mn	Si	S*	P	Cr	Ni	Cu	N
min	-	5,00	-	-	-	16,00	3,00	1,00	0,15
max	0,10	9,00	1,00	0,015	0,045	19,00	6,00	4,00	0,20

* for bars S=0,015 - 0,030

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

Classe di resistenza	+C 600	+C 700	+C 800	+C900	+C 1000	+C 1100
R _m (MPa)	600÷800	700÷900	800÷1000	900÷1100	1000÷1250	1100÷1350

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

* For reference only

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

CARATTERISTICHE MECCANICHE - Bars, wire and coils for cold heading *

Size mm	as Treated (+AT) or Peeled (+AT+PE)		Cold drawn (+AT +C)		Cold drawn + Solution Annealed (+AT +C +AT)		Cold drawn + Solution Annealed + Skin passed (+AT +C +AT +LC)	
	R _m (MPa) max	Z (%) min	R _m (MPa) max	Z (%) min	R _m (MPa) max	Z (%) min	R _m (MPa) max	Z (%) min
≥2 ≤5	-	-	-	-	600	68	650	63
> 5 ≤10	590	68	740	-	590	68	640	63
> 10 ≤25	590	68	740	-	590	68	-	-
> 25 ≤50	590	68	-	-	-	-	-	-

* For reference only

WORKING TEMPERATURES RECOMMENDED

Operation	Hot forgings deformation	Solution annealing (water, air)
°C	900÷1200	1000÷1100