STANDARD REFERENCE:

EN ISO 683-4: 2018 (Hot-rolled products) | **EN ISO 683-7: 2024** (Bright products)

RODACCIAI REFERENCES AND COMPARABLE STANDARDS

EUROPE		ITALY	GERMANY		FRANCE	UK	USA
(EN 10087: 1998) (EN 10277-3: 2008)		(UNI 4838-80)	(DIN 1651-88)		(NF A 35-561-92)	(BS 970 pt.3-91)	ASTM A 29
Grade	N°		Werkstoff	N°			
11SMn30	-	CF 9 SMn 28	9 SMn28	1.0715	S250	230M07	-

CHEMICAL COMPOSITION (CAST ANALYSIS) (%)

C / max	Si / max	Mn	P / max	S	Bi *
0,14	0,05	0,90÷1,30	0,11	0,27÷0,33	0,03÷0,20

* These elements shall be reported in the inspection document according to EN ISO 683-4 table 2.

MECHANICAL PROPERTIES OF BRIGHT STEEL

Size mm	as Rolled and/or as Rolled + Turned (+SH)		Cold Drawn (+C)		
	Hardness HB max	R_m (MPa)	$Rp_{0,2}$ (MPa) min	R_m (MPa)	A5 (%) min
≥5 ≤10	-	-	440	510÷810	6
>10 ≤16	-	-	410	490÷760	7
>16 ≤40	169	380÷570	375	460÷710	8
>40 ≤63	169	370÷570	305	400÷650	9
>63 ≤100	154	360÷520	245	360÷630	9

For size <5 mm the mechanical properties may be agreed at the time of enquiry and order

WORKING TEMPERATURES RECOMMENDED

Operation	Hot forgings deformation	Normalizing	Soft annealing
°C	950÷1250	870÷910	650÷700

rev. 01/2026