



QUALITY	39NiCrMo3	W.NR. 1.6510
REFERENCE NORM HOT ROLLED STEEL PRODUCTS		UNI EN 10083-3 2006
REFERENCE NORM BRIGHT STEEL PRODUCTS		UNI EN 10277

CHEMICAL COMPOSITION (%)

	C	Si (max)	Mn	P (max.)	S (max)	Cr	Mo	Ni
39NiCrMo3	0,35 ÷ 0,43	0,40	0,50 ÷ 0,80	0,025	0,035	0,60 ÷ 1,00	0,15 ÷ 0,25	0,70 ÷ 1,00

MECHANICAL PROPERTIES HOT ROLLED QUENCHED & TEMPERED STEEL (ISO 683-3)

Size (mm)	ReH (MPa) Min.	Rm (MPa)	A% Min.	Z% Min	KV Min (J) Amb.
d ≤ 16mm	785	980 + 1180	11	40	
t ≤ 8mm					
16mm < d ≤ 40mm	735	930 + 1130	11	40	35
8mm < t ≤ 20mm					
40mm < d ≤ 100mm	685	880 + 1080	12	45	40
20mm < t ≤ 60mm					
100mm < d ≤ 160mm	635	830 + 980	12	50	40
60mm < t ≤ 100mm					
160mm < d ≤ 250mm	540	740 + 880	13	50	40
100mm < t ≤ 160mm					

MECHANICAL PROPERTIES BRIGHT STEEL PRODUCTS (UNI EN 10277)

Size (mm)	(+A+SH) ANNEALED + PEELED	(+A+C) ANNEALED + COLD DRAWN	(QT+C) QUENCHED & TEMPERED + COLD DRAWN			
	Hardness (HBW) Max.	Hardness (HBW) Max.	Rp0,2 (MPa) Min.	Rm (MPa)	A5 (%) min.	KV Min (J) Amb
5 ≤ t ≤ 10		295	735	900 + 1180	8	
10 < t ≤ 16		290	700	930 + 1130	8	
16 < t ≤ 40	240	285	700	930 + 1130	9	
40 < t ≤ 63	240	280	625	880 + 1080	10	
63 < t ≤ 100	240	280	600	880 + 1080	10	

Jominy test values HRC (ISO 683-1)

Distance from ends mm	1,5	3	5	7	9	11	13	15	20	25	30
MAX	60	60	59	58	58	57	57	56	55	52	51
MIN	52	51	50	49	48	46	44	43	39	36	34

Distance from ends mm	35	40	45	50
MAX	49	48	46	45
MIN	33	32	31	30

Indicative values based on current regulations.