

Quality	14NiCrMo 13 - 4
According to Standard	EN 10084 : 1998
Number	1.6657



Comparable Standards	EN	W.N.	Italy
	14NiCrMo 13 - 4	1.6657	16NiCrMo12

Chemical Analysis	C %	Si % max	Mn %	P% max	S%	Cr %
	0.11 to 0.17	0.40	0.30 to 0.60	0.035	≤ 0.035	0.80 to 1.10
	Mo %	Ni %	B			
	0.10 to 0.25	3.00 to 3.50	—			

#### Hot Work and Heat Treatment Temperatures

End quench test Quenching <sup>2)</sup> °C	Carburizing temperature <sup>3)</sup> °C	Core-hardening temperature <sup>4),5)</sup> °C	Case-hardening temperature <sup>4),5)</sup> °C	Tempering <sup>6)</sup> °C
880	880 to 980	840 to 880	780 to 820	150 to 200

#### Mechanical Properties at Room Temperature

Mechanical Properties for the ruling section with a diameter )d) or for flat products thickness (f) of				
Re min. MPa <sup>c</sup>	Rm	A min. %	Z min. %	KV <sup>b</sup> min. J
-	-	-	-	-

Hardness Requirements for Products Delivered in the Conditions 'treated to improve shearability' (+S), 'annealed to maximum hardness requirements' (+A), 'treated to hardness range' (+TH), or 'treated to ferrite - pearlite structure and hardness range' (+FP)

Brinell Hardness in the Condition						
+S max.	+A max.	+TH min.		max.	+FP min.	max.
255	241	187	241	166	217	