



EN 31 DIN 100Cr6 AISI 52100

C 1.1 Si 0.25 Mn 0.6 Cr 1.40 S 0.5

Steel properties

EN31 steel stockholders and suppliers, delivering throughout the India. Virat Special Steel are stockholders and suppliers of EN31 through hardening steel in round, flat and square bar. EN31 could be a quality high carbon tool steel that offers a high degree of hardness with compressive strength and abrasion resistances.

Standards

AISI 52100 AFNOR 20NCD

Physical properties

Thermal conductivity °C W/(m • K)	20	350	700
	44.5	45.0	46.0

Applications

Acceptable for many automobile applications such as heavy duty gear, shaft, pinion, camshafts, gudgeon pins and machining components.

Heat treatment

Soft annealing °C 780-800	Cooling Furnace	Hardness HB max. 207				
Stress-relief annealing °C 600-650	Cooling Furnace					
1st pre-heating °C up to approx. 300 in an air-circulating furnace	2nd and 3rd pre-heating °C a) 800 b) 800 and 900	Hardening °C 800-820	Quenching a) Oil b) Quench	Tempering °C at least twice 150-200	Hardness after tempering HRC 61-63	

Tempering Graph

EFFECT OF TEMPERING ON CASE HARDNESS

