


# TECHNICAL GUIDE

## 535A99 / EN31 / 100CR6

### Steel Description

535A99 / EN31 / 100CR6 is a bright drawn carbon alloy steel which is supplied in the spheroidised annealed condition and offers a high measure of hardness with compressive strength and abrasion resistance. 535A99 / EN31 / 100CR6 is typically used for ball and roller bearings, bearing rings, collets and connecting rods.

BS970: 1955	BS970: 1991	COLOUR CODE	DESCRIPTION
EN31	535A99		Bright 1% carbon chromium steel

CHEMICAL ANALYSIS	
Car	0.95 / 1.10
Sil	0.10 / 0.35
Mang	0.40 / 0.70
Phos	0.040 max
Sul	0.050 max
Chr	1.20 / 1.60

INTERNATIONAL SPECIFICATION COMPARISON	
BRITISH BS 970:1991	535A99
BRITISH BS 970:1955	EN31
GERMAN DIN	100CR6
FRENCH AFNOR	100C6
SWEDISH SS	2258
AMERICAN SAE	52100
EUROPEAN STEEL NO.	1.2067
EUROPEAN STEEL NAME	
EUROPEAN STANDARD	

QUICK VIEW SYSTEM	
MACHINEABILITY	40
WELDABILITY	Seek advice
HARDENABILITY	High hardness and wear resistance
SELECTION GUIDE AND USAGE EXAMPLES	Machined components subject to abrasive wear & high surface loading. Ball and roller bearings

SIZE RANGE SUMMARY			
	Rounds	IMP	1/4" dia

SEE STOCK RANGE FOR SPECIFIC SIZES.