

STAINLESS STEEL - 420

RELATED SPECIFICATIONS:

Germany	W.Nr 1.4021 X20Cr13
Great Britain	BS970 Part 3 1991 420S37
Japan	JIS GR303 Sus 420J1
USA	UNS 42000
	SAE S1420 AISI 420
	ASTM A276-420

DESCRIPTION:

420 is a martensitic stainless steel with 12% Chromium which is sufficient to give good corrosive resistance properties. Its best corrosive resistance is when hardened and surface is ground or polished. It has good ductility in the annealed condition but can be hardened up to 500HB (highest of the chromium grades). Martensitic Grades are known for high hardness and allowances must be made for poor weldability and usually allowances for a final harden and temper treatment. Steel is magnetic and welding is not recommended.

APPLICATIONS:

Knives, surgical instruments, fasteners, shaft sleeves, spindles, nozzles, shafts and plastic moulds.

CHEMICAL ANALYSIS:

	C %	Si %	Mn %	P %	S %	Cr %
Min.	-	-	-	-	-	12.00
Max.	0.15	1.00	1.00	0.04	0.03	14.00

*Carbon Range can vary extensively from 420A (lowest carbon) increasing in carbon content to 420C.

TYPICAL MECHANICAL PROPERTIES:

Diameter	Condition	Tensile Strength MPa Min.	Yield Strength MPa min.	Elongation in 50mm % min.	Hardness Brillnell Max.
ALL	ANNEALED				>230
Up to 160mm	HARDENED & TEMPERED	850-1000	600	12	>280

*Hardened and Tempered usually supplied in Condition R or Condition S.

SIZES AVAILABLE:

Available stock is normally supplied in 420C (highest carbon range) and hardened and tempered Condition "R" to AS1444 standard.

Round bars supplied cold drawn to h9 condition up to 25.4mm, smooth turned and polished up to 127mm and peeled over 12.7mm

Size Range: 15.88mm – 220mm

COLOUR CODE: ROSE PINK END

