

STAINLESS STEEL - 630 / 17-4PH

RELATED SPECIFICATIONS:

Germany	W.Nr 1.4542 X5CrNiCuNb17-4
Japan	JIS G4303 SUS 630
USA	AISI 630
	ASTM A564-630
	UNS S17400

DESCRIPTION:

630 is a martensitic precipitation hardening, chromium, nickel, copper stainless steel. The steel can be hardened by a single ageing treatment at relatively low temperatures, this minimises any risk of distortion. 630 is an ideal selection when high strength and corrosion is required.

APPLICATIONS:

Propeller shafts, pump shafts, pins, and valve spindles. Corrosion resistance is similar to type 304.

CHEMICAL ANALYSIS:

	C %	Si %	Mn %	P %	S %	Cr %	N %	Cu %	Nb+Ta
Min.	-	-	-	-	-	15.00	3.00	3.00	0.15
Max.	0.07	1.00	1.00	0.04	0.03	17.50	-	5.00	0.45

CONDITION OF SUPPLY:

630 can be supplied in the solution annealed or age hardened condition (as per chart below). Condition required must be specified at time of order.

TYPICAL MECHANICAL PROPERTIES (In solution Annealed and Age Hardened Conditions):

Temper	DIA.	Yield Strength 0.2%Proof MPa Min.	U.T.S.MPa Min	Elongation %	Hardness Brinell	Charpy V- Notch- Joules
ANNEALED		1000	1105	15	363 MAX	
H900 (H480)	Up to 200mm	1170	1310	10	388 MIN.	
H925 (H495)	Up to 200mm	1070	1170	10	375 MIN	6.8
H1025 (H550)		1000	1070	12	331 MIN	20
H1075 (H580)		860	1000	13	311 MIN	27
H1100 (H595)	Up to 200mm	795	965	14	302 MIN.	34
H1150 (H620)		725	930	16	277 MIN.	41

SIZES AVAILABLE:

Available stock is normally stocked in H580 or H620 Temper Condition. Round bars supplied cold drawn to h9 condition up to 25.4mm, smooth turned and polished up to 127mm and peeled over 127mm.

ALSO AVAILABLE IN PUMP SHAFT QUALITY

Size Range: 15.88mm – 304.8mm

COLOUR CODE: **SUNFLOWER** 