nauticALLOY
Marine Propeller Shafting

MILLSTOCK stainless

nauticALLOY 4542

Material grade: nauticalloy 4542
martensitic stainless steel

Characteristics: enhanced mechanical properties
temperature stability
high strength-to-weight ratio

Technical Data

Chemical Composition	C	Si	Mn	P	S	Cr	Ni	Mo	Cu
% in weight (min)	-	-	-	-	-	15.00	3.00	-	3.00
% in weight (max)	0.07	1.00	1.50	0.04	0.03	17.50	5.00	0.60	5.00

Mechanical Properties	Proof Strength Rp0.2	Tensile Strength UTS	Elongation A	Red. of area %	Hardness BHN (max)
Metric units (MPa-N/mm^2)	>720	>930	16	12	<311
Imperial units (ksi)	>105	>135	16	12	<311
Related Specifications	17-4 PH	AISI 630	UNS S17400	1.4542	

All Nauticalloy produced:

- can be supplied complete with 3rd party Inspection, testing and certification
- can be supplied with dimensional reports confirming diameter tolerance and straightness
- have a straightness tolerance up to Ø 80mm of 0.005" - 0.010" (0.127 mm - 0.254 mm) TIR and 85mm and above we aim for 0.010" (0.254 mm) TIR (TIR=Total Indicator Reading)

Millstock Stainless Ltd
Fusion House, The Crescent
Willenhall, West Midlands, WV13 2QR
United Kingdom

Tel: +44 (0)1902 409409
Fax: +44 (0)1902 409411

sales@millstockstainless.com
www.millstockstainless.com
www.nauticalloy.com