

Precision, Excellence, Reliability

nautiCALLOY
Marine Propeller Shafting

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nautiCALLOY 22HS

Chemical Composition	C	Si	Mn	P	S	Cr	Ni	Mo	N
% values (min)	≤	≤	4.0	≤	≤	20.5	11.5	1.5	0.2
% values (max)	0.060	1.0	6.0	0.045	0.030	23.5	13.5	3.0	.4
Mechanical Properties	Proof Strength Rp0.2		Tensile Strength		Elong.		Red of Area %	Hardness BHN (Min)	
Metric units (Mpa-N/mm ²)	>725		825-1150		15		45	<340	
Imperial units (ksi)	>105		120-165		15		45	<340	
Related Specification	UNS S20910		XM-19HS		Nitronic 50®		1.3964		

Nauticalloy 22HS combines high strength with the best corrosion resistance to offer the ultimate marine shaft material, Nauticalloy 22HS is a non-magnetic alloy steel.



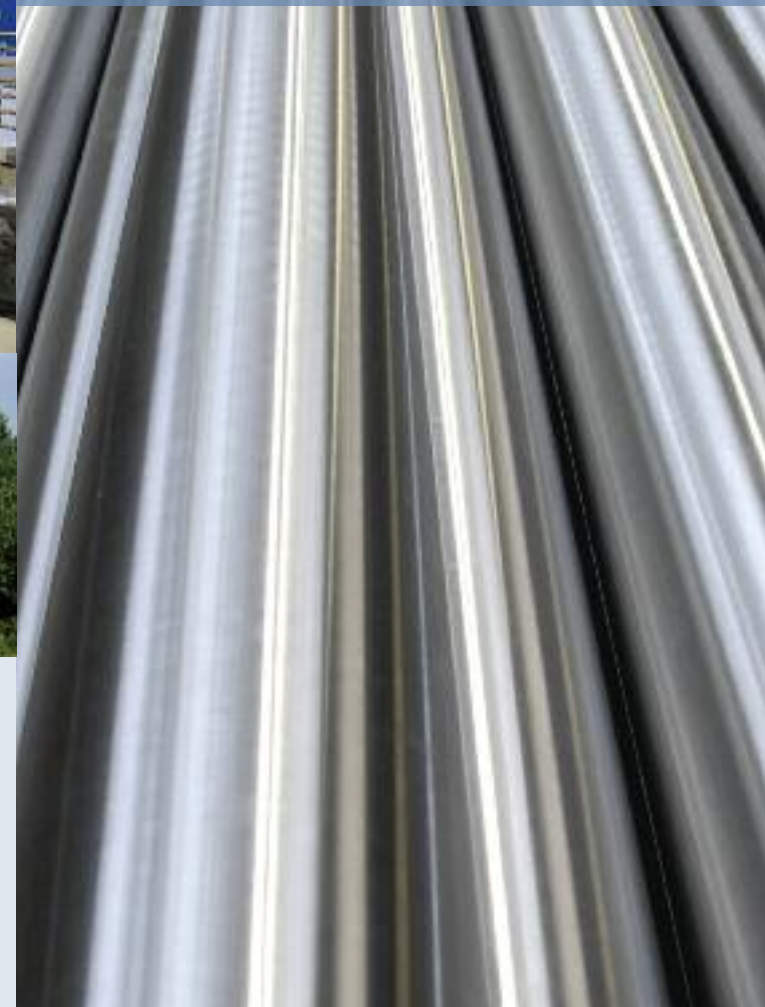
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TECHNICAL DATA



nauticalALLOY 4462

*Chemical Composition	C	Si	Mn	P	S	Cr	Ni	Mo	N
% values	.03	1.0	2.0	.03	.015	22.5	5.5	3.2	.18
Mechanical Properties	Proof Strength Rp0.2		Tensile Strength		Elong.A4%		Hardness Brinell		
Metric units (Mpa-N/mm ²)	450		620-860		>=25		<290		
Imperial units (ksi)	65		96-125		>=25		<290		
Related Specification	Duplex F51		UNS S31803		1.4462		SAF 2205		

*Has a chemical composition that ensures enhanced strength and corrosion properties are achieved at all times.

nauticalALLOY 4542

Chemical Composition	C	Si	Mn	P	S	Cr	Ni	Mo	N
% values	.07	1.0	1.0	.04	.03	17.50	5	.50	-
Mechanical Properties	Proof Strength Rp0.2		Tensile Strength		Elong.		Hardness Brinell		
Metric units (Mpa-N/mm ²)	724		>930		16		300		
Imperial units (ksi)	105		>140		16		300		
Related Specification	17/4PH		AISI630		UNS S17400		1.4542		

nauticalALLOY 4404

Chemical Composition	C	Si	Mn	P	S	Cr	Ni	Mo	N
% values	.03	0.3	1.8	.04	.030	17	10	2.1	0
Mechanical Properties	Proof Strength Rp0.2		Tensile Strength		Elong.		Hardness Brinell		
Metric units (Mpa-N/mm ²)	240		520-680		40		215		
Imperial units (ksi)	29.5		74.5-100		40		215		
Related Specification	316L		AISI316L		UNS S31603		1.4404		

