



Grade	BroderNab22 / BroderNab24		
Specification	ASTM B150/B150M: C63200 TQ-50 (Quench hardened & temper annealed)		
Use	Fasteners, and marine components – bearing cages, vales and valve stems, shafts,		
Strengths	High strength and hardness, good anti-friction and corrosion resistance. Resists scaling and oxidation at elevated temperatures.		
Chemistry		Min	Max
	Al	8.7	9.5
	Fe	3.5	4.3
	Ni	4	4.8
	Mn	1.2	2
	Si*	-	0.1
	Pb*	-	0.02
	Cu	Balance	
Notes	1. Nickel includes Cobalt 2. Nickel content must exceed Iron content		
Heat Treatment	Deg°C	Time at temperature	Cooling method
Heat treat	850	1 hour min	Water quench
Temper anneal	685-715	3-9 hours (to achieve properties)	Air cool
Mechanicals for Temper TQ-50	Tensile Strength, MPa min	0.5% Proof stress MPa (min)	Elongation on 4D GL %
Up to 80 mm	620	345	15
80 mm – 88.9 mm	620	310	15

Broder Nab is just one of a range of corrosion resistant materials stocked by Broder Metals Group Ltd – please see our website for the full range stocked: www.broder-metals-group.com

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