

ISO 9001 CERTIFIED
ISO REGISTERED SINCE 1993
CORROSIONMATERIALS.COM

Conversion Factors							
English to Metric				Metric to English			
Have	Need	Multiply		Have	Need	Multiply	
in	mm	25.4		mm	in	0.03937	
ft	m	0.3048		m	ft	3.2808	
in²	cm <sup>2</sup>	6.4516		cm²	in²	0.155	
ft²	m²	0.0929		m²	ft²	10.764	
lb	kg	0.4356		kg	lb	2.2046	
lb/ft	kg/m	1.4882		kg/m	lb/ft	0.672	
psi	N/mm²(MPa)	0.00689		N/mm²(MPa)	psi	145.138	
ksi	N/mm²(MPa)	6.89		N/mm²(MPa)	ksi	0.1451	
Temperature							
°F = (1.8 x °C) + 32			°C = (°F-32) x 5/9				

Main Alloying Elements in Nickel Alloys				
Cr	In the presence of oxygen, creates a passive protective film resistant to corrosion.			
Cu	Improves the resistance to reducing acids and salts.			
Мо	Improves the high temperature strength, pitting and crevice corrosion. Also improves resistance to reducing acids.			
Fe	Influences passivation and controlled thermal expansion additon.			
Si	Improves oxidation and carburization resistance.			
Nb+Ta	Increase solid solution strength.			
w	Improves high temperature strength, pitting and crevice corrosion resistance.			

The information contained in this technical data sheet is intended to be used as a guide and may be revised at any time without prior notice. The information is believed to be reliable and accurate, however Corrosion Materials does not make any warranty or assume any legal liability with respect to the accuracy, completeness or usefulness of the information.

Nickel Alloy Hardness Comparison					
Brinell BHN	Rockwell HRB HRC				
450	-	50			
403	-	46			
363	-	42			
329	-	38			
298	-	32			
258	-	25.5			
241	100	22.5			
228	98	20			
204	94	-			
184	90	-			
168	86	-			
155	82	-			
144	78	-			
139	76	-			
134	74	-			
129	72	-			