



## **MONEL<sup>®</sup> 400**

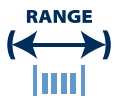
### ➤ **Key Features**

- Excellent corrosion resistance in a wide range of acidic & alkaline environments
- Especially suitable for reducing conditions
- Good ductility & thermal conductivity
- Good for sea water applications

### **IMPORTANT**

We will manufacture to your required mechanical properties.

## **key advantages to you, our customer**



0.025mm to 21mm  
(.001" to .827")



Order 3m to 3t  
(10 ft to 6000 Lbs)



Delivery:  
within 3 weeks



Wire to your spec



E.M.S available



Technical support

### **MONEL<sup>®</sup> 400 available in:-**

- Round wire
- Bars or lengths
- Flat wire
- Shaped wire
- Rope/Strand

### **Packaging**

- Coils
- Spools
- Bars or lengths



\*Trade name of Special Metals Group of Companies.

Chemical Composition			Specifications	Key Features	Typical Applications
Element	Min %	Max %	AMS 4730 ASTM B164 BS 3075 NA 13 BS 3076 NA 13 DTD 204B ISO 15156-3 (NACE MR 0175) QQ-N-281	Excellent corrosion resistance in a wide range of acidic & alkaline environments Especially suitable for reducing conditions Good ductility and thermal conductivity Good for sea water applications	Marine Engineering Chemical Processing Hydro-carbon Processing Heat Exchangers Valves Pumps
C	-	0.30			
Si	-	0.50			
Mn	-	2.00			
S	-	0.024			
Cu	28.00	34.00			
Fe	-	2.50	W.Nr. 2.4361		
Ni+Co	63.00	70.00	W.Nr. 2.4360		
Co	-	2.0	UNS N04400		
			AWS 040		

<b>Density</b>	8.8 g/cm <sup>3</sup>	0.318 lb/in <sup>3</sup>
<b>Melting Point</b>	1350 °C	2460 °F
<b>Coefficient of Expansion</b>	13.9 µm/m °C (20 – 100 °C)	7.7 x 10 <sup>-6</sup> in/in °F (70 – 212 °F)
<b>Modulus of Rigidity</b>	65.3 kN/mm <sup>2</sup>	9471 ksi
<b>Modulus of Elasticity</b>	173 kN/mm <sup>2</sup>	25092 ksi

Heat Treatment of Finished Parts					
Condition as supplied by Alloy Wire	Type	Temperature		Time (Hr)	Cooling
		°C	°F		
Annealed or Spring Temper	Stress Relieve	300 – 320	570 – 610	0.5 – 1	Air

Properties				
Condition	Approx. tensile strength		Approx. operating temperature	
	N/mm <sup>2</sup>	ksi	°C	°F
Annealed	400 – 600	58 – 87	-200 to +230	-330 to +445
Spring Temper	800 – 1100	116 – 160	-200 to +230	-330 to +445

The above tensile strength ranges are typical. If you require different please ask.