

## NITRONIC<sup>\*\*</sup> 60

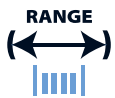
### Key Features

- Anti galling
- Wear resistant

### 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

### NITRONIC<sup>\*\*</sup> 60 available in:-

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

### Packaging

- Coils
- Spools
- Bars or lengths



<sup>\*\*</sup>Trade name of AK Steel.

Chemical Composition			Specifications	Key Features	Typical Applications
Element	Min %	Max %	AMS 5848 ASTM A580	Anti galling Wear resistant	Valve Stems Pins Brushes Roller bearings Pump shafts and rings Thread inserts Fasteners
C	-	0.10			
Si	3.50	4.50	UNS S21800 AWS 166		
Mn	7.00	9.00			
Ni	8.00	9.00			
Cr	16.00	18.00			
S	-	0.03			
P	-	0.04			
Mo	-	0.75			
N	0.08	0.18			
Cu	-	0.75			
Fe	BAL				

<b>Density</b>	7.6 g/cm <sup>3</sup>	0.28 lb/in <sup>3</sup>
<b>Melting Point</b>	1375 °C	2500 °F
<b>Coefficient of Expansion</b>	15.8 µm/m °C (21 – 200 °C)	8.810 x 10 <sup>-6</sup> in/in °F (70 – 212 °F)
<b>Modulus of Rigidity</b>	69 kN/mm <sup>2</sup>	10008 ksi
<b>Modulus of Elasticity</b>	181 kN/mm <sup>2</sup>	26200 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	250	480	1	Air

Properties				
Condition	Approx. tensile strength		Approx. operating temperature	
	N/mm <sup>2</sup>	ksi	°C	°F
Solution Annealed	700 – 1000	102 – 145	-200 to +300	-330 to +570
Spring Temper	1300 – 1900	189 – 276	-200 to +300	-330 to +570

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