



NIMONIC® C-263



Key Features

Excellent fabrication characteristics in the annealed condition

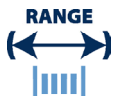
Age Hardenable

**High temperature static 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

NIMONIC® C-263 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 %	W.Nr. 2.4650 UNS N07263	Excellent fabrication characteristics in the annealed condition Age Hardenable **High temperature static applications	Parts in gas turbines Sealing rings
C	0.04	0.08	Designations AMS 5872 AMS 5886 BS HR 10 BS HR 206		
Si	-	0.40			
Mn	-	0.60			
S	-	0.007			
Ag	-	0.0005			
Al	0.30	0.60			
B	-	0.005			
Bi	-	0.0001			
Co	19.0	21.0			
Cr	19.0	21.0			
Cu	-	0.20			
Fe	-	0.70			
Mo	5.60	6.10			
Pb	-	0.002			
Ti	1.90	2.40			
Ti+Al	2.40	2.80			
Ni	Bal				

Density	8.36 g/cm ³	0.302 lb/in ³
Melting Point	1325 °C	2415 °F
Coefficient of Expansion	10.6 µm/m* °C (20 – 100 °C)	5.7 x 10 ⁻⁶ in/in* °F (70 – 212 °F)
Modulus of Elasticity	222.5 kN/mm ²	32270 ksi

Heat Treatment of Finished Parts					
Condition as supplied by Alloy Wire	Type	Temperature		Time (Hr)	Cooling
		°C	°F		
Annealed	Age Harden	800	1475	8 hours	Air
Spring Temper	Anneal	1040 - 1165	1900 - 2125	Suited to diameter 8 Hours	Water or Air Air
	Age Harden	800	1475		

Properties				
Condition	Approx. tensile strength		Approx. operating temperature depending on load** and environment	
	N/mm ²	ksi	°C	°F
Annealed	<1000	<145	up to 800	up to 1500
Annealed + Aged	1000 – 1200	145 – 174	up to 800	up to 1500
Spring Temper	1200 – 1500	174 – 217	up to 800	up to 1500
Spring Temper + Annealed + Aged	1000 – 1200	145 – 174	up to 800	up to 1500

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

**Static applications = still/fixe/motionless/rigid