



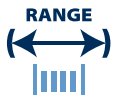
INCONEL® 600

Key Features

- Good Oxidation Resistance
- Good Corrosion Resistance at high temperatures
- **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
(10ft to 6000Lbs)



Delivery:
within 3 weeks



Wire to your spec



E.M.S available



Technical support

INCONEL® 600 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.

INCONEL® 600



| Chemical Composition | | | Specifications | Key Features | Typical Applications |
|----------------------|-------|-------|---|---|---|
| Element | Min % | Max % | AMS 5665 AMS 5687 ASTM B166 BS 3075 NA 14 BS 3076 NA 14 DTD 328A QQ-W-390 Designations W.Nr. 2.4816 UNS N06600 AWS 010 | Good Oxidation Resistance Good Corrosion Resistance at high temperatures **High temperature static applications | Furnace Components Chemical Processing Food Processing Nuclear Engineering |
| Ni | 72.00 | - | | | |
| Cr | 14.00 | 17.00 | | | |
| Fe | 6.00 | 10.00 | | | |
| Mn | - | 1.00 | | | |
| C | - | 0.10 | | | |
| Cu | - | 0.50 | | | |
| Si | - | 0.50 | | | |
| S | - | 0.015 | | | |
| P | - | 0.04 | | | |
| Co | - | 1.00 | | | |
| Nb/Cb | - | 1.00 | | | |
| Ti | - | 0.50 | | | |
| Ta | - | 0.05 | | | |
| Al | - | 0.35 | | | |

| | | |
|---------------------------------|----------------------------|---|
| Density | 8.47 g/cm ³ | 0.306 lb/in ³ |
| Melting Point | 1413°C | 2575 °F |
| Coefficient of Expansion | 13.3 µm/m °C (20 – 100 °C) | 7.4 x 10 ⁻⁶ in/in °F (70 – 212 °F) |
| Modulus of Rigidity | 75.6 kN/mm ² | 10965 ksi |
| Modulus of Elasticity | 206 kN/mm ² | 29878 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 | 460 | 860 | 1 | Air |

| Properties | | | | |
|---------------|--------------------------|-----------|---|---------------|
| Condition | Approx. tensile strength | | Approx. operating temperature depending on load** and environment | |
| | N/mm ² | ksi | °C | °F |
| Annealed | 600 – 850 | 87 – 123 | -200 to +1000 | -330 to +1830 |
| Spring Temper | 900 – 1450 | 131 – 210 | -200 to +1000 | -330 to +1830 |

Slight magnetism may occur below 120 °C (184 °F)

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

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