

## Technical datasheet

## Alloy 263 / W-Nr. 2.4650

An age-hardenable nickel-cobalt-chromium alloy with additions of molybdenum for excellent high temperature strength and good oxidation resistance.

### Available products

Product form	Size range from	Size range to
Sheet/plate	1.20 mm thickness	3.18 mm thickness
Bar	35.0 mm diameter	45.0 mm diameter

### Chemical composition (%)

Ni	Cr	Co	Mo	Ti+Al	Fe	Mn	C
Balance	19.0-21.0	19.0-21.0	5.6-6.1	2.4-2.8	0.7 max	0.6 max	0.04-0.08

### Major specifications

AMS 5872	UNS N07263
MSRR 7035	BS HR10

### Physical properties

Density	8.36 g/cm <sup>3</sup>
Melting range	1330-1355°C

### Mechanical properties – typical room temperature properties

Yield strength	339 MPa
Tensile strength	806 MPa
Elongation	57 %

### Key attributes

Alloy 263 is an age-hardenable grade which achieves high strength through specific heat treatment. In the age hardened condition Alloy 263 has high strength at service temperatures up to 816°C and excellent high temperature corrosion and oxidation resistance at temperatures up to 982°C. This combination of properties and fabricability makes it suitable for a variety of fabricated components in both aerospace and industrial gas turbines.

Alloy 263 is highly fabricable and is readily formed by either hot or cold working processes. It is machinable and can be welded by conventional processes and procedures. Please contact us for further details on forming, fabrication and welding consumables.

### Applications

Combustors  
Ducting/hot gas paths  
Exhaust systems  
After burners  
Ring components