Technical datasheet — Alloy 75 / W-Nr. 2.4951/2.4630

A nickel-chromium alloy with good high temperature oxidation resistance and moderate strength used widely in gas turbine and aerospace applications.

Available products

Product form	Size range from	Size range to
Sheet/plate	0.5 mm thickness	16.0 mm thickness
Bar	6.35 mm diameter	35.0 mm diameter

Chemical composition (%)

Ni	Cr	Mo	Nb	Fe	Al	Ti	C
58.0 min	20.0-23.0	8.0-10.0	3.15-4.15	5.0 max	0.4 max	0.4 max	0.1 max

Major specifications

BS HR203

UNS N06075
DIN 17750, 17752

Physical properties

Density	8.37 g/cm^3
Melting range	1340-1380°C

Mechanical properties – typical room temperature properties (annealed sheet)

Yield strength	400 MPa
Tensile strength	790 MPa
Elongation	30 %

Key attributes

Alloy 75 is a solid solution strengthened nickel-chromium grade with additions of titanium. It offers moderate strength up to 650°C and good resistance to oxidation and scaling. It is mainly utilised in low-stress elevated temperature applications requiring moderate oxidation resistance and is used in gas turbine engineering (both for aerospace and power generation) and in industrial furnace and thermal processing equipment.

Alloy 75 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

Gas turbine and aerospace
Thermal processing
Heat treatment equipment

Do you require further information or a quotation?
Please contact us…
info@bibusmetals.com
www.bibusmetals.com