



## Alloy X / 2.4656 / UNS N06002

Alloy X is a non-magnetic, corrosion and high temperature resistant solid solution strengthened nickel based alloy. Excellent resistance to oxidation and exceptional strength at high temperatures characterize this material. Alloy X is readily formable, weldable and generally easy to machine.

It exhibits high strength up to 816°C (1500°F).

A good oxidation resistance up to 1204°C (2200°F).

### Alloy X / 2.4656 / UNS N06002 metal powder for 3d metal printing

We are pleased to offer you powder for 3D printing made of P900 / 1.3816. Send us your inquiry.

### Material Data Sheet

Material Designation	2.4656
UNS	N06002
Alloy	Alloy X
Protected designation	Hastelloy® X
Density	8.221g/cm <sup>3</sup>
Melting range	1260 – 1354°C
Norms	AMS 5536, AMS 5754, AMS 5798, ASME SB 435, AMS 5536, AMS 5754, AMS 5798, ASME SB 435, ASME SB 572,

### Main fields of application of Alloy X / 2.4656

Alloy X is used in particular for high-temperature jet engines and turbines. The material is particularly resistant to stress corrosion cracking.

### Chemical composition of alloy X / 2.4656

%	Cr	Mo	Co	W	Al	Ti	B	C
Min	20.5	8	0.5	0.2	-	-	-	0.05
Max	23	10	2.5	1	0.5	0.15	0.01	0.15
%	Fe	Mn	Si	P	S	Cu	Ni	
Min	17	-	-	-	-	-	-	
Max	20	1	1	0.04	0.03	0.5	Balance	

### Characteristics of Alloy X / 2.4656

Mechanical Properties	21°C	538°C	649°C	760°C	871°C	982°C
Ultimate Tensile Strength /MPa	765.3	613.6	572.2	462	310.3	-
0.2% Yield Strength /MPa	379.2	248.2	241.3	234.4	193	-
Elongation %	44	49	54	53	58	-
Coefficient of Thermal Expansion /mm/m°C x 10 <sup>-6</sup>	-	15.1	15.5	15.8	16.2	16.6
Thermal Conductivity /kcal/(hr.m.°C)	-	16.8	19	20.7	22.6	24.4
Modulus of Elasticity/ x105 MPa	2.07	1.79	1.72	1.72 1.59	1.52	1.38

### Contact us



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### Material Outlet by Hempel

ECONOXX.com offers buyers a new and uncomplicated procurement channel, which also includes small quantities and materials in special alloys at favourable conditions.