Hastelloy X

Hastelloy X as a high temperature alloy is matrix stiffened nickel-chromium-molybdenum with tungsten and cobalt. It is characterized by:

- excellent oxidation resistance up to 1200℃
- high-temperature strength
- good formability and weldability
- good resistance to stress corrosion cracking

Chemical Composition, %

element	Ni	Cr	Fe	Mo	Co	W	C	Mn	Si	P	S
min.	余	20.5	17.0	8.0	0.5	0.2	0.05				
max.		23.0	20.0	10.0	2.5	1.0	0.15	1.0	1.0	0.04	0.03

Chemical Composition according to ASTM. Some compositional limits of other specifications may vary slightly.

Designation and standards

National Standards	Material designation	Chemical composition	Forgings	Rod and bar	Plate and sheet	Strip	Wire	Seamless tube
ASTM ASME SAE	UNS N06002		AMS 5754	B572 SB572 AMS 5754	B435 SB435 AMS 5536	B435 SB435 AMS 5536	AMS 5798	B622 SB622 AMS 5587
DIN	2.4665 NiCr22Fe18Mo	DIN 17744		DIN 17752	DIN 17750	DIN 17750		DIN 17751
GB/T	GH3536, GH536	GB/T 14992	GJB 3020A HB 5496	HB 5497	GJB 1952A HB 5495		GJB 2612 HB 5498	HB 5494

Density 8.28g/cm^3

Corrosion resistance

- excellent oxidation resistance up to 1200℃
- excellent corrosion resistance in neutral as well as in reducing atmospheres
- good resistance to carburizing and nitriding atmospheres

Applications

Hastelloy X finds wide application in high-temperature service, due to its corrosion resistance in various atmospheres up to very high temperatures, and excellent high-temperature strength.

Typical applications are:

- components for industrial and aircraft gas turbines, such as combustion chambers, honeycombs, housings etc.
- industrial furnace parts, support rolls, grids, wire belts and radiant tubes
- pigtails in petrochemical furnaces
- high temperature gas cooled nuclear reactors

You could send email to sales@huishih.com for more information.