Hastelloy C-2000

Hastelloy C-2000 is a nickel-chromium-molybdenum alloy containing copper and extremely low carbon and silicon contents. It is characterized by:

- excellent resistance to a wide range of corrosive media, under oxidizing and reducing conditions
- excellent resistance to pitting, crevice corrosion, and stress corrosion cracking

Chemical Composition, %

element	Ni	Mo	Cr	Fe	Cu	Co	Al	C	Mn	Si	P	S
min.	bal.	15.0	22.0		1.3							
max.		17.0	24.0	3.0	1.9	2.0	0.50	0.01	0.5	0.08	0.025	0.010

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	Seamless tube
ASTM ASME	UNS N06200		B564 SB564 B462 SB462	B574 SB574	B575 SB575	B575 SB575	B622 SB622
DIN	2.4675 NiCr23Mo16Cu	DIN 17744		DIN 17752	DIN 17750	DIN 17750	DIN 17751
GB/T	NS3405, NS345	GB/T 15007					

Density 8.50g/cm^3

Corrosion resistance

- excellent corrosion resistance in sulfuric acid, hydrofluoric acid and dilute hydrochloric acid over large temperature ranges
- excellent resistance to pitting, crevice attack, and stress corrosion cracking

Applications

Typical applications are:

- chemical process industry reactors, heat exchangers, columns and piping
- pharmaceutical industry reactors and dryers
- flue gas desulfurization systems