

Hastelloy C-276

Hastelloy C-276 is a nickel-chromium-molybdenum alloy containing tungsten 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	W	V	Co	C	Mn	Si	P	S
min.	bal.	15.0	14.5	4.0	3.0							
max.		17.0	16.5	7.0	4.5	0.35	2.5	0.01	1.0	0.08	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	Seamless tube
ASTM ASME	UNS N10276		B564 SB564 B462 SB462	B574 SB574	B575 SB575	B575 SB575	B622 SB622
DIN		2.4819 NiMo16Cr15W	DIN 17744		DIN 17752	DIN 17750	DIN 17750
GB/T	NS3304, NS334	GB/T 15007		GB/T 15008	GB/T 15009 GB/T 15010		

Density 8.90g/cm³

Corrosion resistance

- good resistance to chloride ion attack
- excellent resistance to moist chlorine gas, hypochlorite and chlorine dioxide solutions
- excellent resistance to concentrated solutions of oxidizing salts such as iron chloride and copper chloride

Applications

Hastelloy C-276 finds wide applications in the chemical and petrochemical industry, for components in organic processes containing chlorides, and for catalytic systems. This alloy is especially suitable for use in situations where hot, contaminated mineral acids, solutions and organic acids as well as sea water are encountered. It also widely used in pollution control equipment in energy production and thermal waste treatment plants.

Typical applications are:

- pulp and paper industry, e.g. for digestion and bleaching vessels
- scrubbers and special reheaters as well as wet-operating fans for combustion and flue gas desulphurization systems
- sulphuric acid coolers
- manufacture and processing of technically impure phosphoric acid
- combustion-resistant alloy for high pressure oxygen applications

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

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