

# Alloy C276

## Product Datasheet



Nickel Molybdenum Chromium Alloy

Service. Quality. Value.

## Outstanding Corrosion Resistance

Alloy C276 is a nickel molybdenum chromium alloy which is one of the most corrosion resistant alloys available today, and can be used in a broad range of environments and media.

The solution annealed material is immune to chloride-induced stress corrosion cracking, while the high molybdenum and chromium content enhance performance in both oxidising and reducing environments. The alloy also displays excellent resistance to pitting and crevice corrosion. For this reason, Alloy C276 is the material of choice for chemical and petrochemical applications. The product is ductile, weldable and easily formed. Alloy C276 succeeds in the harshest corrosive environments where other materials have often failed. C276 is suitable for offshore applications susceptible to hydrogen-sulphide stress corrosion cracking.



### Key Features

- One of the most corrosion resistant alloys available
- Ductile, weldable and easily formed
- Ideal for chemical, petrochemical and offshore

### Applications

- Pressure vessels
- Heat exchangers
- Pumps and valves
- Stack liners, dampers and scrubbers

### Chemical Composition (weight %)

%	C	Mn	S	Si	Cr	Ni	Fe	Mo	Co	V	W	P	
Min					14.5	Bal	4.0	15.0			3.0		
Max	0.01	1.0	0.03	0.08	16.5	Bal	7.0	17.0	2.5	0.35	4.5	0.05	

### Mechanical Properties (typical at room temperature - annealed condition)

Yield Strength 0.2% Offset		Ultimate Tensile Strength		Elongation	Hardness
ksi	MPa	ksi	MPa	% in 2"	HRB
50.3	34.7	107.4	741	67	69

We supply Alloy C276 in round bar, plate, sheet, tube and pipe.

#### UK Service Centres:

Smiths Belfast **02895 908 897**  
Smiths Biggleswade **01767 604 704**  
Smiths Birmingham **0121 728 4940**  
Smiths Bristol **0117 971 2800**  
Smiths Chelmsford **01245 466 664**  
Smiths Gateshead **0191 469 5428**  
Smiths Horsham **01403 261 981**

Smiths Leeds **0113 307 5167**  
Smiths Manchester **0161 794 8650**  
Smiths Norwich **01603 789 878**  
Smiths Nottingham **0115 925 4801**  
Smiths Redruth **01209 315 512**  
Smiths Verwood **01202 824 347**  
Main Office **0845 527 3331**

#### Quality & Testing:



[www.smithmetal.com](http://www.smithmetal.com) [info@smithmetal.com](mailto:info@smithmetal.com)

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