

Description

Alloy C276 is a nickel-molybdenum-chromium alloy with an addition of tungsten designed to have excellent corrosion resistance. The high nickel and molybdenum contents make the nickel steel alloy resistant to pitting and crevice corrosion in reducing environments while chromium conveys resistance to oxidizing media.

Product Capabilities

Form Name	Size Range	Schedules	Specifications
Welded Pipe	1/2"-36"	10S, 40S	ASTM B619 / ASME SB619
Seamless Pipe	1/2"-36"	40S, 80S, 160	ASTM B622 / ASME SB622
Buttweld Fittings	1/2"-36"	10S, 40S, 80S	ASTM B366 / ASME SB366
Flanges	1/2"-36"	150#, 300#	ASTM B564 / ASME SB564 ASTM B462 / ASME SB462
Pressure Fittings	1/2"-2"	3000# THRD/SW	ASTM B564 / ASME SB564 ASTM B366 / ASME SB366
Valves	1/2"-2"	2000-1500 WOG	NACE MR0175 / MR0103

Limiting Chemical Composition %

Ni	Mo	Cr	Fe	W	Co	Mn	C	V	P	S	Si
Remainder	15.0-17.0	14.5-16.5	4.0-7.0	3.0-4.5	MAX 2.5	MAX 1.0	MAX 0.01	MAX 0.35	MAX 0.04	MAX 0.03	MAX 0.08

Typical Industrial Applications

- Chemical processing components like heat exchangers, reaction vessels, evaporators, and transfer piping
- Sour gas wells
- Pulp and paper production
- Waste treatment
- Pharmaceutical and food processing equipment

Tensile Requirements

Product Form	Tensile Strength (ksi)	Yield Strength (ksi)
Tube & Pipe	105.4	45.4