

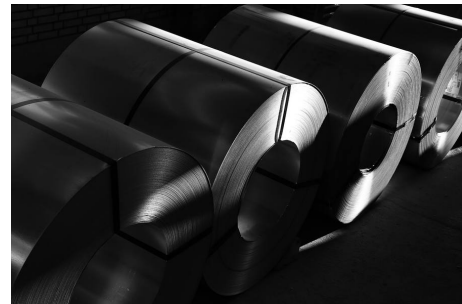
ALLOY STEEL

Advanced Materials. Engineered for Performance.

SA387 Grade 9 Class 2

Alloy Steel | ASTM / ASME: A387 / SA387 Grade 9 Class 2 | EN: X11CrMo9-1 / 1.7386

9Cr-1Mo plate for high temperature service. Used where sulphidic corrosion resistance and creep strength have to be carried above the 5Cr range, typically in refinery heaters and transfer line equipment.



Stock status: Mill indent - Typical lead time: 4 - 8 weeks mill indent

Key features

- Chromium-molybdenum creep strength at elevated temperature
- Resistance to hydrogen attack (Nelson curve service)
- Supplied normalised and tempered with simulated PWHT on request
- Ultrasonic testing to SA578 and through-thickness Z grades available

Available forms & sizes

Form	Size range
Plates	6 - 150 mm thk, up to 3000 mm wide, N or Q+T
Flanges	1/2" - 24", 150# - 2500#, F11 / F12 / F22 / F5 / F9 / F91
Fittings	1/2" - 24" butt weld fittings, WP11 / WP22 / WP91

Chemical composition (%)

Element	Min	Max
C	-	0.15
Cr	8.00	10.00
Mo	0.90	1.10
Si	0.25	1.00
Mn	0.30	0.60

Mechanical properties

Property	Value	Unit
Yield Strength (0.2%)	380 min	MPa
Tensile Strength	585 - 760	MPa

Property	Value	Unit
Elongation	18 min	%
Condition	Normalised and tempered	-

Physical properties

Property	Value	Unit
Density	7.85	g/cm3
Max Service Temperature	550 - 650 depending on grade	C

Standards

ASTM A387 / ASME SA387 Class 2, ASME Section II Part A, EN 10028-2, EN 10204 3.1 / 3.2

Equivalent grades

X11CrMo9-1, 1.7386, A387 Gr 9 Cl 2

Industries served

Oil & Gas, Petrochemical, Refining, Power Generation, Fertiliser

Typical applications

- Pressure vessel shells and heads for elevated temperature service
- Hydrogen service reactors and separators
- Boiler drums, headers and steam plant
- Petrochemical heaters and hot wall equipment



Live datasheet