

Material - ASTM A217 Grade C12

Standard Specification for Steel Castings, Martensitic Stainless and Alloy, for Pressure-Containing Parts, Suitable for High-Temperature Service

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A217 / A217M Steel Castings, Martensitic Stainless and Alloy, for Pressure-Containing Parts, Suitable for High-Temperature Service

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.200 max.	Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	1.000 max.		
Manganese	Mn %	0.350 - 0.650		
Phosphorus	P %	0.035 max.		
Sulphur	S %	0.035 max.		
Chromium	Cr %	8.000 - 10.000		
Nickel	Ni %	0.500 max.		
Molybdenum	Mo %	0.900 - 1.200		
Copper	Cu %	0.500 max.	Mechanical Properties	
Vanadium	V %	0.060 max.	Tensile Strength in Mpa	620 - 795
Niobium	Nb %	0.030 max.	Yield Strength in Mpa	415 min.
Tungsten	W %	0.100 max.	Elongation in %	18 min.
Other	%	1.000 max.	Reduction of Area in %	35 min.
Iron	Fe %	Balance	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J82090	UNS	USA	Casting
SA-217 Grade GC12	ASTM	USA	Casting
A426 Grade CP9	ASTM	USA	Casting
G X 12 CrMo 10-1	DIN	Germany	Casting
1.7389	DIN	Germany	Casting
A217 Grade C12A	ASTM	USA	Casting
A217 J84090	ASTM	USA	Casting

For any further inquiries, please do not hesitate to contact us. You may visit our website at AMTECH TECHNOCAST PVT. LTD., call us at [+91 9879817994](tel:+919879817994), or email us at manish@amtechtechnocast.com

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.