



Material - AFNOR NF GX12CrMoVNbN9-1

Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - AFNOR NF GX12CrMoVNbN9-1 Steel Castings for Pressure Purposes
Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries
Grade Belongs to the Industry - Casting

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Chemical Composition			Heat Treatment	
Carbon	C %	0.100 - 0.140	Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.200 - 0.500		
Manganese	Mn %	0.300 - 0.800		
Phosphorus	P %	0.020 max.		
Sulphur	S %	0.010 max.		
Chromium	Cr %	8.000 - 9.500		
Nickel	Ni %	0.400 max.		
Molybdenum	Mo %	0.850 - 1.050		
Nitrogen	N %	0.030 - 0.070	Mechanical Properties	
Vanadium	V %	0.180 - 0.250	Tensile Strength in Mpa	600 - 750
Aluminium	Al %	0.020 max.	Yield Strength in Mpa	460 min.
Niobium	Nb %	0.060 - 0.100	Elongation in %	15 min.
Iron	Fe %	Balance	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impac <mark>t in Joule</mark>	27 J @ RT

Cross Reference Table					
Material	Standard	Country	Grade Belong to the Industry		
1.4955	EN	European Union	Casting		
J8409	UNS	USA	Casting		
1.4955	DIN	Germany	Casting		
1.4955	DIN	Germany	Casting		
GX12CrMoVNbN9-1	EN	European Union	Casting		
GX12CrMoVNbN9-1	UNI	Italy	Casting		
GX12CrMoVNbN9-1	DIN	Germany	Casting		

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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