



Material - ASTM A1001 Grade 3

Standard Specification for High Strength Steel Castings in Heavy Sections

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A1001 High Strength Steel Castings in Heavy Sections

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 - 0.280	Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.300 - 0.600		
Manganese	Mn %	1.000 - 1.400		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.025 max.		
Chromium	Cr %	0.800 - 1.200		
Nickel	Ni %	1.000 - 1.300		
Molybdenum	Mo %	0.600 - 0.850		
Aluminium	Al %	0.070 max.		
Other	%	0.600 max.		
Iron	Fe %	Balance	Mechanical Properties Tensile Strength in Mpa 550 min. Yield Strength in Mpa 435 min. Elongation in % 13 min Reduction of Area in % - Hardness in BHN - Impact in Joule 20 min. @ -40°C	
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-	-	-		
-	-	-		
-	-	-		
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A1001 Grade 2	ASTM	USA	Casting
A757 A1Q	ASTM	USA	Casting
J03002	UNS	USA	Casting
1.0619	DIN	Germany	Casting
1.0619	EN	European Union	Casting
A660 WCB	ASTM	USA	Fusion Welding, Bending and Forming
SA 660 WCB	ASME	USA	Centrifugal 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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