



Material - BS 3100 Grade A1

Standard Specification for Steel Castings for General Engineering Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - BS 3100 Grade A1 Steel Castings for General Engineering Purposes
Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries
Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.250 max.		
Silicon	Si %	0.600 max.	As Cast or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.900 max.		alizing or Hardoning and
Phosphorus	P %	0.050 max.		
Sulphur	S %	0.050 max.		
Chromium	Cr %	0.300 max.		
Molybdenum	Mo %	0.150 max.		
Nickel	Ni %	0.400 max.		-
Copper	Cu %	0.300 max.	Mechanical Properties	
Other	Ot %	0.800 max.	Tensile Strength in Mpa	430 min.
Iron	Fe %	Balance	Yield Strength in Mpa	230 min.
-	-	-	Elongation in %	22 min.
-	-	-	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	
A 216 WCB	ASTM	USA	Casting	
SA 216 WCB	ASTM	USA	Casting	
A660 Grade WCB	ASTM	USA	Casting	
A757 A1Q	ASTM	USA	Casting	
J03002	UNS	USA	Casting	
1.0619	WN	Germany	Casting	
1.0619	EN	European Union	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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