



**GRAVITY CAST PVT. LTD.**  
**GRAVITY GROUP OF COMPANIES**

## Material - AISI 1138

**Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel**

**Group - Ferrous Mild Steel Alloys**

**Sub Group - AISI 1138 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel**

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

**Grade Belongs to the Industry - Steel**

Chemical Composition			Heat Treatment			
Carbon	C %	0.340 - 0.400	As Raw or Annealing or Normalizing or Hardening and Tempering			
Manganese	Mn %	0.700 - 1.000				
Phosphorus	P %	0.030 max.				
Sulphur	S %	0.080 - 0.130				
Lead	Pb %	0.150 - 0.350				
Iron	Fe %	Balance				
-	-	-				
-	-	-	<b>Mechanical Properties</b>			
-	-	-			Tensile Strength in Mpa	-
-	-	-			Yield Strength in Mpa	-
-	-	-			Elongation in %	-
-	-	-			Reduction of Area in %	-
-	-	-			Hardness in BHN	-
-	-	-			Impact in Joule	-
-	-	-				
-	-	-				
-	-	-				

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G11380	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1138	SAE	USA	Steel
11L38	SAE	USA	Steel
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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

**ONE STOP SOLUTION FOR METAL PARTS**