



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

## Material - SAE 1050

**Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel, Sheet, Strip and Plate**

**Group - Ferrous Mild Steel Alloys**

**Sub Group - SAE 1050 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel, Sheet, Strip and Plate**

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

**Grade Belongs to the Industry - Steel, Sheet, Strip and Plate**

Chemical Composition			Heat Treatment	
Carbon	C %	0.480 - 0.550	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.600 - 0.900		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.035 max.		
Silicon	Si %	0.150 - 0.300		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Mechanical Properties	
			Tensile Strength in Mpa	620 - 690
			Yield Strength in Mpa	340 min.
			Elongation in %	10 min.
			Reduction of Area in %	30 - 40
			Hardness in HB	179 - 197
			Impact in Joule	9.5 - 12.2 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10500	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1050	AISI	USA	Steel, Sheet, Strip and Plate
A 311 1050 Class A	ASTM	USA	Steel and Bar
A 311 1050 Class B	ASTM	USA	Steel and Bar
A 513 Grade 1050	ASTM	USA	Steel and Tubing
A 684 Grade 1050	ASTM	USA	Steel and Strip
A 108 Grade 1050	ASTM	USA	Steel and Bar

**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**