

# Material: AISI 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:** AISI 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	470 min.
			Yield Strength in Mpa	260 min.
			Elongation in %	6 min.
			Reduction of Area in %	30 min.
			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	SAE	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

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