

# Material - SAE 1020

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

#### **Group - Ferrous Mild Steel Alloys**

Sub Group - SAE 1020 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Sheet, Strip and Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Sheet, Strip and Plate

Chemical Composition			Heat Treatment	
Carbon	C %	0.170 - 0.230		
Manganese	Mn %	0.300 - 0.600	As Raw or Annealing or Normalizing or Hardening and Tempering	
Phosphorus	Р%	0.040 max.		alizing or Hardoning and
Sulphur	S %	0.050 max.		•
Iron	Fe %	Balance		IIg
-	-	-		
-	-	-		
-	-	-		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	345 - 520.5
-	-	-	Yield Strength in Mpa	210 min
	-	-	Elongation in %	15 min.
	-	-	Reduction of Area in %	40 - 50
-	-	-	Hardn <mark>ess in HB</mark>	111 - 121
-	-	-	Impa <mark>ct in Joule</mark>	47.6 - 69.7 J @ RT

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
G10200	UNS	USA	Bars, Wire Rods and Tubing	
1020	AISI	USA	Sheet, Strip and Plate	
A 1040 1020	ASTM	USA	Steel	
A 108 Grade 1020	ASTM	USA	Steel and Bar	
A 29 1020	ASTM	USA	Steel and Bar	
A 29 M1020	ASTM	USA	Steel and Bar	
A 510 1020	ASTM	USA	Wire Rod and Round Wire	

# 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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