



## Material - AMS 1020

Standard Specification for Carbon Steels and Carbon Manganese Steels - Hot Rolled Bars and Semi Finished Products

**Group - Ferrous Mild Steel Alloys** 

Sub Group - AMS 1020 Carbon Steels and Carbon Manganese Steels - Hot Rolled Bars and Semi Finished Products Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Bar, Wire, Tube and Forging

Chemical Composition			Heat Treatment	
Carbon	C %	0.180 - 0.230		
Silicon	Si %	0.100 - 0.350	As- Cast or Normalising or Annealing or Hardening + Tempering	
Manganese	Mn %	0.300 - 0.600		nooling or Hardoning I
Phosphorus	P %	0.040 max.		•
Sulphur	S %	0.040 max.		
Chromium	Cr %	0.300 max.		
Molybdenum	Mo %	0.100 max.		
Nickel	Ni %	0.350 max.		
Copper	Cu %	0.350 max.	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	330 - 690
-	-	-	Yield Strength in Mpa	195 min.
-	-	-	Elongation in %	5 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	Country Grade Belong to the Industry	
A915 Grade SC 1020	ASTM	USA	Bar, War, Tube and Forging	
J02003	UNS	USA	Casting	
1020	AISI	USA	Bar, War, Tube and Forging	
1020	SAE	USA	Bar, War, Tube and Forging	
1020	AMS	USA	Bar, War, Tube and Forging	
-	-	-	-	
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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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