

# Material: AS 1020

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

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** AS 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		
Carbon	C %	0.180 - 0.230
Silicon	Si %	0.100 - 0.350
Manganese	Mn %	0.300 - 0.600
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.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment	
As- Cast or Normalizing or Annealing or Hardening + Tempering	
Mechanical Properties	
Tensile Strength in Mpa	
Yield Strength in Mpa	
Elongation in %	
Reduction of Area in %	
Hardness in HB	
Impact in Joule	

Cross Reference Table			
Material	Standard	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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