

# Material: AISI 1075

## Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel and Bar

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** AISI 1075 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel and Bar

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

**Grade Belongs to the Industry:** Steel and Bar

Chemical Composition			Heat Treatment	
Carbon	C %	0.700 - 0.800	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.400 - 0.700		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.050 max.		
Boron	B %	0.0005 - 0.003		
Aluminium	Al %	0.020 min.		
Copper	Cu %	0.200 min.		
Niobium	Nb %	0.015 min.		
Silicon	Si %	0.100 max.		
Vanadium	V %	0.020 min.		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	1025 min.
-	-	-	Yield Strength in Mpa	696 min.
-	-	-	Elongation in %	17.6 min.
-	-	-	Reduction of Area in %	58.2 min.
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	21.7 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10750	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1075	SAE	USA	Steel
A 1040 1075	ASTM	USA	Steel
A 29 1075	ASTM	USA	Steel and Bar
A 510 1075	ASTM	USA	Steel
A 713 G10750	ASTM	USA	Steel
A 713 Grade 1075	ASTM	USA	Steel

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