



Material - SAE 1086

Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled Steel

Group - Ferrous Mild Steel Alloys

Sub Group - SAE 1086 Carbon Steel Compositions For Forging To Hot-Rolled Steel
Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries
Grade Belongs to the Industry - Steel

Chemical Composition			Heat Treatment	
Carbon	C %	0.800 - 0.930		
Manganese	Mn %	0.300 - 0.500	As Raw or Annealing or Normalizing or Hardening and Tempering	
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.035 max.		
Boron	В %	0.0005 - 0.003		
Chromium	Cr %	0.150 max.		
Copper	Cu %	0.200 max.		
Molybdenum	Mo %	0.060 max.		_
Nickel	Ni %	0.200 max.	Mechanical Properties	
Lead	Pb %	0.150 - 0.350	Tensile Strength in Mpa	670 - 770
Iron	Fe %	Balance	Yield Strength in Mpa	420 min.
-	-	-	Elongation in %	10 min.
-	-	-	Reduction of Area in %	25 - 40
-	-	-	Hardness in HB	192 - 229
-	-	-	Impac <mark>t in Joule</mark>	-

Cross Reference Table				
Material	Standard	Country Grade Belong to the Industry		
G10860	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
1086	AISI	USA	Steel and Bar	
A 713 G10860	ASTM	USA	Steel and Wire	
A 682 G10860	ASTM	USA	Steel and Strip	
A 1040 1086	ASTM	USA	Steel	
A 682 Grade 1086	ASTM	USA	Steel and Strip	
A 684 Grade 1086	ASTM	USA	Steel and Strip	

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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