



## Material - ASTM A 1040 1086

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

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A 1040 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	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.300 - 0.500		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.035 max.		
Silicon	Si %	0.150 - 0.300		
Boron	B %	0.0005 - 0.003		
Iron	Fe %	Balance		
-	-	-		
-	-	-	<b>Mechanical Properties</b> Tensile Strength in Mpa      670 - 770 Yield Strength in Mpa      420 min. Elongation in %      10 min. Reduction of Area in %      25 - 40 Hardness in HB      192 - 229 Impact in Joule      -	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10860	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1086	SAE	USA	Steel
1086	AISI	USA	Steel and Bar
A 713 G10860	ASTM	USA	Steel and Wire
A 682 G10860	ASTM	USA	Steel and Strip
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](mailto:marketing@gravitycastindia.com)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.