



## Material - SAE 1140

**Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel**

**Group - Ferrous Mild Steel Alloys**

**Sub Group - SAE 1140 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel**

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

**Grade Belongs to the Industry - Steel**

Chemical Composition			Heat Treatment	
Carbon	C %	0.370 - 0.440	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.700 - 1.000		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.080 - 0.130		
Lead	Pb %	0.150 - 0.350		
Iron	Fe %	Balance		
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-	-	-	<b>Mechanical Properties</b> Tensile Strength in Mpa      540 - 610 Yield Strength in Mpa      300 min. Elongation in %      12 min. Reduction of Area in %      35 - 40 Hardness in HB      156 - 170 Impact in Joule      -	
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G11400	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1140	AISI	USA	Steel and Bar
A 1040 1140	ASTM	USA	Steel
A 29 1140	ASTM	USA	Steel and Bar
A 510 1140	ASTM	USA	Wire Rod, Round Wire and Steel
A 576 11L40	ASTM	USA	Steel and Bar
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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](mailto:marketing@gravitycastindia.com)**

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