



## Material - AISI 1527

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

**Group - Ferrous Mild Steel Alloys**

**Sub Group - AISI 1527 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 %	0.220 - 0.290	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	1.200 - 1.500		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.050 max.		
Boron	B %	0.0005 - 0.003		
Aluminium	Al %	0.020 max.		
Copper	Cu %	0.200 max.		
Niobium	Nb %	0.025 max.		
Silicon	Si %	0.100 max.		
Vanadium	V %	0.050 max.		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	520 - 570
-	-	-	Yield Strength in Mpa	280 min.
-	-	-	Elongation in %	12 min.
-	-	-	Reduction of Area in %	35 - 40
-	-	-	Hardness in HB	149 - 163
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G15270	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1527	SAE	USA	Plate, Strip, Sheets and Tubing
A 29 1527	ASTM	USA	Steel and Bar
A 510 1527	ASTM	USA	Wire Rod, Round Wire and Steel
A 576 15L27	ASTM	USA	Steel and Bar
A 830 1527	ASTM	USA	Plate and Steel
A 830 G15270	ASTM	USA	Plate and Steel

**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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