



**GRAVITY CAST PVT. LTD.**  
GRAVITY GROUP OF COMPANIES

## Material - ASTM A 576 15L27

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

**Group - Ferrous Mild Steel Alloys**

**Sub Group - ASTM A 576 15L27 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 %	0.220 - 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		
Lead	Pb %	0.150 - 0.350		
Silicon	Si %	0.100 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
1527	AISI	USA	Steel
A 29 1527	ASTM	USA	Steel and Bar
A 510 1527	ASTM	USA	Wire Rod, Round Wire and Steel
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)**

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.

**ONE STOP SOLUTION FOR METAL PARTS**