



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

## Material - ASTM A 576 11L51

**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 11L51 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 %	0.480 - 0.550	As Raw or Annealing or Normalizing or Hardening and Tempering			
Manganese	Mn %	0.700 - 1.000				
Phosphorus	P %	0.040 max.				
Sulphur	S %	0.080 - 0.130				
Silicon	Si %	0.100 max.				
Lead	Pb %	0.150 - 0.350				
Iron	Fe %	Balance				
-	-	-	<b>Mechanical Properties</b>			
-	-	-			Tensile Strength in Mpa	630 min.
-	-	-			Yield Strength in Mpa	340 min.
-	-	-			Elongation in %	10 min.
-	-	-			Reduction of Area in %	30 - 35
-	-	-			Hardness in HB	187 - 321
-	-	-			Impact in Joule	-
-	-	-				

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G11510	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1151	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1151	AISI	USA	Steel and Bar
A 1040 1151	ASTM	USA	Steel
A 108 Grade 1151	ASTM	USA	Steel and Bar
A 29 1151	ASTM	USA	Steel and Bar
A 510 1151	ASTM	USA	Wire Rod, Round Wire 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**