



## Material - ASTM A 576 10L90

Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled Steel and Bar

## **Group - Ferrous Mild Steel Alloys**

Sub Group - ASTM A 576 10L90 Carbon Steel Compositions For Forging To Hot-Rolled 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 %	0.850 - 0.980		
Manganese	Mn %	0.600 - 0.900	As Raw or Annealing or Normalizing or Hardening and Tempering	
Phosphorus	Р%	0.040 max.		lizing or Hardoning and
Sulphur	S %	0.050 max.		<b>v</b>
Boron	В%	0.0005 - 0.003		
Copper	Cu %	0.200 max.		
Lead	Pb %	0.150 - 0.350		
Silicon	Si %	0.100 max.		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	700 - 840
-	-	-	Yield Strength in Mpa	460 min.
	-	-	Elongation in %	10 min.
-	-	-	Reduction of Area in %	25 - 40
-	-	-	Hardn <mark>ess in HB</mark>	197 - 248
-	-	-	Impact in Joule	-

Cross Reference Table				
Material	Standard	Country Grade Belong to the Industry		
G10900	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
1090	SAE	USA	Steel and Wire	
1090	AISI	USA	Steel and Wire	
A 1040 1090	ASTM	USA	Steel	
A 29 1090	ASTM	USA	Steel and Bar	
A 510 1090	ASTM	USA	Wire Rod, Round Wire and Steel	
A 713 G10900	ASTM	USA	Steel and Wire	

## Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email 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**