



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

## Material - JIS SMnC443

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

**Group - Ferrous Mild Steel Alloys**

**Sub Group - JIS SMnC443 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 %	0.400 - 0.460	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	1.350 - 1.650		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	0.350 - 0.700		
Nickel	Ni %	0.250 max.		
Silicon	Si %	0.150 - 0.350		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	650 min.
-	-	-	Yield Strength in Mpa	360 min.
-	-	-	Elongation in %	10 min.
-	-	-	Reduction of Area in %	40 min.
-	-	-	Hardness in HB	207 max.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G15470	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1547	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1547	SAE	USA	Bar and Steel
NV 2	SAE	USA	Valve
SMnC443	SAE	USA	Valve
A 576 15L47	ASTM	USA	Steel and Bar
A 510 1547	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.

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