



Material - SAE 4340

Standard Specification for General Characteristics and Heat Treatments of Steels

Group - Ferrous Mild Steel Alloys

Sub Group - SAE 4340 General Characteristics and Heat Treatments of Steels

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Bar, Tube, Sheet, Strip and Forging

Chemical Composition			Heat Treatment	
Carbon	C %	0.380 - 0.430	Annealing or Normalising or Hardening + Tempering	
Silicon	Si %	0.150 - 0.350		
Manganese	Mn %	0.650 - 0.850		
Phosphorus	P %	0.015 max.		
Sulphur	S %	0.008 max.		
Chromium	Cr %	0.700 - 0.900		
Nickel	Ni %	1.650 - 2.000		
Molybdenum	Mo %	0.200 - 0.300		
Copper	Cu %	0.350 max.	Mechanical Properties	
Iron	Fe %	Balance	Tensile Strength in Mpa	862 - 1931
-	-	-	Yield Strength in Mpa	934.2 min.
-	-	-	Elongation in %	4 min.
-	-	-	Reduction of Area in %	20 min.
-	-	-	Hardness in HB	187 - 322
-	-	-	Impact in Joule	14.2 - 52.7 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J24054	UNS	USA	Casting
4340	AISI	USA	Casting
4340	AMS	USA	Bar and Forging
A732 10Q	AISI	USA	Casting
J13080	UNS	USA	Casting
A487 13B	ASTM	USA	Casting
SA 487 13A	ASME	USA	Casting

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

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