



Material - AISI 4340

Standard Specification for Structural and Constructional Steels

Group - Ferrous Mild Steel Alloys

Sub Group - AISI 4340 Structural and Constructional Steels

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

Grade Belongs to the Industry - Forging, Bar, Wire and Shape

Chemical Composition			Heat Treatment	
Carbon	C %	0.380 - 0.430		
Silicon	Si %	0.150 - 0.350		
Manganese	Mn %	0.650 - 0.850		
Phosphorus	P %	0.025 max.	Annealing or Normalising or Hardening + Tempering	
Sulphur	S %	0.025 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	
Vanadium	V %	0.020 - 0.080	Tensile Strength in Mpa	862 - 1931
Niobium	Nb %	0.020 - 0.050	Yield Strength in Mpa	934.2 min.
Iron	Fe %	Balance	Elongation in %	4 min.
-	-	-	Reduction of Area in %	20 min.
-	-	-	Hardness in HB	187 - 322
-	-	-	Impac <mark>t in Joule</mark>	14.2 - 52.7 J @ RT

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
J24054	UNS	USA	Casting	
4340	SAE	USA	Bar, Tube, Sheet, Strip and Forging	
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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