



Material - SAE 8620

Standard Specification for General Characteristics and Heat Treatments of Steels

Group - Ferrous Mild Steel Alloys

Sub Group - SAE 8620 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 %	0.180 - 0.230	Annealing or Normalising or Hardening + Tempering	
Silicon	Si %	1.500 - 0.350		
Manganese	Mn %	0.700 - 1.000		
Phosphorus	P %	0.012 max.		
Sulphur	S %	0.012 max.		
Chromium	Cr %	0.400 - 0.600		
Nickel	Ni %	0.400 - 0.700		
Molybdenum	Mo %	0.150 - 0.250		
Copper	Cu %	0.350 min.		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	862 min.
-	-	-	Yield Strength in Mpa	-
-	-	-	Elongation in %	-
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HB	99 min.
-	-	-	Impact in Joule	48.1 - 61.5 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J12048	UNS	USA	Casting
8620	AISI	USA	Forging, Bar, Wire, and Shape
8620	AMS	USA	Bar and Forging
A732 13Q	AISI	USA	Casting
J13047	UNS	USA	Casting
A487 4A	ASTM	USA	Casting
A487 4B	ASTM	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

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.