



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - UNS J12048

Standard Specification for Alloy Steel Casting

Group - Ferrous Mild Steel Alloys

Sub Group - UNS J12048 Alloy Steel Casting

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.150 - 0.250	Annealing or Normalising or Hardening + Tempering	
Silicon	Si %	0.200 - 8.000		
Manganese	Mn %	0.650 - 0.950		
Phosphorus	P %	0.035 max.		
Sulphur	S %	0.045 max.		
Chromium	Cr %	0.400 - 0.700		
Nickel	Ni %	0.400 - 0.700		
Molybdenum	Mo %	0.150 - 0.250		
Tungsten	W %	0.100 max.		
Copper	Cu %	0.500 max.		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Mechanical Properties	
Tensile Strength in Mpa	724 min.
Yield Strength in Mpa	586 min.
Elongation in %	10 min.
Reduction of Area in %	-
Hardness in BHN	-
Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
8620.0000	AISI	USA	Forging, Bar, Wire, and Shape
8620	SAE	USA	Bar, Tube, Sheet, Strip and Forging
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.

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