



Material - UNS K14047

Standard Specification for Alloy Steel Casting

Group - Ferrous Mild Steel Alloys

Sub Group - UNS K14047 Alloy Steel Casting

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

Grade Belongs to the Industry - Steel

Chemical Composition			Heat Treatment	
Carbon	C %	0.380 - 0.430	Annealing or Normalising or Hardening + Tempering	
Silicon	Si %	0.200 - 0.350		
Manganese	Mn %	0.750 - 1.000		
Phosphorus	P %	0.250 max.		
Sulphur	S %	0.250 max.		
Chromium	Cr %	0.800 - 1.100		
Molybdenum	Mo %	0.150 - 0.250		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	621 - 1516
-	-	-	Yield Strength in Mpa	725 min.
-	-	-	Elongation in %	5 min.
-	-	-	Reduction of Area in %	20 min.
-	-	-	Hardness in HB	187 - 241
-	-	-	Impact in Joule	25.1 - 25.7 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J14049	UNS	USA	Casting
4140	SAE	USA	Bar, Tube, Sheet, Strip and Forging
4140	AMS	USA	Bar and Forging
K11542	UNS	USA	Steel
4140	AISI	USA	Forging, Bar, Wire, and Shape
A732 8Q	ASTM	USA	Casting
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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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