



## Material - UNS J12094

### Standard Specification for Alloy Steel Casting

Group - Ferrous Mild Steel Alloys

Sub Group - UNS J12094 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 - 0.800				
Manganese	Mn %	0.400 - 0.700				
Phosphorus	P %	0.040 max.				
Sulphur	S %	0.045 max.				
Chromium	Cr %	0.350 max.				
Nickel	Ni %	1.650 - 2.000				
Molybdenum	Mo %	0.200 - 0.300				
Tungsten	W %	0.100 max.				
Copper	Cu %	0.500 max.				
Iron	Fe %	Balance	<th colspan="2">Mechanical Properties</th>		Mechanical Properties	
-	-	-	Tensile Strength in Mpa	827 min.		
-	-	-	Yield Strength in Mpa	689 min.		
-	-	-	Elongation in %	10 min.		
-	-	-	Reduction of Area in %	10 min.		
-	-	-	Hardness in BHN	-		
-	-	-	Impact in Joule	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
4620.0000	AISI	USA	Forging, Bar, Wire, and Shape
4620	SAE	USA	Bar, Tube, Sheet, Strip and Forging
4620	AMS	USA	Bar and Forging
A732 11Q	AISI	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](mailto:marketing@gravitycastindia.com)**

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