



Material - UNS J91154

Standard Specification for Alloy Steel Casting

Group - Ferrous Stainless Steel Alloys

Sub Group - UNS J91154 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 %	0.200 - 0.400	Annealing or Hardening + Tempering	
Silicon	Si %	1.500 max.		
Manganese	Mn %	1.000 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.200 - 0.400		
Chromium	Cr %	11.500 - 14.000		
Nickel	Ni %	1.000 max.		
Molybdenum	Mo %	0.500 max.		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	690 min.
-	-	-	Yield Strength in Mpa	485 min.
-	-	-	Elongation in %	12 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HB	269 max.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
420F	AISI	USA	Bar, Wire, Shapes and Forging
A895 Type 420F	ASTM	USA	Plate, Sheet and Strip
A959 Type 420F	ASTM	USA	Bar, Wire, Shapes and Forging
A 582 Type 420F	ASTM	USA	Bar and Forging
SUS 420F	JIS	Japan	Bar and Forging
S 42020	UNS	USA	Casting
A743 CA40F	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

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