



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - IS 3444 Grade 14

Standard Specification for Corrosion Resistant High Alloy Steel and Nickel Base Castings for General Applications

Group - Ferrous Stainless Steel Alloys

Sub Group - IS 3444 Corrosion Resistant High Alloy Steel and Nickel Base Castings for General Applications

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 %	0.040 max.		
Chromium	Cr %	11.500 - 14.000		
Molybdenum	Mo %	0.500 max.		
Nickel	Ni %	1.000 max.		
Iron	Fe %	Balance		
-	-	-		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	690 min.
-	-	-	Yield Strength in Mpa	480 min.
-	-	-	Elongation in %	13 min.
-	-	-	Reduction of Area in %	25 min.
-	-	-	Hardness in HB	269 max.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J9154	UNS	USA	Casting
420F	AISI	USA	Bar, Wire, Shape and Forging
A895 Type 420F	ASTM	USA	Plate, Sheet and Strip
A959 Type 420F	ASTM	USA	Bar, Wire, Shape and Forging
A582 Type 420F	ASTM	USA	Bar and Forging
SUS 420F	JIS	Japan	Bar and Forging
S 42020	UNS	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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