



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - IS 10774 Grade 9

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

Group - Ferrous Stainless Steel Alloys

Sub Group - IS 10774 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 %	14 min.
			Reduction of Area in %	-
			Hardness in HB	201 - 255
			Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
420	AISI	USA	Bar, Wire, Shape and Forging
1.4028	EN	European Union	Forging
SUS 420J2	JIS	Japan	Forging
30CH13	GOST	Russia	Bar, Wire, Shape and Forging
2304	SS	Sweden	Bar, Wire, Shape and Forging
X 30 Cr 13	UNI	Italy	Bar, Wire, Shape and Forging
420 S 45	BS	British	Bar, Wire, Shape and Forging

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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