



Material - IS 4522 Grade 9

Standard Specification for Heat Resistant Alloy Steel and Nickel Base Castings

Group - Ferrous Stainless Steel Alloys

Sub Group - IS 4522 Grade 9 Heat Resistant Alloy Steel and Nickel Base Castings

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 - 0.500	As - Cast or Annealing	
Silicon	Si %	2.000 max.		
Manganese	Mn %	2.000 max.		
Phosphorus	P %	0.050 max.		
Sulphur	S %	0.050 max.		
Chromium	Cr %	23.000 - 27.000		
Nickel	Ni %	18.000 - 22.000		
Molybdenum	Mo %	0.500 max.		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Mechanical Properties	
			Tensile Strength in Mpa	450 - 500
			Yield Strength in Mpa	250 - 290
			Elongation in %	7 - 10
			Reduction of Area in %	-
			Hardness in HB	150 - 220
			Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J94224	UNS	USA	Casting
310 C 40	BS	British	Casting
1.4848	DIN	Germany	Casting
G X 40 CrNi 26-20	UNI	Italy	Casting
422952	CSN	Czech Republic	Casting
40 CrNiSi 25-20	MSZ	Hungary	Casting
393 G X 40 CrNi 25-20	SFS	Finland	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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