

## Material - IS 3444 Grade 19

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

**Group - Non-Ferrous Nickel Alloys** 

**Sub Group - IS 3444 Grade 19 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 %	0.120 max.		
Silicon	Si %	1.500 max.		
Manganese	Mn %	1.000 max.	As-Cast or Annealing or Age Hardning	
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.040 max.		
Chromium	Cr %	15.500 - 20.000		
Molybdenum	Mo %	16.000 - 20.000		
Tungsten	W %	5.250 max.		
Vanadium	V %	0.400 max.	Mechanical Properties	
Cobalt	Co %	2.500 max.	Tensile Strength in Mpa	500 min.
Iron	Fe %	7.500 max.	Yield Strength in Mpa	320 min.
Nickel	Ni %	Balance	Elongation in %	3 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table					
Material	Standard	Country	Grade Belong to the Industry		
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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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