



## Material - ASTM B 564 R20033

### Standard Specification for Nickel Alloy Forgings

Group - Non-Ferrous Nickel Alloys

Sub Group - ASTM B 564 R20033 Nickel Alloy Forgings

Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries

Grade Belongs to the Industry - Forging

Chemical Composition			Heat Treatment	
Carbon	C %	0.015 max.	As-Cast or Annealing or Age Hardning	
Silicon	Si %	0.500 max.		
Manganese	Mn %	2.000 max.		
Chromium	Cr %	31.000 - 35.000		
Sulphur	S %	0.010 max.		
Molybdenum	Mo %	0.500 - 2.000		
Phosphorus	P %	0.020 max.		
Nitrogen	N %	0.350 - 0.600		
Copper	Cu %	0.300 - 1.200		
Nickel	Ni %	30.000 - 33.000		
Iron	Fe %	Balance	<b>Mechanical Properties</b> Tensile Strength in Mpa   750 min. Yield Strength in Mpa   380 min. Elongation in %   40 min. Reduction of Area in %   - Hardness in BHN   - Impact in Joule   -	
-	-	-		
-	-	-		
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-	-	-		
-	-	-		
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B 649 R20033	ASTM	USA	Bar and Wire
B 462 R20033	ASTM	USA	Pipe Flanges, Forged Fittings and Valve
B 619 R20033	ASTM	USA	Pipe
B 622 R20033	ASTM	USA	Pipe and Tube
B 626 R20033	ASTM	USA	Tube
B 625 R20033	ASTM	USA	Plate, Sheet and Strip
SB-649 R20033	ASME	USA	Bar and Wire

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)**

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