



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM B 649 R20033

Standard Specification for Ni-Fe-Cr-Mo-Cu Low-Carbon Alloy, Ni-Fe-Cr-Mo-Cu-N Low-Carbon Alloys and Cr-Ni-Fe-N Low-Carbon Alloy Bar and Wire

Group - Non-Ferrous Nickel Alloys

Sub Group - ASTM B 649 R20033 Ni-Fe-Cr-Mo-Cu Low-Carbon Alloy, Ni-Fe-Cr-Mo-Cu-N Low-Carbon Alloys and Cr-Ni-Fe-N Low-Carbon Alloy Bar and Wire

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

Grade Belongs to the Industry - Bar and Wire

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	Mechanical Properties	
Copper	Cu %	0.300 - 1.200	Tensile Strength in Mpa	750 min.
Nickel	Ni %	30.000 - 33.000	Yield Strength in Mpa	380 min.
Iron	Fe %	Balance	Elongation in %	40 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B 564 R20033	ASTM	USA	Forging
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

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