



**GRAVITY CAST PVT. LTD.**  
GRAVITY GROUP OF COMPANIES

## Material - ASTM B 166 N06603

**Standard Specification for Nickel-Chromium-Iron Alloys and Nickel-Chromium-Cobalt-Molybdenum Alloy Rod, Bar and Wire**

**Group - Non-Ferrous Nickel Alloys**

**Sub Group - ASTM B 166 N06603 Nickel-Chromium-Iron Alloys and Nickel-Chromium-Cobalt-Molybdenum Alloy Rod, Bar and Wire**

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

**Grade Belongs to the Industry - Rod, Bar and Wire**

Chemical Composition			Heat Treatment	
Carbon	C %	0.200 - 0.400	As-Cast or Annealing or Age Hardning	
Silicon	Si %	0.500 max.		
Manganese	Mn %	0.150 max.		
Copper	Cu %	0.500 max.		
Sulphur	S %	0.010 max.		
Chromium	Cr %	24.000 - 26.000		
Iron	Fe %	8.000 - 11.000		
Aluminium	Al %	2.400 - 3.000		
Titanium	Ti %	0.010 - 0.250		
Phosphorus	P %	0.200 max.		
Zirconium	Zr %	0.010 - 0.100	Mechanical Properties	
Yttrium	Y %	0.010 - 0.150	Tensile Strength in Mpa	650 min.
Nickel	Ni %	Balance	Yield Strength in Mpa	300 min.
-	-	-	Elongation in %	25 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B 163 N06603	ASTM	USA	Tube
N06603	UNS	USA	Tube
B 167 N06603	ASTM	USA	Pipe and Tube
B 168 N06603	ASTM	USA	Plate, Sheet and Strip
B 516 N06603	ASTM	USA	Tube
B 517 N06603	ASTM	USA	Pipe
B 564 N06603	ASTM	USA	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](mailto: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.

**ONE STOP SOLUTION FOR METAL PARTS**