



## Material - ASTM B 163 N06686

### Standard Specification for Seamless Nickel and Nickel Alloy Condenser and Heat-Exchanger Tubes

Group - Non-Ferrous Nickel Alloys

Sub Group - ASTM B 163 N06686 Seamless Nickel and Nickel Alloy Condenser and Heat-Exchanger Tubes

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

Grade Belongs to the Industry - Tube

Chemical Composition			Heat Treatment	
Carbon	C %	0.010 max.	As-Cast or Annealing or Age Hardning	
Silicon	Si %	0.080 max.		
Manganese	Mn %	0.750 max.		
Molybdenum	Mo %	15.000 - 17.000		
Sulphur	S %	0.020 max.		
Chromium	Cr %	19.000 - 23.000		
Iron	Fe %	5.000 max.		
Phosphorus	P %	0.040 max.		
Titanium	Ti %	0.020 - 0.250		
Tungsten	W %	3.000 - 4.400		
Nickel	Ni %	Balance	<b>Mechanical Properties</b> Tensile Strength in Mpa   690 min. Yield Strength in Mpa   310 min. Elongation in %   45 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 462 N06686	ASTM	USA	Pipe and Valve
B 564 N06686	ASTM	USA	Forging
B 574 N06686 Grade 1	ASTM	USA	Rod
B 575 N06686	ASTM	USA	Plate, Sheet and Strip
B 619 N06686	ASTM	USA	Pipe
B 622 N06686	ASTM	USA	Pipe and Tube
B 626 N06686	ASTM	USA	Tube

**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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