



## Material - ASTM B 163 N08810

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

Group - Non-Ferrous Nickel Alloys

Sub Group - ASTM B 163 N08810 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 %	0.050 - 0.100	As-Cast or Annealing or Age Hardning	
Silicon	Si %	1.000 max.		
Manganese	Mn %	1.500 max.		
Copper	Cu %	0.750 max.		
Sulphur	S %	0.015 max.		
Chromium	Cr %	19.000 - 23.000		
Aluminium	Al %	0.150 - 0.600		
Titanium	Ti %	0.150 - 0.600		
Iron	Fe %	39.500 max.		
Nickel	Ni %	30.000 - 35.000		
-	-	-	<b>Mechanical Properties</b> Tensile Strength in Mpa      448 min. Yield Strength in Mpa      172 min. Elongation in %      30 min. Reduction of Area in %      - Hardness in BHN      - Impact in Joule      -	
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B 407 N08810	ASTM	USA	Pipe and Tube
B 408 N08810	ASTM	USA	Rod and Bar
B 409 N08810	ASTM	USA	Plate, Sheet and Strip
B 564 N08810	ASTM	USA	Forging
SB-163 N08810	ASME	USA	Tube
N08810	UNS	USA	Tube
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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](mailto:marketing@gravitycastindia.com)**

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