



Material - ASTM B 163 N08811

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

Group - Non-Ferrous Nickel Alloys

Sub Group - ASTM B 163 N08811 Seamless Nickel and Nickel Alloy Condenser and Heat-Exchanger Tube

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

Grade Belongs to the Industry - Tube

Chemical Composition			Heat Treatment			
Carbon	C %	0.060 - 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.				
Al + Ti	Al % + Ti %	0.850 - 1.200				
Nickel	Ni %	30.000 - 35.000	<th colspan="2">Mechanical Properties</th>		Mechanical Properties	
-	-	-	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	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B 407 N08811	ASTM	USA	Pipe and Tube
B 408 N08811	ASTM	USA	Rod and Bar
B 409 N08811	ASTM	USA	Plate, Sheet and Strip
B 564 N08811	ASTM	USA	Forging
SB-163 N08811	ASME	USA	Tube
N08811	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

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