



## Material - UNS N08810

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

Group - Non-Ferrous Nickel Alloys

Sub Group - UNS N08810 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 %	0.050 - 1.000	As-Cast or Annealing or Age Hardning	
Silicon	Si %	1.000 max.		
Manganese	Mn %	1.500 max.		
Chromium	Cr %	19.000 - 23.000		
Sulphur	S %	0.015 max.		
Copper	Cu %	0.750 max.		
Aluminium	Al %	0.150 - 0.600		
Titanium	Ti %	0.150 - 0.600		
Iron	Fe %	39.500 max.		
Phosphorus	P %	0.045 max.		
Nickel	Ni %	30.000 - 35.000	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 163 N08810	ASTM	USA	Tube
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
-	-	-	-

**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.