



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A 213 N08904

Standard Specification for Seamless Ferritic and Austenitic Alloy-Steel Boiler, Superheater, and Heat-Exchanger Tubes

Group - Non-Ferrous Nickel Alloys

Sub Group - ASTM A 213 N08904 Seamless Ferritic and Austenitic Alloy-Steel Boiler, Superheater, 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 %	0.020 max.	As-Cast or Annealing or Age Hardning	
Silicon	Si %	1.000 max.		
Manganese	Mn %	2.000 max.		
Chromium	Cr %	19.000 - 23.000		
Sulphur	S %	0.035 max.		
Molybdenum	Mo %	4.000 - 5.000		
Phosphorus	P %	0.040 max.		
Copper	Cu %	1.000 - 2.000		
Nitrogen	N %	0.100 max.		
Nickel	Ni %	23.000 - 28.000		
-	-	-	Mechanical Properties Tensile Strength in Mpa 490 min. Yield Strength in Mpa 215 min. Elongation in % 35 min. Reduction of Area in % - Hardness in HRC 90 max. Impact in Joule -	
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B 649 N08904	ASTM	USA	Bar and Wire
A 182 F 904L	ASTM	USA	Pipe Flanges, Forged Fittings and Valves
A 249 N08904	ASTM	USA	Tube
A 269 N08904	ASTM	USA	Tube
A 312 N08904	ASTM	USA	Pipe
A 511 N08904	ASTM	USA	Bar
A 965 N08904	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

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.

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