

## Material: ASTM A 213 N08028

### 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 N08028 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 %	0.030 max.	As-Cast or Annealing or Age Hardning	
Silicon	Si %	1.000 max.		
Manganese	Mn %	2.500 max.		
Chromium	Cr %	26.000 - 28.000		
Sulphur	S %	0.030 max.		
Molybdenum	Mo %	3.000 - 4.000		
Copper	Cu %	0.600 - 1.400		
Phosphorus	P %	0.030 max.		
Nickel	Ni %	30.000 - 34.000		
Iron	Fe %	Balance		
-	-	-	<b>Mechanical Properties</b> Tensile Strength in Mpa 500 min. Yield Strength in Mpa 214 min. Elongation in % 40 min. Reduction of Area in % - Hardness in BHN - Impact in Joule -	
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-	-	-		
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-	-	-		
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
Incoloy Alloy 28	Gravity	India	Pipe, Tube, Sheet, Strip, Plate, Hexagon and Wire
A 988 N08028	ASTM	USA	Flanges, Fittings, Valves and Parts
A312 N08028	ASTM	USA	Pipe
SA-213 N08028	ASME	USA	Tube
SA-312 N08028	ASME	USA	Pipe
SA-988 N08028	ASME	USA	Flanges, Fittings, Valves and Parts
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Customer Care: +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)