



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-213 S31277

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

Group - Non-Ferrous Nickel Alloys

Sub Group - ASME SA-213 S31277 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 %	0.500 max.		
Manganese	Mn %	3.000 max.		
Chromium	Cr %	20.500 - 23.000		
Molybdenum	Mo %	6.500 - 8.000		
Copper	Cu %	0.500 - 1.500		
Nitrogen	N %	0.300 - 0.400		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.010 max.		
Nickel	Ni %	26.000 - 28.000		
-	-	-	Mechanical Properties Tensile Strength in Mpa 770 min. Yield Strength in Mpa 360 min. Elongation in % 40 min. Reduction of Area in % - Hardness in HRC 100 max. Impact in Joule -	
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-	-	-		
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
Incoloy 27-7MO	Gravity	India	Sheet, Plate, Bar and Wire
A 213 S31277	ASTM	USA	Tube
A 240 S31277	ASTM	USA	Plate, Sheet and Strip
A 249 S31277	ASTM	USA	Tube
A 312 S31277	ASTM	USA	Pipe
A 580 S31277	ASTM	USA	Wire
A 959 S31277	ASTM	USA	Pipe

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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