GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-249 S31277

Standard Specification for Welded Austenitic Steel Boiler, Superheater, Heat-Exchanger, and Condenser Tubes

Group - Ferrous Stainless Steel Alloys

Sub Group - ASME SA-249 S31277 Welded Austenitic Steel Boiler, Superheater, Heat-Exchanger, and Condenser Tubes

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

Grade Belongs to the Industry - Tubing

Chemical Composition		
Carbon	C %	0.020 max.
Manganese	Mn %	3.000 max.
Phosphorus	P %	0.030 max.
Sulphur	S %	0.010 max.
Silicon	Si %	0.500 max.
Chromium	Cr %	20.500 - 23.000
Nickel	Ni %	26.000 - 28.000
Molybdenum	Mo %	6.500 - 8.000
Nitrogen	N %	0.300 - 0.400
Copper	Cu %	0.500 - 1.500
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Solution Annealing

Mechanical Properties	
Tensile Strength in Mpa	770 min.
Yield Strength in Mpa	360 min.
Elongation in %	40 min.
Reduction of Area in %	-
Hardness in HB	245 max.
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
SA-240 S31277	ASME	USA	Plate, Sheet and Strip
SA-213 S31277	ASME	USA	Steel and Tubing
A 240 S31277	ASTM	USA	Plate, Sheet and Strip
A 580 S31277	ASTM	USA	Steel and Wire
A 213 S31277	ASTM	USA	Steel and Tubing
A 959 S31277	ASTM	USA	Steel
A 249 S31277	ASTM	USA	Steel and Tubing

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.