

## Material - ASTM A249 S 32050

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

**Group - Ferrous Stainless Steel Alloys** 

Sub Group - ASTM A 249/A249M- 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 - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.030 max.		
Silicon	Si %	1.000 max.		
Manganese	Mn %	1.500 max.		
Phosphorus	Р%	0.035 max.	Annealing or Hardening + Tempering	
Sulphur	S %	0.020 max.		
Chromium	Cr %	22.000 - 24.000		
Nickel	Ni %	20.000 - 23.000		
Molybdenum	Mo %	6.000 - 6.8000		
Copper	Cu %	0.400 max.	Mechanical Properties	
Nitrogen	N %	0.210 - 0.320	Tensile Strength in Mpa	675 min.
Iron	Fe %	Balance	Yield Strength in Mpa	330 min.
-	-	-	Elongation in %	40 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HRC	100 max.
-	-	-	Impac <mark>t in Joule</mark>	-

Cross Reference Table				
Material	Standard	Country Grade Belong to the Industry		
A240 S 32050	ASTM	USA	Plate, Sheet and Strip	
A358 S 32050	ASTM	USA	Pipes	
A959 S 32050	ASTM	USA	Plate, Sheet and Strip	
A213 S 32050	ASTM	USA	Tubes for Superheater and Heat exchanger	
S 32050	UNS	USA	Plate, Sheets and , Strip	
A743 CK35MN	ASTM	USA	Casting	
STS 350	KS	Korea	Casting	

## Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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