



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A213 UNS S32050

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

Group - Ferrous Stainless Steel Alloys

Sub Group - ASTM A213 UNS S32050 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.	Solution Annealing															
Silicon	Si %	1.000 max.																
Manganese	Mn %	1.500 max.																
Phosphorus	P %	0.035 max.																
Sulphur	S %	0.020 max.																
Chromium	Cr %	22.000 - 24.000																
Nickel	Ni %	20.000 - 23.000																
Molybdenum	Mo %	6.000 - 6.800																
Nitrogen	N %	0.210 - 0.320																
Copper	Cu %	0.400 max.																
Iron	Fe %	Balance	<table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>675 min.</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>330 min.</td> </tr> <tr> <td>Elongation in %</td> <td>40 min.</td> </tr> <tr> <td>Reduction of Area in %</td> <td>-</td> </tr> <tr> <td>Hardness in BHN</td> <td>256 max.</td> </tr> <tr> <td>Impact in Joule</td> <td>-</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	675 min.	Yield Strength in Mpa	330 min.	Elongation in %	40 min.	Reduction of Area in %	-	Hardness in BHN	256 max.	Impact in Joule	-
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A240 UNS S32050	ASTM	USA	Steel, Plate, Sheet and Strip
A240 S32050	ASTM	USA	Plate, Sheet and Strip
A 959 S32050	ASTM	USA	Plate, Sheet and Strip
A358 S32050	ASTM	USA	Pipes
A249 S32050	ASTM	USA	Tubes for Superheaters and Heat Exchanges
S32050	UNS	USA	Plate, Sheet and Strip
-	-	-	-

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.

ONE STOP SOLUTION FOR METAL PARTS