GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-213 Grade T21

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

Group - Ferrous Mild Steel Alloys

Sub Group - ASME SA-213 Grade T21 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 - Tubing

Chemical Composition		
Carbon	C %	0.050 - 0.150
Manganese	Mn %	0.300 - 0.600
Phosphorus	P %	0.025 max.
Sulphur	S %	0.025 max.
Silicon	Si %	0.500 - 1.000
Chromium	Cr %	2.650 - 3.350
Molybdenum	Mo %	0.800 - 1.060
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Annealing or Normalising & Tempering

Mechanical Properties	
Tensile Strength in Mpa	-
Yield Strength in Mpa	-
Elongation in %	-
Reduction of Area in %	-
Hardness in BHN	-
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
K31545	UNS	USA	Steel
A 182 F 21	ASTM	USA	Steel and Pipe
A 988 K31545	ASTM	USA	Steel
A 369 Grade FP21	ASTM	USA	Steel and Pipe
A 335 Grade P21	ASTM	USA	Steel and Pipe
A 213 Grade T21	ASTM	USA	Steel and Tubing
A 387 Grade 21	ASTM	USA	Steel and Plates

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.