GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A333 Grade 9

Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A333 Grade 9 Seamless and Welded Steel Pipe for Low-Temperature Service

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

Grade Belongs to the Industry - Pipe

Chemical Composition		
Carbon	C %	0.200 max.
Manganese	Mn %	0.400 - 1.060
Phosphorus	P %	0.025 max.
Sulphur	S %	0.025 max.
Nickel	Ni %	1.600 - 2.240
Copper	Cu %	0.750 - 1.250
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw or Normalizing

Mechanical Properties	
Tensile Strength in Mpa	435 min.
Yield Strength in Mpa	315 min.
Elongation in %	-
Reduction of Area in %	-
Hardness in HB	-
Impact in Joule	18 @ -75˚C

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
K22035	UNS	USA	Steel
SA-333 Grade 9	ASME	USA	Pipe
SA-334 Grade 9	ASME	USA	Tubing
A 334 Grade 9	ASTM	USA	Tubing
A 714 Grade V	ASTM	USA	Pipe
A 234 Grade WPR	ASTM	USA	Steel
A 182 FR	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.