GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A105

Standard Specification for Carbon Steel Forgings for Piping Applications

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A105 Carbon Steel Forgings for Piping Applications

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

Grade Belongs to the Industry - Pipe and Forging

Chemical Composition		
Carbon	C %	0.350 max.
Manganese	Mn %	0.600 - 1.050
Phosphorus	P %	0.035 max.
Sulphur	S %	0.040 max.
Silicon	Si %	0.100 - 0.350
Copper	Cu %	0.400 max.
Nickel	Ni %	0.400 max.
Chromium	Cr %	0.300 max.
Molybdenum	Mo %	0.120 max.
Vanadium	V %	0.080 max.
Cr + Mo	Cr % + Mo %	0.320 max.
Cu + Ni + Cr + Mo + V	Cu% + Ni% + Cr% + Mo % + V%	1.000 max.
Iron	Fe %	Balance
-	-	-
-	-	-

Heat Treatment
As-Raw or Annealing or Normalizing or Normalizing & Tempering or Quenching & Tempering

Mechanical Properties	
Tensile Strength in Mpa	485 min.
Yield Strength in Mpa	250 max.
Elongation in %	30 min.
Reduction of Area in %	30 min.
Hardness in HB	187 max.
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
10222-2 P 245 GH	EN	European Union	Forging
10222-2 P 305 GH	EN	European Union	Forging
10222-2 1.0352	EN	European Union	Forging
10222-2 1.0436	EN	European Union	Forging
84023/06 St 3 s-b	PN	Poland	Steel
1448 S1030	AS	Australia	Forging
1448 S1021	AS	Australia	Forging

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.