GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-487 Grade 1 Class A (1N)

Standard Specification for Steel Castings Suitable for Pressure Service

Group - Ferrous Mild Steel Alloys

Sub Group - ASME SA-487 Grade 1 Class A (1N) Steel Castings Suitable for Pressure Service

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

Grade Belongs to the Industry - Castings

Chemical Composition		
Carbon	C %	0.300 max.
Manganese	Mn %	1.000 max.
Phosphorus	P %	0.040 max.
Sulphur	S %	0.045 max.
Silicon	Si %	0.800 max.
Vanadium	V %	0.040 - 0.120
Copper	Cu %	0.500 max.
Nickel	Ni %	0.500 max.
Chromium	Cr %	0.350 max.
Mo + W	Mo% + W%	0.250 max.
Other	Ot %	1.000 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-

Heat Treatment
Normalizing

Mechanical Properties	
Tensile Strength in Mpa	585 - 760
Yield Strength in Mpa	380 min.
Elongation in %	22 min.
Reduction of Area in %	40 min.
Hardness in HRC	-
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
J13002	UNS	USA	Steel and Castings
SA-487 Class 1Q	ASME	USA	Steel and Castings
EN 10213-2 G20Mn5	UNI	Italy	Steel
10222-2 1.5415	EN	European Union	Steel
10273 1.5415	EN	European Union	Steel
10222-2 16 Mo 3	EN	European Union	Steel
G7821 200-400 W	JIS	Japan	Steel and 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

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.