GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-487 Grade 1 Class B (1Q)

Standard Specification for Steel Castings Suitable for Pressure Service

Group - Ferrous Mild Steel Alloys

Sub Group - ASME SA-487 Grade 1 Class B (1Q) 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
Quenching & Tempering

Mechanical Properties	
Tensile Strength in Mpa	620 -795
Yield Strength in Mpa	450 min.
Elongation in %	22 min.
Reduction of Area in %	45 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 1N	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

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