GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - IS 3038 Grade 2

Standard Specification for Martensitic Stainless Steel and Alloy Steel Castings for Pressure Containing Parts Suitable for High Temperature Service

Group - Ferrous Mild Steel Alloys

Sub Group - IS 3038 Grade 2 Martensitic Stainless Steel and Alloy Steel Castings for Pressure Containing Parts Suitable for High Temperature Service

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

Grade Belongs to the Industry - Casting

Chemical Composition		
Carbon	C %	0.250 max.
Silicon	Si %	0.200 - 0.600
Manganese	Mn %	0.500 - 0.800
Sulphur	S %	0.045 max.
Phosphorus	P %	0.040 max.
Chromium	Cr %	0.350 max.
Nickel	Ni %	0.500 max.
Molybdenum	Mo %	0.450 - 0.650
Vanadium	V %	0.050 max.
Copper	Cu %	0.500 max.
Tungsten	W %	0.100 max.
Zirconium	Zr %	0.035 max.
Other	Ot %	1.000 max.
Iron	Fe %	Balance
-	-	-

Heat Treatment
As-Cast or Normalizing + Tempering

Mechanical Properties	
Tensile Strength in Mpa	450 - 620
Yield Strength in Mpa	240 min.
Elongation in %	22 min.
Reduction of Area in %	35 min.
Hardness in HV	-
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
J12520	UNS	USA	Steel and Casting
SA-217 Grade WC1	ASME	USA	Steel and Casting
SA-29 Grade 4422	ASME	USA	Steel and Bars
A 217 Grade WC1	ASTM	USA	Steel and Casting
G 5152 SCPL 11	JIS	Japan	Steel and Casting
1504 245	B.S.	United Kingdom	Steel and Casting
5892-4 B 5	B.S.	United Kingdom	Steel

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.