GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - IS 3038 Grade 10

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 10 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 %	0.050 - 0.200
Silicon	Si %	0.600 max.
Manganese	Mn %	0.400 - 0.700
Sulphur	S %	0.045 max.
Phosphorus	P %	0.040 max.
Chromium	Cr %	0.500 - 0.900
Nickel	Ni %	0.600 - 1.000
Molybdenum	Mo %	0.900 - 1.200
Copper	Cu %	0.500 max.
Tungsten	W %	0.100 max.
Other	Ot %	0.600 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Cast or Normalizing + Tempering

Mechanical Properties	
Tensile Strength in Mpa	685 - 655
Yield Strength in Mpa	275 min.
Elongation in %	18 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**
J22000	UNS	USA	Steel and Casting
A 487 Grade 12	ASTM	USA	Steel and Casting
A 217 Grade WC5	ASTM	USA	Steel and Casting
SA-217 Grade WC5	ASME	USA	Steel and Casting
SA-487 Grade 12A	ASME	USA	Steel and Casting
SA-487 Grade 12B	ASME	USA	Steel and Casting
A 217 Grade WC4	ASTM	USA	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.