



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A217 Grade WC5

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

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A217 / A217M Steel Castings, Martensitic Stainless and Alloy, 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			Heat Treatment	
Carbon	C %	0.050 - 0.200	Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.600 max.		
Manganese	Mn %	0.400 - 0.700		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.045 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.	Mechanical Properties Tensile Strength in Mpa 485 - 655 Yield Strength in Mpa 275 min. Elongation in % 20 min. Reduction of Area in % 35 min. Hardness in BHN - Impact in Joule -	
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J22000	UNS	USA	Casting
SA-217 Grade WC5	ASME	USA	Casting
A487 Grade 12	ASTM	USA	Casting
SA-487 Grade 12A	ASME	USA	Casting
SA-487 Grade 12B	ASME	USA	Casting
WC5	KS	Korea	Casting
WC5	NMX	Mexico	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.

ONE STOP SOLUTION FOR METAL PARTS