



**GRAVITY CAST PVT. LTD.**  
**GRAVITY GROUP OF COMPANIES**

## Material - ASTM A541 Grade 11 Class 4

**Standard Specification for Quenched and Tempered Carbon and Alloy Steel Forgings for Pressure Vessel Components**

**Group - Ferrous Mild Steel Alloys**

**Sub Group - ASTM A541 Grade 11 Class 4 Quenched and Tempered Carbon and Alloy Steel Forgings for Pressure Vessel Components**

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

**Grade Belongs to the Industry - Forging**

Chemical Composition			Heat Treatment	
Carbon	C %	0.100 - 0.200	Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.500 - 1.000		
Manganese	Mn %	0.300 - 0.800		
Phosphorus	P %	0.025 max.		
Sulphur	S %	0.025 max.		
Chromium	Cr %	1.000 - 1.500		
Nickel	Ni %	0.500 max.		
Molybdenum	Mo %	0.450 - 0.650		
Vanadium	V %	0.050 max.		
Iron	Fe %	Balance		
-	-	-	<b>Mechanical Properties</b>	
-	-	-	Tensile Strength in Mpa	550 - 725
-	-	-	Yield Strength in Mpa	345 min.
-	-	-	Elongation in %	18 min.
-	-	-	Reduction of Area in %	38 min.
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	20 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
369 G-17 CrMo 5-5	SFS	Finland	Casting
621	BS	British	Plate
J12073	UNS	USA	Casting
G 17 CrMo 5-5	UNI	Italy	Casting
A217 WC11	ASTM	USA	Casting
A217 WC6	ASTM	USA	Casting
A356 6	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](mailto: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**