



## Material - UNS J42045

### Standard Specification for Alloy Steel Casting

Group - Ferrous Mild Steel Alloys

Sub Group - UNS J42045 Alloy Steel Casting

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.200 max.	Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.750 max.		
Manganese	Mn %	0.400 - 0.700		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.045 max.		
Chromium	Cr %	4.000 - 6.500		
Molybdenum	Mo %	0.450 - 0.650		
Nickel	Ni %	0.500 max.		
Tungsten	W %	0.100 max.		
Copper	Cu %	0.500 max.		
Iron	Fe %	Balance	<b>Mechanical Properties</b> Tensile Strength in Mpa      620 - 795 Yield Strength in Mpa      415 min. Elongation in %      18 min. Reduction of Area in %      35 min. Hardness in BHN      - Impact in Joule      -	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A426 Grade CP5	ASTM	USA	Casting
G S 12 CrMo 19-5	DIN	Germany	Casting
G X 15 CrMo 5	EN	European Union	Casting
SCPH 61	JIS	Japan	Casting
1.7363	DIN	Germany	Casting
G X 12 CrMo 5	DIN	Germany	Casting
A217 Grade C5	ASTM	USA	Casting

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +91846916029, 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.