



## Material - BS 3100 Grade 420C28

### Standard Specification for Steel Castings for General Engineering Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - BS 3100 Grade 420C28 Steel Castings for General Engineering Purposes

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.	As Cast or Annealing or Normalizing or Hardening and Tempering	
Silicon	Si %	1.000 max.		
Manganese	Mn %	1.000 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.040 max.		
Chromium	Cr %	11.500 - 13.500		
Nickel	Ni %	1.000 max.		
Copper	Cu %	0.300 max.		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	620 min.
-	-	-	Yield Strength in Mpa	450 min.
-	-	-	Elongation in %	13 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	179 - 235
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
420C29	BS	British	Casting
420	SAE	USA	Sheet, Strip and Plate
420	AISI	USA	Forging
A 176 S42000	ASTM	USA	Steel Plate, Sheet and Strip
A 176 Type 420	ASTM	USA	Steel Plate, Sheet and Strip
A 314 420	ASTM	USA	Billets and Bars for Forging
A 314 S42000	ASTM	USA	Billets and Bars for Forging

**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.