



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

## Material - UNI EN 12420 CW612N

### Standard Specification for Copper and Copper-Alloy Forgings

Group - Non-Ferrous Copper Alloy

Sub Group - UNI EN 12420 Copper and Copper-Alloy Forgings

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

Grade Belongs to the Industry - Forging

Chemical Composition			Heat Treatment	
Aluminium	Al %	0.050 max.	Normalizing or Annealing or Tempering	
Iron	Fe %	0.300 max.		
Nickel	Ni %	0.300 max.		
Other	Ot%	0.200 max.		
Lead	Pb %	1.600 - 2.500		
Tin	Sn %	0.300 max.		
Copper	Cu %	59.000 - 60.000		
Zinc	Zn %	Balance		
-	-	-	<b>Mechanical Properties</b>	
-	-	-	Tensile Strength in Mpa	350 - 570
-	-	-	Yield Strength in Mpa	140 - 510
-	-	-	Elongation in %	5 - 30
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HB	70 - 145
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B981 C37700	ASTM	USA	Rod, Bar, Wire and Shapes
CuZn39Pb2	UNI	Italy	Plate, Sheet and Strip
CW612N	ONORM	Australia	Forging
B283 C37700	ASTM	USA	Forging
SB-283 C37700	ASME	USA	Forging
CA377	SAE	USA	Forging
C37700	UNS	USA	Rod, Bar, Tube and Shapes

**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.

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