

# Material - ASME SA-351 CK3MCuN

## Standard Specification for Austenitic Steel Castings for Valves, Flanges, Fittings, and Other Pressure-Containing Parts

Group - Ferrous Stainless Steel Alloys

Sub Group - SA-351 Austenitic Steel Castings for Valves, Flanges, Fittings, and Other Pressure-Containing Parts

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.025 max.	Solution Annealing	
Silicon	Si %	1.000 max.		
Manganese	Mn %	1.200 max.		
Phosphorus	P %	0.045 max.		
Sulphur	S %	0.010 max.		
Chromium	Cr %	19.000 - 20.500		
Nickel	Ni %	17.500 - 19.500		
Molybdenum	Mo %	6.000 - 7.000		
Nitrogen	N %	0.1800 - 0.2400		
Copper	Cu %	0.500 - 1.000.		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	490 min.
-	-	-	Yield Strength in Mpa	195 min.
-	-	-	Elongation in %	40 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A351 CK3MCuN	ASTM	USA	Casting
Z4Cmd 19.13M	AFNOR NF	France	Casting
317 C 12	BS	British	Casting
422940	CSN	Czech Republic	Casting
J92810	UNS	USA	Casting
J93254	UNS	USA	Casting
A351 CE20	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)**

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