

## Material: ASTM A744 Grade CK3MCuN

### Standard Specification for Castings, Iron-Chromium-Nickel, Corrosion Resistant for Severe Service

**Group:** Ferrous Stainless Steel Alloys

**Sub Group:** ASTM A744 Grade CK3MCuN Iron-Chromium-Nickel, Corrosion Resistant for Severe Service

**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 %	19.500 - 20.500		
Nickel	Ni %	17.500 - 19.500		
Molybdenum	Mo %	6.000 - 7.000		
Copper	Cu %	0.500 - 1.000		
Nitrogen	N %	0.180 - 0.240		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Tensile Strength in Mpa	550 min.
			Yield Strength in Mpa	260 min.
			Elongation in %	35 min.
			Reduction of Area in %	-
			Hardness in BHN	-
			Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A743 CK3MCuN	ASTM	USA	Casting
SA-351 CKMCuN	ASME	USA	Casting
Z 4 CND 19.13 M	AFNOR NF	France	Casting
317 C 12	BS	British	Casting
422940	CSN	Czech Republic	Casting
J92810	UNS	USA	Casting
J93254	UNS	USA	Casting

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