

## Material: UNS J80020

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

**Group:** Ferrous Stainless Steel Alloys

**Sub Group:** UNS J80020 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 %	0.030 max.	Solution Annealing	
Silicon	Si %	1.000 max.		
Manganese	Mn %	1.500 max.		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.015 max.		
Chromium	Cr %	19.000 - 22.000		
Nickel	Ni %	27.500 - 30.500		
Molybdenum	Mo %	2.000 - 3.000		
Copper	Cu %	3.000 - 3.500		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	425 min.
-	-	-	Yield Strength in Mpa	170 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
A 744 CN3MCu	UNS	USA	Casting
A990 CN3MCu	ASTM	USA	Casting
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-	-	-	-
-	-	-	-
-	-	-	-
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