

# Material: ASME SA-351 CF10SMnN

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

**Group:** Ferrous Stainless Steel Alloys

**Sub Group:** ASME SA-351 CF10SMnN 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 %	0.100 max.	Solution Annealing	
Silicon	Si %	3.500 - 4.500		
Manganese	Mn %	7.000 - 9.000		
Phosphorus	P %	0.060 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	16.000 - 18.000		
Nickel	Ni %	8.000 - 9.000		
Nitrogen	N %	0.080 - 0.180		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Tensile Strength in Mpa	
			585 min.	
			Yield Strength in Mpa	
			295 min.	
			Elongation in %	
			30 min.	
			Reduction of Area in %	
			-	
			Hardness in BHN	
			-	
			Impact in Joule	
			-	

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A743 CF10MnN	ASTM	USA	Casting
J92972	UNS	USA	Casting
S21800	UNS	USA	Casting
5848	AMS	USA	Bar, Wire, Extrusions, Tube, Ring and Forging
SA-276 S21800	ASME	USA	Bar and Shapes
A580 S21800	ASTM	USA	Wire
A351 CF10SMnN	ASTM	USA	Casting

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