

# Material: AMS 5848

**Standard Specification for Steel, Corrosion Resistant, Bars, Wire, Forgings, Extrusions, Tubing, and Rings, Wear and Galling Resistant**

**Group:** Ferrous Stainless Steel Alloys

**Sub Group:** AMS 5848 Steel, Corrosion Resistant, Bars, Wire, Forgings, Extrusions, Tubing, and Rings, Wear and Galling Resistant

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

**Grade Belongs to the Industry:** Bar, Wire, Extrusions, Tube, Ring and Forging

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 %	0.040 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	16.000 - 18.000		
Nickel	Ni %	8.000 - 9.000		
Molybdenum	Mo %	0.750 max.		
Nitrogen	N %	0.080 - 0.180		
Copper	Cu %	0.750 max.		
Iron	Fe %	Balance	<b>Mechanical Properties</b> Tensile Strength in Mpa 655 min. Yield Strength in Mpa 345 min. Elongation in % 35 min. Reduction of Area in % 55 min. Hardness in BHN 170 - 255 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
SA-351 CF10SMnN	ASME	USA	Casting
SA-276 S21800	ASME	USA	Bar and Shapes
A580 S21800	ASTM	USA	Wire
A351 CF10SMnN	ASTM	USA	Casting

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Customer Care: +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)