

## 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	Mechanical Properties	
Copper	Cu %	0.750 max.	Tensile Strength in Mpa	655 min.
Iron	Fe %	Balance	Yield Strength in Mpa	345 min.
-	-	-	Elongation in %	35 min.
-	-	-	Reduction of Area in %	55 min.
-	-	-	Hardness in BHN	170 - 255
-	-	-	Impac <mark>t in Joule</mark>	-

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		

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.