



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SB-818 R31233

Standard Specification for Cobalt-Chromium-Nickel-Molybdenum-Tungsten Alloy Plate, Sheet and Strip

Group - Non-Ferrous Nickel Alloys

Sub Group - ASME SB-818 R31233 Cobalt-Chromium-Nickel-Molybdenum-Tungsten Alloy Plate, Sheet and Strip

Application - Intended for Valve, Pump, General Engineering, Automotive, Medical and other Industries

Grade Belongs to the Industry - Plate, Sheet and Strip

Chemical Composition			Heat Treatment	
Carbon	C %	0.020 - 0.100	As-Cast or Annealing or Age Hardning	
Silicon	Si %	0.050 - 1.000		
Manganese	Mn %	0.100 - 1.500		
Chromium	Cr %	23.500 - 27.500		
Sulphur	S %	0.020 max.		
Molybdenum	Mo %	4.000 - 6.000		
Phosphorus	P %	0.030 max.		
Boron	B %	0.015 max.		
Iron	Fe %	1.000 - 5.000	Mechanical Properties	
Nickel	Ni %	7.000 - 11.000	Tensile Strength in Mpa	896 min.
Nitrogen	N %	0.030 - 0.120	Yield Strength in Mpa	379 min.
Tungsten	W %	1.000 - 3.000	Elongation in %	15 min.
Cobalt	Co %	Balance	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
B 815 R31233	ASTM	USA	Rod
B 818 R31233	ASTM	USA	Plate, Sheet and Strip
SB-815 R31233	ASME	USA	Rod
R31233	UNS	USA	Rod
-	-	-	-
-	-	-	-
-	-	-	-

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.

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