



Material - ASTM A 494 CW12MW

Standard Specification for Castings, Nickel and Nickel Alloy

Group - Non-Ferrous Nickel Alloys

Sub Group - ASTM A 494 CW12MW Castings, Nickel and Nickel Alloy

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.120 max.	As-Cast or Annealing or Age Hardning	
Silicon	Si %	1.000 max.		
Manganese	Mn %	1.000 max.		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.020 max.		
Chromium	Cr %	15.500 - 17.500		
Tungsten	W %	3.750 - 5.250		
Molybdenum	Mo %	16.000 - 18.000		
Vanadium	V %	0.200 - 0.400		
Iron	Fe %	4.500 - 7.500		
Nickel	Ni %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	495 min.
-	-	-	Yield Strength in Mpa	275 min.
-	-	-	Elongation in %	4 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
SA-494 CW12MW	ASME	USA	Casting
C-NiMo17Cr16Fe6W4	AFNOR NF	France	Casting
NC0002	AFNOR NF	France	Casting
NC16D16Fe5W5-M	AFNOR NF	France	Casting
N30002	UNS	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

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