



Material - UNS J80490

Standard Specification for Alloy Steel Casting

Group - Ferrous Stainless Steel Alloys

Sub Group - UNS J80490 Alloy Steel Casting

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.080 - 0.120	Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.200 - 0.500		
Manganese	Mn %	0.300 - 0.600		
Phosphorus	P %	0.020 max.		
Sulphur	S %	0.010 max.		
Chromium	Cr %	8.000 - 9.500		
Molybdenum	Mo %	0.850 - 1.050		
Nickel	Ni %	0.400 max.		
Vanadium	V %	0.180 - 0.250		
Niobium	Nb %	0.060 - 0.100		
Aluminium	Al %	0.040 max.	Mechanical Properties Tensile Strength in Mpa 585 min. Yield Strength in Mpa 415 min. Elongation in % 20 min. Reduction of Area in % - Hardness in BHN - Impact in Joule -	
Nitrogen	N %	0.030 - 0.070		
Iron	Fe %	Balance		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1.4903	UNS	USA	Casting
A234 Grade WP91	ASTM	USA	Pipe
A336 Grade F91	ASTM	USA	Forging
TUZ 10 CDVNb 09-01	AFNOR NF	France	Tube
X 10 CrMoVNb 9-1	UNS	USA	Steel
J84090	UNS	USA	Steel
A217 Grade C12A	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

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