



Material - SAE AMS 4490K AZ91D

Standard Specification for Magnesium Alloy Castings

Group - Non-Ferrous Magnesium Alloy

Sub Group - SAE AMS 4490K Magnesium Alloy Castings

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Aluminium	Al %	8.300 - 9.700		
Zinc	Zn %	0.350 - 1.000		
Manganese	Mn %	0.150 - 0.500		
Silicon	Si %	0.100 max.	As-Cast	
Iron	Fe %	0.005 max.		
Copper	Cu %	0.030 max.		
Nickel	Ni %	0.002 max.		
Other	Ot%	0.030 max.		
Magnesium	Mg %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	230 min.
-	-	-	Yield Strength in Mpa	160 min.
-	-	-	Elongation in %	3 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HB	75 min.
-	-	-	Impac <mark>t in Joule</mark>	2.2 min. @RT

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
AZ91D	ANSI/AA	USA	Casting	
M11916	UNS	USA	Casting	
B94 AZ91D	ASTM	USA	Casting	
B275 AZ91D	ASTM	USA	Casting	
B951 AZ91D	ASTM	USA	Casting	
B951 M11916	ASTM	USA	Casting	
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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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