GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A372 Grade M Class 85

Standard Specification for Carbon and Alloy Steel Forgings for Thin-Walled Pressure Vessels

Group - Ferrous Mild Steel Alloys
Sub Group - ASTM A372 Grade M Class 85 Carbon and Alloy Steel Forgings for Thin-Walled Pressure Vessels
Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries
Grade Belongs to the Industry - Forging

Chemical Composition		
Carbon	C %	0.230 max.
Manganese	Mn %	0.200 - 0.400
Phosphorus	P %	0.020 max.
Sulphur	S %	0.020 max.
Silicon	Si %	0.300 max.
Nickel	Ni %	2.800 - 3.900
Chromium	Cr %	1.500 - 2.000
Molybdenum	Mo %	0.400 - 0.600
Vanadium	V %	0.080 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw or Quenching & Tempering

Mechanical Properties	
Tensile Strength in Mpa	725 - 895
Yield Strength in Mpa	585 min.
Elongation in %	18 min.
Reduction of Area in %	-
Hardness in HB	217 min.
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
K42365	UNS	USA	Steel
A 508 Grade 5 Class 1	ASTM	USA	Steel and Forging
A 508 Grade 5 Class 2	ASTM	USA	Steel and Forging
SA-508 Class 5	ASME	USA	Forging
SA-508 Class 5a	ASME	USA	Forging
SA-372 Grade M Class A	ASME	USA	Forging
SA-372 Grade M Class B	ASME	USA	Forging

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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