GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-372 Grade R Class 90

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

Group - Ferrous Mild Steel Alloys
Sub Group - ASME SA-372 Grade R Class 90 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 - Forgings

Chemical Composition		
Carbon	C %	0.350 - 0.500
Manganese	Mn %	0.750 - 1.050
Phosphorus	P %	0.015 max.
Sulphur	S %	0.010 max.
Silicon	Si %	0.150 - 0.350
Chromium	Cr %	0.800 - 1.150
Molybdenum	Mo %	0.150 - 0.250
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Normalising or Normalising & Tempering or Quenching & Tempering

Mechanical Properties	
Tensile Strength in Mpa	825 - 1000
Yield Strength in Mpa	620 min.
Elongation in %	18 min.
Reduction of Area in %	-
Hardness in BHN	248 min.
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
K14248	UNS	USA	Steel
G 4107 SNB 7	JIS	Japan	Steel
EN 10083-1 42 CrMo 4	B.S.	United Kingdom	Steel
SAE J 404 4140	AISI	USA	Steel
A 372 Grade J Class 55	ASTM	USA	Steel and Forging
A 372 Grade J Class 65	ASTM	USA	Steel and Forging
A 372 Grade J Class 70	ASTM	USA	Steel and 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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