GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-765 Grade III

Standard Specification for Carbon Steel and Low-Alloy Steel Pressure-Vessel-Component Forgings With Mandatory Toughness Requirements

Group - Ferrous Mild Steel Alloys

Sub Group - ASME SA-765 Grade III Carbon Steel and Low-Alloy Steel Pressure-Vessel-Component Forgings With Mandatory Toughness Requirements

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

Grade Belongs to the Industry - Forging

Chemical Composition		
Carbon	C %	0.200 max.
Manganese	Mn %	0.900 max.
Phosphorus	P %	0.020 max.
Sulphur	S %	0.020 max.
Silicon	Si %	0.150 - 0.350
Nickel	Ni %	3.300 - 3.800
Vanadium	V %	0.050 max.
Aluminium	Al %	0.050 max.
Chromium	Cr %	0.200 max.
Molybdenum	Mo %	0.060 max.
Copper	Cu %	0.350 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-

Heat Treatment
Quenching & Tempering or Normalizing & Tempering

Mechanical Properties	
Tensile Strength in Mpa	485 - 655
Yield Strength in Mpa	260 min.
Elongation in %	22 min.
Reduction of Area in %	35 min.
Hardness in HB	-
Impact in Joule	20 @ RT

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
4817 H	AISI	USA	Steel
SAE J 1249 4817	AISI	USA	Steel
J 1268 4817 H	SAE	USA	Steel
J 1249 4817	SAE	USA	Steel
A 519 4817	ASTM	USA	Steel and Tubing
A 752 Grade 4817	ASTM	USA	Steel and Wire Rods
A 765 Grade III	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

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.