GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-765 Grade V Class 1

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 V Class 1 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 %	0.300 max.
Manganese	Mn %	0.600 - 1.350
Phosphorus	P %	0.020 max.
Sulphur	S %	0.020 max.
Silicon	Si %	0.150 - 0.500
Nickel	Ni %	1.000 - 2.000
Vanadium	V %	0.030 max.
Aluminium	Al %	0.050 max.
Chromium	Cr %	0.300 max.
Molybdenum	Mo %	0.120 max.
Copper	Cu %	0.350 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-

Heat Treatment
Quenching & Tempering or Normalizing & Tempering

Mechanical Properties	
Tensile Strength in Mpa	415 - 585
Yield Strength in Mpa	205 min.
Elongation in %	25 min.
Reduction of Area in %	38 min.
Hardness in HB	-
Impact in Joule	20 @ RT

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
81-316 SA 2 Ni 1	AFNOR NF	France	Steel
6447 SA 2 Ni 1	MSZ	Hungary	Steel
SA-350 Grade LF5 Class 1	ASME	USA	Steel and Forging
SA-350 Grade LF5 Class 2	ASME	USA	Steel and Forging
A 350 Grade LF5 Class 1	ASTM	USA	Steel and Forging
A 350 Grade LF5 Class 2	ASTM	USA	Steel and Forging
1.5633	DIN	Germany	Steel

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.