GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-765 Grade I

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 I 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 - 0.350
Nickel	Ni %	0.500 max.
Vanadium	V %	0.050 max.
Aluminium	Al %	0.050 max.
Chromium	Cr %	0.400 max.
Molybdenum	Mo %	0.100 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	18 @ RT

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
K11801	UNS	USA	Steel
1448 S1016	AS	Australia	Steel and Forging
1448 S1021	AS	Australia	Steel and Forging
J 1868 15B21 RH	SAE	USA	Steel
10016-2 1.0304	EN	European Union	Steel
10016-2 1.0304	DIN	Germany	Steel
EN 10016-2 C9D	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

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