GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-723 Grade 1 Class 1

Standard Specification for Alloy Steel Forgings for High-Strength Pressure Component Application

Group - Ferrous Mild Steel Alloys

Sub Group - ASME SA-723 Grade 1 Class 1 Alloy Steel Forgings for High-Strength Pressure Component Application

Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries
Grade Belongs to the Industry - Forging

Chemical Composition		
Carbon	C %	0.350 max.
Manganese	Mn %	0.900 max.
Phosphorus	P %	0.015 max.
Sulphur	S %	0.015 max.
Silicon	Si %	0.350 max.
Chromium	Cr %	0.800 - 2.000
Nickel	Ni %	1.500 - 2.250
Molybdenum	Mo %	0.200 - 0.400
Vanadium	V %	0.200 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Quenching & Tempering

Mechanical Properties	
Tensile Strength in Mpa	795 min.
Yield Strength in Mpa	690 min.
Elongation in %	16 min.
Reduction of Area in %	50 min.
Hardness in HB	-
Impact in Joule	47 @ RT

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
K23550	UNS	USA	Steel
1.6586	DIN	Germany	Steel
31 CrNiMo 8	DIN	Germany	Steel
SA-723 Grade 1 Class 5	ASME	USA	Steel and Forging
SA-723 Grade 1 Class 2	ASME	USA	Steel and Forging
SA-723 Grade 1 Class 3	ASME	USA	Steel and Forging
SA-723 Grade 1 Class 4	ASME	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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