GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-182 Grade F 122

Standard Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings and Valves and Parts for High-Temperature Service

Group - Ferrous Stainless Steel Alloys

Sub Group - ASME SA-182 Grade F 122 Forged or Rolled Alloy and Stainles Steel Pipe Flanges, Forged Fittings and Valves and Parts for Hogh-Temperature Service

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

Grade Belongs to the Industry - Pipe and Forging

Chemical Composition		
Carbon	C %	0.070 - 0.140
Manganese	Mn %	0.700 max.
Phosphorus	P %	0.020 max.
Sulphur	S %	0.010 max.
Silicon	Si %	0.500 max.
Nickel	Ni %	0.500 max.
Chromium	Cr %	10.000 - 11.500
Molybdenum	Mo %	0.250 - 0.600
Niobium	Nb %	0.040 - 0.010
Vanadium	V %	0.150 - 0.300
Boron	B %	0.005 max.
Nitrogen	N %	0.040 - 0.100
Aluminium	Al %	0.020 max.
Copper	Cu %	0.300 - 1.700
Tungsten	W %	1.500 - 2.500

Chemical Composition		
Zirconium	Zr %	0.010 max.
Iron	Fe%	Balance
-	-	-
-	-	-
-	-	-
Heat Treatment		
Normalising & Tempering		
Mechanical Properties		
Tensile Strength in Mpa	620 min.	
Yield Strength in Mpa	400 min.	
Elongation in %	20 min.	
Reduction of Area in %	40 min.	
Hardness in BHN	250 max.	
Impact in Joule	-	

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
K91271	UNS	USA	Steel
SA-1017 Grade 122	ASME	USA	Steel and Plate
SA-335 P122	ASME	USA	Steel and Pipe
SA-213 T22	ASME	USA	Steel and Tubing
A 1017 Grade 122	ASTM	USA	Steel and Plate
A 335 Grade P122	ASTM	USA	Steel and Pipe
A 213 Grade T122	ASTM	USA	Steel and Tubing

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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