GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-182 Grade F 5A

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

Group - Ferrous Mild Steel Alloys

Sub Group - ASME SA-182 Grade F 5A Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings and Valves and Parts for High-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 %	0.250 max.
Manganese	Mn %	0.600 max.
Phosphorus	P %	0.040 max.
Sulphur	S %	0.030 Max.
Silicon	Si %	0.500 max.
Nickel	Ni %	0.500 max.
Chromium	Cr %	4.000 - 6.000
Molybdenum	Mo %	0.440 - 0.650
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Annealing or Normalising & Tempering

Mechanical Properties	
Tensile Strength in Mpa	620 min.
Yield Strength in Mpa	450 min.
Elongation in %	22 min.
Reduction of Area in %	50 min.
Hardness in BHN	187 - 248
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
K42544	UNS	USA	Steel
17176 12 CrMo 19 5	DIN	Germany	Steel and Tubing
2528 1.7362	DIN	Germany	Steel
G 3458 STPA 25	JIS	Japan	Steel and Pipe
7660 A 16 CrMo 20 5 KG	UNI	Italy	Steel and Forging
3606 625	B.S.	United Kingdom	Steel and Tubing
SA-213 Grade T 5	ASME	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

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.