



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-182 Grade F 36

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 36 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 %	0.100 - 0.170
Manganese	Mn %	0.800 - 1.200
Phosphorus	P %	0.030 Max.
Sulphur	S %	0.025 max.
Silicon	Si %	0.250 - 0.500
Nickel	Ni %	1.000 - 1.300
Chromium	Cr %	0.300 max.
Molybdenum	Mo %	0.250 - 0.500
Niobium	Nb %	0.015 - 0.045
Nitrogen	N %	0.020 max.
Aluminium	Al %	0.050 max.
Copper	Cu %	0.500 - 0.800
Vanadium	V %	0.020 max.
Iron	Fe %	Balance
-	-	-

Heat Treatment	
Normalising & Tempering	

Mechanical Properties	
Tensile Strength in Mpa	620 min.
Yield Strength in Mpa	440 min.
Elongation in %	15 min.
Reduction of Area in %	-
Hardness in BHN	252 max.
Impact in Joule	-

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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
K21001	UNS	USA	Steel
SEW 028 1.6368	DIN	Germany	Steel
1.6369	DIN	Germany	Steel
15 NiCuMon 5 S	DIN	Germany	Steel
15NiCuMoNb5	DIN	Germany	Steel
3604-1 591	B.S.	United Kingdom	Steel
9329-2 9 NiMnMoCrNb 5-4-4	ISO	International	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.

ONE STOP SOLUTION FOR METAL PARTS