



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-182 Grade F 24

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 24 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 % | 0.050 - 0.100 |
| Manganese | Mn % | 0.300 - 0.700 |
| Phosphorus | P % | 0.020 max. |
| Sulphur | S % | 0.010 max. |
| Silicon | Si % | 0.150 - 0.450 |
| Chromium | Cr % | 2.200 - 2.600 |
| Molybdenum | Mo % | 0.900 - 1.100 |
| Titanium | Ti % | 0.060 - 0.100 |
| Vanadium | V % | 0.200 - 0.300 |
| Nitrogen | N % | 0.120 max. |
| Aluminium | Al % | 0.020 max. |
| Boron | B % | 0.0015 - 0.0070 |
| Iron | Fe % | Balance |
| - | - | - |
| - | - | - |

| Chemical Composition | | |
|-------------------------|---|----------|
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| Heat Treatment | | |
| Normalising & Tempering | | |
| Mechanical Properties | | |
| Tensile Strength in Mpa | | 585 min. |
| Yield Strength in Mpa | | 415 min. |
| Elongation in % | | 20 min. |
| Reduction of Area in % | | 40 min. |
| Hardness in BHN | | 248 max. |
| Impact in Joule | | - |

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| Cross Reference Table | | | |
|-------------------------|----------|----------------|------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| K30736 | UNS | USA | Steel |
| A 182 F 24 | ASTM | USA | Steel and Pipe |
| A 213 T24 | ASTM | USA | Steel and Tubing |
| 7CrMoVTiB10-10 - 1.7378 | EN | European Union | Steel and Tubing |
| 10216-2 7CrMoVTiB10-10 | EN | European Union | Pipe and Tubing |
| C.B5.022 C 7401 | JUS | Yugoslavia | 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.

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