GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

# Material - ASTM A225 Grade C

## Standard Specification for Pressure Vessel Plates, Alloy Steel, Manganese-Vanadium-Nickel

**Group - Ferrous Mild Steel Alloys**
**Sub Group - ASTM A225 Grade C Pressure Vessel Plates, Alloy Steel, Manganese-Vanadium-Nickel**
**Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries**
**Grade Belongs to the Industry - Plates**

| Chemical Composition | | |
|---|---|---|
| Carbon | C % | 0.250 max. |
| Manganese | Mn % | 1.720 max. |
| Phosphorus | P % | 0.035 max. |
| Sulphur | S % | 0.035 max. |
| Silicon | Si % | 0.130 - 0.450 |
| Vanadium | V % | 0.110 - 0.200 |
| Nickel | Ni % | 0.370 - 0.730 |
| Iron | Fe % | Balance |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |

| Heat Treatment |
|---|
| As-Raw or Normalizing or Stress Relieved |

| Mechanical Properties | |
|---|---|
| Tensile Strength in Mpa | 725 - 930 |
| Yield Strength in Mpa | 485 min. |
| Elongation in % | 20 min. |
| Reduction of Area in % | - |
| Hardness in HB | - |
| Impact in Joule | - |

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| Cross Reference Table | | | |
|---|---|---|---|
| **Material** | **Standard** | **Country** | **Grade Belong to the Industry** |
| K12524 | UNS | USA | Steel |
| K12004 | UNS | USA | Steel |
| 1.0532 | EN | European Union | Steel |
| S 390 G1 S | EN | European Union | Steel |
| 1.0532 | DIN | Germany | Steel |
| GL-A 40 (S 390 G 1 S) | DIN | Germany | Steel |
| SA-225 Grade C | ASME | USA | Plates |

**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.