



Material - ASTM A128 Grade B-4

Standard Specification for Steel Castings, Austenitic Manganese

Group - Ferrous Austenitic Manganese Steel Alloy

Sub Group - ASTM A128 / A128M Steel Castings, Austenitic Manganese

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

Grade Belongs to the Industry - Casting

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|-----------------|---|---|
| Carbon | C % | 1.200 - 1.350 | Normalising or Annealing or Hardening + Tempering | |
| Silicon | Si % | 1.000 max. | | |
| Manganese | Mn % | 11.500 - 14.000 | | |
| Phosphorus | P % | 0.070 max. | | |
| Iron | Fe % | Balance | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| | | | Mechanical Properties | |
| | | | Tensile Strength in Mpa | - |
| | | | Yield Strength in Mpa | - |
| | | | Elongation in % | - |
| | | | Reduction of Area in % | - |
| | | | Hardness in BHN | - |
| | | | Impact in Joule | - |

| Cross Reference Table | | | |
|-----------------------|----------|---------|------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| Z 120 M 12 | AFNOR NF | France | Steel |
| BW10 | BS | British | Casting |
| X 120 Mn 12 | DIN | Germany | Steel |
| 11OG13L | GOST | Russia | Casting |
| SCMnH1 | JIS | Japan | Casting |
| G X 120 Mn 12 | UNI | Italy | Casting |
| J91109 | UNS | USA | Casting |

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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