

## Material - ASTM A128 Grade D

### 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 %  | 0.700 - 1.300   | Normalising or Annealing or Hardening + Tempering                                                                                                                               |  |
| Silicon              | Si % | 1.000 max.      |                                                                                                                                                                                 |  |
| Manganese            | Mn % | 11.500 - 14.000 |                                                                                                                                                                                 |  |
| Phosphorus           | P %  | 0.070 max.      |                                                                                                                                                                                 |  |
| Nickel               | Ni % | 3.000 - 4.000   |                                                                                                                                                                                 |  |
| Iron                 | Fe % | Balance         |                                                                                                                                                                                 |  |
| -                    | -    | -               |                                                                                                                                                                                 |  |
| -                    | -    | -               | <b>Mechanical Properties</b><br>Tensile Strength in Mpa -<br>Yield Strength in Mpa -<br>Elongation in % -<br>Reduction of Area in % -<br>Hardness in BHN -<br>Impact in Joule - |  |
| -                    | -    | -               |                                                                                                                                                                                 |  |
| -                    | -    | -               |                                                                                                                                                                                 |  |
| -                    | -    | -               |                                                                                                                                                                                 |  |
| -                    | -    | -               |                                                                                                                                                                                 |  |
| -                    | -    | -               |                                                                                                                                                                                 |  |
| -                    | -    | -               |                                                                                                                                                                                 |  |

| Cross Reference Table |          |         |                              |
|-----------------------|----------|---------|------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry |
| J91459                | UNS      | USA     | Casting                      |
| T 100 NiMn 130        | STAS     | Romania | Casting                      |
| A131 Grade D          | ASTM     | USA     | Casting                      |
| GX100MnNi12-3         | AFNOR NF | France  | Casting                      |
| Class D               | NMX      | Maxico  | Casting                      |
| -                     | -        | -       | -                            |
| -                     | -        | -       | -                            |

For any further inquiries, please do not hesitate to contact us. You may visit our website at [AMTECH TECHNOCAST PVT. LTD.](http://AMTECH TECHNOCAST PVT. LTD.), call us at [+91 9879817994](tel:+919879817994), or email us at [manish@amtechtechnocast.com](mailto:manish@amtechtechnocast.com)

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