# Material - DIN 1.5638

## Standard Specification for Steel Casting for Use at Low Temperature

**Group - Ferrous Mild Steel Alloys**

**Sub Group - DIN 1.5638 Steel Casting for Use at Low Temperature**

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

**Grade Belongs to the Industry - Casting**

| Chemical Composition | | | Heat Treatment |
|---|---|---|---|
| Carbon | C % | 0.060 - 0.120 | Normalising + Tempering or Hardening + Tempering |
| Silicon | Si % | 0.600 max. | |
| Manganese | Mn % | 0.500 - 0.800 | |
| Phosphorus | P % | 0.015 max. | |
| Sulphur | S % | 0.015 max. | |
| Nickel | Ni % | 3.300 - 3.800 | |
| Iron | Fe % | Balance | |
| - | - | - | |

| Chemical Composition | | | Mechanical Properties | |
|---|---|---|---|---|
| - | - | - | Tensile Strength in Mpa | 500 - 650 |
| - | - | - | Yield Strength in Mpa | 360 min. |
| - | - | - | Elongation in % | 20 min. |
| - | - | - | Reduction of Area in % | - |
| - | - | - | Hardness in BHN | - |
| - | - | - | Impact in Joule | 27 @ J RT |

| Cross Reference Table | | | |
|---|---|---|---|
| Material | Standard | Country | Grade Belong to the Industry |
| SA-352 Grade LC3 | ASME | USA | Casting |
| J31550 | UNS | USA | Casting |
| 1.5638 | EN | European Union | Casting |
| 503-490 | BS | British | Forging |
| AM8Ni14 | UNE | Spain | Casting |
| G12Ni14 | UNI | Italy | Casting |
| A352 LC3 | ASTM | 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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