# Material - ISO 3522 Al Si5Cu1Mg

## Standard Specification for Aluminium and Aluminium Alloys

**Group - Non-Ferrous Aluminium Alloy**

**Sub Group - ISO 3522 for Aluminium and Aluminium Alloys**

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

**Grade Belongs to the Industry - Casting**

| Chemical Composition | | | Heat Treatment | |
|---|---|---|---|---|
| Silicon | Si % | 4.500 - 5.500 | As-Cast or Aging | |
| Iron | Fe % | 0.650 max. | | |
| Copper | Cu % | 1.000 - 1.500 | | |
| Manganese | Mn % | 0.550 max. | | |
| Magnesium | Mg % | 0.350 - 0.650 | | |
| Nickel | Ni % | 0.250 max. | | |
| Zinc | Zn % | 0.150 max. | | |
| Lead | Pb % | 0.150 max. | | |
| Tin | Sn % | 0.050 max. | **Mechanical Properties** | |
| Titanium | Ti % | 0.050 - 0.250 | Tensile Strength in Mpa | 170 min. |
| Other | Ot% | 0.150 max. | Yield Strength in Mpa | 120 min. |
| Aluminium | Al % | Balance | Elongation in % | 2 min. |
| - | - | - | Reduction of Area in % | - |
| - | - | - | Hardness in HBW | 80 min. |
| - | - | - | Impact in Joule | - |

| Cross Reference Table | | | |
|---|---|---|---|
| Material | Standard | Country | Grade Belong to the Industry |
| EN AC-45300 | ASME | USA | Casting |
| EN AC-45300 | DIN | Germany | Casting |
| EN AC-45300 | BS | British | Casting |
| EN AC-45300 | UNI | Italy | Casting |
| EN AC-45300 | AFNOR NF | France | Casting |
| EN AC-45300 | UNE | Spain | Casting |
| EN AC-45300 | SFS | Finland | 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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