



## Material - DIN EN 1706 AC-45300

### Standard Specification for Aluminium and Aluminium Alloys - Castings

Group - Non-Ferrous Aluminium Alloy

Sub Group - DIN EN 1706 Aluminium and Aluminium Alloys - Castings

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

Grade Belongs to the Industry - Casting

| Chemical Composition |      |               | Heat Treatment          |           |
|----------------------|------|---------------|-------------------------|-----------|
| Copper               | Cu % | 1.000 - 1.500 | As-Cast                 |           |
| Iron                 | Fe % | 0.650 max.    |                         |           |
| Magnesium            | Mg % | 0.350 - 0.650 |                         |           |
| Manganese            | Mn % | 0.550 max.    |                         |           |
| Nickel               | Ni % | 0.250 max.    |                         |           |
| Silicon              | Si % | 4.500 - 5.500 |                         |           |
| Lead                 | Pb % | 0.150 max.    |                         |           |
| Tin                  | Sn % | 0.050 max.    |                         |           |
| Titanium             | Ti % | 0.200 max.    |                         |           |
| Zinc                 | Zn % | 0.150 max.    |                         |           |
| Other                | Ot%  | 0.150 max.    | Mechanical Properties   |           |
| Aluminium            | Al % | Balance       | Tensile Strength in Mpa | 170 - 280 |
| -                    | -    | -             | Yield Strength in Mpa   | 120 - 210 |
| -                    | -    | -             | Elongation in %         | 1 - 3     |
| -                    | -    | -             | Reduction of Area in %  | -         |
| -                    | -    | -             | Hardness in HB          | 80 - 110  |
| -                    | -    | -             | Impact in Joule         | -         |

| Cross Reference Table |          |                |                              |
|-----------------------|----------|----------------|------------------------------|
| Material              | Standard | Country        | Grade Belong to the Industry |
| LM16                  | BS       | British        | Ingot and Casting            |
| EN AC-45300           | ASME     | USA            | Casting                      |
| EN AC-45300           | UNI      | Italy          | Casting                      |
| EN AC-45300           | SFS      | Finland        | Casting                      |
| EN AC-45300           | AFNOR NF | France         | Casting                      |
| EN AC-45300           | CSN      | Czech Republic | Casting                      |
| EN AC-45300           | BDS      | Bulgaria       | 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](mailto:marketing@gravitycastindia.com)**

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