



## Material - SAE 6061

## Standard Specification For Aerospace Material Aluminium Alloy

**Group - Non-Ferrous Aluminium Alloys** 

Sub Group - SAE 6061 Aerospace Material Aluminium Alloy

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

Grade Belongs to the Industry - Bar, Rod, Shapes, Tube and Wire, Extrusion

| Chemical Composition |      |               | Heat Treatment                                |          |
|----------------------|------|---------------|---|----------|
| Silicon              | Si % | 0.400 - 0.800 |   |          |
| Chromium             | Cr % | 0.040 - 0.350 | As Raw or Temper or Solution Treated or Aging |          |
| Manganese            | Mn % | 0.150 max.    |   |          |
| Magnesium            | Mg % | 0.800 - 1.200 |   |          |
| Copper               | Cu % | 0.150 - 0.400 |   |          |
| Iron                 | Fe % | 0.700 max.    |   |          |
| Zinc                 | Zn % | 0.250 max.    |   |          |
| Titanium             | Ti % | 0.150 max.    |   | -        |
| Other                | Ot % | 1.000 max.    | Mechanical Properties                         |          |
| Aluminium            | Al % | Balance       | Tensile Strength in Mpa                       | 179 min. |
| -                    | -    | -             | Yield Strength in Mpa                         | 97 min.  |
| -                    | -    | -             | Elongation in %                               | 16 min.  |
| -                    | -    | -             | Reduction of Area in %                        | -        |
| -                    | -    |               | Hardness in BHN                               | -        |
| -                    | -    | -             | Impac <mark>t in Joule</mark>                 | -        |

| Cross Reference Table |          |           |  |  |
|-----------------------|----------|-----------|--|--|
| Material              | Standard | Country   | Grade Belong to the Industry               |  |
| 6061                  | AS       | Australia | Plate, Sheet, Rod, Bar, Wire and Strip     |  |
| F901 6061             | ASTM     | USA       | Bolt and Nut                               |  |
| SB-210 6061           | ASME     | USA       | Tube                                       |  |
| Alclad 6061           | SAE      | USA       | Plate and Sheet                            |  |
| A05050                | UNS      | USA       | Casting                                    |  |
| A 6061S               | JIS      | Japan     | Bar, Rod, Shapes, Tube and Wire, Extrusion |  |
| AL-P6061              | UNI      | Italy     | Tube                                       |  |

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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