



## Material - SAE 1055

## Standard Specification for Steel Castings for General Engineering Purposes

**Group - Ferrous Mild Steel Alloys** 

Sub Group - SAE 1055 Steel Castings for General Engineering Purposes

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

**Grade Belongs to the Industry - Casting** 

| Chemical Composition |            |               | Heat Treatment  |                          |
|----------------------|------------|---------------|---|--------------------------|
| Carbon               | C %        | 0.500 - 0.600 | As Cast or Annealing or Normalizing or Hardening and<br>Tempering |                          |
| Manganese            | Mn %       | 0.600 - 0.900 |   |                          |
| Phosphorus           | P %        | 0.030 max.    |   | olizing or Hardoning and |
| Sulphur              | S %        | 0.035 max.    |   | -                        |
| Iron                 | Fe %       | Balance       |   | lg .                     |
| -                    | -          | -             |   |                          |
| -                    | -          | -             |   |                          |
| -                    | -          | -             |   |                          |
| -                    | -          | -             | Mechanical Properties   |                          |
| -                    | <b>/</b> - | -             | Tensile Strength in Mpa   | 650 - 660                |
| -                    | -          | -             | Yield Strength in Mpa   | 360 min.                 |
| -                    | -          | -             | Elongation in %   | 10 min.                  |
| -                    | -          | -             | Reduction of Area in %  | 30 - 40                  |
| -                    | -          | -             | Hardn <mark>ess in BH</mark> N                                    | 192 - 197                |
| -                    | -          | -             | Impac <mark>t in Joule</mark>                                     | -                        |

| Cross Reference Table |          |         |                              |  |
|-----------------------|----------|---------|------------------------------|--|
| Material              | Standard | Country | Grade Belong to the Industry |  |
| AW3                   | BS       | British | Casting                      |  |
| 1055                  | AISI     | USA     | Casting                      |  |
| A 1040 1055           | ASTM     | USA     | Casting                      |  |
| A 29 1055             | ASTM     | USA     | Casting                      |  |
| A 510 1055            | ASTM     | USA     | Casting                      |  |
| A 576 10L55           | ASTM     | USA     | Bar                          |  |
| A 682 G10550          | ASTM     | USA     | Steel and Strip              |  |

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.