

## Material - UNS J02505

## Standard Specification for Carbon Steel Casting

**Group - Ferrous Mild Steel Alloys** 

Sub Group - UNS J02505 Carbon Steel Casting

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

Grade Belongs to the Industry - Casting

| Chemical Composition |      |            | Heat Treatment                                   |           |
|----------------------|------|------------|--|-----------|
| Carbon               | C %  | 0.250 max. |  |           |
| Silicon              | Si % | 0.600 max. |  |           |
| Manganese            | Mn % | 1.200 max. |  |           |
| Phosphorus           | Р%   | 0.040 max. | Normalising + Tempering or Hardening + Tempering |           |
| Sulphur              | S %  | 0.045 max. |  |           |
| Iron                 | Fe % | Balance    |  |           |
| -                    | -    | -          |  |           |
| -                    | -    | -          |  |           |
| -                    | -    | -          | Mechanical Properties                            |           |
| -                    | -    | -          | Tensile Strength in Mpa                          | 485 - 655 |
| -                    | -    | -          | Yield Strength in Mpa                            | 275 min.  |
| -                    | -    | -          | Elongation in %                                  | 22 min.   |
| -                    | -    | -          | Reduction of Area in %                           | 35 min.   |
| -                    | -    | -          | Hardness in BHN                                  | -         |
| -                    | -    | -          | Impac <mark>t in Joule</mark>                    | -         |

| Cross Reference Table |          |                |                              |  |
|-----------------------|----------|----------------|------------------------------|--|
| Material              | Standard | Country        | Grade Belong to the Industry |  |
| SA-352 LCC            | ASME     | USA            | Casting                      |  |
| A352 LCC              | ASTM     | USA            | Casting                      |  |
| SA 352 LCB            | ASME     | USA            | Casting                      |  |
| SA 660 WCC            | ASME     | USA            | Centrifugal Casting          |  |
| A216 WCB              | ASTM     | USA            | Casting                      |  |
| 1.0619                | EN       | European Union | Casting                      |  |
| 1.0619                | DIN      | Germany        | 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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