

## Material: ASTM A 510 1522

### Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled Wire Rods, Round Wire and Steel

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** ASTM A 510 152 Carbon Steel Compositions For Forging To Hot-Rolled Wire Rods, Round Wire and Steel

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

**Grade Belongs to the Industry:** Wire Rods, Round Wire and Steel

| Chemical Composition |      |               | Heat Treatment                                                                                                                                                                                      |  |
|----------------------|------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Carbon               | C %  | 0.180 - 0.240 | As Raw or Annealing or Normalizing or Hardening and Tempering                                                                                                                                       |  |
| Manganese            | Mn % | 1.100 - 1.140 |                                                                                                                                                                                                     |  |
| Phosphorus           | P %  | 0.040 max.    |                                                                                                                                                                                                     |  |
| Sulphur              | S %  | 0.050 max.    |                                                                                                                                                                                                     |  |
| Iron                 | Fe % | Balance       |                                                                                                                                                                                                     |  |
| -                    | -    | -             |                                                                                                                                                                                                     |  |
| -                    | -    | -             | <b>Mechanical Properties</b><br>Tensile Strength in Mpa 410 min.<br>Yield Strength in Mpa 340 min.<br>Elongation in % 22 min.<br>Reduction of Area in % -<br>Hardness in BHN -<br>Impact in Joule - |  |
| -                    | -    | -             |                                                                                                                                                                                                     |  |
| -                    | -    | -             |                                                                                                                                                                                                     |  |
| -                    | -    | -             |                                                                                                                                                                                                     |  |
| -                    | -    | -             |                                                                                                                                                                                                     |  |
| -                    | -    | -             |                                                                                                                                                                                                     |  |
| -                    | -    | -             |                                                                                                                                                                                                     |  |
| -                    | -    | -             |                                                                                                                                                                                                     |  |

| Cross Reference Table |          |         |                                                   |
|-----------------------|----------|---------|---------------------------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry                      |
| G15220                | UNS      | USA     | Bars, Wire Rods, Plates, Strip, Sheets and Tubing |
| 1522                  | SAE      | USA     | Bars, Wire Rod and Tubing                         |
| 1522                  | AISI     | USA     | Steel and Bar                                     |
| A 29 1522             | ASTM     | USA     | Steel and Bar                                     |
| A 576 15L22           | ASTM     | USA     | Steel and Bar                                     |
| -                     | -        | -       | -                                                 |
| -                     | -        | -       | -                                                 |

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

Customer Care: +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)