

## Material - ASTM A 510 1132

**Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Wire Rod, Round Wire and Steel**

**Group - Ferrous Mild Steel Alloys**

**Sub Group - ASTM A 510 1132 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Wire Rod, Round Wire and Steel**

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

**Grade Belongs to the Industry - Wire Rod, Round Wire and Steel**

| Chemical Composition |      |               | Heat Treatment                                                                                                                                                                                                     |  |
|----------------------|------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Carbon               | C %  | 0.270 - 0.340 | As Raw or Annealing or Normalizing or Hardening and Tempering                                                                                                                                                      |  |
| Manganese            | Mn % | 1.350 - 1.650 |                                                                                                                                                                                                                    |  |
| Phosphorus           | P %  | 0.040 max.    |                                                                                                                                                                                                                    |  |
| Sulphur              | S %  | 0.080 - 0.130 |                                                                                                                                                                                                                    |  |
| Iron                 | Fe % | Balance       |                                                                                                                                                                                                                    |  |
| -                    | -    | -             | <b>Mechanical Properties</b><br>Tensile Strength in Mpa 550 - 760<br>Yield Strength in Mpa 310 - 620<br>Elongation in % 12 - 23<br>Reduction of Area in % 35 - 40<br>Hardness in HB 164 - 217<br>Impact in Joule - |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |

| Cross Reference Table |          |         |                                                   |
|-----------------------|----------|---------|---------------------------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry                      |
| G11320                | UNS      | USA     | Bars, Wire Rods, Plates, Strip, Sheets and Tubing |
| 1132                  | SAE      | USA     | Bars, Wire Rods, Plates, Strip, Sheets and Tubing |
| 1132                  | AISI     | USA     | Steel and Bar                                     |
| A 1040 1132           | ASTM     | USA     | Steel                                             |
| A 29 1132             | ASTM     | USA     | Steel and Bar                                     |
| A 519 1132            | ASTM     | USA     | Steel and Tubing                                  |
| A 576 11L32           | ASTM     | USA     | Steel and Bar                                     |

**For any further inquiries, please do not hesitate to contact us. You may visit our website at [AMTECH TECHNOCAST PVT. LTD.](http://AMTECH TECHNOCAST PVT. LTD.), call us at [+91 9879817994](tel:+919879817994), or email us at [manish@amtechtechnocast.com](mailto:manish@amtechtechnocast.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.