



## Material - AISI 1548

Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel and Bar

**Group - Ferrous Mild Steel Alloys** 

Sub Group - AISI 1548 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel and Bar Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Steel and Bar

| Chemical Composition |   | Heat Treatment  |  |
|----------------------|---|---|--|
| C %                  | 0.440 - 0.520                                       |   |  |
| Mn %                 | 1.100 - 1.400                                       | As Raw or Annealing or Normalizing or Hardening and Tempering   |  |
| Р%                   | 0.040 max.  |   | izing or Hordoning and   |
| S %                  | 0.050 max.  |   | •  |
| Al %                 | 0.020 max.  |   | ğ  |
| В%                   | 0.0005 - 0.003                                      |   |  |
| Cu %                 | 0.200 max.  |   |  |
| Nb %                 | 0.015 max.  |   |  |
| Si %                 | 0.100 max.  | Mechanical Pro  | perties  |
| V %                  | 0.020 max.  | Tensile Strength in Mpa   | 640 - 730  |
| Fe %                 | Balance   | Yield Strength in Mpa   | 370 min.   |
| -                    | -   | Elongation in %   | 10 min.  |
| -                    | -   | Reduction of Area in %  | 28 - 35  |
| -                    | -   | Hardness in HB  | 192 - 217  |
| -                    | -   | Impact in Joule   | -  |
|                      | C % Mn % P % S % Al % B % Cu % Nb % Si % V % Fe % - | C % 0.440 - 0.520  Mn % 1.100 - 1.400  P % 0.040 max.  S % 0.050 max.  Al % 0.020 max.  B % 0.0005 - 0.003  Cu % 0.200 max.  Nb % 0.015 max.  Si % 0.100 max.  V % 0.020 max.  Fe % Balance | C %         0.440 - 0.520           Mn %         1.100 - 1.400           P %         0.040 max.           S %         0.050 max.           Al %         0.020 max.           B %         0.0005 - 0.003           Cu %         0.200 max.           Nb %         0.100 max.           V %         0.020 max.           Fe %         Balance           Fe %         Balance           Fe %         Belongation in %           Reduction of Area in %           Hardness in HB |

| Cross Reference Table |          |         |   |  |
|-----------------------|----------|---------|---|--|
| Material              | Standard | Country | Grade Belong to the Industry                      |  |
| G15480                | UNS      | USA     | Bars, Wire Rods, Plates, Strip, Sheets and Tubing |  |
| 1548                  | SAE      | USA     | Steel   |  |
| A 29 1548             | ASTM     | USA     | Steel and Bar                                     |  |
| A 510 1548            | ASTM     | USA     | Wire Rod, Round Wire and Steel                    |  |
| A 576 15L48           | ASTM     | USA     | Steel and Bar                                     |  |
| A 830 1548            | ASTM     | USA     | Plate and Steel                                   |  |
| A 830 G15480          | ASTM     | USA     | Plate and Steel                                   |  |

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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