



## Material - EN 10083-3 34Cr4

### Standard Specification for Mild Steel Alloys Bar and Rod

Group - Ferrous Mild Steel Alloys

Sub Group - EN 10083-3 34Cr4 Mild Steel Alloys Bar and Rod

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

Grade Belongs to the Industry - Bar and Rod

| Chemical Composition |      |               | Heat Treatment   |  |
|----------------------|------|---------------|--|--|
| Carbon               | C %  | 0.300 - 0.370 | As Raw or Annealing or Normalizing or Hardening and Tempering  |  |
| Silicon              | Si % | 0.400 max.    |  |  |
| Manganese            | Mn % | 0.600 - 0.900 |  |  |
| Phosphorus           | P %  | 0.025 max.    |  |  |
| Sulphur              | S %  | 0.035 max.    |  |  |
| Chromium             | Cr % | 0.900 - 1.200 |  |  |
| Iron                 | Fe % | Balance       |  |  |
| -                    | -    | -             | <b>Mechanical Properties</b><br>Tensile Strength in Mpa      700 - 850<br>Yield Strength in Mpa      460 min.<br>Elongation in %      15 - 45<br>Reduction of Area in %      -<br>Hardness in BHN      As Per HT<br>Impact in Joule      40 J @ RT |  |
| -                    | -    | -             |  |  |
| -                    | -    | -             |  |  |
| -                    | -    | -             |  |  |
| -                    | -    | -             |  |  |
| -                    | -    | -             |  |  |
| -                    | -    | -             |  |  |
| -                    | -    | -             |  |  |
| -                    | -    | -             |  |  |
| -                    | -    | -             |  |  |

| Cross Reference Table |          |                |                              |
|-----------------------|----------|----------------|------------------------------|
| Material              | Standard | Country        | Grade Belong to the Industry |
| 1.7033                | EN       | European Union | Bar and Rod                  |
| Cr 1 Z                | MSZ      | Hungary        | Bar and Rod                  |
| 34 Cr 4 E             | ISO      | International  | Bar and Rod                  |
| 34 Cr 4 E             | JIS      | Japan          | Bar and Rod                  |
| 1.7037                | BDS      | Bulgaria       | Bar and Rod                  |
| 34CrS4                | BDS      | Bulgaria       | Bar and Rod                  |
| 1.7037                | NBN      | Belgium        | Bar and Rod                  |

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

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