

## Material - ONORM 1.7023

## Standard Specification for Mild Steel Alloys Bar and Rod

**Group - Ferrous Mild Steel Alloys** 

Sub Group - ONORM 1.7023 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 %  | 0.350 - 0.420 | As Raw or Annealing or Normalizing or Hardening and<br>Tempering |                         |
| Silicon              | Si % | 0.400 max.    |  |                         |
| Manganese            | Mn % | 0.500 - 0.800 |  | lizing or Hardoning and |
| Phosphorus           | P %  | 0.035 max.    |  | <b>°</b>                |
| Sulphur              | S %  | 0.020 - 0.040 |  |                         |
| Chromium             | Cr % | 0.400 - 0.600 |  |                         |
| Iron                 | Fe % | Balance       |  |                         |
| -                    | -    | -             |  |                         |
| -                    | -    | -             | Mechanical Properties  |                         |
| -                    | -    | -             | Tensile Strength in Mpa  | 650 - 950               |
| -                    | -    | -             | Yield Strength in Mpa  | 350 min.                |
| -                    | -    | -             | Elongation in %  | 14 min.                 |
| -                    | -    | -             | Reduction of Area in %   | 35 min.                 |
| -                    | -    | -             | Hardn <mark>ess in BH</mark> N                                   | 255 max.                |
| -                    | -    | -             | Impac <mark>t in Joule</mark>                                    | 35 J @ RT               |

| Cross Reference Table |          |                |                              |  |
|-----------------------|----------|----------------|------------------------------|--|
| Material              | Standard | Country        | Grade Belong to the Industry |  |
| 38Cr2                 | EN       | European Union | Bar and Rod                  |  |
| 1.7003                | EN       | European Union | Bar and Rod                  |  |
| 38 CrS 2              | ONORM    | Australia      | Bar and Rod                  |  |
| 38 CrS 2              | EN       | European Union | Bar and Rod                  |  |
| 1.7023                | EN       | European Union | Bar and Rod                  |  |
| 38 CrS 2              | SFS      | Finland        | Bar and Rod                  |  |
| 1.7023                | SFS      | Finland        | 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

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