



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - NBR 4151

Standard Specification for Mild Steel Alloys Bar and Rod

Group - Ferrous Mild Steel Alloys

Sub Group - NBR 4151 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 % | 0.460 - 0.540 | As Raw or Annealing or Normalizing or Hardening and Tempering | |
| Silicon | Si % | 0.150 - 0.400 | | |
| Manganese | Mn % | 0.500 - 0.800 | | |
| Phosphorus | P % | 0.035 max. | | |
| Sulphur | S % | 0.035 max. | | |
| Chromium | Cr % | 0.900 - 1.200 | | |
| Molybdenum | Mo % | 0.150 - 0.300 | | |
| Iron | Fe % | Balance | | |
| - | - | - | Mechanical Properties | |
| - | - | - | Tensile Strength in Mpa | 800 - 950 |
| - | - | - | Yield Strength in Mpa | 550 min. |
| - | - | - | Elongation in % | 13 min. |
| - | - | - | Reduction of Area in % | - |
| - | - | - | Hardness in BHN | As Per HT |
| - | - | - | Impact in Joule | 30 J @ RT |

| Cross Reference Table | | | |
|-----------------------|----------|----------------|------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| 50CrMo4 | EN | European Union | Bar and Rod |
| 1.7228 | EN | European Union | Bar and Rod |
| 50CrMo4 | ISO | International | Bar and Rod |
| G50CrMo4 | ISO | International | Bar and Rod |
| SFCM 690 S | JIS | Japan | Bar and Rod |
| SFCM 740 S | JIS | Japan | Bar and Rod |
| SFCM 780 S | JIS | Japan | 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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ONE STOP SOLUTION FOR METAL PARTS