



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - BDS 35 NiCr 6

Standard Specification for Mild Steel Alloys Bar and Rod

Group - Ferrous Mild Steel Alloys

Sub Group - BDS 35 NiCr 6 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 % | 0.025 max. | | | | |
| Chromium | Cr % | 0.800 - 1.100 | | | | |
| Nickel | Ni % | 1.200 - 1.600 | | | | |
| Iron | Fe % | Balance | | | | |
| - | - | - | Mechanical Properties | | | |
| - | - | - | | | Tensile Strength in Mpa | 780 - 1080 |
| - | - | - | | | Yield Strength in Mpa | 640 min. |
| - | - | - | | | Elongation in % | 12 min. |
| - | - | - | | | Reduction of Area in % | 40 min. |
| - | - | - | | | Hardness in BHN | 223 max. |
| - | - | - | | | Impact in Joule | 35 J @ RT |
| - | - | - | | | - | - |

| Cross Reference Table | | | |
|-----------------------|----------|----------------|------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| 35NiCr6 | EN | European Union | Bar and Rod |
| 1.5815 | EN | European Union | Bar and Rod |
| 1.5815 | ONORM | Australia | Bar and Rod |
| 35 NiCr 6 | ONORM | Australia | Bar and Rod |
| 1.5815 | NBN | Belgium | Bar and Rod |
| 35 NiCr 6 | NBN | Belgium | Bar and Rod |
| 1.5815 | BDS | Bulgaria | 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

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.

ONE STOP SOLUTION FOR METAL PARTS