



## Material - BDS 1.6510

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

Group - Ferrous Mild Steel Alloys

Sub Group - BDS 1.6510 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 - 0.430	As Raw or Annealing or Normalizing or Hardening and Tempering	
Silicon	Si %	0.400 max.		
Manganese	Mn %	0.500 - 0.800		
Phosphorus	P %	0.025 max.		
Sulphur	S %	0.035 max.		
Chromium	Cr %	0.600 - 1.000		
Molybdenum	Mo %	0.150 - 0.250		
Nickel	Ni %	0.700 - 1.000		
Iron	Fe %	Balance		
-	-	-	<b>Mechanical Properties</b>	
-	-	-	Tensile Strength in Mpa	740 - 1180
-	-	-	Yield Strength in Mpa	540 min.
-	-	-	Elongation in %	8 min.
-	-	-	Reduction of Area in %	40 min.
-	-	-	Hardness in BHN	295 max.
-	-	-	Impact in Joule	35 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
39NiCrMo3	EN	European Union	Bar and Rod
1.651	EN	European Union	Bar and Rod
NCMo 4	MSZ	Hungary	Bar, Wire and Rod
39 NiCrMo 3	CSN	Czech Republic	Bar and Rod
1.651	DIN	Germany	Bar and Rod
39 NiCrMo 3	DIN	Germany	Bar and Rod
1.651	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](mailto:marketing@gravitycastindia.com)**

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