



## Material - DIN 1.7182

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

Group - Ferrous Mild Steel Alloys

Sub Group - DIN 1.7182 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 %	0.240 - 0.300	As Raw or Annealing or Normalizing or Hardening and Tempering	
Silicon	Si %	0.400 max.		
Manganese	Mn %	1.100 - 1.140		
Phosphorus	P %	0.025 max.		
Sulphur	S %	0.035 max.		
Chromium	Cr %	0.300 - 0.600		
Boron	B %	0.0008 - 0.0050		
Copper	Cu %	0.400 max.		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	580 min.
-	-	-	Yield Strength in Mpa	460 min.
-	-	-	Elongation in %	14 min.
-	-	-	Reduction of Area in %	55 min.
-	-	-	Hardness in HRC	32 - 89
-	-	-	Impact in Joule	60 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
27MnCrB5-2	EN	European Union	Bar and Rod
1.7182	EN	European Union	Bar and Rod
27MnCrB5-2	ISO	International	Bar and Rod
27MnCrB5-2	DIN	Germany	Bar and Rod
1.7182	SFS	Finland	Bar and Rod
27MnCrB5-2	SFS	Finland	Bar and Rod
1.7182	CSN	Czech Republic	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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