



**GRAVITY CAST PVT. LTD.**  
GRAVITY GROUP OF COMPANIES

## Material - EN 10083-3 33MnCrB5-2

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

Group - Ferrous Mild Steel Alloys

Sub Group - EN 10083-3 33MnCrB5-2 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 - 0.360	As Raw or Annealing or Normalizing or Hardening and Tempering	
Silicon	Si %	0.400 max.		
Manganese	Mn %	1.200 - 1.500		
Phosphorus	P %	0.025 max.		
Sulphur	S %	0.035 max.		
Chromium	Cr %	0.300 - 0.600		
Boron	B %	0.0008 - 0.0050		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	900 - 1100
-	-	-	Yield Strength in Mpa	750 min.
-	-	-	Elongation in %	13 min.
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	As Per HT
-	-	-	Impact in Joule	50 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1.7185	EN	European Union	Bar and Rod
33MnCrB5-2	ISO	International	Bar and Rod
1.7185	ONORM	Australia	Bar and Rod
33MnCrB5-2	ONORM	Australia	Bar and Rod
1.7185	NBN	Belgium	Bar and Rod
33MnCrB5-2	NBN	Belgium	Bar and Rod
1.7185	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)**

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.

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