

# Material: NBN 1.7189

## Standard Specification for Mild Steel Alloys Bar and Rod

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** NBN 1.7189 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 %	0.360 - 0.420	As Raw or Annealing or Normalizing or Hardening and Tempering	
Silicon	Si %	0.400 max.		
Manganese	Mn %	1.400 - 1.700		
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	1000 - 1350
-	-	-	Yield Strength in Mpa	800 min.
-	-	-	Elongation in %	12 min.
-	-	-	Reduction of Area in %	50 min.
-	-	-	Hardness in BHN	255 max.
-	-	-	Impact in Joule	40 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
39MnCrB6-2	EN	European Union	Bar and Rod
1.7189	EN	European Union	Bar and Rod
39MnCrB6-2	ISO	International	Bar and Rod
1.7189	AFNOR NF	France	Bar and Rod
39MnCrB6-2	AFNOR NF	France	Bar and Rod
1.7189	BS	British	Bar and Rod
39MnCrB6-2	BS	British	Bar and Rod

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