



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - EN 10083-3 42CrMoS4

Standard Specification for Mild Steel Alloys Bar and Rod

Group - Ferrous Mild Steel Alloys

Sub Group - EN 10083-3 42CrMoS4 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 %	0.380 - 0.450	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 %	0.020 - 0.040		
Chromium	Cr %	0.900 - 1.200		
Molybdenum	Mo %	0.150 - 0.300		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	750 - 900
-	-	-	Yield Strength in Mpa	500 min.
-	-	-	Elongation in %	14 - 55
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	As Per HT
-	-	-	Impact in Joule	35 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
42CrMo4	EN	European Union	Bar and Rod
1.7225	EN	European Union	Bar and Rod
1.7227	EN	European Union	Bar and Rod
P 1000 - 42CrMo4	AFNOR NF	France	Bar and Rod
P 880 - 42CrMo4	AFNOR NF	France	Bar and Rod
CMo 4 Z	MSZ	Hungary	Bar and Rod
F.1252	UNE	Spain	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