



## Material - JIS SFCM 690 S

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

Group - Ferrous Mild Steel Alloys

Sub Group - JIS SFCM 690 S 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 %	0.480 max.	As Raw or Annealing or Normalizing or Hardening and Tempering	
Silicon	Si %	0.150 - 0.350		
Manganese	Mn %	0.300 - 0.850		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	0.900 - 1.500		
Molybdenum	Mo %	0.150 - 0.300		
Copper	Cu %	0.300 max.		
Iron	Fe %	Balance		
-	-	-		
-	-	-	<b>Mechanical Properties</b>	
-	-	-	Tensile Strength in Mpa	690 - 830
-	-	-	Yield Strength in Mpa	450 min.
-	-	-	Elongation in %	15 min.
-	-	-	Reduction of Area in %	43 min.
-	-	-	Hardness in BHN	201 min.
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
50CrMo4	EN	European Union	Bar and Rod
1.7228	EN	European Union	Bar and Rod
4151	NBR	Brazil	Bar and Rod
50CrMo4	ISO	International	Bar and Rod
G50CrMo4	ISO	International	Bar and Rod
SFCM 740 S	JIS	Japan	Bar and Rod
SFCM 780 S	JIS	Japan	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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