GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - IS 2707 Grade 1

Standard Specification for Carbon Steel Castings for Surface Hardening

Group - Ferrous Mild Steel Alloys

Sub Group - IS 2707 Grade 1 Carbon Steel Castings for Surface Hardening

Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries

Grade Belongs to the Industry - Casting

Chemical Composition		
Carbon	C %	0.420 - 0.480
Silicon	Si %	0.600 max.
Manganese	Mn %	1.000 max.
Sulphur	S %	0.040 max.
Phosphorus	P %	0.040 max.
Chromium	Cr %	0.200 max.
Nickel	Ni %	0.300 max.
Molybdenum	Mo %	0.150 max.
Copper	Cu %	0.250 max.
Cr + Cu + Mo + Ni	Cr% + Cu% + Mo% + Ni%	0.700 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
Annealing or Hardening + Tempering

Mechanical Properties	
Tensile Strength in Mpa	620 min.
Yield Strength in Mpa	320 min.
Elongation in %	12 min.
Reduction of Area in %	-
Hardness in HB	-
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
EU 86 C 46	EN	European Union	Steel
10016-4 C 46 D 2	EN	European Union	Steel
970-1 080 M 46	B.S.	United Kingdom	Steel
G 4051 S 45 C	JIS	Japan	Steel
EN 10016-4 C 46 D 2	UNI	Italy	Steel
EN 10016-4 1.1162	DIN	Germany	Steel
EN 10016-4 C46D2	DIN	Germany	Steel

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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