GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - BS EN 10269 C45E I 1.1191

Standard Specification for Steel and Nickel Alloys for Fasteners with Specified Elevated and/or Low Temperature Properties

Group - Ferrous Mild Steel Alloys

Sub Group - BS EN 10269 C45E I 1.1191 Steel and Nickel Alloys for Fasteners with Specified Elevated and/or Low Temperature Properties

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

Grade Belongs to the Industry - Steel

Chemical Composition		
Carbon	C %	0.420 - 0.500
Silicon	Si %	0.400 max.
Manganese	Mn %	0.500 - 0.800
Phosphorus	P %	0.030 max.
Sulphur	S %	0.015 max.
Chromium	Cr %	0.400 max.
Molybdenum	Mo %	0.100 max.
Nickel	Ni %	0.400 max.
Cr + Mo + Ni	Cr% + Mo% + Ni%	0.630 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw or Normalizing or Quenching & Tempering

Mechanical Properties	
Tensile Strength in Mpa	560 - 710
Proof Strength in Mpa	340 min.
Elongation in %	19 min.
Reduction of Area in %	40 min.
Hardness in HBW	-
Impact in Joule	50 @ RT

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
EN 10083-2 1 C 45	B.S.	United Kingdom	Steel
10083-2 1 C 45	EN	European Union	Steel
36051-2 1 C 45	UNE	Spain	Steel
EN 10083-1 2 C 45	AFNOR NF	France	Steel
C 45	NBN	Belgium	Steel
EN 10083-2 C 45	DIN	Germany	Steel
EN 10083-2 C 45	NS	Norway	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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