GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SA-29 Grade 1045

Standard Specification for Steel Bars, Carbon and Alloy, Hot-Wrought and Cold-Finished, General Requirements For

Group - Ferrous Mild Steel Alloys

Sub Group - ASME SA-29 Grade 1045 Steel Bars, Carbon and Alloy, Hot-Wrought and Cold-Finished, General Requirements For

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

Grade Belongs to the Industry - Steel and Bars

Chemical Composition		
Carbon	C %	0.430 - 0.500
Manganese	Mn %	0.600 - 0.900
Phosphorus	P %	0.040 max.
Sulphur	S %	0.050 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw or Annealing or Normalizing or Hardening + Tempering

Mechanical Properties	
Tensile Strength in Mpa	-
Yield Strength in Mpa	-
Elongation in %	-
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**
G10450	UNS	USA	Forging and Bars
683-18 C 45 E4	ISO	International	Steel
17200 1.1191	DIN	Germany	Steel
SEW 550 Ck 45	DIN	Germany	Steel
A 576 1045	ASTM	USA	Steel and Bars
A 108 1045	ASTM	USA	Steel and Bars
A 519 1045	ASTM	USA	Steel and Tubing

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.