GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - SAE J 1249 Grade 46B12

Standard Specification for Chemical Compositions of SAE Experimental Steels

Group - Ferrous Mild Steel Alloys

Sub Group - SAE J 1249 Grade 46B12 Chemical Compositions of SAE Experimental Steels

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

Grade Belongs to the Industry - Steel

Chemical Composition		
Carbon	C %	0.100 - 0.150
Manganese	Mn %	0.450 - 0.650
Phosphorus	P %	0.040 max.
Sulphur	S %	0.040 max.
Silicon	Si %	0.200 - 0.350
Nickel	Ni %	1.650 - 2.000
Molybdenum	Mo %	0.200 - 0.300
Boron	B %	0.0005 - 0.0030
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As-Raw

Mechanical Properties	
Tensile Strength in Mpa	-
Yield Strength in Mpa	-
Elongation in %	-
Reduction of Area in %	-
Hardness in HV	-
Impact in Joule	-

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Cross Reference Table			
Material	**Standard**	**Country**	**Grade Belong to the Industry**
SAE J 1249 46B12	AISI	USA	Steel
683-17 14	ISO	International	Steel
4543 15N2M	GOST	Russia	Steel
36027 20 NiCrMo 7	UNE	Spain	Steel
3097 20 NiCrMo 7	UNI	Italy	Steel
J 412 4620	SAE	USA	Steel
J 404 4620	SAE	USA	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

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.