



Material - SAE 1023

Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel

Group - Ferrous Mild Steel Alloys

Sub Group - SAE 1023 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Steel

Chemical Composition		Heat Treatment	
C %	0.200 - 0.250	As Raw or Annealing or Normalizing or Hardening an Tempering	
Mn %	0.300 - 0.600		
P %	0.030 max.		olizing or Hordoning and
S %	0.035 max.		· ·
В %	0.0005 - 0.003		iig
Cr %	0.150 max.		
Cu %	0.200 max.		
Mo %	0.060 max.		
Ni %	0.200 max.	Mechanical Properties	
Pb %	0.150 - 0.350	Tensile Strength in Mpa	370 - 430
Fe %	Balance	Yield Strength in Mpa	210 min
-	-	Elongation in %	15 min.
-	-	Reduction of Area in %	40 - 50
-	-	Hardn <mark>ess in HB</mark>	111 - 121
-	-	Impact in Joule	-
	C % Mn % P % S % B % Cr % Cu % Mo % Ni % Pb % Fe % -	C % 0.200 - 0.250 Mn % 0.300 - 0.600 P % 0.030 max. S % 0.035 max. B % 0.0005 - 0.003 Cr % 0.150 max. Cu % 0.200 max. Mo % 0.060 max. Ni % 0.200 max. Pb % 0.150 - 0.350 Fe % Balance	C % 0.200 - 0.250 Mn % 0.300 - 0.600 P % 0.030 max. S % 0.035 max. B % 0.0005 - 0.003 Cr % 0.150 max. Cu % 0.200 max. Ni % 0.200 max. Pb % 0.150 - 0.350 Fe % Balance Pe % Balance Pe % Balance Pe % Reduction of Area in % Reduction of Area in % Hardness in HB

Cross Reference Table				
Material	Standard	Country Grade Belong to the Industry		
G10230	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
1023	AISI	USA	Steel and Bar	
A 1040 1023	ASTM	USA	Steel	
A 29 1023	ASTM	USA	Steel and Bar	
A 29 M1023	ASTM	USA	Steel and Bar	
A 510 1023	ASTM	USA	Wire Rod and Round Wire	
A 513 Grade 1023	ASTM	USA	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

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