



Material - AISI 1078

Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled Steel and Bar

Group - Ferrous Mild Steel Alloys

Sub Group - AISI 1078 Carbon Steel Compositions For Forging To Hot-Rolled Steel and Bar

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

Grade Belongs to the Industry - Steel and Bar

Chemical Composition			Heat Treatment	
Carbon	C %	0.700 - 0.850	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.300 - 0.600		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.035 max.		
Boron	B %	0.0005 - 0.003		
Aluminium	Al %	0.020 max.		
Copper	Cu %	0.200 min.		
Niobium	Nb %	0.015 max.		
Silicon	Si %	0.100 max.		
Vanadium	V %	0.020 max.		
Iron	Fe %	Balance	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	650 - 690
-	-	-	Yield Strength in Mpa	380 min.
-	-	-	Elongation in %	10 min.
-	-	-	Reduction of Area in %	30 - 40
-	-	-	Hardness in HB	192 - 207
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10780	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1078	SAE	USA	Steel
A 830 G10780	ASTM	USA	Plate and Steel
A 713 G10780	ASTM	USA	Steel and Wire
A 576 10L78	ASTM	USA	Steel and Bar
A 830 1078	ASTM	USA	Plate and Steel
A 713 Grade 1078	ASTM	USA	Steel and Wire

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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