

# Material: AISI 1141

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

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** AISI 1141 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel and Bar

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

**Grade Belongs to the Industry:** Steel and Bar

Chemical Composition		
Carbon	C %	0.370 - 0.450
Manganese	Mn %	1.350 - 1.650
Phosphorus	P %	0.040 max.
Sulphur	S %	0.080 - 0.130
Aluminium	Al %	0.020 max.
Niobium	Nb %	0.015 max.
Silicon	Si %	0.100 max.
Vanadium	V %	0.020 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As Raw or Annealing or Normalizing or Hardening and Tempering

Mechanical Properties	
Tensile Strength in Mpa	550 min.
Yield Strength in Mpa	360 min.
Elongation in %	10 min.
Reduction of Area in %	30 min.
Hardness in HB	187 - 321
Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G11410	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1141	SAE	USA	Steel
A 1040 1141	ASTM	USA	Steel
A 108 Grade 1141	ASTM	USA	Steel and Bar
A 29 1141	ASTM	USA	Steel and Bar
A 311 1141 Class A	ASTM	USA	Steel and Bar
A 311 1141 Class B	ASTM	USA	Steel and Bar

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