



## Material - AS 1040

### Standard Specification for Carbon Steels and Carbon Manganese Steels

Group - Ferrous Mild Steel Alloys

Sub Group - AS 1040 Carbon Steels and Carbon Manganese Steels

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

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.370 -0.440	As- Cast or Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.100 - 0.350		
Manganese	Mn %	0.600 - 0.900		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.040 max.		
Chromium	Cr %	0.300 max.		
Nickel	Ni %	0.350 max.		
Molybdenum	Mo %	0.100 max.		
Copper	Cu %	0.350 max.		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Mechanical Properties	
			Tensile Strength in Mpa	418 - 590
			Yield Strength in Mpa	290 min.
			Elongation in %	12 min.
			Reduction of Area in %	35 - 40
			Hardness in HB	149 - 170
			Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A915 Grade SC 1040	ASTM	USA	Casting
1040	AISI	USA	Casting
J04003	UNS	USA	Casting
1040	SAE	USA	Casting
1040	AMS	USA	Casting
A 108 1040	ASTM	USA	Casting
A 29 1040	ASTM	USA	Casting

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto: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.