



## Material - ASTM A 29 4340

### Standard Specification for Hot - Cold Finished Carbon and Alloy Steel Bars

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A 29 4340 Hot - Cold Finished Carbon and Alloy Steel Bars

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

Grade Belongs to the Industry - Bar, Wire, Tube and Forging

Chemical Composition			Heat Treatment	
Carbon	C %	0.380 - 0.430	As- Cast or Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.150 - 0.350		
Manganese	Mn %	0.600 - 0.800		
Phosphorus	P %	0.035 max.		
Sulphur	S %	0.040 max.		
Chromium	Cr %	0.700 - 0.900		
Nickel	Ni %	1.650 - 2.000		
Molybdenum	Mo %	0.200 - 0.300		
Copper	Cu %	0.350 max.		
Niobium	Nb %	0.015 max.		
Vanadium	V %	0.020 max.	Mechanical Properties	
Aluminium	Al %	0.020 max.	Tensile Strength in Mpa	862 - 1931
Iron	Fe %	Balance	Yield Strength in Mpa	934.2 min.
-	-	-	Elongation in %	4 min.
-	-	-	Reduction of Area in %	20 min.
			Hardness in HB	187 - 322
			Impact in Joule	14.2 - 52.7 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A915 Grade SC 4340	ASTM	USA	Casting
J24053	UNS	USA	Casting
4340	AISI	USA	Bar, Wire, Tube and Forging
4340	AS	Australia	Bar, Wire, Tube and Forging
4340	AMS	USA	Bar, Wire, Tube and Forging
4340	SAE	USA	Bar, Wire, Tube and Forging
A 505 4340	ASTM	USA	Bar, Wire, Tube and Forging

**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)**

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