



## Material - ASTM A 29 8630

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

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A 29 8630 Hot and 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 %	0.280 - 0.330	As- Cast or Normalising or Annealing or Hardening + Tempering	
Silicon	Si %	0.150 - 0.350		
Manganese	Mn %	0.700 - 0.900		
Phosphorus	P %	0.035 max.		
Sulphur	S %	0.040 max.		
Chromium	Cr %	0.400 - 0.600		
Molybdenum	Mo %	0.150 - 0.250		
Nickel	Ni %	0.400 - 0.700		
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	-
Iron	Fe %	Balance	Yield Strength in Mpa	482 min.
-	-	-	Elongation in %	8 min.
-	-	-	Reduction of Area in %	-
			Hardness in HB	179 - 248
			Impact in Joule	25.7 - 53.2 J @ RT

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A915 Grade SC 8630	UNS	USA	Casting
J13095	UNS	USA	Bar, Wire, Tube and Forging
A 505 8630	ASTM	USA	Bar, Wire, Tube and Forging
8630	AISI	USA	Bar, Wire, Tube and Forging
8630	SAE	USA	Bar, Wire, Tube and Forging
8630	AMS	USA	Bar, Wire, Tube and Forging
8630	AS	Australia	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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