



## Material - ASTM A 505 4140

### Standard Specification for Alloy Steel Casting

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A 505 4140 Alloy Steel Casting

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 - 0.300		
Manganese	Mn %	0.750 - 1.000		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.040 max.		
Chromium	Cr %	0.800 - 1.100		
Molybdenum	Mo %	0.150 - 0.250		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	-
-	-	-	Yield Strength in Mpa	-
-	-	-	Elongation in %	-
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in BHN	-
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
A915 Grade SC 4140	ASTM	USA	Casting
J1405	UNS	USA	Bar, Wire, Tube and Forging
4140	AISI	USA	Bar, Wire, Tube and Forging
4140	SAE	USA	Bar, Wire, Tube and Forging
4140	AS	Australia	Bar, Wire, Tube and Forging
4140	AMS	USA	Bar, Wire, Tube and Forging
A 29 4140	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)**

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.