

Material: ASTM A 108 1045

Standard Specification for Steel Bars, Carbon, Cold-Finished and Standard Quality

Group: Ferrous Mild Steel Alloys

Sub Group: ASTM A 108 1045 Steel Bars, Carbon, Cold-Finished and Standard Quality

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

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

| Chemical Composition | | |
|----------------------|------|---------------|
| Carbon | C % | 0.430 - 0.500 |
| Manganese | Mn % | 0.600 - 0.900 |
| Phosphorus | P % | 0.040 max. |
| Sulphur | S % | 0.050 max. |
| Silicon | Si % | 0.100 max. |
| Lead | Pb % | 0.150 - 0.350 |
| Iron | Fe % | Balance |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |

| Heat Treatment |
|---|
| As- Cast or Normalizing or Annealing or Hardening + Tempering |

| Mechanical Properties | |
|-------------------------|-----------|
| Tensile Strength in Mpa | 570 - 862 |
| Yield Strength in Mpa | 310 min. |
| Elongation in % | 10 min. |
| Reduction of Area in % | 35 - 45 |
| Hardness in HB | 163 - 321 |
| Impact in Joule | - |

| Cross Reference Table | | | |
|-----------------------|----------|-----------|------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| A915 Grade SC 1045 | ASTM | USA | Casting |
| J04502 | UNS | USA | Bar, Wire, Tube and Forging |
| 1045 | AISI | USA | Bar, Wire, Tube and Forging |
| 1045 | AS | Australia | Bar, Wire, Tube and Forging |
| 1045 | SAE | USA | Bar, Wire, Tube and Forging |
| 1045 | AMS | USA | Bar, Wire, Tube and Forging |
| A 29 1045 | ASTM | USA | Bar, Wire, Tube and Forging |

Disclaimer: All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

Customer Care: +91-99090 45075 Email: info@icastllp.com



+91-99090 45075



info@icastllp.com



ICAST ALLOYS LLP, Plot 2527, Road H1, Kranti Gate, GIDC Metoda, Lodhika, Rajkot-360021, Gujarat, India