GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

# Material - ASTM A1008 HSLAS Grade 70 [480] Class 1

## Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability

**Group - Ferrous Mild Steel Alloys**

**Sub Group - ASTM A1008 HSLAS Grade 70 [480] Class 1 Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability**

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

**Grade Belongs to the Industry - Steel and Sheet**

| Chemical Composition | | |
|---|---|---|
| Carbon | C % | 0.260 max. |
| Manganese | Mn % | 1.650 max. |
| Phosphorus | P % | 0.040 max. |
| Sulphur | S % | 0.040 max. |
| Copper | Cu % | 0.200 max. |
| Nickel | Ni % | 0.200 max. |
| Chromium | Cr % | 0.150 max. |
| Molybdenum | Mo % | 0.060 max. |
| Vanadium | V % | 0.010 min. |
| Niobium | Nb % | 0.005 min. |
| Cr + Cu + Mo + Ni | Cr% + Cu% + Mo% + Ni% | 0.500 max. |
| Iron | Fe % | Balance |
| - | - | - |
| - | - | - |
| - | - | - |

| Heat Treatment |
|---|
| As-Raw or Annealing or Normalizing or Normalizing & Tempering or Quenching & Tempering |

| Mechanical Properties | |
|---|---|
| Tensile Strength in Mpa | 585 min. |
| Yield Strength in Mpa | 480 min. |
| Elongation in % | 14 min. |
| Reduction of Area in % | - |
| Hardness in HB | - |
| Impact in Joule | - |

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| Cross Reference Table | | | |
|---|---|---|---|
| **Material** | **Standard** | **Country** | **Grade Belong to the Industry** |
| A 1011 HSLAS Grade 70 [480] Class 1 | ASTM | USA | Sheet and Strip |
| A 1018 HSLAS Grade 70 [480] Class 1 | ASTM | USA | Steel |
| A 591 A607-HSLAS Grade 70 Class 1 | ASTM | USA | Steel and Sheet |
| SA-1008 HSLAS Grade 70 [480] Class 1 | ASME | USA | Steel and Sheet |
| SA-1011 HSLAS Grade 70 [480] Class 1 | ASME | USA | Sheet and Strip |
| SA-1011 HSLAS Grade 65 [450] Class 1 | ASME | USA | Sheet and Strip |
| 1163 C350 | AS | Australia | Steel |

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email 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.