



Material - SAE J 452 413.0

Standard Specification for Aluminium and Aluminium Alloy - Ingot and Casting

Group - Non-Ferrous Aluminium Alloy

Sub Group - SAE J 452 Aluminium and Aluminium Alloy - Ingot and Casting

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

Grade Belongs to the Industry - Casting

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Copper | Cu % | 1.000 max. | As-Cast | |
| Iron | Fe % | 2.000 max. | | |
| Magnesium | Mg % | 0.100 max. | | |
| Manganese | Mn % | 0.350 max. | | |
| Nickel | Ni % | 0.500 max. | | |
| Silicon | Si % | 11.000 - 13.000 | | |
| Tin | Sn % | 0.150 max. | | |
| Zinc | Zn % | 0.500 max. | | |
| Other | Ot% | 0.250 max. | | |
| Aluminium | Al % | Balance | | |
| - | - | - | Mechanical Properties Tensile Strength in Mpa 295 - 300 Yield Strength in Mpa 140 - 145 Elongation in % 2.5 min. Reduction of Area in % - Hardness in HB - Impact in Joule - | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |
| - | - | - | | |

| Cross Reference Table | | | |
|-----------------------|----------|---------|------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| B 275 S12B | ASTM | USA | Casting |
| A04130 | UNS | USA | Casting |
| A04130 | SAE | USA | Casting |
| B85 S12B | ASTM | USA | Casting |
| 413.0 | NBR | Brazil | Casting |
| 413.0 | NMX | Mexico | Casting |
| 13 | AA | USA | Casting |

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

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