

Material type

# Metal



Material name

# Aluminum 6082 | 3.2315 | 64430 | AlSi1MgMn

Alternative names

## 3.2315, AlSi1MgMn

Process compatibility

## CNC machining

### Mechanical properties

Ultimate tensile strength	140-280 MPa
Yield strength	85-230 MPa
Young's modulus (modulus of elasticity)	69 - 71 GPa
Elongation at break	8-15 %

### Thermal properties

Maximum service temperature	130 - 150 °C
Thermal expansion coefficient	23 10 <sup>-6</sup> /°C
Thermal conductivity	160-180 W/(m·°C)

### Post treatments

Anodizing compatibility	Responds well
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### Physical properties

Corrosion resistance	Excellent
Magnetism	Non-magnetic
Weldability	High

### Electrical properties

Electrical resistivity	4 μΩ*cm
ESD Safety	No

### Common applications

- General purpose high duty applications
- Structural frames
- Pylons

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