

# AlSi10Mg

Aluminum-based alloy offering dynamic properties suits a wide range of industrial applications

## Key Features:

- > Build parts offers excellent mechanical properties, such as hardness and tensile strength
- > Outstanding corrosion resistance
- > Good thermal and electrical conductivity
- > High dynamic toughness

## Example Applications:

- > Functional parts in automotive industries
- > Light weight structural geometries for aerospace
- > Thermal applications such as heat exchangers
- > Robotics & engineering

## [ Technical Data ]

### General Properties

### Mechanical Properties

(As built)

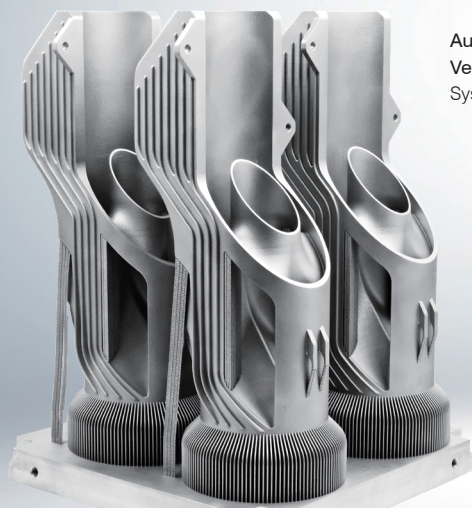
### Mechanical Properties <sup>1</sup>

(Heat treated)

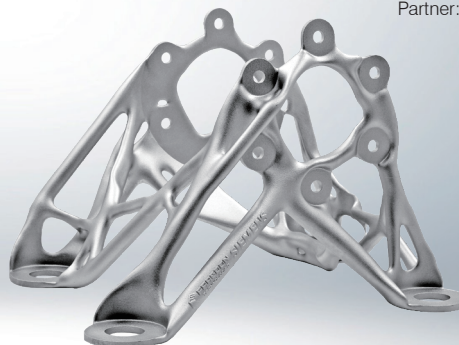
<b>Density</b> <small>ISO3369</small>	≥2.65 g/cm <sup>3</sup>
<b>Tensile Strength</b> <small>ISO6892-1</small>	≥ 430 MPa
<b>Yield Strength</b> <small>ISO6892-1</small>	≥ 250 MPa
<b>Elongation after Fracture</b> <small>ISO6892-1</small>	≥ 5 %
<b>Vickers hardness</b> <small>ISO6507-1</small>	≥ 120 HV5/15
<b>Tensile Strength</b> <small>ISO6892-1</small>	≥ 300 MPa
<b>Yield Strength</b> <small>ISO6892-1</small>	≥ 200 MPa
<b>Elongation after Fracture</b> <small>ISO6892-1</small>	≥ 10 %
<b>Vickers hardness</b> <small>ISO6507-1</small>	≥ 70 HV5/15

<sup>1</sup> For more information on heat treatment process, please contact us directly. Farsoon systems are open material platform. For special materials such as tungsten, tantalum and pure copper, please contact us with your inquiries or requirements.

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Autonomous Underwater Vehicle (AUV) Chiller  
System: FS301M-2



Gearbox Mount of Formula Race Car  
System: FS301M-2  
Partner: Siemens

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