Core Capability:
- Aluminum Investment Castings

Capabilities:
- Design-for-Manufacturing Assistance
- Advanced Aluminum Alloys
- Concurrent Engineering
- Prototype Castings Using SLA Models
- Finished Parts
- Small Assemblies
- Fasteners Installation
- In-House Material Testing

High-strength Aluminum Casting Alloy
A205/AMS 4471

✓ Reduces defects traditionally associated with high-strength 200-series copper alloys.

✓ Elimination of hot tearing or segregation defects common in 200-series alloys.

✓ Elimination of aluminum copper alloy castability and welding related issues.

✓ Elimination of segregation issues in large sections.

✓ Improved properties at elevated temperatures over traditional cast alloys (400°F+).

✓ Improved compositional and mechanical properties.

✓ Improved resistance to stress corrosion cracking.

✓ Fluidity comparable to aluminum silicon alloys.

<table>
<thead>
<tr>
<th>Alloy</th>
<th>Yield Strength</th>
<th>Tensile Strength</th>
<th>Elongation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A205 T7</td>
<td>65 ksi</td>
<td>75 ksi</td>
<td>5%</td>
</tr>
</tbody>
</table>

✓ Reduction of shrinkage or porosity.

✓ Exceptional fatigue properties.