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## 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 (400F+).
- Improved compositional and mechanical properties.
- Improved resistance to stress corrosion cracking.
- Fluidity comparable to aluminum silicon alloys.

Typical Mechanical Properties			
Alloy	Yield Strength	Tensile Strength	Elongation
A205 T7 Typical	65 ksi	75 ksi	5%

- Reduction of shrinkage or porosity.
- Exceptional fatigue properties.











