

Greensand Casting at Eagle Aluminum

Tolerances, Capabilities
and Design Recommendations



Contents

- Casting Characteristics
- Mold & Pouring Capabilities
- Design Recommendations
- Inspection Services at EACP



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GREENSAND CASTING AT EAGLE ALUMINUM

Tolerances, Capabilities and Design Recommendations

Greensand is a versatile and comparatively low cost method of metal casting that utilizes clay-bonded-sand molds that are compacted over a pattern without the application of heat. While dimensional tolerances and surface finishes are less advanced compared to other methods, greensand offers low tooling costs, and is often a cost-effective option for smaller runs.

Characteristics of greensand castings at Eagle Aluminum*:

Typical tolerance held	+/- .03" to .063"
Typical weight range:	10 lbs to 100 lbs
Largest pattern dimensions	33" x 80"
Surface finish	MIN 350 RMS
Typical production quantity	50-1,000 per run



Mold and pouring capabilities:

Aluminum alloys poured	319 and A356
Pouring temperature	Between 1350 and 1450 degrees F

Design recommendations:

- Minimum radius: 1/16"
- We recommend designing parts with rounded corners

Inspection & quality control services offered by Eagle Aluminum Cast Products, Inc.:

- Visual inspections
- Gaging
- Fixture checking
- **EAGLE ALUMINUM CAST PRODUCTS, INC. IS ISO 9001:2015 CERTIFIED**

*Tolerances and characteristics based on experience and on the Aluminum Association's Standards for Aluminum Sand Castings