



Overview of New GA Machined Target Component Designs

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Current Capabilities

The Center for Precision Manufacturing has several machines and stations for manufacturing a wide variety of components. Our components include materials such as: Au, Al, Cu, Epoxy, Polystyrene, and Rexolite.

- 5-Axis Lathe with Ultra-Sonic Capabilities
- Automated 5-Axis Mill
- Au electroplating station
- Micro-assembly
- Optical Metrology including White Light Profilometry & Dual Confocal Profilometry
- Plastics and Epoxy Manufacturing Capabilities

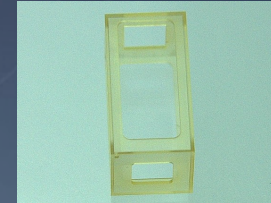


Direct-Machined Components

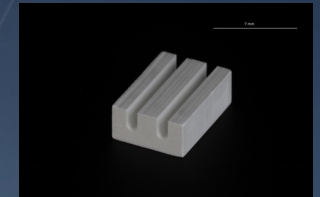
- GA is able to directly machine components into the final design with minimal or even without casting material at all



Rexolite Gas Pipe Assembly



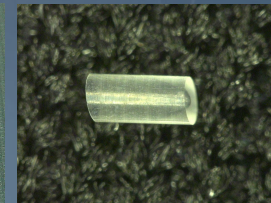
MagRadShock Epoxy Frame



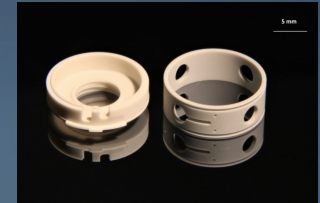
Boron Nitride Heat Sink



MagShock Angled End Cap



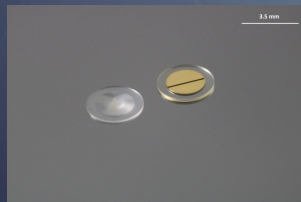
CD Parabolic Cone with 10µm CD Film



Shapal Diagnostic Band

Multi-Material Components

- Using electroplating and casting methods, GA is able to manufacture components utilizing metals and plastics for either structural integrity or ablation with the added benefit of no glue-gap



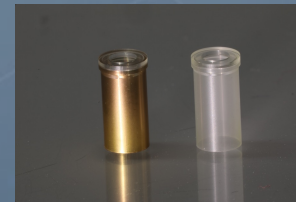
MachEOS Ge-Doped CH Disk
MachEOS Au Step CH Disk - No Glue



Au_Epoxy Male & Female Rugby Hohlräume



Au-Epoxy Parabolic Cone



MagLIF-EP Gas Pipes
Cu Liner & Linerless



Opacity Hohlräume Coated in Al, Be, & Si



Au-Epoxy Parabolic Cone
with Ti Coating

Selective Coatings Components

- Using machined fixtures, GA is able to coat various metals onto different substrates in selective areas