

Milling Capabilities



Satellite Components

Inertial Navigation Components

Optical Benches

Infrared Seekers

Nuclear Reactors

Strategic and Tactical Weapons

General Dynamics provides milling capabilities to produce precise, light-weight structures from high-performance materials including Beryllium and its alloys, Titanium, Aluminum, Quartz, machineable glass, Inconel, Magnesium and other exotic and conventional materials. With more than 50 years of expertise and state-of-the-art turning equipment, we are able to achieve virtually unmatched tolerances.

General Dynamics Mission Systems designs and manufactures a full portfolio of high-performance electro-optical/infrared (EO/IR) systems and components that provide our customers the clarity, accuracy and reliability to successfully complete their mission.

Milling Capabilities

Lightweighting

- 2-piece, lightweighted, brazed, closed-back beryllium mirror substrate (18" x 22") for use on a remote sensing satellite
- One meter class diameter, light-weighted mirror substrates used on both land-based and space telescopes
- Lightweighted E-20 beryllium alloy electronics chassis for use on a commercial communication satellite

Thin Walls

- 3' x 4' lightweighted beryllium panels for satellite optical bench with wall thickness of .080"
- 18" x 22" lightweighted beryllium scan mirror with wall thickness of .025"
- Aluminum-beryllium large satellite heatsinks for heat dissipation with wall thickness of .025"

Machine "HOGOUT"

- 77 lb. beryllium billet machined to 8% of original weight maintaining intricately detailed features
- 762 lb. beryllium billet machined to 9% of original weight with a honeycomb geometric thin-walled isogrid
- Aluminum removal rate of 1/2" deep by 1/4" wide at 160 inches per minute turning 7,800 RPM with a single flute, 1" diameter inserted cutter



GENERAL DYNAMICS

Mission Systems

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D-MillingCapabilities-01-0316