GENERAL DYNAMICS

Mission Systems

Turning Capabilities





Satellite Components

Inertial Navigation Components

Mirror Substrates

Nuclear Reactors

Strategic Missiles

Momentum/Reaction Wheels

Commercial Scanners

General Dynamics provides precision capabilities to generate complicated part geometries from high-performance materials including Beryllium and its alloys, Titanium, Aluminum, Inconel, stainless steel forgings and other exotic and conventional materials. With more than 50 years of expertise and state-of-theart turning equipment, we are able to achieve virtually unmatched tolerances.

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

Turning Capabilities

Large Diameters

Mirror substrates up to 88" in diameter and 23" in thickness 35" diameter beryllium mirror surface turned to within .001" of final form for use on a space telescope

Interrupted cut on the facesheet of a 34" \times 20" beryllium mirror used on a defense satellite

Complex Features

2-piece conical beryllium structure, 34" in length, 13" at the large diameter with wall thickness of .100"

Core drilling of raw material to reduce input material costs

15" diameter stainless steel reaction wheel held to within .001" tolerance on diameter size and .0005" on runout

Thin Walls

15" diameter stainless steel reaction wheel with wall thickness of .040" +/- .001"

1" diameter by 1" long beryllium cylinder with wall thickness of .003" - .005" $\,$

12" diameter x 18" long beryllium sunshade turned and etched with wall thickness of .020" +/- .001"

Manufacturer reserves the right to change specifications to reflect latest changes in technology and improvements at any time without notice. Export is subject to U.S. Government regulations.





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