

Manufacturing



AEROSPACE QUALITY

AMD&E is a trusted manufacturer of mission critical parts, subassemblies, systems, and often-entire products. We specialize in aerospace quality mid-size; mid volume parts and assemblies delivered on an accelerated timeframe. Our clients receive the highest quality American made machined parts allowing them to compete successfully on a global scale.

ACCELERATED DELIVERY

Customers count on us to manufacture specification driven components and systems used in precision motion control, positioning, lightweight structures, power transmission, material handling, fixturing and locating. They also rely on us for *rigorous program* management, quality control, inspection and precision testing capabilities and repeatability down to the micron level.

GLOBALLY COMPETITIVE

We specialize in precision CNC machining and turning of aluminum alloys, stainless steels, titanium, brass, plastics, and other engineering materials, serving a variety of industries where quality and precision are the highest priority.

LOCALLY MANUFACTURED

We employ state-of-the-art manufacturing technology, with an average asset age of just three years, ensuring our customers the best possible outcomes.



One and done capability in tool or alloy steel



One and done thin walled 📤 aluminum spacecraft component



Mission critical complex stainless steel spacecraft actuator component with demanding tolerances, heat treat, coating and inspection requirements



CNC machined lightweight aerostructure













Manufacturing



CNC Machining

- Prismatic machining from 0.5" cube to 120" X 60" cube
- 3, 4, 5 axis machining
- 5 face bridge milling
- · Machining of castings, forgings, stampings
- Weldments and fabrications up to 120" X 63" X 48"
- Match machined housings, thin-walled aero & space structures, light weight structures, high temperature alloys, motion control components, optical components
- Weldments, bases, frames, ground plates, plattens, mold bases, gun drilled housings, gun drilled tombstones, hog outs
- Aluminum alloys, stainless steel alloys, titanium alloys, steel & tool steel, brass, plastics, and other engineering materials
- Tight tolerance & precision parts

CNC Turning

- Turned part sizes from 1" diameter to 12" diameter
- Turn-mill up to Ø8" (lower volumes Ø12")
- · Chucker parts & done-in-one
- Sheaves, couplings, adapters, flanges, housings
- Aluminum alloys, stainless steel alloys, titanium alloys, steel & tool steel, brass, plastics, and other engineering materials

Grinding

- Surface grinding up to 24" long X 12" wide parts
- Rotary surface grinding up to Ø16" X 2" thick parts
- Steel alloys

Laser Marking

- Serial numbers
- Labels
- Images
- 2D and 3D
- Marking of steel alloys, aluminum alloys, and most plastics

Inspection

- Manual CMM for quick verification
- Portable micro CMM for quick verification & high accuracy
- Portable large format CMM up to 30' work zone
- Surface gauges
- Manual inspection micrometers, calipers, surface gauges, height gauges
- Surface finish
- Hardness

Secondary Operations – Local Supply Chain

- Anodize, black oxide, passivate, chem conversion coat
- Blast
- Paint
- Powder coat
- MPI, NDT

3D Printing

Plastics





CNC Lathe with secondary spindle and live tooling



table and 12,000 RPM spindle



Medium size CNC machining

CNC Bridge mill with 5 face machining

