



# 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.



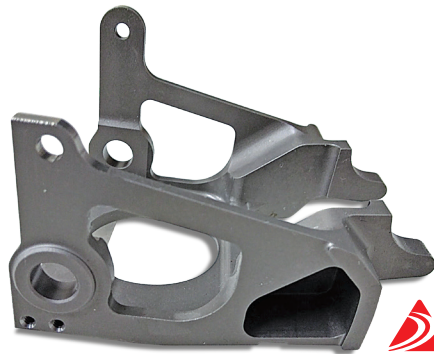
One and done capability in tool or alloy steel



One and done thin walled aluminum spacecraft component

## ACCELERATED DELIVERY

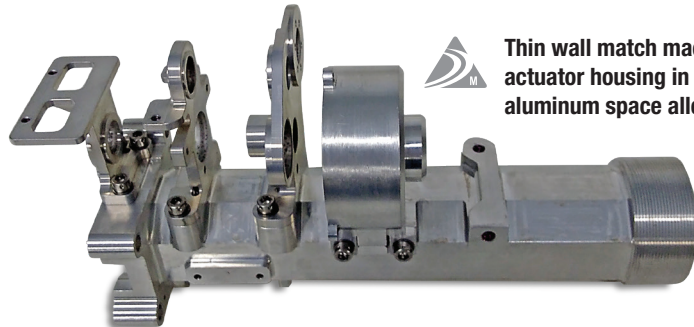
Customers count on us to manufacture specification driven components and systems used in precision motion control, positioning, lightweight structures, power transmission, material handling, fixturing and locating. They also rely on us for *rigorous program management, quality control, inspection and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



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

## GLOBALLY COMPETITIVE

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



Thin wall match machined actuator housing in lightweight aluminum space alloy

## 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.

CNC machined lightweight aerostructure



Cage Code: 72AB9  
DUNS: 83 203 4131  
NAICS (Manufacturing): 332710, 332721, 333249, 33318, 333517  
NAICS (Engineering): 541330, 541490, 541712, 541715





## 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



5 Axis CNC with part probing and high-speed machining

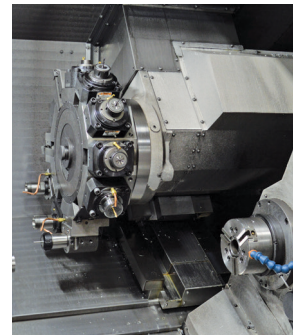
Precision portable CMM



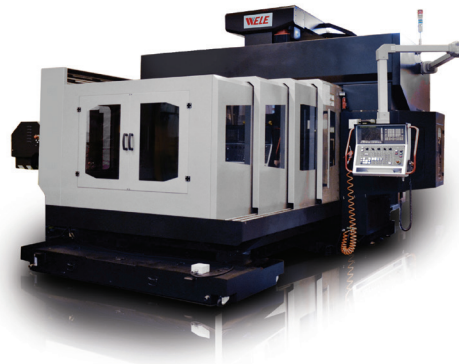
Large travel VMC with rotary table and 12,000 RPM spindle



CNC Lathe with secondary spindle and live tooling



Medium size CNC machining



CNC Bridge mill with 5 face machining