CORE COMPETENCIES
KNT Manufacturing is a World Class Manufacturer of Precision Machined Components. 137,000 square foot manufacturing factory, equipped with over 120 state-of-the-art CNC Machines, premium welding services, and a Zeiss centered CMM Inspection Laboratory. We offer short to long production volumes as well as prototype & one-off builds, and reverse engineering services.

Our CNC milling machines and turning centers are computer-controlled and can produce complex precision parts exponentially faster than human-controlled machines. They are also generally more consistent and precise than traditional lathes and drill presses. Our CNC turning centers and milling machines are state-of-the-art and are operated by the most highly trained technicians.

CORE CAPABILITIES
- Machining (Light and Heavy)
- Turning, Milling, Boring, Drilling, Broaching, Line Boring
- Welding – Steel, Stainless, Aluminum, Cast
- Full Range of Materials from Plastic to Exotics (Titanium/Inconel)
- All Metals and Alloys, Shapes Including Channel, Angle, Beam, Tubes and Plate

Light Value-Added Manufacturing
- Clean Room Assembly/Sub-assembly/Kitting
- Tooling, Jig & Fixture Manufacturing

Secondary Processing
- Cleaning, Plating, Paint, Heat Treatment

KEY OFFERINGS:
- Dedicated department for rapid prototype manufacturing
- World class OTD metrics 98-99% OTD
- World class Quality with a QPPM <320/12 months
- High production supplier with wide open capacity + burst capacity
- CNC Milling 3, 4, & 5 Axis
- CNC Tool Room
- Lathe with Live Tooling
- CNC Vertical Milling 3, 4, & 5 Axis
- CNC Tool Room Lathe with Live Tooling
- Full Manual Machine Shop
- Surface Grinding
- Certified Precision Welding Ferrous and Non Ferrous
- Pressure Test / Flow Testing Capabilities / Leak testing/
  - Leak test, flow test, pressure test

KNT, INC.
Experience, Precision, & Customer Satisfaction

Our state of the art laboratory is environmentally controlled to 20°C ±1° C⁰ assuring you the highest standard of accuracy and reliability. All of our equipment is state of the art Zeiss CMM Units.

Our Quality Team offers a complete line of CMM first article contract inspection services, including inspection and certification of production tooling, gaging and fixtures. With a wealth of standards at our disposal, the team is capable of performing part & fixture measurements of all types, complexities, accuracies and resolutions.

5 Axis Machining Bonus Capability

In addition to our numerous machines, we have added a MAZAK Series Variable Axis 500-5X which has a unique highly-rigid and built-in tilting rotary table which allows work pieces with complex contours and features to be finished in just a single machine setup. It has tremendous weight capacity and increases machining accuracy while reducing cycle time. With 5-axis simultaneously controlled machining the Variable axis is ideal for aerospace components as well as prismatic parts in steel and aluminum which offers the following characteristics.

- Simultaneous 5-axis control
- Table tilts up to 150° (A-axis)
- Table rotates up to 380° (C-axis)
- Minimal thermal distortion – cooled ball screws and spindle
- CNC Accuracy
  - Diameter – external / internal
    - .0002 lathe/.0003 mill
  - Positional
    - .0005
  - Surface
    - Mill 16Ra
    - Lathe 10Ra
  - Roundness, Straightness, Flatness
    - Round: .0005, Perpendicularity: .0005, Flatness: .0002
Machining Tolerance Capabilities:

- Maximum Tolerances
  - MILL: +/- .0002
  - LATHE +/- .0002
- Max Dimensions – diameter, length, width, height
  - MAX DIMENSION: 59.8 X 49.2 X 53.1
- Mill Capability
  - MIN DIMENSIONS: .0625 X .0625 X .0625
  - MAX DIMENSIONS: 59.8 X 49.2 X 53.1
- Lathe Capability
  - MIN LATHE DIAMETER: .0625
  - MIN SCREW MACHINE DIAMETER: .03125
  - MAX DIAMETER: 78.78
  - MAX LENGTH: 51.1
- 5-Axis Milling/Lathe
  - 28.34 X 17.71 (MAAM)
- Largest Footprint machining
  - 59.8 X 49.2
- Smallest footprint machining
  - .062 X .062
- Welding Capabilities
  - Aluminum, Stainless steel,
    - Aluminum, Stainless Steel, Copper, Titanium, Inconel, Steel
  - Specific welding techniques...TIG, MIG
    - Ultra Clean Capability
    - Ventilation Hoods
    - 5 Welding Stations
- Surface / Finish Treatments
  - Max Surface Finish Ra
    - MACHINE FINISH: Ra 2
    - DEBURR FINISH: Ra 4
  - Plating types – Anodizing, Chromium, Nickel, Electro polish
    - Anodize, hard anodization, sulfuric anodization, nickel, silver, alodine
  - Painting types -
    - Paint, powder coat, textured paint
  - Cleaning types – Blasting
    - Etch clean, electro polish, IPA Cleaning