



# **Turning Center of Excellence**



# Welcome to the Accurate Specialties Turning Center of Excellence

Accurate Specialties Turning Center of Excellence, a division of Fisher Barton, holds ISO 9001:2015 certification and is ITAR registered, showcasing our commitment to excellence in machining. Specializing in precision solutions and high complexity, our new facility is equipped with the latest multi-axis CNC lathes and mills with a highly skilled team to consistently deliver top-tier quality and reliability in every component.

Understanding the properties of different CNC machining materials is vital to the proper machining of parts for any industry. We have the engineering expertise as well as state-of-the-art equipment to accurately CNC machine components made of most metals and alloys, including aluminum, brass, bronze, Inconel, Monel, stainless steel, titanium, and other metals.

With over 50 years of metallurgical expertise, we continuously innovate. In addition to close tolerance machining, we offer advanced heat treatment and Engineered Coating Solutions® to further extend the life of your components. This dedication ensures our clients receive durable, tailor-made products that exceed expectations and fulfill their unique requirements.

#### **ITAR Registered Categories**

- Category IV Launch vehicles, guided & ballistic Missiles, rockets, torpedoes, bombs, and mines
- Category VI Surface vessels of ware and special naval equipment
- Category VII Ground vehicles
- Category XIII Materials and miscellaneous articles
- Category XV Spacecraft systems and associated equipment

# **Machining & Turning Capabilities**

# Giddings and Lewis VTC 2500 Vertical Turning Center

High-speed 5-axis lathe for turning very large parts. Its functionality and features are ideal for heavy precision cutting with better surface finishes, milling, and drilling capabilities for precision and accuracy for complex geometries.

- Max machining diameter: Up to 2.5m or 98 (in)
- Table diameter: 98.43 in
- Maximum swing capacity: 106.29 in
- Maximum turning height: 98.43 in
- Power: 100 Hp

# **Okuma VTM 100 Vertical Turning Center**

Vertical turning benefits of a lathe combined with those of a machining center. Ideal for lower run parts with heavy milling. Integrated milling capabilities for multi-tasking and a high-speed spindle for rapid machining

- Max Cutting Diameter (in): Ø39.37
- Max Cutting Length (in): 33.07
- Power: 40/30 Hp

# Momentum MVL-12M Heavy-Duty Vertical Turning Lathe

This heavy-duty machine has the highest power in its class and is ideal for large parts. It uses one tool for both ID and OD.

- 1,250 mm (49-inch) table as a standard.
- Swing and Turn: 1,600mm (63-inches)
- Max Turning Height: 1,150mm (45-inches)
- Max Weight: 8,000 kg (17,600+ lbs.)
- Power: 74/60 Hp

#### Haas UMC-750 Machining Center

Equipped with 5-axis simultaneous machining, offering unparalleled flexibility in tackling complex geometries with precision and efficiency while maintaining exceptional surface finishes.

- X Axis: 30.0 in 762 mm
- Y Axis: 20.0 in 508 mm
- Z Axis: 20.0 in 508 mm
- Power: 30 Hp

# **Okuma LB3000 EX II Turning Center**

This large horizontal lathe offers robust turning capabilities for heavy high-speed cutting of diverse materials with increased efficiency and superior accuracy.

- Max machining diameter (in): 16.14
- Max machining length (in): 19.69 [39.37, 51.18]
- Power: 30/20 Hp

#### **Doosan 5100MB Turning Center**

This machine excels in heavy-duty turning for large-scale components, offering the highest spindle speeds in its class. These speeds provide powerful cutting capabilities and increased stability, making it ideal for demanding applications.

- Max Turning Diameter: 650 mm (25.6 in)
- Max Turning Length: 952 mm (37.5 in)
- Through Hole Diameter: 166.5 mm (6.6 in)
- Power: 60 Hp

# **Okuma LU4000 EX Turning Center**

This 4-axis turning center has exceptional rigidity for precision machining and a dual-spindle configuration for simultaneous machining.

- Max Turning Diameter (in): 18.90
- Max Turning Length (in): 49.21
- Power: 30/20 Hp

# **Okuma VTR-160 Turning Center**

This double column turning center provides large capacity machining for close tolerance parts and the flexibility to handle a wide range of parts.

- Max Turning Diameter (in) Ø62.99
- Max Turning Length (in) 49.21 [62.99]
- Power: 60/50 Hp



# **Quality & Additional Services**

# **Coordinate Measuring Machines (CMM)**

Measuring CNC parts with a Coordinate Measuring Machine (CMM) offers several advantages over traditional hand tools like calipers and micrometers.

**Precision:** CMMs are highly precise machines capable of measuring parts to extremely tight tolerances, often within microns or even fractions of a micron. This level of precision is difficult to achieve consistently with hand tools.

**Complex Geometry:** CNC parts can have intricate and complex geometries that are challenging to measure accurately with hand tools alone. CMMs can measure these complex shapes with ease, including free form surfaces, contours, and non-linear dimensions.

**Repeatability:** CMM measurements are highly repeatable, meaning that the same part measured multiple times will yield consistent results. This repeatability is crucial for quality control and ensuring parts meet stringent specification

# **On-Site Sawing**

We process all material in house with our fully automatic TSUNE CNC saw which allows us to keep material costs to a minimum. With its large capacity, automatic bar feeding, accuracy, and versatile working envelope, we are able to make precision cuts efficiently. This allows us to stay competitive, minimize material waste, and pass these savings on to our customers. We have a wide range of additional services that allows us to stay on the leading edge of our industry.

#### **Additional Services from Fisher Barton**

- Heat Treating
- Grinding
- Surface Engineering Thermal Spray
- Mechanical/Metallurgical Testing
- Laser cutting and Waterjet cutting
- Permanent Marking (Engraving, Etching)

#### Why Choose Accurate Specialties?

- Cutting-edge technology for unmatched precision and complex geometries
- Customized solutions tailored to your specific requirements
- On-time delivery and reliable customer support
- Long-tenured, highly experienced professionals dedicated to quality craftsmanship
- Streamlined processes designed to provide expertise and short lead times.
- Surface engineering technology for high-wear components that extend the life of the product
- In-house capabilities providing full-service prototyping and testing services



# Please contact us for complete machine capability listing. Visit fisherbarton.com or call 920-545-0704 for detailed information on all our capabilities.

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