**CAPABILITIES:**

**5-AXIS CNC MILLING:**

1. **HAAS UMC-750**
	* **19.7” Table**
	* **30” X-axis Travel**
	* **20” Y-axis Travel**
	* **20” Z-axis Travel**
	* **12,000 RPM / 30HP Spindle**
	* **1200 IPM Rapid Traverse**
	* **40+1 ATC Carousel Tool Changer**
	* **Dynamic Work Offsets**
	* **Intuitive Probing System**

**VERTICAL CNC MILLING:**

1. **HAAS VF-3SS**

**(featuring right angle head capability and 1,000 psi through-the-spindle coolant)**

1. **HAAS VF-3 (2)**
	* **48” x 18” Table**
	* **40” X-axis Travel**
	* **20” Y-axis Travel**
	* **25” Z-axis Travel**
	* **10,000 RPM / 30HP Spindle**
	* **1000 IPM Rapid Traverse**
	* **24 ATC Carousel Tool Changer**
2. **HURCO VM-2**
	* **48” x 20” Table**
	* **40” X-axis Travel**
	* **20” Y-axis Travel**
	* **25” Z-axis Travel**
	* **8,000 RPM / 15HP Spindle**
	* **1200 IPM Rapid Traverse**
	* **20 ATC Carousel Tool Changer**
3. **HURCO VM-1 (3)**
	* **30” x 14” Table**
	* **26” X-axis Travel**
	* **14” Y-axis Travel**
	* **18” Z-axis Travel**
	* **8,000 RPM / 15HP Spindle**
	* **750 IPM Rapid Traverse**
	* **16 ATC Carousel Tool Changer**
4. **HURCO BMC-30**
	* **40” x 16” Table**
	* **30” X-axis Travel**
	* **18” Y-axis Travel**
	* **24” Z-axis Travel**
	* **6,000 RPM / 15HP Spindle**
	* **945 IPM Rapid Traverse**
	* **24 ATC Carousel Tool Changer**
5. **ACRA AM-2V**
	* **49” x 9” Table**
	* **33” X-axis Travel**
	* **12” Y-axis Travel**
	* **5” Z-axis Travel**
	* **16” Manual Knee / 5” Manual Quill Z-axis Travel**
	* **5,000 RPM / 3HP Spindle**

**CNC TURNING CENTER:**

1. **HAAS HL-2**
* **20” Swing over bed**
* **24” Between centers**
* **8” Chuck**
* **15HP Spindle**

**QUALITY CONTROLS:**

1. **BROWN & SHARPE VALIDATOR CMM**
	* **48” x 84” table**
	* **36” x 48” travel / bridge type**
	* **Automatic and programmable**

**PROGRAMMING:**

* **Autodesk Fusion360 Ultimate (2 seats)**
	+ **5-axis programming and modeling package**
	+ **Drafting with GD&T**
	+ **Translation capability of nearly all major file types**
* **Autodesk Fusion360 Standard (1 seat)**
	+ **3-axis programming and modeling package**
	+ **Translation capability of nearly all major file types**
* **BobCAD-CAM**
	+ **3-axis programming and modeling**
	+ **Translation capability of nearly all major file types**

**SAWING:**

1. **Ridgid Horizontal band saw**
2. **Evolution cold saw / carbide chop saw**