

## Machine List

### CNC Milling

### Capacity

3	<b>Mori Seiki</b> NH4000 DCG horizontal machining centers with 36 station linear pallet pool, full 4th axis, spindle probe, 180 tool magazine, P.S.I. through spindle coolant	22" x 22" x 24.8" travel + full 4th axis
1	<b>Mori Seiki</b> NH4000 DCG horizontal machining center with 6 station pallet pool, 4th axis, spindle probe, 180 tool magazine, 1000 P.S.I. through spindle coolant	22" x 22" x 24.8" travel + full 4th axis
2	<b>Mori Seiki</b> NHX4000 horizontal machining centers with 5 station pallet pool, 20,000rpm spindles, 4th axis, spindle probe, 180tool magazine, 1000 P.S.I. through spindle coolant	22" x 22" x 26" travel full 4th axis
1	<b>Mori Seiki</b> NHX4000 horizontal machining centers. 1 degree indexing, 60 tool magazine, 1000 P.S.I. through spindle coolant	22" x 22" x 26" travel
2	<b>Mori Seiki</b> NHX4000 horizontal machining centers with 20,000rpm spindles, 4th axis, spindle probe, 60 tool magazines, 1000 P.S.I. through spindle coolant	22" x 22" x 26" travel
2	<b>Mori Seiki</b> NHX 5000 horizontal machining centers. Each with full 4th axis, spindle probe, 60 tool magazine, 1000 P.S.I. through spindle coolant	29" x 28" x 33" travel
1	<b>Mori Seiki</b> NV5000b machining center with 30 tool magazine, 1000 P.S.I. through spindle coolant	40" x 20" travel + rotary table
1	<b>Mori Seiki</b> DuraVertical 5100 with 30 tool magazine, 1000 P.S.I. through spindle coolant	40" x 20" travel + full 4 axis
2	<b>Mori Seiki</b> DuraVertical 5100 with 30 tool magazine, 1000 P.S.I. through spindle coolant	40" x 20" travel
1	<b>Mori Seiki</b> DuraVertical 5060 with 30 tool magazine, 1000 P.S.I. through spindle coolant	30" x 20" travel

### MillTurn

### Capacity

1	<b>Mori Seiki</b> NTX 2000SZM integrated mill turn center. 5 axis, spindle probe, 76 tool magazine, 1000 P.S.I. through spindle coolant	Max. turning dia 24", 60" between centers
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## Turning

### Capacity

2	Tsugami SS20 Swiss type lathe with Fanuc 31 control, magazine bar loader, live tools, sub-spindle with pick off capability	3/4" diameter capacity
1	Citizen L20 Type VII Swiss-type lathe with Mitsubishi control, magazine bar loader, live tools, sub-spindle with pick off capability	3/4" diameter capacity
1	<b>Mori Seiki</b> NLX2500/700 SY. Sub-spindle, 12 station turret, live tools, Y-Axis, magazine bar loader, 1000psi coolant	14.1" dia x 27.7" long

## 5-Axis Milling/Quick Turn Prototype

### Capacity

2	<b>Mori Seiki</b> DMU 65 monoBLOCK 5-axis machining centers with 20,000rpm spindles, spindle probe, 60 tool magazines	28.9"x25.6"x22" travels, full 5-axis
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## Inspection Machines

### Measuring Range

1	Zeiss Contura - AKTIV CMM VAST XT-Gold Sensor System with MSR - Probe Change Magazine	X=1000 Y=1200 Z=600 (39.4") (47.2") (23.6")
1	Zeiss Contura G2 CMM VAST XXT-RDS Sensor System with MSR - Probe Change Magazine	X=700 Y=700 Z=600 (27.6") (27.6") (23.6")
1	Starrett MVR300M Vision System Metlogic M3 CNC Metrology Zoom Optics Standard 6.5:1	X=300 Y=200 Z=200 (12") (8") (8")
1	Mitutiyo PH A14 Optical Computer KA Couter Series 174 Digital Readout with 10X Standard Magnification	Measuring Travel 4" x 8"

## Tool Room / Model Shop

4	CNC prototyping mills
5	Vertical mills with digital readouts
1	Agie wire EDM
2	Heat treat ovens
4	Harding lathes w/DRO
1	Sunnen hone
1	LeBlond engine lathe under capacity
1	Micromaster 618 and 818 Brown & Sharp two axis hydraulic surface grinders
1	Strippit ST 20 1212 CNC Turret Punch Press – 20 ton, 48"x48" sheet capacity, 26 tools, 3 auto-index stations, programmable stroke