



Machinery List

Abrasive Waterjets

OMAX 55100

(1 available)

- 55" x 100" travel (52" x 96" with taper compensation on)
- Tilt-A-Jet with tilt forward for taper free parts and faster cut speeds
- terrain follower
- kerf width (jet diameter) – .030"
- Minijet – allows cutting down to .020"

OMAX 2652

(1 available)

- 26" x 52" travel
- kerf width (jet diameter) – .030"

CNC Mills

Matsuura MAM72-35V

(1 available)

- max part diameter of 13.77" and max part height of 12.4"
- 20,000 rpm
- positioning accuracy 0.0001"
- through spindle coolant
- 32 pallet pool
- high-speed simultaneous 5-axis machining

Fanuc Robodrill 5-axis Mill – D21MiB5 ADV

(5 available)

- 19.6" x 15.74" x 15.74" (X, Y, Z) travel
- max part diameter of 8" (or 6" sq) and max part height of 6"
- 24,000 rpm
- rotary positioning accuracy 15 sec
- through spindle coolant
- robot loading
- high-speed machining

Hurco 5-Axis Mill – VMX30U

(1 available)

- 30" x 20" x 20.5" (X, Y, Z) travel
- max part diameter of 15.75" (or 11" sq) and max part height of 10"
- 12,000 rpm
- rotary positioning accuracy 10 sec
- high-speed machining

Hurco 5-Axis Mill – VMX42U

(1 available)

- 42" x 24" x 20.5" (X, Y, Z) travel
- max part diameter of 18.7" (or 14" sq) and max part height of 12"
- 12,000 rpm
- rotary positioning accuracy 10 sec
- through spindle coolant
- high-speed machining

Fanuc Robodrill 3-axis Mill – D21MiB5

(5 available)

- 19.6" x 15.74" x 13.0" (X, Y, Z) travel
- 24,000 rpm
- through spindle coolant
- robot loading and pallet changer configurations
- high-speed machining

Haas 3-axis Mill – VF-2SS

(6 available)

- 30" x 16" x 20" (X, Y, Z) travel
- 15,000 rpm
- through spindle coolant
- 4th axis
- high-speed machining

Makino 3-axis Mill – KE55

(3 available)

- 24" x 12.5" x 14" (X, Y, Z) travel
- Full CNC or manual operation
- Rigid tapping in manual or CNC mode

Doosan 3-axis Mill – DNM 6700

(1 available)

- 51.2" x 26.4" x 24.6" (X, Y, Z) travel
- 15,000 rpm
- through spindle coolant
- 4th axis
- high-speed machining

Haas 3-axis Mill – VF-3YT

(1 available)

- 40" x 26" x 25" (X, Y, Z) travel
- 50 taper spindle
- 7,500 rpm
- through spindle coolant
- 4th axis

CNC Lathes

Doosan – Puma 2100Y II

(3 available)

- 2.625" bar capacity
- 12" turning capacity (chucker)
- 20" maximum turn length
- dual spindle
- single turret with live tooling and Y-axis

Miyano – BNE

(2 available)

- up to 2" bar capacity
- 12" maximum turn length (48" for end working only)
- twin spindle
- twin turret with live tooling and Y-axis

Doosan – Puma 2600Y

(1 available)

- 3" bar capacity
- 12" turning capacity (chucker)
- 18" maximum turn length
- single spindle
- single turret with live tooling and Y-axis
- tailstock

Mori Seiki – SL-150

(1 available)

- 1.8" bar capacity
- 12" maximum turn length
- twin spindle
- single turret with live tooling and Y-axis

Okuma & Howa – ACT-15

(3 available)

- 6" chuck or 5C collet
- 10" maximum turn length
- single spindle
- single turret

Okuma & Howa – ACT-35L

(1 available)

- 12" chuck or 35J collet
- 38" maximum turn length
- 3.125" bar capacity
- single spindle single turret
- tailstock

Swiss Lathes

Tsugami – SS327-5AX

(1 available)

- 1.25" bar capacity
- 12.6" maximum turn length
- twin spindle
- live tooling with 5-axis milling
- automatic bar loader

Tsugami – B0326-II

(1 available)

- 1.25" bar capacity
- 12.6" maximum turn length
- twin spindle
- live tooling with y-axis
- automatic bar loader

Tsugami – B0205-III

(1 available)

- 0.75" bar capacity
- 8.25" maximum turn length
- twin spindle
- live tooling with y-axis
- automatic bar loader

Hanwha – XE-20

(5 available)

- 0.75" bar capacity
- 8.25" maximum turn length
- 48" part length for end work only
- twin spindle
- automatic bar loader

Hanwha – XD-12H

(1 available)

- 0.5" bar capacity
- twin spindle
- live tooling with y-axis
- automatic bar loader

Hanwha – ML-20H

(1 available)

- 0.75" bar capacity
- 8.25" maximum turn length
- twin spindle
- live tooling with y-axis
- automatic bar loader

Wire EDM

Makino DU064 Wire EDM

(1 available)

- 15.7" thick
- 25.6" x 16.5" travel
- 0.010" wire diameter with auto threading
- 4-axis taper control

Grinders

- Boker Surface Grinder
- Okamoto Automatic Surface Grinder
- Cylindrical Grinder – 6" diameter x 12" long
- Cincinnati Centerless Grinder (3 available) – 2" diameter and 12' long

Inspection Equipment

- Zeiss Eclipse 5-Axis Bridge Style CMM – Renishaw PH20 Probe
- Keyence IM-7030T optical inspection (2 available)
- Keyence XM-5000 handheld probe coordinate measuring machine
- Romer Portable CMM
- Creaform HandySCAN BLACK|Elite high-resolution laser scanner
- Clark Hardness Tester
- Profilometer

Additional Equipment

- Adira Sheet Metal Brake and Shear
- Laser Engraver for Part Marking and Gasket Cutting
- MIG, TIG, and Spot Welders
- Amada 10" Production Band Saw (2 available)
- Heat Treat Oven
- 75 Ton Ironworker Hydraulic Press
- Large & Small Vibratory Deburring Machines
- Chem Film Line (Alodine) [Chemeon TCP-HF](#)
- Course & Fine Media Blasting Cabinets
- Sunnen Hone (up to 2" diameter)