



**Kitamura BRIDGEcenter -8F  
SPECIAL MACHINING CENTER**

- a) 80" x 42.7" x 28" Axis Travel
- b) 40 Tool ATC
- c) Ideal for high precision machining very large parts and molds

CNC



**Roku Roku HC-658**

- a) 32,000 RPM
- b) 23.60" x 19.70" x 15.70" Axis Travel
- c) 30 Tool ATC

CNC



**ROKU-ROKU HC-548EX**

- a) 32,000 RPM
- b) 18.10" x 14.10" x 10.20" Travel
- c) 12 Tool ATC

CNC

**DECKEL MAHO DMU 100monoBLOCK**

- a) 18,000 RPM
- b) 49" x 28" x 13.7" Axis Travel  
Rotary Table: 31.5" Max.Dia.
- c) 60 Tool ATC

CNC





**Deckle Maho DMU 80 MonoBLOCK**

- a) 18,000 RPM
- b) 31.60" x 24.80" x 24.80" Axis Travel  
Rotary Table 27.5" Max. Dia.
- c) 32 Tool ATC

**CNC**

**Deckle DMU 65 MonoBlock 5 Axis**

- a) 18,000 RPM
- b) 25.6" x 25.6" x 22.1" Axis Travel
- c) Rotary Table 25.6" Max. Dia.
- d) 60 Tool ATC

**CNC**



**Makino V-55 Vertical Machining Center**

- a) Super Geometric Intelligence
- b) 2,000 In/Min Table Feed
- c) 35.50" x 19.70" x 17.70" Travel
- d) 20 Tool ATC

**CNC**



**Mazak FH 680  
Horizontal Full 4 Axis Machining Center**

- a) 10,000 RPM
- b) 41.30" x 31.50" x 32.50" Axis Travel
- c) 40 Tool ATC
- d) Two Pallets

**CNC**







**Makino GF-6 Vertical Full 4 Axis Machining Center**

- a) Super Geometric Intelligence
- b) 8000 RPM
- c) 30 Tool ATC

**CNC**



**Mori Seiki NVD 5000 Die/Mold Machining Center**

- a) High Precision Contour Control
- b) 20,000 RPM
- c) 31.50" x 20.10" x 20.10" Axis Travel
- d) 30 Tool ATC

**CNC**



**Kitamura Mycenter 1 Vertical Machining Center**

- a) 13,000 RPM
- b) 20" x 16" x 16" Axis Travel
- c) 20 Tool ATC

**CNC**

**Mazak V655/60 Vertical Machining Center**

- a) 6000 RPM
- b) 60" x 25" x 25" Axis Travel
- c) 30 Tool ATC

**CNC**





**Fryer MB-14 CNC 3 Axis Bed Type Mill**

- a) 3 Axis (Anilam 3300) Control
- b) 40" x 20" x 23" Axis Travel
- c) 54" x 14" Table

**CNC**

**Proto TRAK DPM SX2 - (3 Machines)**

- a) 4,200 RPM
- b) 31" x 16" x 23.5" Axis Travel

**CNC**



**'Twin' ACER - ULTIMA II**

- a) 4,200 RPM
- b) 50" x 10" x 19" Axis Travel

**CNC**

**ELOX Model 12.6636**

- a) Tank Capacity of 72" x 40" x 20"
- b) 20 Amp Power Supply
- c) Digital Equipped

**EDM**







**MITSUBISHI EA12D**

- a) 15.7" x 11.8" x 11.8" Axis Travel
- b) 24 Tool ATC

**EDM**

**AGIE AGIETRON Advance/Mitsubishi EA12D tied in with 3R Workmaster Robot**

- a) 15.7" x 11.8" x 11.8" Axis Travel for EA12D
- b) 27.50" x 19.60" x 13.70" Axis Travel for AGIE
- c) 152 Tool ATC when connected

**EDM**



**OPS Ingersoll GANTRY EAGLE 800**

- a) 21.6" x 33.5" x 17.7" Axis Travel
- c) 20 Tool ATC

**EDM**

**LATHES**

**1 TRAK TRL 1630 HS CNC LATHE**

- a) Spindle Speed is 150-4000 RPM
- b) 16" Swing - 30" between centers

**CNC**



- 1 Clausing 30" Max Swing
- 1 Mori-Seike 17" Tracer Lathe
- 1 Hardinge Model HLV-H Precision Lathe with Threading

**CUTTER GRINDERS**

- 1 S1 Universal Deckel Cutter Grinder
- 5 SO Deckel Cutter Grinders
- 1 3752 Gorton Cutter Grinder
- 1 Oliver Model 510 Drill Pointer 3" CAP
- 1 U.S. Tool 5 H.P. Tool Grinder
- 6 Bench Grinders

**DRILL PRESSES**

- 1 13" Column 4' Arm Carlton Radial
- 1 11" Column 4' Arm American Hole Wizard Radial
- 1 Clausing H.D. Conventional

**SAWS**

- 1 Doall 16" Contourmatic Band Saw with Hydraulic Table
- 1 Marvel Series 8" Mark 1 18" Band Saw with 32" Extended Column
- 1 Doall 16" Band Saw with Hydraulic Table

**MILLING EQUIPMENT**

- 1 Model FP4L Vertical and Horizontal Deckel (48" x 24.5" Range) with 55" x 36" Table with Anilam 99 memory digital readout
- 1 Model FP3L Vertical and Horizontal Deckel (32" x 12" Range) with 39" x 28" Universal Tilting Table
- 1 Series II Special 2 H.P. Bridgeport with Extended Column
- 4 Series 12 H.P. Bridgeport with Anilam 99 Memory Digital Readout
- 3 Series 12 H.P. Bridgeport with Travadial Readings

**DUPLICATORS**

- 1 Deckel KF12 Duplicator Pantograph
- 1 Deckel GK21 Pantograph

**GRINDERS SURFACE**

- 1 ELB 10VA at 18" x 56" Hydraulic Wet
- 2 Okamoto Model 124 DX 12" x 24" Hydro-Wet with Digital Controls
- 2 Okamoto Linear Model 6-18B 6" x 18" x 24" Dry
- 1 Doall D10 12" x 30" Hydraulic Wet
- 1 Boyar Schultz Super Model 10" x 18" Fully Automatic Wet
- 2 Harrig 6" x 12" Dry
- 4 Boyar Schultz Delux Model 6" x 12" Dry
- 1 Chevalier CNC Grinder 24" x 60"
  - a) Fully Automatic
  - b) Electromagnetic Chuck 24" x 60"
  - c) Variable Spindle Speed
  - d) Coolant System
  - e) 20" Grinding Wheel
  - f) 25 HP Drive Head

**WELDING EQUIPMENT**

- 1 Linde UCC305 AC/DC Heliarc
- 1 Rocklin "Mold Mender" Micro Welder
- 1 Miller Portable AC/DC Heliarc 100 Amp
- 1 Acetylene Welding outfit
- 1 Waage Electric Hot Plate 18' x 24"
- 1 Dry Rod Electrode Stabilizing Oven

**TRYOUT & FITTING PRESSES**

- 1 Reis Tryout Press TUS115 36" x 56" x 36" with Molding Unit
  - 1 DME Jiffyshot Mold Sampler
  - 1 PD Injecto Hand Molding Press
- Mold Testing:  
Mold Testing available as required.

**LAYOUT & QUALITY CONTROL EQUIPMENT**

- 1 Mitutoyo CMM Machine Micro Pak 21
    - a) 30" x 40" work area
    - b) 18" height
  - 1 Jones and Lamson Optical Comparator CMM 30" x 10" table
  - 3 4' x 5' Granite Layout Tables
  - 1 3' x 6' Granite Layout Table
  - 1 Wilson Rockwell Tester
  - 1 Portable Rockwell Tester
  - 14 Various Granite Layout Tables 12" x 18"
  - 10 Various Cast Iron Surface Tables 16" x 24"
- Plus a full compliment of certified measuring equipment and gages



**CUTOFF MACHINES**

1 Delta Cutoff

**COMPRESSORS**

2 Gardner Denver - Electra-Screw 25 H.P.

1 Ingersoll Rand 5 H.P.

Both systems equipped with Hankison 3/4 H.P. Dryer

**HANDLING EQUIPMENT**

4 Robbins and Myers 5 Ton Electrical Bridge Crane & Hoist

1 Wright 2 Ton Crane and Electrical Hoist

1 Load Lifter (1 Ton Electrical)

2 Hoists (5 Ton)

2 Hoists (3 Ton)

1 Allis Chalmers Fork Lift (10,000 lbs.)

1 Yale Fork Lift (8,000 lbs.)

6 Hydraulic lift trucks

1 Winch lift truck

1 Catapiller Fork Lift Truck (15,000 lbs)

50 Various Die Trucks

**SANDBLASTERS**

1 Empire PF3648 Glass Bead System

1 Vapor Blast Liquid Honing Machine

1 Portable Sandblast Machine

**DELIVERY EQUIPMENT**

- 1 Sterling Rack Body Diesel  
GVWR 26,000 lbs.  
C-6500 Series  
Mercedes Diesel Engine
- 1 Ford F350 Super Duty Max Pay Load 7,260 lbs
- 1 Dodge Ram Pick-up Truck with 1 Ton Capacity
- 1 Chevy Avalanche
- 1 Ford F750  
GVWR 26,000 lbs  
Cummins Diesel Engine

**COMPUTERS, ENGINEERING, & SOFTWARE**

L&Z is a fully networked facility which allows for ease of information transfer from one department to another. Numerous work stations are located throughout the building. We have the capability to read in and translate most file formats.