



THE SPECIALTY MFG. CO.

*ISO 9001:2008 Certified*

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## Machining Equipment List

Updated 12-14-2011

### CNC Swiss Type Machines

- (1) Citizen B-12 VI, 2 live tools, 4 axis, 1/2" max spindle capacity, bar loaders
- (4) Citizen B-12, 3 axis, 1/2" max spindle capacity, magazine bar loaders
- (2) Citizen C-16, live tools, 9 axis, 5/8" max spindle capacity, high pressure coolant, magazine bar loaders
- (1) Citizen L-20, live tools, 7 axis, 3/4" max spindle capacity, magazine bar loaders
- (2) Citizen L-20 VII, live tools, 7 axis, 3/4" max spindle capacity, high pressure coolant, magazine bar loaders
- (1) Citizen L-20 VIII, live tools, 7 axis, 3/4" max spindle capacity, high pressure coolant, magazine bar loader
- (3) Citizen A-20 2F7PL, live tools, 7 axis, 3/4" max spindle capacity, high pressure coolant, magazine bar loader
- (1) Tsugami SS26, live tools, 8 axis, 1" max spindle capacity, high pressure coolant, magazine bar loader (also chucker)
- (1) Citizen L-25 VII, live tools, 7 axis, 1" max spindle capacity, high pressure coolant, magazine bar loader
- (2) Citizen L-32 VII, live tools, 7 axis, 1 1/4" max spindle capacity, high pressure coolant, magazine bar loaders

### CNC Multi-Axis Lathes

- (2) Nakamura WTS-150, 2 upper and one lower turret, live tools, 1 5/8" max spindle capacity, Y axis on upper turrets, sub-spindle, high pressure coolant, magazine bar loaders
- (5) Nakamura NTY3, 2 upper and one lower turret, live tools, 1 5/8" max spindle capacity, Y axis on all three turrets, sub-spindle, high pressure coolant, magazine bar loaders
- (2) Nakamura WT-150, live tools, 2" max spindle capacity, one upper and one lower turret, Y axis on upper turret, sub-spindle, high pressure coolant, magazine bar loader
- (1) Nakamura TW-20, live tools, 2 5/8" max spindle capacity, 2 turrets, sub-spindle, high pressure coolant, magazine bar loader
- (1) Mori Seiki SL2500Y turning center, 4 axis machining, Y axis control

### CNC Lathes

- (1) American Way, 5C collet chuck, 1" max spindle capacity, bar loader
- (2) Haas SL-10, 16C collet chuck, 6" 3 jaw chuck
- (1) Hyundai HIT 8F, 16C collet chuck, 6" 3 jaw chuck, high pressure coolant
- (1) Hyundai 20M, live tools, 16C collet chuck, 10" 3 jaw chuck, 4' bar loader
- (1) Okuma LB15-1SC CNC turning center
- (1) Haas TL-1 Manual/CNC 2 axis lathe
- (1) Prodigy 1" max spindle, bar feeder

### Rotary Transfer

- (1) Hydromat HW25-12 transfer machine, 25mm capacity 12 stations

### Acme Gridley

- (7) 7/16" RA-6
- (2) 9/16" RA-6
- (1) 9/16" RA-6 spindle stop
- (5) 1" RAN-6
- (3) 1" RA-6 spindle stop
- (4) 1 1/4" RA-6
- (2) 1 1/4" RA-6 spindle stop
- (1) 1 1/4" Acme Chucker
- (2) 2" RA-6
- (1) 2 5/8 RA-6

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### **Precision Vertical Machining Equipment**

- (1) Okuma MC-4VA vertical machining center 6000 rpm spindle (16" x 34" table) 20 position tool magazine
- (1) Okuma MC-40VA vertical machining center 6000 rpm spindle (16" x 34" table) 20 position tool magazine
- (1) OKK MCV 520 vertical machining center 20" x 40" travel 30 position tool magazine
- (1) Mori Seiki 503/B40 10,000 rpm, 20" x 40", 30 tools.
- (1) Haas VF-OE, 7500rpm spindle, 20" X travel, 16" Y travel, 20" Z travel, thru spindle coolant, 4<sup>th</sup> axis rotary indexer
- (1) Fanuc Robo-Drill, 10,000 rpm spindle, 19.5" X travel, 15.75" Y travel, 13" Z travel, 4<sup>th</sup> axis rotary indexer, 10 tools
- (1) Fanuc Robo-Drill, 12,000 rpm spindle, 19.5" X travel, 15.75" Y travel, 13" Z travel, 4<sup>th</sup> axis rotary indexer, 14 tools
- (1) Milltronics VM 17, 8000 rpm spindle, 20" X travel, 16" Y travel, 20" Z travel, Haas 4<sup>th</sup> axis rotary indexer
- (2) Fanuc Robo-Drill, 15,000 rpm spindle, 27.5" X travel, 14.5" Y travel, 12" Z travel
- (1) Fanuc Robo-Drill, 8000 rpm spindle, 19.5" X travel, 15.75" Y travel, 13" Z travel, Haas 4<sup>th</sup> axis rotary indexer, thru the spindle coolant,
- (1) Kitamura Mycenter 1Xif, 15,000 rpm spindle, 20" X travel, 14" Y travel, 16" Z travel, spark changer pallet, thru the spindle coolant

### **Rotary Indexers**

- (1) Haas HRT210
- (2) Haas HA5C

### **Precision Horizontal Machining Equipment**

- (1) Okuma MA600-HB 600 MM horizontal machining center
- (1) Okuma MX-40HA 400 MM horizontal machining center 12,000 rpm spindle, 40 position tool magazine
- (1) Tsugami MA-3 lightning horizontal four axis machining center 4000 rpm spindle, pallet loader with 10 pallet capacity
- (1) Makino A-51 horizontal machining center 12,000 rpm spindle w/through the spindle coolant, pallet changer, 60 position tool magazine

### **Creep Feed Grinders**

- (2) Profimat

### **Precision Grinding**

- (1) Danobat 20" X 40" hydraulic surface grinder with electromagnetic chuck & readouts
- (1) DoAll 618 surface grinder with Optidress precision wheel dresser
- (1) Moore G18 jig grinder
- (1) Unison Dedtru centerless grinding equipment
- (1) DoAll 618 surface grinder
- (1) Brown & Sharpe cylindrical grinder 6" x 24"
- (1) Okamoto 12-24 DX surface grinder
- (1) Okamoto 820 surface grinder

### **WIRE ELECTRICAL DISCHARGE MACHINE**

- (1) Mitsubishi QA20 self threading 4 axis wire EDM. Capable of .002 wire.
- (1) Mitsubishi QA20 self threading 4 axis wire EDM. Capable of .004 wire.
- (1) Mitsubishi FX10K self threading 4 axis wire EDM. Capable of .004 wire.
- (1) Mitsubishi FX10 self threading 4 axis wire EDM. Capable of .008 wire.
- (1) Fanuc A-OB Robot Cut self threading 4 axis wire EDM Capable of .002 wire.
- (1) Charmilles model 310 self-threading programmable 5 axis control wire EDM
- (1) Charmilles Roboform 400 CNC EDM machine, complete with 128-amp generator, C-Axis, and 40 position tool changer
- (1) Mitsubishi FA10S Wire EDM, 5 axis
- (1) Charmilles HD-20 EDM hole drilling "Hole Popper"

### **Specialty Equipment**

- (1) Harrison 13" x 40" lathe equipped with .0005" digital readouts and gears for metric thread cutting
- (1) MBC 1803 Sunnen production honing machine
- (1) Dimension BST 1200 ES Rapid Prototype 3D Printer 10"x10"x10"

### **Parts Washing Equipment**

- (1) CAE Ransohoff Immerso-Jet
- (1) Omega Sonics sonic cleaner

### **Passivation**

- (1) ESMA citric acid passivation equipment 10"x13" tanks

### **Deburring and Finishing Equipment**

- (1) Earth Chain HD-750 CL spinner
- (1) Earth Chain HD-728 spinner
- (1) Torex vibratory tumbler 1.5 cu ft
- (1) Torex vibratory tumbler 3.5 cu ft
- (2) Torex vibratory tumbler 6.5 cu ft

### **Tool Room Equipment**

SMC Contract Division has complete tool room capabilities allowing us to offer in-house mold making, die making and prototyping. For more information contact SMC Contract Sales.

### **INSPECTION EQUIPMENT**

SMC Contract Division has a full range of metrology equipment/capabilities including:

Temperature controlled inspection areas

- (1) Numerex co-ordinate measuring machine with Metronics Quadra-Chek 3300
- (1) Mitutoyo toolmakers microscope 30x to 300x lenses coupled with a Metronics Quadra-Chek 3300
- (1) ROMER-CimCore Portable CMM Model 3000i with 8' arm
- (2) QGP Smartscope 500 high speed camera and laser measurement
- (1) QGP Smartscope 200 high speed camera and laser measurement
- (1) Vertex 210 Micro-Vu vision system
- (1) S-T Industries video inspection w/Quadra-Chek 4000
- (2) Starret optical comparator
- (1) CMI coating measurement machine

### **CAD and CAM SYSTEMS**

AutoCAD

Feature CAM

Inventor

Mechanical Desktop

Partmaker

Pro/E

SolidWorks

Gibbs CAM