

PRO CNC INC www.procnc.com	Equipment List	

CNC MILLING CENTERS

Toyoda FA400 (3) Machine – 25 Pallet Linear System is a 3 machine horizontal cell system. Each machine has a 14,000 RPM 25 HP spindle and a 120 tool carousel. This system allows the ultimate in set-up reduction and flexible JIT delivery requirements. It can run 24/7, often unattended, reducing direct labor cost. With the ability to run small batches as cost effectively as large ones, this machine supports our customer's lean manufacturing efforts by allowing us to efficiently deliver Kanban type orders as frequently as desired.

Mori Seiki NH4000DCG is a horizontal machining center with 22.05"x22.05"x24.80" travel (x,y,z). This machine has a high-speed 14,000 RPM/18.5 HP AC motor-driven spindle for high velocity metal removal. In addition, the 2000 IPM rapids and cutting allow for very efficient machining. This horizontal also offers lightning-quick 6 second pallet rotation with a standard full 4th axis rotary table. The 80-tool magazine and 2.8 chip-to-chip tool change time gives us great flexibility for tool options and versatility.

(Qty. 5) - Mori Seiki Duracenter 5 is a vertical machining center with 30"x20"x18" travel (x,y,z). It has a 12,000 RPM direct drive spindle which can accelerate from 0-12,000 RPM in only 1.1 sec. Offering a 3.5 second chip to chip time, this machine maximizes in-the-cut time. While cutting, it can maintain extremely tight tolerances at the fastest feedrates with its HPCC-Nano MAPPS II control which is Mori's most advanced. When it comes to providing ultra precision and high-speed machining, few CNC's can outperform this amazing machine.

HAAS VF-7/40 is vertical machining center with 84"x32"x30" travel (x,y,z). It has a 15,000 RPM spindle with a 20 horsepower motor. The 40 tool side-mount changer gives programmers tool diversity options and minimum chip-to-chip time. The Wireless Intuitive Probing System (WIPS) will reduce setup time and 16MB of memory provides plenty of storage for surfacing operations.

Fanuc – Robodrill T21IE is a vertical machining center with 20"x16"x13" travel (x,y,z). It has 24,000 RPM and 21 tools. With a 1.8 second chip to chip time and programmable feedrates of 1200 IPM, this is the fastest machine we own. It has the most advanced control offered by Fanuc for ultra precision and high speed machining. It is designed for lighter cuts in soft materials like aluminum and plastic.

Shizuoka SV-4024 is a vertical machining center with 40"x24"x18" travel (x,y,z). Featuring a 12,000 RPM spindle and 25 HP this machine can remove a lot of material in a hurry. It is driven by a Fanuc 18i-M control with HPCC for extremely high precision. It is outfitted with a Blum laser system for tool touchoff, wear compensation and breakage detection. These features make the machine perfect for large molds which is one of its primary functions. Aside from molds, this is a very fast machine for production with rapid and cutting feedrates of 1600 IPM and 640 IPM respectively. The external oil chiller maintains spindle temperature for accuracy hour after hour.

(Qty. 2) - Mitsubishi M-V5Cn are vertical machining centers with 40"x20"x18" travel (x,y,z). They have a 12,000 RPM spindle and 15 HP for serious metal removal. The spindle motor and spindle are integral and oil cooled for maintaining high accuracy under long operating hours. They feature an arm-style tool changer and have 1.5 second tool change times. With rapid feed rates of 1200 IPM and a high speed machining package they are capable of very fast production.

A-Trump B5-FC is a vertical bed-mill type machining center with 34"x16" travel (x,y). With 5,100 RPM spindle, PC based control and full 4th axis capability it is a very versatile machine. It has the ability to accept programs of unlimited length which make it ideal for machining parts that require a lot of very fine surfacing. It is also a great machine for adding secondary operations to a part that is being made with a lean "flow" type of process.

HAAS VF-2 is vertical machining center with 30"x16"x20" travel (x,y,z). It has a 10,000 RPM spindle with a 20 horsepower motor. The 2 speed gearbox provides a torque output of up to 250 ft-lb @ 450 rpm and the 20 tool changer gives programmers tool diversity options and average chip-to-chip time of 4.5 sec.

CNC TURNING CENTERS


Mori Seiki NL2000SY/500 is a 6-axis turning and milling center with live tooling and sub-spindle. With an 8" main chuck and 6" rear chuck and bar capacity of 2.5" this machine is capable of machining complex parts requiring intensive milling including Y axis features. It has live tooling on each of the 12 turret positions. With the SMW bar feeder and parts catcher it is a great machine for long run production of complex parts.

Nakamura Tome TMC-15M is a 4-axis turning center with live tooling and sub-spindle. The 6" chuck and bar capacity of 1 5/8" make it ideal for small to medium sized parts. It is a full 4-axis lathe with live tooling on both x and z axes which allows this machine to complete turning, milling and drilling operations simultaneously. This feature combined with the sub-spindle increases automation for higher accuracy and faster cycle times.

Daewoo Lynx 210a is a 2 axis turning center. It is equipped with a Cooljet 1000 psi high pressure coolant system for deep drilling difficult materials with incredible speed. With a 6" chuck, as well as a 16C collet system and auto tool eye with tool life management this machine is perfect for long run production of simple turned parts less than 1.75" in diameter.

Haas TL-1 is a toolroom lathe that can be used either as a CNC or full manual with digital read-out. Haas has developed an innovative conversational programming system. Measuring and setting tool lengths is easy and using the two quick-change tool posts will accelerate short runs and support tooling projects.

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SUPPORT EQUIPMENT

Soco MC-360 NFA-DR is a NC controlled auto feeding high speed saw for non-ferrous metals. It is capable of auto feeding to an accuracy of +/- .002.

Yuasa and Haas 4th Axis units allows us to run full 4 axis parts on many of our vertical mills

Jet JTM-1054 38"x17" Milling Machine has spindle tilt in two directions and digital readout

Turnmaster 13"x40" Lathe is a manual lathe with 2000 RPM. With three jaw and four jaw chucks and a 5C collet closer this lathe is very versatile and capable of high tolerance parts.

Fabrication equipment including multiple surface grinders, sanders, drill presses, vertical and horizontal bandsaws, non-ferrous metal cutting chop saws, hydraulic presses, vibratory tumblers, MIG and TIG Welders

Assembly Equipment including pneumatic Helicoil drivers, arbor presses, pneumatic stamping machines, arm style tapping head, assembly benches, and a full array of assembly hand tools and equipment.

QUALITY EQUIPMENT

Zeiss Spectrum 700 CMM - This Zeiss CMM has 39" x 27" x 24" (x, y, z) travel and a full 5 axis Vast scanning head for part probing. With Calypso software it is a powerful combination for verifying dimensional accuracy.

Mitutoyo PH-3500 Profile Projector with fiber-optic OptiEye auto edge sensing and Micropak 2 control.

14" Deltronic Optical Comparator Model DH14

3 - Brown & Sharp Tesa-Hite Height Gages

Bausch & Lomb Binocular Microscope 7x - 40x with circular lighting

Mitutoyo Height Master with .0001" resolution and 67" total height capacity

Granite Plates - 60x36, 48x36, (3) 36x24, and many 12"

Sunnen Gage Setting Fixture with .0001" resolution

2 - Surface Profilometers

Complete compliment of highest quality hand measuring instruments including:

- Gage block sets, Gage ball set, multiple complete pin sets from .011 - .750 , digital micrometers, .0001 Sunnen bore gages, Starret, Etalon and Brown & Sharp 3 point bore gages, depth micrometers, thread micrometers, calipers 6"-36", drop gages, pin micrometers, 1-2-3 and 2-4-6 blocks, angle plates, sine gages, Travel indicators, groove gages, etc.

FACILITIES & COMPUTER HARDWARE/SOFTWARE

Secure World-class 20,000-sq/ft facility

Pro/ENGINEER™ is one of the most powerful parametric solid modeling and surfacing packages available. Used in conjunction with Pro/MFG, this combination is a very fast and powerful package for part creation.

Pro/MANUFACTURING™ is one of the most advanced CAM packages on the market.

Mastercam™ CAD/CAM package.

Proprietary Shop Management Software that is HTML based and database driven for tracking all aspects of the shop environment, including QA information, job tracking, tooling, real time scheduling and work order history. Our full time on-staff programmer keeps adding new and time saving features virtually every day. Our customers who have seen it first person say it is the most amazing software they have ever seen of it's kind. Please contact us to discuss how our innovations can help us provide you with superior service. This software is hosted on a dual Xeon Pentium 4 3.06 Ghz server with 4 GB of memory, and dual 15,000 RPM SCSI drives in a Raid array. We are serious about our computer hardware!

6 Engineering Workstations for programming with dual LCD 20" monitors and up to 2 GB RAM provide fast and powerful CAD/CAM computing.

5 Servers for Data, Network, and photo serving. We back up to external HDs on a regular basis and take data off site.

Digital Video Equipment for on screen video part set-up and tie-in information to ensure proper conformance of customer requirements.

40 + PCs at each CNC machine linked at 100 MBS and/or 54 MBS wireless for QA and job information.