PRODUCT GUIDE

Unprecedented FLEXIBILITY and PRODUCTIVITY

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CNC ROUTERS AND MACHINING CENTERS
Komo Machine, Inc. designs and manufactures an entire line of high quality precision computer numerically controlled (CNC) routers and machining centers.

KOMO Machine, Inc.

KOMO has produced more than 3,500 CNC machines for the USA and serves International markets throughout the world with an extensive list of satisfied customers.

The challenge for every manufacturer when it comes to capital equipment is never about the equipment alone. It is about seizing new opportunities, expanding productivity and capabilities, realizing the value of single-source solutions, reliability and support. It is about discovering an experienced partner committed to your success. That is KOMO. That is thinking beyond the machine.

All of KOMO’s products are MANUFACTURED IN THE USA and are designed and supported by a highly skilled team of individuals.

KOMO CELEBRATES 50 YEARS!

Honoring the Past. Defining the Future.

CNC technology has progressed at a fast pace over the past five decades and KOMO has contributed significantly to that innovation which ultimately has elevated the standards industry-wide. We are grateful for your business and promise to continue to provide the superior quality, excellent service and technical innovation that you’ve come to expect from KOMO, your premier CNC router manufacturer.
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The Xtreme XL Series of CNC machining centers from Komo Machine, Inc. has been developed for the cost-conscious yet demanding customer who expects the utmost in technical quality and reliability. These machines feature a moving table configuration and a side-mounted tool changer.

**Standard Features**

- Four-pole, 18HP (13.5kw), 24,000 RPM, HSK 63F, fan-cooled spindle
- Air blast for optimal dust/chip evacuation and cooling of the cutting tool
- Advanced Fanuc HVI servo system tuned for optimum acceleration and deceleration
- Fanuc Panel i control with integrated PC
- Tool touch-off device with automatic tool data uploading
- Universal grid fixture table available in composite (standard) or aluminum (option)
- Pressurized automatic centralized lubrication system
- Komo Production Manager with Intelligent Spoil Board Management
- 17” touch screen display

**Optional Features**

- Tooling Packages
- Vacuum Pumps
- Boring Blocks
- Part Labeling System
- Material Handling Systems
- Dual 17” Touch Screen Display
- C Axis
**XTREME 5 AXIS** features more machining flexibility and more Z travel, along with a four-pole, 11.7HP (8.7kw), 20,000 RPM, HSK 63F, liquid-cooled spindle.

**XTREME 5 AXIS SERIES**

**Standard Features**
- Four-pole, 11.7HP (8.7kw), 20,000 RPM, HSK 63F, liquid-cooled spindle
- Advanced Fanuc HVI servo system tuned for optimum acceleration and deceleration
- Fanuc Panel i control with integrated PC
- Universal grid fixture table available in composite (standard) or aluminum (option)
- Pressurized automatic centralized lubrication system
- Komo Production Manager with Intelligent Spoil Board Management
- 17” touch screen display

**Optional Features**
- Tooling Packages
- Vacuum Pumps
- Part Labeling System
- Material Handling Systems
- Dual 17” Touch Screen Display
The Fusion Series of CNC machining centers from Komo Machine, Inc. has been developed for the customer who requires a machine with more flexibility, a larger tool changer and more Z travel than an Xtreme XL. These machines feature a moving table configuration and a spindle-mounted tool changer.

**Standard Features**

- Four-pole, 18HP (13.5kw), 24,000 RPM, HSK 63F, fan-cooled spindle*
- 15 position automatic tool changer with aggregate capability (optional additional 15 position tool changer available)
- Tool touch-off device with automatic tool data uploading
- Advanced Fanuc HVI servo system tuned for optimum acceleration and deceleration

* Applies to Fusion XL and Fusion TT Series only)
**FUSION 5 AXIS** features more machining flexibility and more Z travel, along with a four-pole, 20HP (15kw), 22,000 RPM, HSK 63F, liquid-cooled spindle.

**Optional Features**

- Tooling Packages
- Vacuum Pumps
- Dual 17" Touch Screen Display
- Additional Tool changers
- Scale feedback on all axis for improved accuracy

**Optional Features (FUSION XL & TT Series)**

- Tooling Packages
- Vacuum Pumps
- Dual 17" Touch Screen Display
- Liquid Cooled Spindles
- C Axis
- Boring Blocks
- Part Labeling System
- Material Handling Systems
- Multiple Spindles
The MACH III Series of CNC machining centers from Komo Machine, Inc. has been developed for the customer who requires a premier machine with more options and flexibility.

**Standard Features**

- Four-pole, 18HP (13.5kw), 24,000 RPM, HSK 63F, fan-cooled spindle
- Air blast for optimal dust/chip evacuation and cooling of the cutting tool
- Advanced Fanuc HVI servo system
- Fanuc Panel i control with integrated PC
- 2” Precision machined aluminum table
- Pressurized automatic centralized lubrication system
- Komo Production Manager with Intelligent Spoil Board Management
- 17” touch screen display
15 POSITION automatic tool changer with aggregate capability
(Additional tool changers available)

MACH III GT SERIES

Optional Features
- Tooling Packages
- Vacuum Pumps
- Boring Blocks
- Part Labeling System
- Material Handling Systems
- Dual 17” Touch Screen Display
- Multiple Spindles
- Liquid Cooled Spindles
- C Axis

MACH III SERIES
The Mach One GT Series of CNC machining centers from Komo Machine, Inc. has been developed for the cost-conscious yet demanding customer who expects the utmost in technical quality and reliability. These machines feature a moving gantry configuration with table sizes available up to 24’ (7,316 mm) in the X axis.

**Standard Features**

- Four-pole, 13.4HP (10kw), 24,000 RPM, HSK 63F, fan-cooled spindle
- Air blast for optimal dust/chip evacuation and cooling of the cutting tool
- Fanuc Panel i control with HVI servo system and integrated PC
- 12 position automatic tool changer with aggregate capability
- Dual helical rack drive on X/U axes with synchronous axis control
- Pressurized automatic centralized lubrication system

**Optional Features**

- Tooling Packages
- Vacuum Pumps
- Boring Blocks
- Part Labeling System
- Material Handling Systems
- Dual 17” Touch Screen Display
- Mist Coolant
- C Axis
The Solution Series of CNC machining centers from Komo Machine, Inc. has been developed for the customer who requires more features and flexibility than a Mach One GT, as well as a larger spindle. These machines feature a moving gantry configuration with table sizes available up to 12’ (3,658 mm) in the Y axis and 110’ (33,000 mm) in the X axis.

**Standard Features**

- Four-pole, 18HP (13.5kw), 24,000 RPM, HSK 63F, fan-cooled spindle
- 12 position automatic tool changer with aggregate capability
- Air blast for optimal dust/chip evacuation and cooling of the cutting tool
- Dual helical rack drive on X/U axes with synchronous axis control
- Tool touch-off device with automatic tool data uploading
- Universal grid fixture table available in composite (standard) or aluminum (option)

**Optional Features**

- Tooling Package
- Vacuum Pumps
- Boring Blocks
- Part Labeling System
- Material Handling Systems
- Dual 17” Touch Screen Display
- C Axis
KOMO’s Independent Programmable Technology (IPT) is an option rather than a specific model of machine. Available in either a Fusion or Mach III format, single or twin table.

IPT delivers COMPLETE FLEXIBILITY via fully programmable center spacing as well as individual spindle feed, speed and axis control.
Available with **UP TO 6 HEADS** and work envelopes **UP TO 24’ X 8’**

The spindles can be programmed to be slaved together to cut multiple parts simultaneously, or they can be split up to cut dissimilar parts on separate tables simultaneously.

Tired of waiting on a table? Run multiple short cycles on one table while running a long cycle on the other.

Flexibility and Productivity — that’s the new IPT from Komo Machine, Inc.

Unprecedented **FLEXIBILITY and PRODUCTIVITY**
The VGM Series features a 34.8HP (26kw), 6000 RPM, CAT 40, belt-driven spindle

Standard Features
- 15 position automatic tool changer
- 2” Precision machined aluminum table
- Pressurized automatic centralized lubrication system
- Advanced Fanuc HVI servo system tuned for optimum acceleration and deceleration
- Fanuc Panel i control with integrated PC
- Heavy-duty steel fabrication
- Komo Production Manager
These machines feature a moving gantry and **UP TO FOUR** 15 position automatic tool changers for a total capacity of **60 TOOLS**

Optional Features

- **Tooling Package** - A complete set of tool holders, configured per customer requirements
- **Vacuum Pumps** - Started via push button on main operator panel, with remote start relay
- **Vacuum System** - With low vacuum sensing interfaces
- **Safety Equipment** - Laser scanners, light curtains, pressure mats
- **Dual Screen** - Additional 17” screen attached to the control allows for flexibility
- **Coolant** - Mist, flood and coolant-thru-spindle
- **Table** - Aluminum universal grid, steel with T slots, inserts, non-machined, custom
- **Chip Removal** - Dual augers, chip guards around front and back of table
- **IMS** - Integrated Measuring System available on X, Y and Z axes
- **Tool Setter** - Contact or non-contact tool setting and tool breakage detection
- **Part Probe** - Measure complex 3D part geometries with high accuracy touch probe
Universal Grid Table System
The Universal Grid Table System allows for a modular worktable. Section off areas of the table to concentrate your vacuum hold-down system while also giving you the capability to use vacuum pods in a universal format.

Integrated Pop-Up Rollerball System
Built right into the machining table, these roller balls raise and lower to facilitate material transfer to and from the machining table reducing operator fatigue and allowing for more productivity with your KOMO CNC Machining Center. Available on Composite and Aluminum Universal Grid tables.

Manual Material Handling System
The Manual Material Handling System gives you an economical option for increasing productivity and reducing operator fatigue. The system gives you the ability to control cycle start and cycle stop from either side of the machine for complete flexibility and control.

Automated Material Handling System
Create a high productivity work cell on your Mach One GT or Solution XL Series machine with the KOMO Automated Material Handling System. Let the machine clean the spoilboard and remove machined parts all in one pass, allowing you to prepare the new material for your next machining cycle.

Automatic Material Handling System
The KOMO Automatic Material Handling System creates a high productivity work cell for your moving table machining center. Load new material, clean the spoilboard and remove machined parts all in one pass with a 30 second cycle time*. Automatic Material Handling System available in a multiple bunk configuration for different materials.

Available on 510/512 single moving table KOMO Machines.

*Cycle time dependent on weight of material that is being transferred.
Automatic Outfeed Conveyor System

Add the Automatic Outfeed Conveyor System to your Automatic Material Handling System. The conveyor brings the machined parts to the edge of the conveyor while photo eye sensors prevent parts from going over the edge. Add safety and increased productivity to the Automatic Material Handling System work cell.

Roller Hold Down System

The Roller Hold Down system has four robust rollers controlled by pneumatic cylinders that keep constant pressure on the material, usually plywood, giving you the ability to cut multiple sheets in a single pass.

SAFETY FEATURES

KOMO offers a variety of add-on safety equipment that can be configured to any specific model and application, including but not limited to those shown here.

> LIGHT CURTAINS > LASER SCANNERS > PRESSURE MATS > TABLE BUMP STRIPS
KOMO Production Manager Software

Each machine includes KOMO’s exclusive Production Manager Software with Intelligent Spoil Board Management©. This productivity feature takes the guesswork out of managing your spoil board, insures optimum performance of the flow-through vacuum system when nesting and provides a fast and efficient way to load programs into your CNC machining center.

- User programmable buttons allow fast access to most commonly used programs
- Send programs to control memory in just seconds
- Ability to save partially run Schedule files due to production interruption
- Multiple file select and drag-and-drop support
- See your programs running on the control without switching screens

KOMO Machine Monitoring Software

Each machine now ships with KOMO’s exclusive software that captures the machine’s production data without any input from the operator. Specific events are recorded throughout the day, which are later imported into a spreadsheet and analyzed. This data is then graphically displayed, which can help to identify problem areas. The software starts up with the machine every morning, and is password protected against being disabled by the operator. This software also includes Tool Life Monitoring, which will visually warn the operator as each tool is nearing its end of life expectancy.
Automated Tool Setter
The machine is supplied with an automated tool length measurement system. The tool setter can be placed in a fixed location for easy tool length offsetting or placed on the table for inputting spoil board or fixture offsets.

KOMO Pathfinder Part Registration System
Parts can be placed in rough position on the router table and still be cut with precision. The part is printed with reference points (typically solid black dots) which are recognized by a camera utilizing vision processing software. These dots are then used to calculate the offset and rotation on the fly for each part. The needed corrections are applied and the part is cut - all without changing the program or manually acquiring work offsets. The rotation and offset can vary from part to part and will be corrected automatically without the need for operator intervention.

KOMO Real Time Tool View
An industrial-hardened camera (and LED work light) mounted under the spindle (inside the dust shroud) takes continuous video feed of the tool while it is cutting. This video feed is viewable from the machine control screen, and can be viewed remotely as well.

KOMO Spindle Condition Monitoring
This option is designed to monitor the vibration levels of the spindle as it is operating, and those levels are viewable from the machine control screen and can be fed to a remote office location. This allows an operator or production manager to know when a spindle is worn or overloaded - or being perfectly utilized.
INVESTMENT CONSIDERATIONS

Komo Machine, Inc. a wholly owned subsidiary of PMC Global, Inc., has more than 50 years of diverse engineering and manufacturing experience in many industrial markets.

KOMO'S machining, fabrication and assembly operations are done in our manufacturing facility in Lakewood, New Jersey, USA.

- KOMO employs dedicated electrical, electronic and mechanical design engineers.

- KOMO uses Finite Element Analysis software for designing all structural components of our machines. Our advanced manufacturing methods used in machine design provide faster cutting feed rates while maintaining superior finishes.

- KOMO furnishes customers with the most comprehensive and up-to-date Operation and Maintenance manuals, loaded right on the hard drive of the control.

- KOMO employs full-time employees for CNC training, software support, applications engineering and implementation services.

- KOMO is one of the largest designers and builders of CNC machining centers in North America, with over 3,500 installations.

- KOMO is a major supplier of CNC machining centers to aerospace companies in metal and composite applications.
KOMO is a certified Fanuc machine control assembler. We do not use a hang-on control package approach; we engineer our CNC industrial control systems to specifically match the capability of each machine tool.

KOMO does all electrical engineering, ladder logic, software interfacing and controller integration in-house, rather than utilizing outside consultants.

KOMO maintains a steady rolling parts inventory for the support of machining centers in the field, as well as the manufacturing of new machines. Most replacement parts are available for same day shipment.

KOMO’s customer support program provides a two year warranty on parts and one year on labor. KOMO maintains parts inventory and service capability on all machining centers we have built - ever since our first models were delivered.

KOMO pioneered a toll-free 24/7 customer assistance hotline with a response from a certified technician within 60 minutes or less.

KOMO offers in-depth training seminars that allow maintenance technicians, programmers and CNC operators to become certified, thereby ensuring optimal CNC machine performance.
24/7/365 Customer Service Hotline 1-800-528-4570

Because your business challenges don’t stick to a 9 to 5 schedule, neither does KOMO. KOMO’s toll-free Customer Service Hotline is available 24/7/365 with a guaranteed response from a certified technician.

From assistance with scheduled maintenance and operations questions to supplying tooling and parts, KOMO is there to support you when you need it. No third-party answering service – just real help real time from experienced customer support technicians with direct access to your exact machine’s maintenance and service history at their fingertips.

KOMO is committed to making sure their customers never have to wait around for answers or solutions to their problems. That’s the KOMO service commitment!

Application Support 1-800-255-5670

Application Engineers can discuss any issues that you may have in regards to tooling, fixturing, programming or processing. CAD files and CNC programs can be examined for flaws or even run on our demo machine to determine an issue. We can also connect to your machine remotely to diagnose and remedy some of the simpler issues.

Preventative Maintenance Program

One of the elements necessary to help ensure machine availability is regular maintenance. Not only will it help keep your machine in production, it may result in a higher trade or resale value. In addition, you will have verifiable maintenance records which help to validate warranty claims. Through the Preventative Maintenance Program, a KOMO factory-trained technician will ensure that all required maintenance is performed correctly and that the latest factory-recommended procedures are followed.
On-Site Maintenance Training

KOMO’s experienced technicians will train your maintenance personnel on the proper procedures and documentation needed to keep your machine running at 100% productivity. This training will cover the factory certified maintenance procedures, documentation, maintenance schedule and any other questions related to the maintenance of your KOMO CNC machining center.

Machine Inspection Program

Offered to provide a quick affordable “check” of the condition of your machine(s). Utilizing the latest technology and procedures a written diagnostic report of your machine’s condition can pinpoint focus areas for your maintenance procedures and lead to a reduction or elimination of unplanned outages.