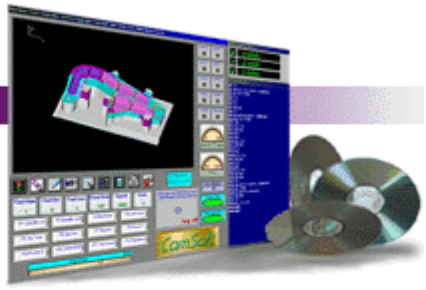
PC-Based Machine Tool Controller Hardware & Software Toolkits for the CNC and General Factory Automation Industries

"Your CNC Professionals...
In Business since 1981"

FEATURED PRODUCT



CNC Professional

PC-Based CNC Machine Tool Control for Windows is a software and/or hardware toolkit that allows you to create and customize your own controller for any 2 to 8 axis CNC machine tool using a standard personal computer. Whether it is a retrofit or a brand new machine tool, CamSoft has the answer for you. All controllers are user configurable and are equipped with CamSoft's Advanced System 3000 Multimedia CAD/CAM for Windows Level 1 software.

CamSoft's PC-Based Machine Tool Controllers come in four scalable packages with a 100% buy-back policy toward upgrades:

CNC Professional
For the serious machinist who wants the best.

CNC Plus
Good functionality and good value.

CNC Lite
If quality and low cost are what you are looking for.

Graphical Operator Interface
For general factory automation, non-CNC applications.

Competitively priced, feature rich, and reliable CamSoft systems are the perfect solution for Retrofitters, Machine Shops and OEMs looking to retrofit or upgrade any CNC machine tool controller on-site.

- CamSoft controllers are your cost-effective way to give your customers what they want
- Open & flexible operator interfaces for Windows 98SE through Windows 8
- The operator interface is simply a collection of bitmapped images
- Easily configure each machine to your customer's exact feature specification
- Create an operator interface that simulates your customer's existing controller
- Patented 3D and 5-axis tool compensation at the CNC controller
- Feedrates automatically adjust in real time based on spindle torque or feedback from spark gap monitors
- Fastmode allows huge programs with small moves to execute fast. Great for mold makers.
- Patent Pending SmartPath option available — look ahead intelligent tool path optimizer
- The control can accept many different formats of G & M codes and CAD files
- If you don't see a canned cycle you need, create one yourself
- Digital I/O events, timed sequential events and logic flows can be tested off line to ensure the machine is properly functioning
- If tool or axes reach or pass the user-defined crash barrier, motion automatically stops
- Backup or visually restart using the mouse along the profile past the point of the last cut, replace the tool or restart the spindle, water or flame and press Cycle Start to continue
- Optionally press a button on the screen to call for technical help via a modem
- Select from several ready-to-go control enclosures
- Spare parts are available off the shelf from many sources

CamSoft's CNC Professional is a true innovation in CNC control engineering. This is one of the only systems to marry CAD/CAM graphics with an Open architecture servo or stepper motor motion control CNC operator interface. It is the next logical step for the CNC machining industry -- Graphics to Motion, Picture to Part -- thus eliminating G code or post processor problems. Produce solid modeled animation in "real-time" as the machine cuts.

No need to understand C++, Visual Basic or Ladder Logic.
No PLC hardware needed, the computer becomes the PLC and does the logic.

RETROFIT OR UPGRADE USING YOUR OWN CONTROL ENCLOSURE

With CamSoft you may choose to use your existing CNC enclosure and motors or choose from a wide selection of “ready-to-go” CNC enclosures. CamSoft offers everything necessary when using your own Windows-based PC. Desktop control enclosures, handheld pendants and floor models are available for most machine tools. All software and hardware are also sold ala carte.

CamSoft offers the perfect solution for retrofitting or upgrading your current CNC machine tool controller.

It begins with either a call to CamSoft to arrange a visit from a CamSoft dealer to do the retrofit for you or many will opt for self installation with proper machine specifications and a willingness and experience to retrofit and trace wires. 90% of the installation involves prepping the machine electrically and mechanically and bringing the wires to the terminal strip provided by CamSoft. The terminal strip is clearly marked and the diagnostic software is accompanied with an automatic servo tuning program. There are several default operator interfaces to select from for all types of machine tools or you can customize your own. The control can accept many different formats of G & M codes and CAD files.

CamSoft supports a variety of controller alternatives. We offer a hardware and software toolkit to turn your computer into a CNC controller. You will be able to cut parts by simply connecting to your existing motors, amps, limit switches and encoders.

CAMSOFT IS THE PERFECT SOFTWARE SOLUTION FOR A NUMBER OF REASONS.

You will immediately realize the unmistakable consistency from machine to machine. This is accomplished by using one software package for your entire CNC and general automation machine needs.

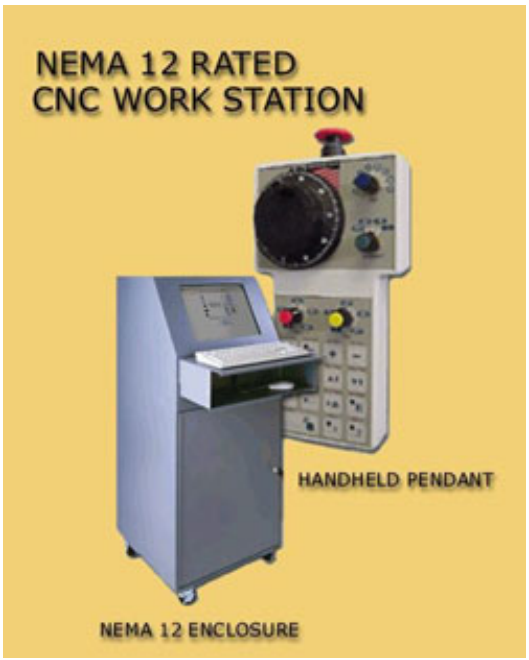
Freedom of Choice for the best customizable user interface.

- Standardize your entire operation with one package
- The operator interface is a collection of bitmapped images right down to your logo
- Easily configure each machine to your customer's exact feature specification
- Create an operator interface that simulates your customer's existing controller
- Create your own operator interface or choose from several default operator interfaces
- E-mail a new CBK backup file to enable new features, change the screen or add new G & M codes
- Perform upgrades without the need for a new controller
- Run older G code programs the same way on the new controller without having to edit them
- It's possible to simulate as a Fanuc lathe in the morning and an Allen Bradley mill in the afternoon using the same control
- Get spare parts from many sources

Design your own operator screen. Include your own logo.

CamSoft offers the best range of choices and prices:

- Select from several ready-to-go control enclosures
- A complete ready-to-go, low-cost handheld controller
- Motion cards and digital I/O hardware and software available ala carte

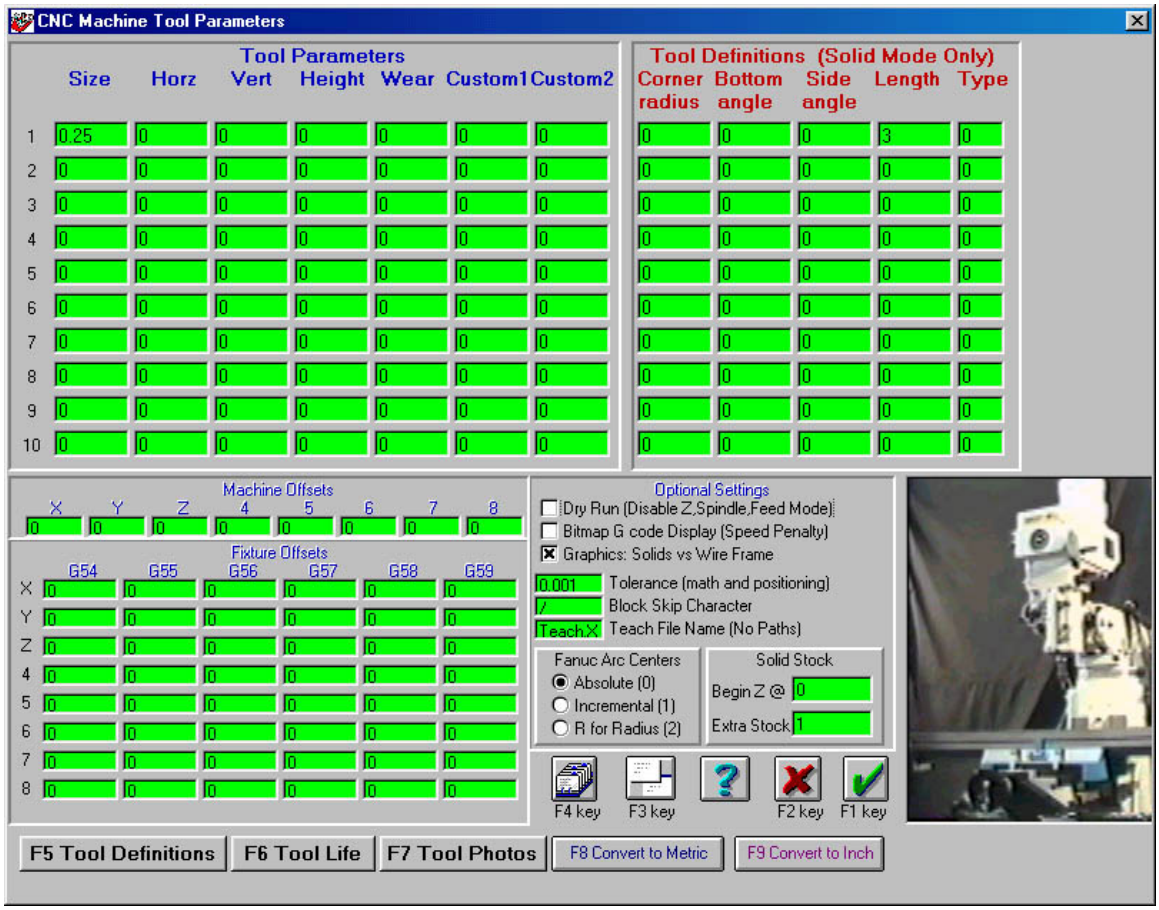


CamSoft offers ready-to-go CNC enclosure pendants and floor models for every type of machine tool.

Patented 3D Tool and 5-Axis Tool Compensation

- The most sophisticated math algorithms & kinematics
- 3D and 5-axis tool compensation G codes at the machine tool with gouge protection
- 3D offset parallel to 3D profile
- 5-axis tool compensation with gouge protection
- 3D part rotation with fixture tilting compensation at the machine itself

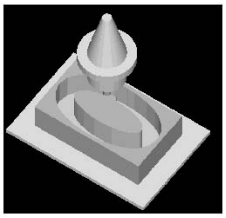
*Special post processor required from your CAD/CAM vendor.

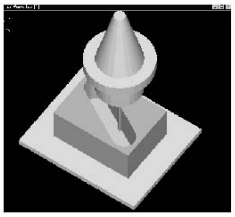


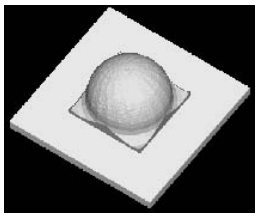
Change the tool definitions on the tool parameter screen for a new 3D cutter just like for G41, G42 in 2D and away you go without G code programming changes in 3D.

New G Codes

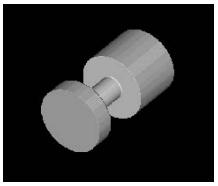
- The finest user configurable canned cycles
- If you don't see a canned cycle you need, create one yourself
- Place math equations within the G code program by enclosing them within braces.
- Included specialized G codes for Mills:
    - G61 and G64 Buffered Look Ahead Spline Mode
    - G65 Mill Out Rectangular Pocket
    - G66 Mill Out Circular Pocket
    - G67 Fly Cut Pattern
    - G68 Mill Out Rectangular Pocket with Fillets
    - G120 Mill Outside Square
    - G121 Mill Outside Circle or Island
    - G122 Mill Out Counter Bore
    - G123 Mill Outside Ellipse Pocket
    - G124 Mill Inside Ellipse Pocket
    - G125 Mill Outside Slot
    - G126 Mill Inside Slot
    - G130 3D Tool Comp with Gouge Protection
    - G131 3D Offset Parallel to 3D Profile
    - G135 5-Axis Tool Comp with Gouge Protection
    - G140 3D Part Rotation and Plane Tilting
    - G141 Scale Factor for the X Axis Only
    - G142 Scale Factor for the Y Axis Only
    - G143 Scale Factor for the Z Axis Only
    - G160 3D Cylinder
    - G162 3D Sphere
    - G163 3D Ramped Plane
    - G181 Bolt Hole Drill
    - G182 Bolt Hole Dwell
    - G183 Bolt Hole Peck
    - G184 Bolt Hole Tap
    - G185 Bolt Hole Bore

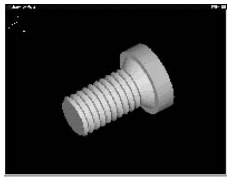

G123


G126


G162

For Lathes:
G110 Lathe Face Groove
G111 Lathe OD Groove
G112 Lathe ID Groove
G113 Lathe OD Thread
G114 Lathe ID Thread
G115 Lathe Rough Face
G116 Lathe Rough Turn

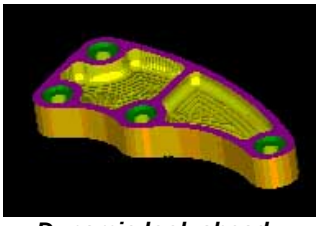

G111


G113

Dynamic Feedrate Control

Automatic feedrate control combined with the SmartPath option:

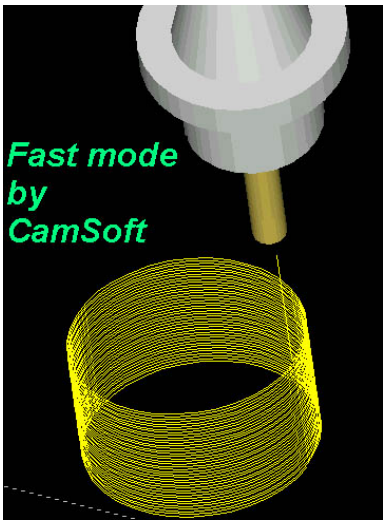
- Control cuts at a maximum programmed feedrate
- Controller makes decisions in real time to dynamically adjust feed rate based on cutting conditions
- Controller makes all kinds of variances within a single move to either slow down or speed up in real time
- Feedrates automatically adjust in real time based on spindle torque or feedback from spark gap monitors



Dynamic look ahead.

The Finest Dual Processor Hardware

- Hardware is tested and proven with over 200,000 motion cards shipped to date
- 62.5 microsecond servo update times per axis and cutting feedrate velocities of up to 122,000 IPM
- Auxiliary digital I/O cards detect a change of state at rates of 10,000 times per second
- Dual processors allow multiple events and multiple positioning motions to happen simultaneously
- Cut 3D profiles while the tool is changing or a servo motor positions a rotary table
- Dual CPU processor design for extra safety against computer pauses, failures or lock ups
- Dual processors are the best and fastest known method for closing the servo loop with the motors to produce the fastest block-to-block cutting speeds
- Proprietary hardware is not an issue. Spare parts are sold by many companies and most every part of a PC-based controller is off the shelf.

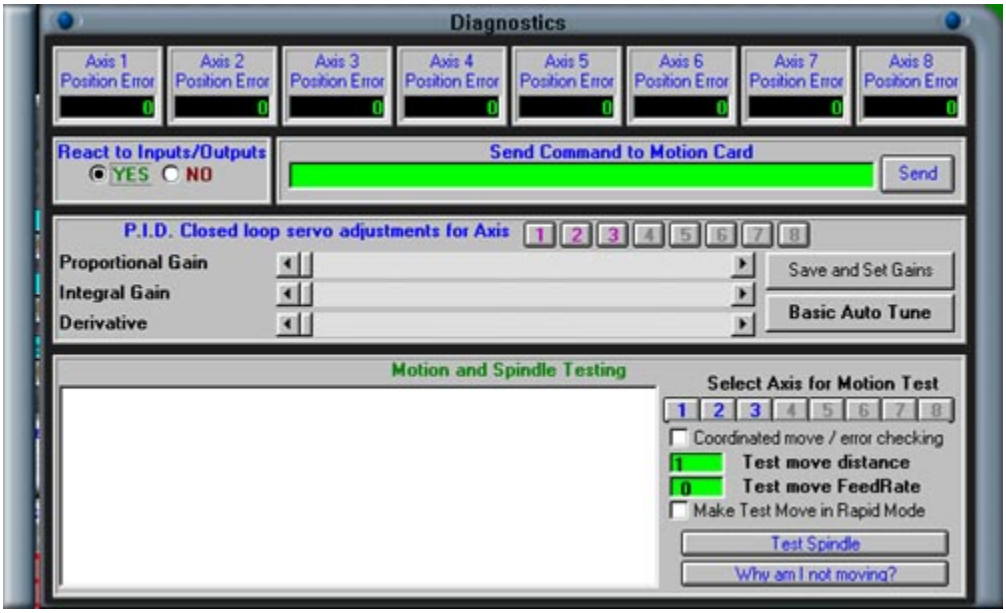


This is a 3D program made up of thousands of G code moves between .0001 and .020 in length. The Z axis spirals down at a rate of about .0005 to .0007 tenths. This part was cut at a feedrate of 3,000 IPM.

Advanced Diagnostics

Introducing the most complete real-time, diagnostic features:

- Axis motor tests, spindle test, digital I/O states, basic servo tuning, analog voltage and position displays, watch windows and remote viewing abilities via a modem directly with CamSoft.
- Hardware items or even logic can be remotely debugged and modified
- Communicate with other machines or other CAD/CAM systems via RS232 or a network
- Optionally press a button on the screen to call for technical help via a modem



Maintenance/Diagnostic screens allow the user to manually control and view many factors about the machine itself including servo tuning and all digital I/O states.

Ball Screw Error & Backlash Compensation

Real-time mechanical error compensation:

- Maps axes in advance for backlash and worn spots to eliminate position errors before they happen
- Upon loading job into memory, system immediately calculates where to move and position corrections ahead of time before you press Cycle Start
- Controller calibrates and maps your axes instead of using a Laser Interferometer and also finds the amount of backlash

Fixture Compensation

Eliminates repositioning of non-flat fixtures:

- Touch off of three points on the fixture to let controller know the amount the fixture is tilting in a 3D plane
- Skews the program and translates the positions to that plane in 3D
- Rotate a part around any axis in 3D

Crash Barriers

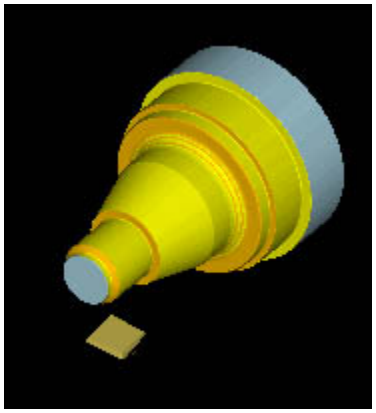
Add extra safety to your application:

- Set up fixture, vise, clamp and chuck crash barriers
- Barrier limits are software-settable for each tool number
- If tool or axes reach or pass the user-defined crash barrier, motion automatically stops

Desktop Machine and Logic Simulation

Prove out your machine "virtually":

- Integrator runs machine on desktop computer to prove all logic prior to disconnecting machine wiring
- Digital I/O events, timed sequential events and logic flows can be tested off line to ensure the machine is properly functioning
- Watch the limit switches trigger and motors position in slow motion to catch and solve problems

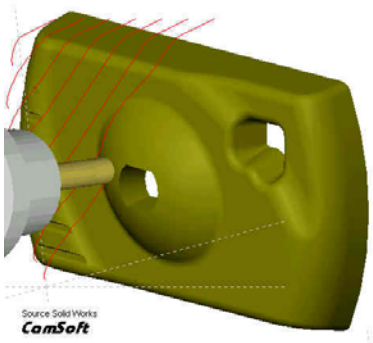


When you are all done, you can run a G code program through the control on your desktop and watch the tool animation cut the block of material out of a high-resolution solid model on the screen.

Cut Visual Models, Not Code

The Best new idea and trend since the NC was invented:

- 3D CAD/CAM system and PC-Based Machine Tool Controller share same database in memory
- Part directly cut from graphics on CAD/CAM screen without the need to write post processors or G code files
- Pass graphic picture files of your parts rather than G and M codes
- Screen image drives the machine in lieu of interpretation of codes or G code programs
- Design next part on the screen while machine is cutting current part – initiate Cycle Start when completed



In this mode you can take any picture of a tool path on the screen, whether it was imported by another CAD/ CAM system or drawn by you with our CAD/CAM system, and initiate a Cycle Start.

High-speed Rigid Tapping & Lathe Threading

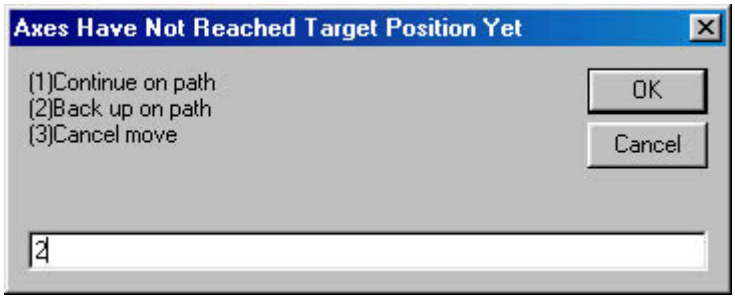
Accurate high-speed precision threads:

- High-speed, precision rigid tapping and lathe threading mode with decelerated stop and reverse
- Rapid to position with forward and reverse coordinated spindle rotation and feedrate control in real time
- Programmable acceleration and deceleration rates for the fastest tapping and threading your machine can handle.

Interruptible Cut-in-progress with Backup

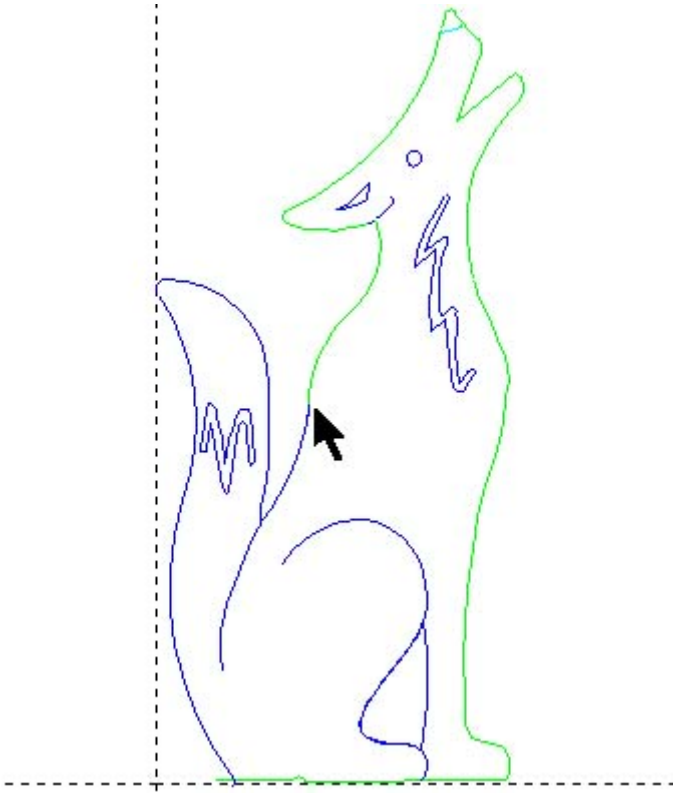
The Best way to backup and restart after an interruption:

- Interruptible “cut-in-progress” feature stops motion and asks operator to select continue, backup, or abort
- Backup or visually restart using the mouse along the profile past the point of the last cut, replace the tool or restart the spindle, water or flame and press Cycle Start to continue



Easily backup and restart after an interruption.

Visually restart mid-program through your part using a mouse or touch screen. This feature reads through the G code program to pick up offsets, tools, fixture positions, speeds, feeds, kerf, tool size and more all the way up to the position you pointed to then prompts you to press Cycle Start when you are ready. This is the easiest and smartest program resume feature we have ever seen. You can even click midway through a cut on a 3D line or arc.



Graphical Mid-program Restart

Set Preferences with Feature Access Limits

The Best way to switch operator interfaces and feature access:

- Swap configurations on the fly with regards to:
  - working directories
  - user preferences
  - visible buttons
  - feature access
  - tolerances
  - metric/inch, and more
- Isolate customer specs, simplify or limit access to features, display information, enable visible buttons and access jobs for each machine operator using the customer name, project name, etc. as a reference or key

Restrict access to features and programs.

CamSoft controllers are your cost-effective way to give your customers what they want.

- CamSoft controllers understand and read many different G & M code formats
- CamSoft controllers conform to you — no need to edit or rewrite your existing programs
- CamSoft controllers support your existing programs that run perfectly fine on your old machine
- CamSoft controllers can easily restore operator interfaces, I/O logic and G & M code formats within seconds. The operator interface is simply a collection of digital photographed bitmapped images that you can replace.

PC-Based CNC Machine Tool Controller Software Feature List

Operator interface choices range from:

(1) Various G code formats
(2) CAD files to motion
(3) Simple interfaces with fill-in-the-blank boxes, buttons and switches
(4) The controller's revolutionary concept converts the graphic drawing on your screen directly into axis motion

Customizable Operator Interface

- Several different ready-to-go, turnkey controllers
- Configurable operator screen with high-resolution solid modeled graphics
- User-customizable interface for designing the look & feel of the operator screen
- Several operator interfaces to choose from or create your own for most machine types
- Touch screen, floor standing, hanging or handheld controller models
- Mix and match virtual controls with physical hardware buttons, knobs and switches
- Dry-run mode
- Absolute mode
- Incremental mode
- Distance yet to go
- Suspend and resume
- Cycle Start/Pause Icon, Button or Function Key
- Single Step Icon, Button or Function Key
- Jog Icon, Button, Function Key or Joy Stick
- Load Program Icon, Button or Function Key
- MDI Editor Icon, Button or Function Key
- RS232 Terminal Icon, Button or Function Key
- CAD/CAM Icon, Button or Function Key
- CAD Links Icon, Button or function Key
- Tool Parameter Icon, Button or Function Key
- Diagnostic Icon, Button or Function Key
- User-defined buttons
- User-defined light bulbs
- User-define display boxes
- User-defined slider bars
- User-defined graphic controls
- User-defined input boxes
- User-defined frame boxes
- User-defined function keys
- Set home position
- Hand wheel or pulse wheel devices
- Access the tool parameters screen
- Tool and Fixture offsets
- Display position relative to machine zero
- Display a message to the operator
- Hear sound out of the speakers
- CamSoft speech engine to pronounce messages
- Graphical and Visual Mid-program Restart

Graphics to Motion

- Seamless marriage of our CAD/CAM system and motion. No G code is necessary.
- Includes Advanced System 3000 Level 1 Multimedia 3D CAD/CAM Software
- DXF, IGES, Gerber, HPGL, APT CL, Cadkey and solids translators can be converted into axes motion
- Turn CAD files, surfaces, solid models and bitmapped photographs into axis motion

Feedrates and Cutting Speeds

- Dynamic feedrate option that automatically adjusts feedrate based on spindle load
- Dynamic read-ahead abilities that can look ahead the entire program length
- Feedrate optimizing and filtering routines for accel/decel and fillets
- Cutting feedrate velocities of up to 122,000 IPM
- 62.5 millionth of a second servo update time per axis
- Extremely fast block processing time
- Fastmode allows huge programs with small moves to execute fast
- Proven and dependable motion card serves as a dual processor for speed and safety
- Patent Pending SmartPath option available – look ahead intelligent tool path optimizer
- Change velocity and direction based on spindle torque, voltages and encoders

Motion Logic

- 8 simultaneous and coordinated axes for any machine type
- No physical PLCs or ladder logic necessary. A visual logic process editor is included
- Dual motion operations can be performed simultaneously for tool changers, etc.
- Real-time gauge meter displays to view and react to torque, RPM and voltage
- Lock Axes, I/O inputs and M codes
- Decelerated stops when you want them
- Feedhold
- Reverse spindle direction
- Exact stop checking and smoothing
- High-speed precision rigid tapping and lathe threading
- Interruptible cut in progress with backup
- Gantry ready master and slave axis union
- Rigid threading
- Rapid to position
- Clockwise arc
- Counterclockwise arc
- Position relative to machine zero
- Axis acceleration rate
- Axis deceleration rate
- Emergency stop
- Spindle & Feedrate override
- Wait for motion to stop
- Find encoder index mark

Diagnostics, Maintenance and Reports

- Complete diagnostic features with automatic servo tuning software
- Advanced diagnostic software and watch windows
- Automatic maintenance reminders tell you when to check filters, belts, oil levels, etc.
- History files for diagnostic purposes
- Tool life management
- Multimedia job planner with part photos, vendor information and process sheet
- 120 tool parameter library with machine, tool and fixture offsets

Graphics Control

- Wire frame or solid modeled color graphics shows cuts in real time
- Mouse Jog – jog to exact table position graphically with mouse
- Visually click on the tool path with a mouse or touch screen to begin the program anywhere
- Define 3D graphic viewport
- Display part profile, current and next positions
- Change graphic colors
- Display bitmap image
- Zoom, Pan, Tumble

Simulation & Animation

- Total desktop logic simulation mode tests and virtually emulates machine operation
- Solid modeled tool animation as the machine is cutting in real time

G & M Codes

- Customize your own G & M codes with a graphical icon-driven logic editor
- 22 new G code canned cycles for all types of machine tools
- NURBS and CUBIC based spline G codes

Communication Control

- Network compatible
- Full API using ActiveX, DLL and RS232 access to the controller while it is running
- E-mailable parameter files allow a visual view of all your parameters and machine logic
- Open an RS232 serial port
- Echo back RS232 data
- Read RS232 data
- Send text or numeric data via RS232
- Print data
- Open, read and write files

Compensation

- Patented 3D and 5-axis tool compensation on the machine controller
- 3D fixture compensation will tilt your program based on 3 points
- Backlash compensation
- Lead screw compensation
- Tool compensation

Math Control

- Add math calculations and variables inside your G code program
- Calculate elapsed idle, spindle and job running times
- Switch between inch and millimeter mode
- Arc centers can be absolute, incremental or radius
- Part counter
- **IF THEN** Conditional branching or processing
- IPM and IPR
- Constant Surface Feed
- Calculate 3D angles
- Calculate 3D distances
- Calculate math equations
- Pop up Calculator
- Loops
- Machining planes
- Polar coordinate system

Digital I/O Control

- Read or set any digital I/O
- Conditional I/O logic
- Fake the status of the digital I/O
- Wait until desired I/O state happens
- Analog I/O
- Tool changers
- Homing routines
- Overtravel limits
- Jogging devices
- Hand wheels
- Feedrate override
- Spindle Speed override
- Voltage override
- Turrets
- Rotary tables
- Gear changing
- Probes & Digitizers
- Timed events
- Blade/Knife tangent functions
- Material height sensing

Machine Monitoring

- Remote machine monitoring and viewing. Control your machine from a remote location.
- Parts Run
- Idle Time
- Spindle Time
- Run Time
- On Time
- Cycle Time
- Status
- Operator
- Customer
- Scrap Parts

Machine Monitoring (cont.)

- Job Name
- Job Number
- Date
- Line Number
- Tool Number
- Speed
- Feed Rate

Miscellaneous Control

- ASCII customizable logic text files
- Password protection and feature access limits
- Settable preferences with feature access limits
- Midprogram start reads previous blocks to pick up offsets, tools, speeds and feeds
- Renishaw series SP2 probe driver for high-speed probing & digitizing
- Teach or digitize
- Definable block skip character
- Crash barriers for fixtures, chucks and tooling
- One year Maintenance/Support
- Define the parameters of an axis
- Display the value of variables
- Store variable table on disk
- Analog input and output
- Subroutines
- Goto or jump
- Read main and auxiliary encoders
- Read encoders relative to machine zero
- Cap maximum spindle speed
- Timer or sleep
- Directly enter motion card commands
- Shut down the system
- 12 Canned Cycles – Rough, Peck, Drill, Bore, Part-off, Thread
- User-defined automatic canned cycles
- Rough and finish square pocket
- Rough and finish pocket with fillets
- Rough and finish circular pockets
- Slots
- Bolt Patterns
- Optionally send text messages to your pager or cell phone

Documentation & Help

- Detailed printed 500+ page CAD/CAM Tutorial and 400+ page Controller Documentation included
- Multimedia-based On-line Search Engine (Search for Solutions feature)
    - Indexed Search
    - Advanced Search
        - Word Search – up to 6 keywords
        - Logic Command Lookup
        - Specify Search Method
- Instant multimedia help with synthesized voice, high-resolution photos and movies
- Complete multimedia features with photos and 40,000 word speech vocabulary

QUESTIONS YOU MAY STILL HAVE:

Q. How does the cost compare to other controllers?
A. CamSoft converts any existing CNC machine at a much more reasonable cost than any other brand name prefabricated control. CamSoft eliminates the need to purchase a new machine to gain the latest state-of-the-art programming capability.

Q. How open is your control?
A. Not enough room to state them all, but for starters:

- Servo loop closed in software or hardware
- HMI, CNC, digital I/O, analog and logic in one software package
- No third-party SoftPLC language to run or buy, and much more.

For a complete list, visit: www.cnccontrols.com.

Q. Do you offer a turnkey system?
A. CamSoft offers several different in-stock, ready-to-go professional CNC controller enclosures. Install the same high-quality CamSoft retrofit hardware/software components into your own Windows 98SE, ME, NT, 2000, XP, Vista, Windows 7 or Windows 8 personal computer.

Q. How easy is the CNC to install?
A. Machine conversions can be accomplished without the need to trace wires to the PLC or write ladder logic. The computer becomes the PLC and does the logic. Several ready-to-go operator screens are available. Run new wires directly from your existing motor drives, encoders, spindle drive, limit switches and home switches directly to the CamSoft provided terminal strip. Mix and match physical buttons, knobs, gauges, switches, lights and displays with virtual ones.

Q. How easy is the CNC to use?
A. With an operator screen that is fully customizable, the time it takes is strictly up to you. You may customize your operator screen as simple to complex as you desire. CamSoft offers two programming styles: G code or CAD to motion. No need to know C++ or VB programming to configure the screen. Simply drag and drop control objects around the operator screen and then set their properties.

Q. Can I use my existing motors and drives?
A. Yes. CamSoft works well with existing motors and drives sparing you the expense of new equipment. This also ensures that the motors and amps are sized right for your machine. Our software can control existing motors that are: brush or brushless, AC or DC, servo, stepper, PWM or hydraulic. The amps, also known as drives, can be either current driven or velocity type. Spindle drives use current mode or invertors. Feedback can be closed loop or open. Closed loop systems use encoders or resolvers.

Q. How long will it take?
A. Approximately ¼ of the time of most other CNC systems that use PLCs. Installations can be done in three days for most common types of knee mills, bed mills, lathes, lasers, water jets, plasmas and punch presses.

Q. Where is the retrofit done?
A. Installation can be done in your own shop by yourself or with the help of our technician on an as-needed basis.

Q. Will my old G code programs still run?
A. Yes. You are given a definable G code and M code table to configure the new controller to your pre-existing programs.

Q. Can I customize the system myself?
A. Yes. Customize the complete system. It's an open system. The screen can easily be customized without having to be a VB or C++ programmer. Typical Windows-style fill-in-the-blanks and check boxes are used to construct a well-organized screen. Drag and drop objects into place and set their properties. More advanced users enjoy configuring the controller routines to support new processes and technologies with published, well-documented software application program interfaces (APIs) and source code for ActiveX and DLLs available to all customers.

Q. How fast is the CNC performance?
A. Tested and proven with over 200,000 motion cards shipped to date. 62.5 microsecond servo update times per axis result in cutting feedrate velocities of up to 122,000 IPM. Detect a change of state at rates in the 10 KHz range. Dual 32-bit processors increase productivity, feedrates, accuracy and cut quality. Multiple events and multiple position motions can happen simultaneously. Cut 3D profiles while the tool is changing or a servo motor positions a rotary table. The extra processor on the motion card is the best way to close the servo loop and the quickest method to produce the fastest block-to-block cutting speeds.

Q. Is there third party support and communications?
A. The software supports the ability to integrate third-party applications into the machine control. Standard software already includes machine maintenance software, remote diagnostics via a modem, self-diagnostics and remote machine tool monitoring via RS232, ActiveX or a Network card. The software also automatically collects manufacturing data such as cycle time, feed rates and setup time in real time without operator intervention.

Q. Will CamSoft help eliminate downtime?
A. Yes. Replace your broken controller with a spare computer. A terminal strip connects the machine wiring to the computer via a 100-pin cable. Swap out the old computer with a new computer by unplugging the cable from the computer. Wiring to the machine is not disturbed. Next, restore your controller logic by restoring a single backup file that fits onto a floppy disk. Motion or I/O cards can also be replaced by anyone without disturbing the wires, control screens or logic. This is much easier than a pre-fab controller since pre-fab controllers have hard wiring and external PLC devices with ladder logic burned into them. With CamSoft, the logic is running in the computer.

Q. What about maintenance and repair?
A. Maintenance and repair are no longer an issue. Self diagnostics are part of each system. When it comes to parts, you can use off-the-shelf Windows 98SE, ME, NT, 2000, XP, Vista, Windows 7 or Windows 8 personal computers and brand name spare parts can be purchased from local sources.

Q. How is logic programmed?
A. You are provided with complete seamless digital I/O logic commands running in concert with the motion and other system logic on the PC itself. NO external PLC devices or ladder logic is needed. No need to purchase third-party software.

Q. Is there graphic CNC simulation?
A. You receive “real time” solid modeled or wire frame tool path simulation while the machine is cutting. Starting with CNC Professional Level 5, tool path animation and CNC verification is available to verify what will happen prior to cutting the part. You have step-by-step control over each move graphically by moving the light source, solid model rotation and changing the viewing angles.

Q. What about service?
A. Always count on prompt, complete service and technical support by contacting our qualified technicians via e-mail, fax or phone. If you need application assistance or custom logic, CamSoft has qualified in-house staff and local reps to assist you.

PC BASED MOTION
PC BASED LOGIC
I/O LOGIC

So Easy...
So Flexible...
So Powerful...
you can do it yourself.

No VB...
No C++...
No Ladder Logic...
needed to visually create a:

GRAPHICAL OPERATOR INTERFACE

using

Bitmap Images

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(VISA, MasterCard, American Express & Discover)

To order your PC-Based Machine Tool Controller Hardware and/or Software Toolkit, please contact:

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