



# Comparison Chart of Features

This chart was designed to help you select the correct CamSoft software product.

	CNC Professional	CNC Plus	CNC Lite	Graphical Operator Interface
Machine types: Mills, Lathes, Laser, EDM, Router, Waterjet, Flame, Grinders & Punch	Yes	Yes	Yes	Yes
Turret or Nibbling Punch Press	Yes	No	No	No
Motor types: Servo brush/brushless, AC/DC, Stepper, PWM or hydraulic	Yes	Yes	Yes	Yes
Definable Operator Interface using drag & drop locatable bitmap images	Yes	Yes	Yes	Yes
Mix & match virtual on-screen user controls with real physical ones	Yes	Yes	Yes	Yes
Digital I/O logic language. No PLCs or 3rd party software required. Event driven.	Yes	Yes	Yes	Yes
Parametric logic language for conditional routines: user prompting, IF THEN statements to direct program flow & advanced math	Yes	Yes	Yes	Yes
Dozens of logic examples for digital & analog I/O, tool changers, homing, jogging, turrets, gear change, probes, user buttons, monitoring, conditional routines & many more.	Yes	Yes	Yes	Yes
32 bit DSP based microprocessor motion card available capable of 62.5 millionths of a second servo update times per axis & feedrates up to 122,000 IPM	Yes	Yes	Yes	Yes
400+ page printed manual(s) & 64 MB of multimedia documentation & photos	Yes	Yes	Yes	Yes
Up to 6 coordinated axes plus 2 positional. Up to 200 digital I/O. Unlimited program size.	Yes	Yes	Yes	Yes
Up to 8 coordinated axes including digital I/O, expandable to 344 I/O	Yes	No	No	No
G & M codes: Default set provided, fixed motions & limited customizing	Yes	Yes	Yes	No
G & M codes: User-definable table 199 of each with definable motion	Yes	No	No	No
Provided ready-to-go CNC operator interfaces for several machine types	Yes	Yes	Yes	No
Non-CNC general factory automation with axes & digital I/O control	Yes	Yes	Yes	Yes
Tool parameter screen with offsets for tools, sizes, home, fixtures & custom values	Yes	Yes	Yes	No
Tool life management screen with tool photos & hourly usage logs	Yes	Yes	Yes	No
Solid model graphic tool animation display in real-time as machine cuts	Yes	No	No	No
Wire frame graphics shows tool offset while it colors in as machine cuts	Yes	No	No	No
Provided Multimedia 2D-3D CAD/CAM system with customizable posts	Yes	No	No	No
10 CAD translators provided to read DXF, IGES, HPGL, Gerber, CL & more	Yes	No	No	No
Graphics to motion, picture to part directly cut from visual models. No G code necessary.	Yes	No	No	No
2D G41 & G42 tool compensation plus M98 & M99 subroutine calls and return	Yes	Yes	No	No
Patent Pending 3D & 5-axis tool compensation with gouge protection at the controller	Yes	No	No	No
Backlash axis compensation which prevents backlash before it occurs	Yes	Yes	No	No
Lead screw axis mapping compensation with user-definable point file	Yes	Yes	No	No
3D fixture compensation to allow for tilted, skewed or non-flat parts	Yes	No	No	No
Volumetric 3D Compensation	Yes	No	No	No
Diagnostics tools, watch voltage, positions, I/O states, errors & history. Saves to file.	Yes	Yes	Yes	Yes
Servo tuning software provided with optional advanced servo design kit	Yes	Yes	Yes	Yes
Desktop interactive simulation of tool cutting, digital I/O events & logic flow	Yes	No	No	No
Send commands via Network, RS232 & ActiveX. Remote machine monitoring (API/DLL).	Yes	No	No	No
Remote control option available via modem, direct control of mouse, keyboard & screen	Yes	Yes	Yes	Yes
E-mailable parameter files, logic & backup data can be sent for troubleshooting	Yes	Yes	Yes	Yes

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Customizable user-defined maintenance messages at regular hourly intervals	Yes	Yes	Yes	Yes
Dynamic feed that automatically adjusts feedrate based on spindle load	Yes	No	No	No
Patent Pending SmartPath option available for intelligent look ahead feedrate/accel/decel optimizing	Yes	No	No	No
Nesting option available, part sheet layout optimization	Yes	No	No	No
4 axes wire EDM option available for the CAD/CAM system	Yes	No	No	No
Dimensioning & engraving option available for the CAD/CAM system	Yes	No	No	No
Art2Cam option available, color or black & white photo to raised 3D image	Yes	No	No	No
Parametric splines, NURBS & 3D offsets a 3D splined profile	Yes	No	No	No
Dynamic dual processor look ahead buffering G8 & G9 with smoothing	Yes	Yes	Yes	No
FastMode allows mold makers to cut large programs with small moves fast, using dual processors	Yes	No	No	No
Dynamic look ahead with DSP buffering for extremely fast G code throughput. Look ahead your entire program length	Yes	No	No	No
MATRIX command for part program Scale, Rotation, Mirror, Stretch & 3D Skew	Yes	No	No	No
Canned Cycles for Drilling, Pecking, Boring, Dwell, Tapping & Custom Cycles	Yes	Yes	Yes	No
Mill canned cycles: Pockets, Slots, Ellipses, Circular, Squares & Fillets	Yes	No	No	No
Advanced lathe canned cycles: Face, OD/ID, Grooves, Threads & Rough cut	Yes	No	No	No
Limited lathe canned cycles: Pecking, Facing, Turning plus IPR & constant surface feed	Yes	Yes	No	No
Lathe threading with fixed & variable spindle speeds with & without encoder	Yes	Yes	No	No
Mold makers canned cycles 3D ramps, spheres, cylinders plus others	Yes	No	No	No
Use math equations or variables in G code program	Yes	Yes	Yes	No
Mid-program start, restarts a program midway by prompting for missing info	Yes	Yes	Yes	No
Mid-program start, visually using a mouse in a viewport restarts midway by reading previous offsets, axis motion, feeds & speeds	Yes	No	No	No
Instant multimedia help: synthesized voice, high-resolution photos & movies	Yes	Yes	Yes	Yes
Multimedia command set for playing wave files, text to speech & photos	Yes	Yes	Yes	Yes
Multimedia job planner: part photos, vendor info, cut-time & process sheet	Yes	No	No	No
Send & receive jobs through background RS232 terminal communications	Yes	No	No	No
Read & write to ASCII text files or RS232: histories, errors, data & maintenance events	Yes	Yes	Yes	Yes
Probe, teach & digitize modes which saves to user-defined file name	Yes	Yes	Yes	Yes
Renishaw Series SP2 model probe & non-contact probe drivers with digitizing routines	Yes	No	No	No
Gantry mode with master/slave union	Yes	Yes	No	No
2D arcs, 3D arcs and Helical arcs in up to 8 axes	Yes	No	No	No
Crash barriers to protect fixtures, chucks & tooling	Yes	Yes	No	No
Mouse jog graphically to axis positions	Yes	No	No	No
Absolute, incremental, millimeter, inch, lock axis, single step, cycle start & feed hold modes	Yes	Yes	Yes	Yes
Dry run, distance-to-go, machine zero, IJ&R arcs & block skip modes	Yes	Yes	Yes	No
Network compatible	Yes	Yes	Yes	Yes
Multiple password protection levels & feature access limits	Yes	Yes	Yes	Yes
One year maintenance, support & free upgrades	Yes	Yes	Yes	Yes