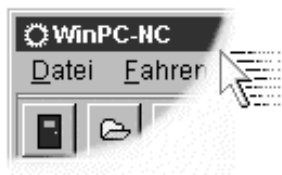Milling, plotting, engraving, drilling, grinding, cutting, dispensing, sign making and much more besides...
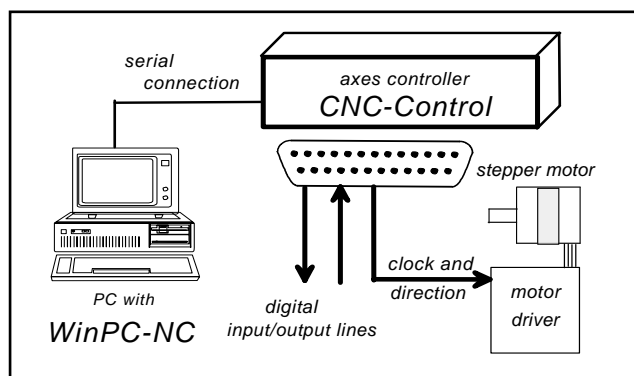
WinPC-NC
Professional

...the software that turns your standard PC into a universal NC machine control

WinPC-NC **is a software that turns any standard PC and our axes controller** *CNC-Control* **into a universal NC machine control and actuates up to four axes. The axes controller is an essential part to free MS-Windows from all realtime tasks and to run the machine independent from other installed programs or running processes. By using it you have an absolute stable and reliable control unit for industrial applications.**

serial connection
axes controller
CNC-Control
stepper motor
clock and direction
motor driver
digital input/output lines
PC with *WinPC-NC*

Simple startup procedure

WinPC-NC Professional and the axes controller *CNC-Control* are already pre-configured when they are delivered and can easily be started. Connecting both requires a simple null modem cable and a serial RS232 or USB port only.

The motor drivers and various additional signals are connected to *CNC-Control*. Optional to the standard TTL signals there are also opto-coupled input/output lines with 24V= possible.

The pinning of the connector is identical to our other programs, i.e. re-fitting of present controlling units or older software of our company is possible without efforts.

Just install the software to your PC and start to move the axes of the machine by the jog move function.

WinPC-NC Professional **in detail**...

- simple and intuitive operation
- runs on any PC with Windows95/98/NT/ 2000/XP and serial RS232 or USB port
- step frequencies up to 40 kHz for interpolated movements
- interpolated move of all axes, true 3D
- import filters for HPGL (PLT), drilling data, MultiCAM 2D/3D, G codes, IselNCP, EPS/AI
- full multitasking capabilities, i.e. start a job and continue drawing in CAD
- jog move exact to the step by keyboard, mouse or compact keypad
- graphical display with scale, functions for zooming, rotating, mirroring
- speeds, ramps, axes resolutions, and more free and individual adjustable for all axes
- various external signals for synchronizing with additional components (256 in/outputs)
- 0-10V output to control spindle speed
- tangential cutting, cylindric engraving
- tool length measurement and compensation
- supports automatic tool changer
- comfortable teachin and digitizing function
- multilingual, more languages to come
- extensive operation manual
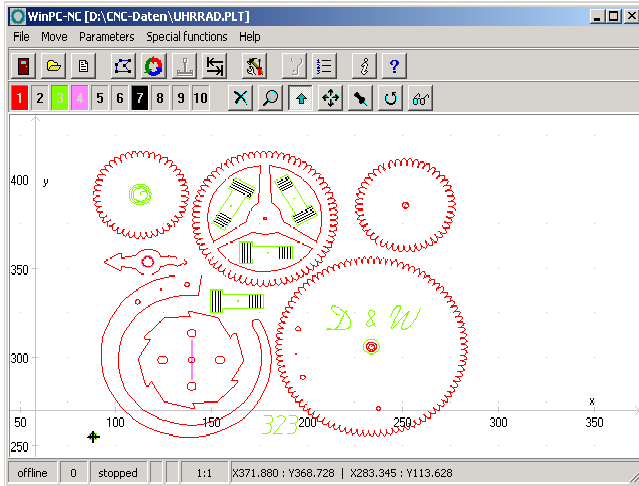
Import filters for lots of NC formats

WinPC-NC is equipped with import filters for the most frequently used NC formats. Besides the widespread **HPGL** language it is also able to communicate with various drilling formats of **Sieb&Meier** or **Excellon**, **MultiCAM** files in 2D und 3D, **Isel NCP**, **ECP** and **AI** post-script as well as the **G code** language which is used with professional NC machines.

New programs can be created by oneself with the integrated editor or with a drawing or construction program running under Windows like AutoCAD or CorelDRAW.

Simple operation of the machine

WinPC-NC offers full and save control of the machine by various functions. Jog move exact to the step is made by keyboard, mouse clicks or compact external keypad.
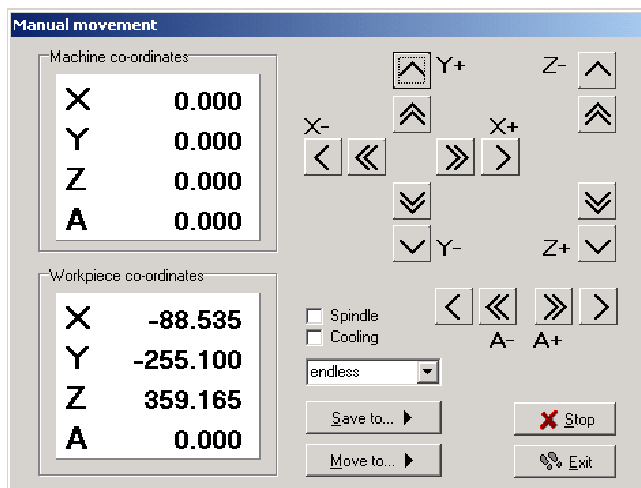
By useful test functions you can optimize parameters, tune the settings of the axes or check the defined input signals and output lines.

Real multitasking

WinPC-NC is a real multitasking program that never blocks operation of Windows or other programs. After starting a job at the machine it is possible to switch to other applications without causing any problems, e.g. to an CAD program in order to construct the next part.

Using the axes controller *CNC-Control* provides two advantages. On the one hand it is guaranteed that actuation of the motors is made in an absolutely careful, soft and smooth running way. On the other hand the Windows PC is set free from all time critical tasks.

Intelligent toolpath controlling

WinPC-NC is a high standard toolpath control. It is able to ascertain and adjust the optimum speed by efficient look-ahead functions in all situations. After activating a movement the machine runs in constant and steady course with the best speed and does not require stops at following vectors or contour elements. The moving style is exactly adjusted to the successing contour lines.
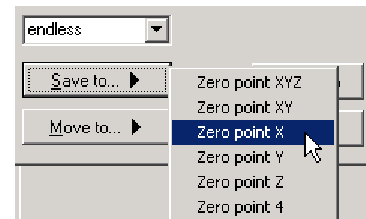
The toolpath control even works with great reliability if axes resolution settings vary for the three axes or if the motors dispose of different move characteristics.

Various applications

Besides the usual limit and reference switches *WinPC-NC Professional* is able to manage further input signals for synchronization with external components. In addition to a *start signal* there are signals for *spindle speed*, *clamping of workpiece*, *Z position reached* and much more.

Only *WinPC-NC Professional* provides certain technology functions for dispensing, digitizing, dual X axis for gantry movement, PLC functions, stand alone mode, loadable ramp profiles for servo motors and others.

WinPC-NC is adjustable to absolute different applications by means of extensive options for parameter settings. On request we are gladly prepared to realize special functions or special controllers according to your instructions..