Milling, plotting, engraving, drilling, grinding, cutting, dispensing and much more besides...
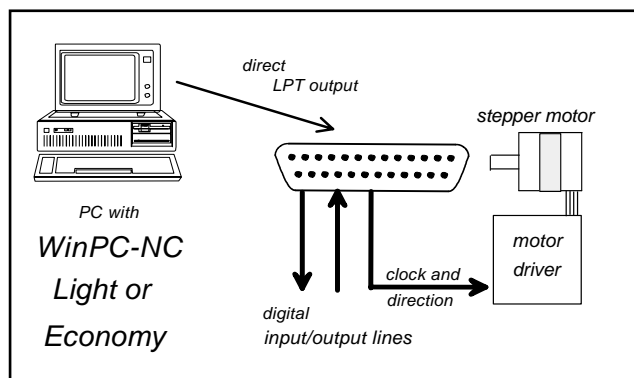
WinPC-NC
Light
Economy

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

WinPC-NC is a software that turns any standard PC into a universal NC machine control and actuates three or four axes and numerous signal inputs and output lines. There are lowcost versions available with direct LPT printer port output or a professional solution with intelligent axes controller CPU for true realtime operations. We offer the suitable solutions for any application by various functional extents and price ranges.

direct
LPT output

stepper motor

PC with

WinPC-NC

Light or

Economy

digital
input/output lines

clock and
direction

motor
driver

Various versions

WinPC-NC is available in three various versions. Due to the graduaded functional extend and the various price range *WinPC-NC* is applicable not only for hobby users or manufacturing modelling parts, but also applies to industrial customers with higher demands or is usable for very special applications.
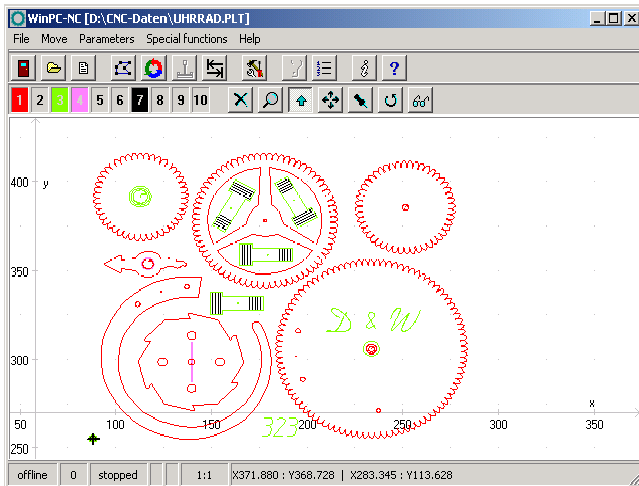
The versions *WinPC-NC Light* and *Economy* are actuating the motor drivers directly by one or two LPT printer ports without any additional hardware.

The version *WinPC-NC Professional*, however, operates with an external axes controller CPU for all time critical tasks and thus offers an absolute steady operating process independent of other Windows applications. Furthermore special technology functions have been implemented.

Review of *WinPC-NC Light* and *WinPC-NC Economy*...

- **simple and intuitive operation**
- **runs on any modern desktop PC from 1 GHz, Win2000/XP, 1-2 LPT printer ports**
- **very high and stable clock frequencies with appropriate computers**
- **runs with any clock/direction electronics or with SMC800/1500 stepper cards**
- **interpolated move of all axes**
- **machine runs in 2D, 2,5D (*Light*) or true 3D, even with 4 axes (*Economy*)**
- **import filters for HPGL(PLT), drilling data (*Light*), MultiCAM 2D/3D, G code, IselNCP and EPS/AI (*Economy*)**
- **efficient NC program editor integrated**
- **teachin exact to the step by keyboard or mouse**
- **graphical display with scale, functions for zooming, rotating, mirroring**
- **speeds, ramps, axes resolutions and more adjustable for all axes**
- **various external signals for synchronisation with additional components (*Economy*)**
- **multilingual (ger, eng, ita, fra, pol, spa, por, turk), more can be added easily**
- **extensive operation manual**

Simple startup procedure

The controlling software *WinPC-NC Light* and *Economy* are already pre-configured when they are delivered and can easily be started. Connection with the machine is simply made by the existing LPT printer port.

Besides the clock/direktion or SMC motor signals, further switching outputs or sensor inputs are definable.

The pinning of the printer port is identical to our other programs, i.e. re-fitting of present controlling units or older controlling software of our company is possible without efforts.
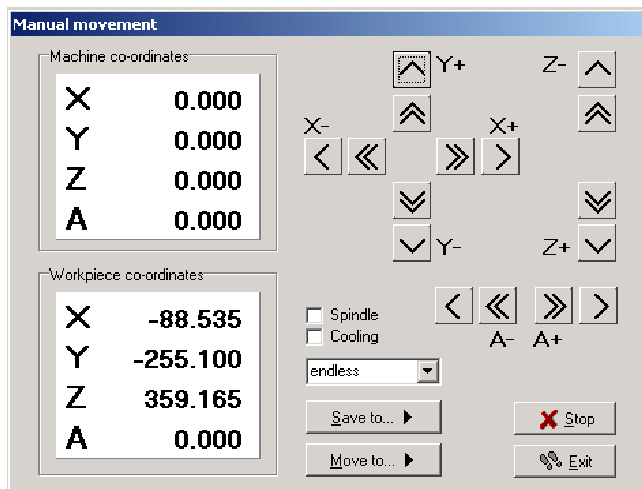
Import filter for lots of NC formats

WinPC-NC Light is equipped with import filters for the widespread HPGL language and for drilling formats by **Sieb&Meier** or **Excellon.** You can master engravings or modelling parts in unlimited size and complexity by it.

The *Economy* version is equipped with additional import filters for **MultiCAM** files in 2D and 3D, **Isel NCP**, **ECP** and **AI** postscript as well as

the **G code** language which is used with professional CNC machines.

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

Simple operation of the machine

WinPC-NC offers full and save control of the machine by various functions. Jog move in exact motor steps is made with keyboard, mouse buttons or joystick.

To start a loaded job is as easy as to click the start button or to press an external switch. The job is performed completely or with breaks whenever you want. Paused jobs can be restarted from the beginning or resumed from the last position.

By various test functions you can optimize parameters, tune the settings of the axes or check the defined input signals and output lines.

intelligent toolpath controlling

WinPC-NC is a real 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.
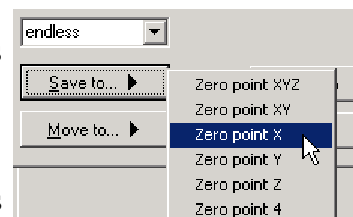
Realtime operation under Windows

Controlling stepper motors is a very hard realtime application. In order to guarantee faultless operation there are some characteristics and requirements to be considered concerning the computer and the system environment.

Realtime reaction of *WinPC-NC Light* ad *Economy* may be affected by other installed or in the background running programs.

Additional documents concerning realtime reaction, differences of functions and versions or simply tips and tricks as well as a test version ready for operation can be downloaded from our web site.