Milling, plotting, engraving, drilling, grinding, cutting, dispensing and much more besides...

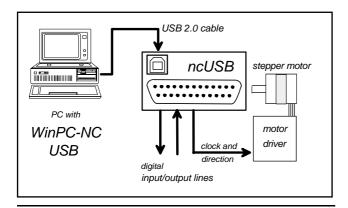


WinPC-NC USB

...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 and USB connection or a professional solution with intelligent axes controller CPU for rough industrial use.



Various versions

WinPC-NC is available in vour 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.

WinPC-NC USB controls the machine by a fast USB 2.0 connection and has comparable functionality to **WinPC-NC Economy**.

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

Review of WinPC-NC USB...

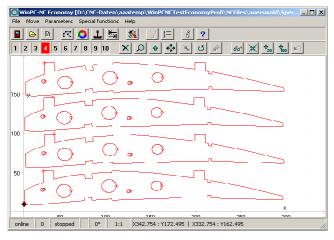
- simple and intuitive operation
- runs on any modern PC from 1 GHz, Win2k/XP/Vista/7, USB 2.0 port
- controls machine by a small box called *ncUSB* and a fast USB 2.0 connection
- runs with any clock/direction electronics, signal level 5V TTL
- very high and stable clock frequencies up to 80kHz and therefore smooth and fast movements
- interpolated move of all axes
- machine runs in 2D, 2,5D or true 3D, even with 4 axes
- import filters for HPGL(PLT), drilling data, MultiCAM 2D/3D, G code, IselNCP, EPS/AI
- efficient NC program editor integrated or external editor configurable
- 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
- multilingual (currently 17 most important european languages)
- comfortable and powerful macro system
- extensive operation manual

Simple startup procedure

The controlling software *WinPC-NC USB* is already pre-configurated at delivery and can be set up by a few further steps. Connection with the machine is simply made by the existing USB cable and *ncUSB* box.

With clock/direktion motor signals corresponding to industrial standards, up to four stepper motor axes can be controlled. Additional input and output signals can be used for synchronizing with external switches and components.

The pinning of connectors at *ncUSB* is identical to LPT ports and to our other programs, i.e. refitting of present controlling units or older controlling software of our company is possible without efforts.



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.

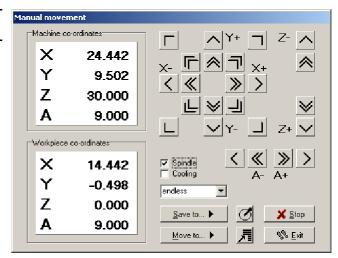
To start a loaded job is as easy as to click the start button or to press an external switch. The job is performed completely or with breaks whenever you want. Paused jobs can be restarted

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.

Import filter for lots of NC formats

WinPC-NC USB 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.



It also hasadditional import filters for **Multi- CAM** 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 construc-

intelligent toolpath controlling

tion program running under Windows.

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

WinPC-NC USB uses the external box ncUSB for connecting and controlling the machine. All time critical tasks are fully independend from Windows and running programs and processes. Resulting is a very smooth and reliable motor movement with high acuracy, fast speed and less resonances.

