

For our production series instead of our BZT CNC-USB-Software respectively BZT CNC-Servo control we can also offer you CNC-Control technology from Siemens or Heidenhain. For example from Siemens we can offer the Summerik 802S, from Heidenhain the TNC320.

## **BZT CNC-USB-software**



The software BZT CNC V5 USB is designed for the use of an external CPU to the CNC-Control. The data transfer of the controlling unit takes place via the USB interface. By sharing the tasks the system even functions with higher speeds without any dropouts. While BZT CNC V5 USB does its work, you can use CAD/CAM applications and other programs without any problems. The function „Look-Ahead-Feed“ calculates optimal paths and provides an excellent speed behaviour. Particularly the G-code generated by CAD/CAM with many short linear pieces profits from this function.

[Here you can find our BZT-CNC-USB software in the shop!](#)

## **Simple CAD/CAM functionality**

- DXF
- HPGL
- Milling / cutting
- Engraving
- Drilling
- Pocket milling

## **Tool data**

- Tool length
- Tool diameter
- Length compensation G41, G42, G43
- For rotary tools there are available additional adjustments for
- X-Offset and tool orientation

## **Simple installation**

- Selection of the visible axis x, y, z, a, b, c
- Number of steps per MM
- Machine program
- Maximum speed and acceleration per axis
- Movement speed, direction, position
- Play compensation.
- Interpolation mode for A-axis, 4-axis milling, 4-axis cutting, styrofoam cutting, standard rotation axis.
- Lookahead feed angle optimisation
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IO-Modi and inversion

- Jog buttons inversion for machines with a moveable bed.
- PWM mode for the control of the spindle rotation speed
- Storage file for the digitisation password in order to avoid adjustment changes by the machine operator
- Hand wheel parameters adjustment
- Freely selectable editor (for example Notepad ++)

## Variables

BZT CNC V5 USB has enlarged G-code functions

- # Variables
  - sub - endsub, gosub (subprograms)
  - while - endwhile
  - if - else - endif
  - Mathematical functions
  - Operator access on the G-code via the function „msgdlg“. With this function the creation of own macros is possible.
  - Automatic tool change, which can be programmed as a macro by the operator, too.
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- Further information for this product you can find in the [Download Section.](#)
  - [Here you can find our BZT-CNC USB software in the shop!](#)

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## BZT servo-control



## SINUMERIK 802S base line control

SIEMENS



The CNC from Siemens for applications in the lowest cost segment offers, thanks to the following three features, the optimal solution in the technologies lathing and milling:

- Extremely simple operation
- No maintenance
- Unbeatably inexpensive

The SINUMERIK 802S base line is constructed on maximal three stepping drive control axis and an analogue spindle. We deliver a control panel with all necessary components: NC, SPS, control panel, machine control panel, inputs, outputs and software.

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## Heidenhain TNC320-Control

HEIDENHAIN



- Components: Central computer with TNC control field with integrated TFT colour flat screen 15.1 inches with soft keys
- Operating System: Real-time operating system HEROS for machine control
- Storage: 300 MB (on Compact Flash storage cards CFR)
- Input fineness and display writing: Linear axis: up to 1  $\mu\text{m}$ , angular axis: up to 0.001°
- Input area: Maximum 99999.999 mm (3.937 inches) respectively 99999.999°
- Interpolation: Straight in 4 axis, circle in 2 axis, helix interference of circular orbit and straight line
- Sentence processing time: 6 ms (3D straight line without radius correction)
- Axis control: Bearing controlling fineness - Signal period of the position measuring device, cycle time bearing controller 3 ms
- Processing range: at a maximum 100 m (3937 inches)
- Spindle rotation speed: at a maximum 100000 U/min (analogue rotational speed nominal value)
- Error-compensation: linear and non-linear axis errors, loose, reverse peaks with circular movements, heat extension, stiction
- Data interfaces: V.24 / RS-232-C max. 115 kbit/s, enlarged data interface with LSV2 protocol for the external operation of the 320, via the data interface with HEIDENHAIN software TNCremoNT, Fast-Ethernet interface 100BaseT, 2 x USB 1.1
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Ambient temperature operation: 0 °C to +45 °C

- Storage: -35 ° C to +65 ° C
- Axes: 3 controlled axis and controlled spindle S

[You have questions concerning these controls or would like to have a non-binding offer? Please get in contact with us!](#)