



HEIDENHAIN



Programming Station for TNC Controls

Programming and Training
on a PC

July 2016

HEIDENHAIN programming stations

– Programming, archiving, training

Why a programming station?

Everyone knows that you can quite easily write a part program with the TNC at the machine, even while it's machining another part. Nevertheless, short reloading times and other machining tasks can often hinder any prolonged or concentrated programming work. With a HEIDENHAIN programming station you have the capability to program just as you do at the machine, but away from the noise and distractions of the shop floor.

Creating programs

Programming, testing and optimizing smarT.NC*, HEIDENHAIN conversational or DIN/ISO programs with a programming station substantially reduces machine idle times. You need not adjust your way of thinking—every keystroke fits. On the programming station you program on the same keyboard unit as at the machine.

* smarT.NC only with iTNC 530

Testing of programs created offline

Of course you can also test programs that were written on a CAD/CAM system. The high-resolution, program verification graphics help you to easily spot contour damage and hidden details even in complex 3-D programs.

Training with the programming station

Since the programming stations are based on the same software as the controls, they are ideally suited for apprentice and advanced training. Programming and program testing function in exactly the same way as they do on the machine. This gives the trainee the experience needed to enable him to safely operate the machine later.

And because the HEIDENHAIN controls can be programmed with smarT.NC*, in HEIDENHAIN conversational format or in DIN/ISO, the programming stations can also be used in schools for TNC programming training.

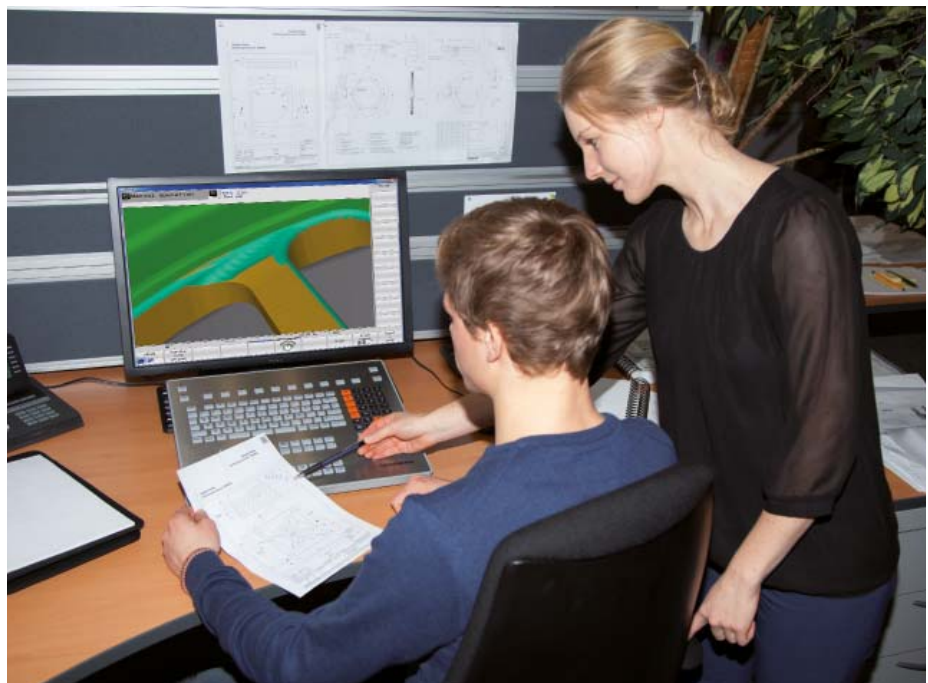
What can the programming station do?

The programming modes offer you the same features as the TNC on the machine. This means that you can create programs

- with smarT.NC*, in HEIDENHAIN conversational format or according to DIN/ISO,
- with graphic support for program input and test run,
- with all field-proven TNC functions, such as FK free contour programming.

With the programming station, you are working with the original control software. This ensures compatibility. Part programs created with the programming station run on any machine tool equipped with the appropriate control. A requirement for this to work is that the programming station software must have been adapted to the machine.

One special benefit: the complete array of **software options** and—on the iTNC 530—**FCL functions** available for the control are fully enabled on the TNC programming station. This enables users of the licensed versions and the free demo version to amply test all functions and then decide whether an upgrade on the machine is worthwhile.



Programming station
with TNC operating
panel

– Your workstation

What does the programming station look like?

The programming station software runs on a PC. The PC screen shows you the same TNC user interface as on the control, and offers the familiar graphic support. Depending on the version of the programming station, there are several types of possibilities for using it.

Demo version of the programming station

A demo version of the programming station is available for testing (for free download at www.heidenhain.de or on DVD). It contains all functions of the TNC, and permits short programs to be saved. The demo version is programmed with the virtual keyboard or PC keyboard. The legend for the control keys is included.

Programming station with TNC operating panel

A separate TNC machine operating panel is connected to the PC via the USB port. You then create your programs as always, on the same keyboard as on the machine. The keyboard also includes the soft keys, which are otherwise integrated in the iTNC's visual display unit. It has a PC keyboard for convenient and efficient entry of file names and comments. Overlays for better soft-key association and self-adhesive strain relief for the USB cable are included in delivery.

If you already have a programming station with virtual keyboard, you can expand it with a TNC operating panel. You can also order the TNC operating panel without a dongle.

Programming station with virtual keyboard

You can also work without the TNC operating panel: this programming station is operated with a virtual keyboard instead. It is displayed together with the TNC control panel on the PC screen, and features the most important dialog initiation keys of the TNC. A dongle for the software is included.

The programming station with virtual keyboard is available in the following versions:

- **Single station license**
 - **Network license** for 1, 14 or 20 stations.
- The stations must be interconnected with each other, because the software dongle is connected to only one PC. The network license is therefore especially useful for training rooms.



Programming station with virtual keyboard

– Versions and system requirements

Which programming stations are available?

Programming stations are available for all current TNC controls. The programming station DVDs include the programming station software, the necessary drivers, and the current User's Manuals in all available languages.

Programming station	TNC 640	TNC 620 TNC 320	iTNC 530
Free demo version (DVD)	ID 1114029-xx ¹⁾	ID 1114030-xx ¹⁾	ID 1114028-xx ¹⁾
With TNC operating panel	ID 1113967-02		
With virtual keyboard			
Single station license	ID 1113924-02		
Network license, 1 station	ID 1125955-02		
Network license, 14 stations	ID 1113926-02		
Network license, 20 stations	ID 1113928-02		
Operating panel without dongle	ID 1113967-52		

¹⁾ can also be downloaded from www.heidenhain.de

System requirements

- Standard PC with Windows 7, 8 or 8.1 (64-bit) with the recommended system
- At least 2 GB RAM
- At least 5 GB memory capacity on hard disk
- Graphic card with min. 1024 x 768 pixel resolution (1280 x 800 when using the virtual keyboard);
TNC 640: min. 1280 x 1024 (1680 x 1050 when using the virtual keyboard);
color depth min. 16 bits
- Processor with virtualization support
- USB interface or LAN for local or network license

Conversational languages

You can install the TNC programming station with several languages and switch among them during operation. All dialogs and soft keys are then displayed in the respective national language. The following languages are available:

- Chinese (simplified and traditional)
- Danish
- German
- English
- Finnish
- French
- Italian
- Korean

- Dutch
- Norwegian
- Polish
- Portuguese
- Romanian
- Russian (Cyrillic)
- Swedish
- Slovak
- Slovenian
- Spanish
- Czech
- Turkish
- Hungarian

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More information:

- *iTNC 530* brochure
- *TNC 640* brochure
- *TNC 620* brochure
- *TNC 320* brochure

