

Operating Instructions

NTEdit

**Software to Prepare Programs for
Controllers**

B400/B410

C440/C450

P470/P480

M03.0017 ENGLISCH

Original instructions

■ Made
■ in
■ Germany

www.nabertherm.com

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1 Introduction

Entering the required temperature curve is simplified considerably by using software on the PC. The program can be entered on the PC and then be imported to the controller with a USB flash drive.

This is why Nabertherm offers a valuable aid with the freeware **NTEdit**.

The following features support you in your day-to-day work:

- Selecting your controller
- Filtering of extra functions and segments depending on the controller
- Setting extra functions in the program
- Exporting a program to a hard disk (.xml)
- Exporting a program to a USB flash drive for direct import into the controller

1.1 Conditions of Use

As a Nabertherm customer, you may use this software (freeware). However, this does not include the right to upgrades or future versions.

With this software, you can enter programs on the PC; however, after importing them into the controller, you must check to make sure that there are no errors. Nabertherm is not liable for damage caused directly or indirectly by a defective program. Therefore, it is important that you check the program after importing it.

1.2 Important



Note

To import programs into the controller, use only USB flash drives that have been checked for malware. Not all USB flash drives are suitable for the controller. If the controller does not recognize the USB flash drive, try a different one, perhaps with less storage space (< 16 GB).



Note

NTEdit is a free tool to prepare programs. If this software does not run on your PC, you can also enter the programs directly on the controller. There is no guarantee that the software functions.

The program is freeware. All Nabertherm customers may use this program at NO CHARGE. The authors and right holders of this program accept absolutely no liability for the functioning or the compatibility of this software. You use this software at your own risk. As this software is free of charge, there is no warranty of any kind. Furthermore, no debugging, service or support is provided.

2 Installation and Download

NTEdit does not have to be installed separately. Simply open the file *NTEdit.xls*.

Make sure that you are using the correct Excel version. **NTEdit** can be used only with Microsoft Excel 2007, 2010 and 2013 for Windows. In Excel, you must enable macros. Ask your administrator about this.

To use NTEdit, you may have to remove write protection of the file "NTEdit_Vxx.xls". Right-click the context menu to open it and select "Properties". In "Properties", uncheck "Read-only".

Note

This software and the corresponding documentation for NTEdit can be downloaded at the following address:

<http://www.nabertherm.com/download/>

Product: NTEdit

Password: 47201701

The downloaded file has to be unzipped before you use it.

Before using NTEdit, read the instructions, which are also in the directory.

System requirements: Microsoft EXCEL™ 2007, EXCEL™ 2010 or EXCEL™ 2013 for Microsoft Windows™.

3 Operating Instructions Summary

The Operating Instructions Summary provides a quick overview of the functions of NTEdit. For more detailed information, read the individual sections of the functions.

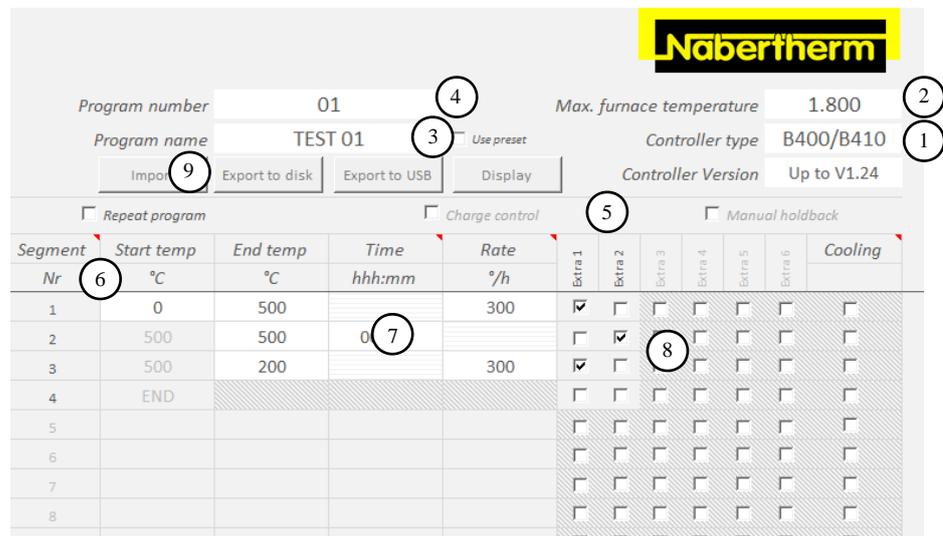


Fig. 1: Operating Instructions Summary (similar to picture)

To create a program and import it into the controller, proceed as follows:

No.	Description
1	Enter controller type
2	Enter maximum furnace temperature
3	Enter the program name or have it specified ([Use Preset])
4	Enter the required program number
5	If required and available, select special functions
6	Enter the start temperature or leave at "0"
7	Enter the program
8	Select extra functions (grayed out fields are not available)
9	Import program, export to hard disk/USB flash drive or display graphically

No.	Description
-	Insert the USB flash drive into the controller
-	Import program to the controller
-	Check program in the controller

4 Preparing Programs

5 Importing Programs into NTEdit

If an exported program is to be changed, it can be imported into NTEdit with **[Import]**. Prior to this, it may have been exported from a controller or have been created with NTEdit and then stored.

After clicking **[Import]**, you are prompted to select a program. The file containing the program has the suffix **[.XML]**.

When you open this file, the program is shown in the program table and can then be modified.

The following data are not imported and, if necessary, may have to be modified afterwards.

- Maximum furnace temperature
- Controller type
- Controller version

5.1 Selecting the Controller

Click the field **[Controller type]**. You can select the controller here. Depending on the chosen controller some functions are shown or hidden.

When you have selected the field, click the small arrow to show a list of controllers:

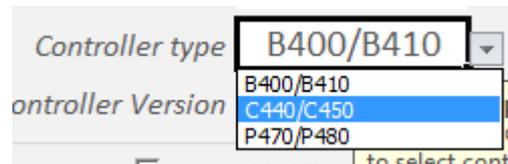


Fig. 2: Selecting the Controller (similar to picture)

Select your controller.

5.2 Entering the Maximum Furnace Temperature

Enter the maximum temperature of your furnace in the field **[Max. furnace temperature]**. You will find this information on the type plate on the furnace.

This value is used to limit the permitted entries in the program.



Fig. 3: Entering the Maximum Furnace Temperature (similar to picture)

5.3 Entering the Program Name

The program name **[Program name]** is imported into the controller; this is why some restrictions must be observed:

- Entry must be in Latin letters
- The name is limited to 17 characters



Fig. 4: Entering the Program Name (similar to picture)

If you cannot enter Latin letters, use the checkbox [Use preset]. If you use this, a preset name is used. The name is then specified by the software.



Fig. 5: Entering the Program Name (similar to picture)

5.4 Entering the Program Number

The program number is used to write the program in the desired storage location in the controller.



Fig. 6: Entering the Program Number (similar to picture)

The maximum number of programs depends on the controller.

- B400/B410 = max. 5
- C440/C450 = max. 20
- P470/P480 = max. 50

5.5 Activating Special Functions

Some optional functions are available, depending on the controller equipment.



Fig. 7: Activating Special Functions (similar to picture)

[Repeat program]	The program is repeated over and over again
[Charge control]	Charge control is activated. Only for P470/P480 with charge control
[Manual holdback]	Manual holdback is activated. Please refer to the controller instructions

5.6 Selecting the Controller Version

Some controller versions have additional limitations in their interaction with this software. For example, up to controller version 1.24 not all segments can be used. This limitation relates only to importing programs into the controller. The limitation does not apply if programs are entered in the controller itself.



Fig. 8: Selecting the Controller Version (similar to picture)

5.7 Filling the Program Table

The temperature curve can be entered in the program entry area.

All information, which can also be entered on the controller, is shown in table format.

Segment	Start temp	End temp	Time	Rate	Extra 1	Extra 2	Extra 3	Extra 4	Extra 5	Extra 6	Cooling
Nr	°C	°C	hh:mm	°/h							
1	0	1.300		100	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
2	1.300	900	00:10		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
3	900	900	INFINITE		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
4	END				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
5					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fig. 9: Filling the Program Table (similar to picture)

- [Segment] The segments that are available for the controller are shown here. A segment is a step in the program.
- [Start temp] Start temperature of the program. Leave the value at “0” if the program is to start at the current temperature. Remember that up to controller version 1.24 this software can export just one segment less than the official number. This is why the start temperature in the last segment is grayed out. There are no restrictions from version 1.25.
You only have to enter the first start temperature. All others are taken over from the end temperature of the previous segment.
- [End temp] End temperature of the segment.
- [Time], [Rate] Times and rates determine the duration of segments. The time is entered in hours and minutes and the rate in degrees/hour. The rate can be thought of as an “increase”. You can enter only a time or rate.

Do not enter the time in the menu bar but always in the entry field itself.
- [Extra 1..6] Depending on the equipment of your furnace, you may have some extra functions available. Click to activate or deactivate them. Different numbers of extra functions are available depending on the controller type. All extra functions that cannot be used because of the controller type are grayed out. Which of them you can select depends on the furnace features.
- [Cooling] If your furnace has controlled cooling, it can be activated here. Controlled cooling should not be confused with simple cooling. This is generally activated by an extra function.

6 Graphic Presentation of a Program

To view the entered program in a graphical display, click [Display]. NTEdit then creates a simple graphical display of the program. Extra functions are not displayed.

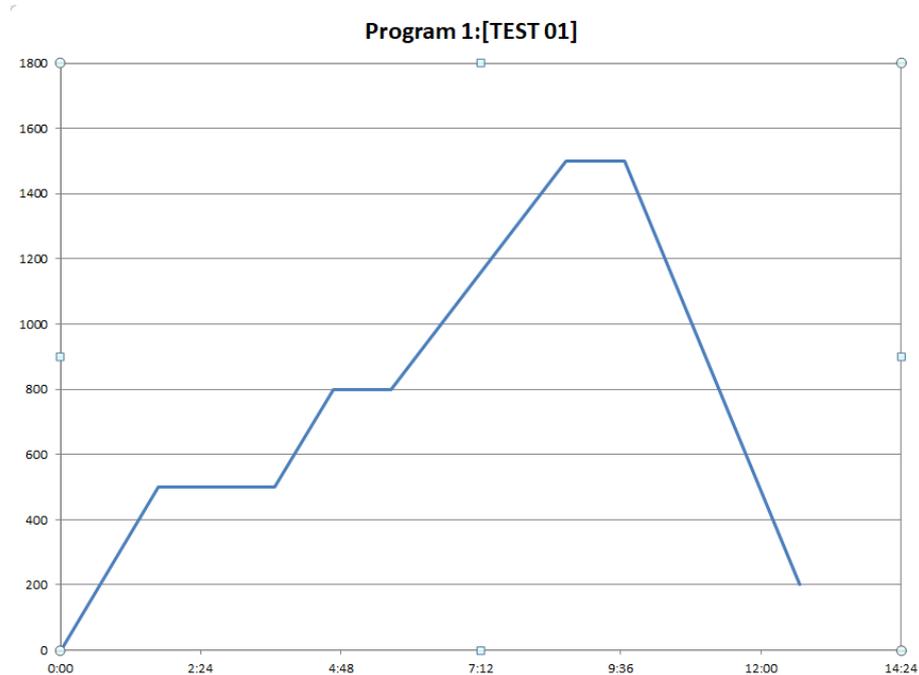


Fig. 10: Graphical display of the program (similar to picture)

The display can be printed using the standard print function in Excel.

7 Exporting a Program File

So that you can import your program into the controller, you must first export it with NTEdit. There are 2 options for this:



Fig. 11: Exporting a Program File (similar to picture)

[Export to disk]

Export your program to a file on the hard disk. Use this function to save your program file at a chosen location. This file cannot be loaded again.

For a subsequent import, create an “Import” folder on the USB flash drive and copy the program file into this.

[Export to USB]

Use this function to export your program to a USB flash drive. The file is automatically saved in an “Import” folder. You can then import the program into the controller with this USB flash drive.



Note

Before exporting, delete the “Import” folder on the USB flash drive so as not to mix old and new programs.

If a program file was exported to a hard drive and is now to be exported to the controller via a USB flash drive, remember to copy the file into an “Import” folder on the USB flash drive.

8 Importing the Program to the Controller

When you have exported the program to the USB flash drive using the [Export to USB] function, insert it into the USB interface of the controller.

You can import the program into the controller only if you are logged on as “Admin” (refer to separate controller instructions). Activate the function to import from a USB flash drive via the controller menu “Settings > Import/Export > Import Program”. When the import is complete, a message is shown on the controller display. If the program was not imported successfully, check the controller type and maximum furnace temperature of the temperature curve in NTEdit.



Note

If a program location is already occupied in the controller, it is overwritten by the imported program.

9 Troubleshooting

The product has been thoroughly tested by Nabertherm GmbH. However, if any faults occur, we recommend that you first check the points listed below:

Product	Type of Malfunction	Possible Causes	Rectify Malfunction
NTEdit	Import to controller unsuccessful	Incorrect entries	Check the controller type and maximum furnace temperature of the heating program in NTEdit.
	Controller does not recognize the USB flash drive	USB flash drive too large, wrongly formatted or not compatible	Use USB flash drives < 16 GB. Format them with Fat32. Use a different USB flash drive.

10 Nabertherm Service



The Nabertherm Service team is available at all times for furnace maintenance and repair. If you have any questions, problems, or requirements, contact Nabertherm GmbH. By mail, phone, or the Internet.



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When you contact us, please have the type plate details of the furnace or controller at hand.