



# User manual

## T8/T8-2 Control unit

### Design repetition



02444V10 [GB] - 2018

Subject to change!  
Änderungen vorbehalten!

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Printed in Germany

[ GB ] 02444V10

## T8-Design repetition

### Fundamental Informations

Download Software-Updates:

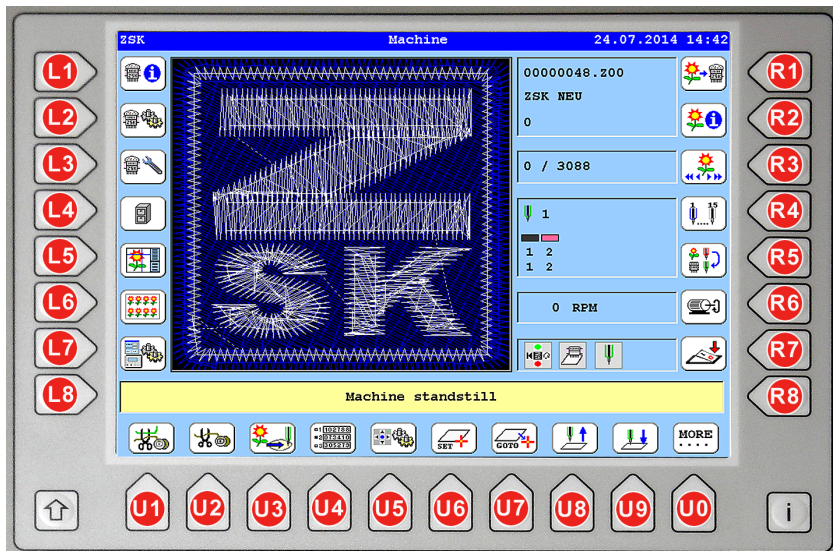
<https://www.zsk.de/t8-software-en.html>

YouTube Video, Install Software Update:

<https://www.youtube.com/watch?v=JNCRShq8pKk>

#### NOTICE

All discribed functions of the control unit T8-/T8-2 will be startedat the Base Screen (BS).



The keys used in the function descriptions are shown in the above T8-/T8-2-figure.

### General

The design repetition function enables you to use a design table, which can be edited as you wish, to embroider one or several different designs repeatedly at freely defined intervals.

Designtables can be created automatically or manually. Existing pattern tables can be edited later.

The embroidered image corresponding to the design table can be examined by way of a graphic depiction on the screen. The table itself can be saved in the memory and thus retained for re-use or editing.

The table is created on the basis of designs contained in the memory. The designs must not be open in the machine or editor when the table is being created.

The designs being used are saved together with the repetition table (combination of data), so that the original designs can be deleted without destroying the table.

Design tables can be copied with the design management and written to diskettes/USB sticks. As data carrier floppy disks / USB sticks can be used with stitch data format as well as transport code format. The stitch data format contains only the created overall design. The transport code additionally contains the table data. A change of the table is thus possible after loading into another machine.

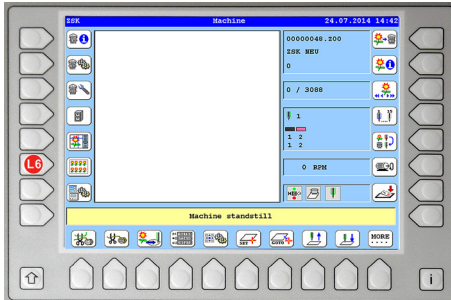
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#### NOTICE

**You cannot edit the design size within the design table. If you wish to change the size, therefore, set the desired values under Modify in the 00461420 Editor menu before starting to compile a design table.**

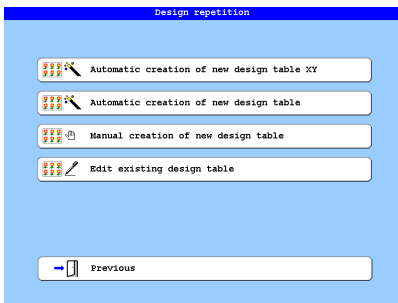
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## Starting design repetition



- Pres **[L6] Design repetition** in the basic screen of the T8 control unit.

## Selection dialog Design repetition



### **[L2/R2] Automatic creation of new design table XY -**

Opens the dialog for automatically creating a design table that corresponds to a guideline created previously in the editor.

### **[L3/R3] Automatic creation of new design table -**

Opens the dialog for automatically creating a simple design table.

### **[L4/R4] Manual creatio of new design table -**

Opens the dialog for the manual creation of a design table.

### **[L4/R4] Edit existing design table -**

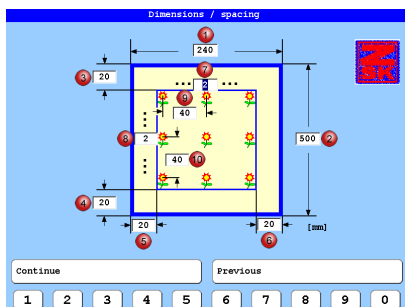
Opens the dialog for manually editing an existing design table.

## Preparation of automatic design tables

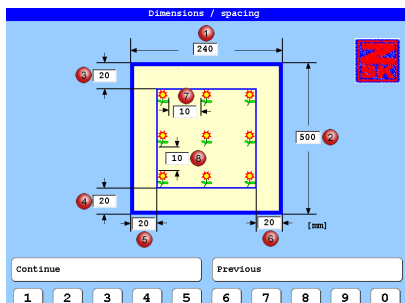
### Dimensions / Spacing

#### NOTICE

The following diagram shows the position of the embroidery field from the perspective of the operator standing in front of the machine.



- (1) Embroidery field width max.
- (2) Embroidery field depth max.
- (3) Design distance to top embroidery field border
- (4) Design distance to bottom embroidery field border
- (5) Design distance to left embroidery field border
- (6) Design distance to right embroidery field border
- (7) Number of design columns
- (8) Number of design rows
- (9) Distance of **design starting points** (Y-distance)
- (10) Distance of **design starting points** (X-distance)



- (1) Embroidery field width max.
- (2) Embroidery field depth max.
- (3) Design distance to top embroidery field border
- (4) Design distance to bottom embroidery field border
- (5) Design distance to left embroidery field border
- (6) Design distance to right embroidery field border
- (7) **Design distance** (Y-distance)
- (8) **Design distance** (X-distance)

#### NOTICE

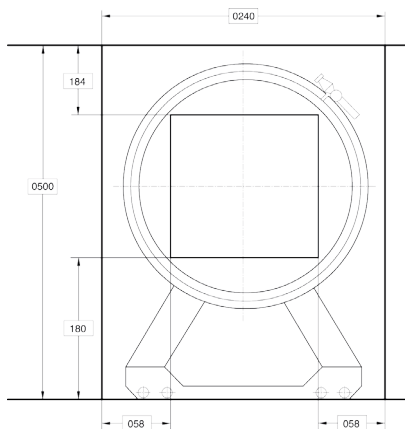
The relevant embroidery field dimensions are stated in the technical data; values are to be entered in mm. Make sure that you enter the embroidery field dimensions that apply to the machine correctly! Incorrect entries can give rise to faults in the form of overlapping embroidery fields when the work is being executed.

The bold outline on the screen symbolizes the **machine's maximum embroidery field**. This is where the embroidery field dimensions applicable to the machine are entered. They are valid irrespective of the embroidery application and therefore need to be entered only once. The most recently entered data are retained when the machine is switched off.

The input fields for the embroidery field dimensions can be reached with the key **[TAB]** or by placing the cursor with the mouse and pressing the left mouse button.

The lighter outline in the center of the input mask symbolizes the machine's actual embroidery field that is available for the work. It is restricted by the use of embroidery frames or other auxiliary devices.

## Actually available embroidery field



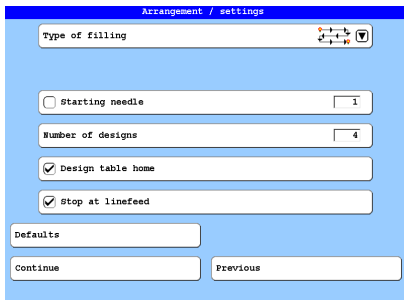
Determine the position and size of the actually available embroidery field.

This procedure has to be carried out for each individual embroidery application.

Enter the determined values (1-6) in the input mask of the design repetition of the T8 control unit.

The illustrated example shows an embroidery field that is restricted by a round frame.

## Arrangement / Settings



**[L1/R1] *Type of filling*** - Opens a selection dialog in which a fill type for the design table is defined.

**[L3/R3] *Starting needle*** - Input field for defining the start needle with which the embroidery design is to be started. This function is to be used in particular for designs without needle change at the design start. The function can be activated/deactivated.

**[L4/R4] *Number designs*** - Input field for manually specifying a desired design number.

**[L5/R5] *Design table Home*** - If the home function is selected, the pantograph automatically returns to the starting point of the design repetition table once it has executed the table, so that the positioning operation does not have to be repeated before the same table is embroidered again. It makes no difference whether or not the design used in the table is optimized. Activating the machine's home function does not alter the design contained in the memory.

**[L6/R6] *Stop at linefeed*** - When the function is activated, the machine stops after each stitched line of the design table, so that the following design line can be prepared for embroidering (applying application, etc.).

**[L7] *Defaults*** - Resets all changed values to the default.

**[L8] *Continue*** - Displays the dialog *Depiction of calculated design table*.

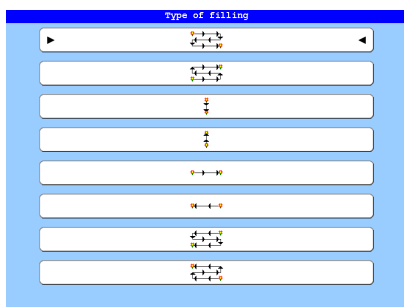
**[R8] *Previous*** - Returns to the dialog *Dimensions/Spacing*.



## Type of filling

### NOTICE

The sequence in which the designs are arranged in the design repetition table is indicated by the symbolic representations. This is the sequence in which the designs are applied to the actual embroidery field during both the calculation process and when the work is subsequently performed.



[L1/R1] *Type of filling* ∇

[L2/R2] *Type of filling* from left right ⇨ and from bottom to top ⇑.

[L3/R3] *Type of filling* from top to bottom ⇩.

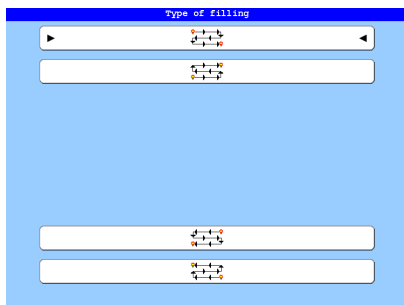
[L4/R4] *Type of filling* from bottom to top ⇑.

[L5/R5] *Type of filling* from left to right ⇨.

[L6/R6] *Type of filling* from right to left ⇐.

[L7/R7] *Type of filling* from right to left ⇐ and from top to bottom ⇩.

[L8/R8] *Type of filling* from right to left ⇐ and from bottom to top ⇑.



[L1/R1] *Type of filling* from left to right ⇨ and from top to bottom ⇩.

[L2/R2] *Type of filling* from left to right ⇨ and from bottom to top ⇑.

[L7/R7] *Type of filling* from right to left ⇐ and from top to bottom ⇩.

[L8/R8] *Type of filling* from right to left ⇐ and from bottom to top ⇑.

## Automatic creation of new design table XY

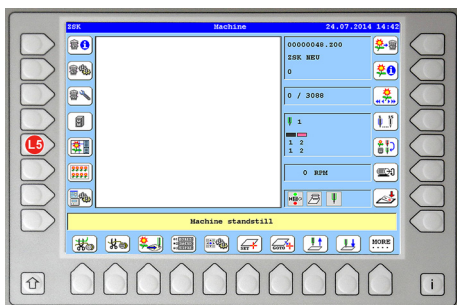
In this creation form of a design repetition table, first a guideline (positioning template) is generated for a design table, then a design table with the guideline and then the final design table. This feature is particularly useful for filling an embroidery area with a repeating design that should be stitched with precisely positioned appliqués, inserts, etc.

### NOTICE

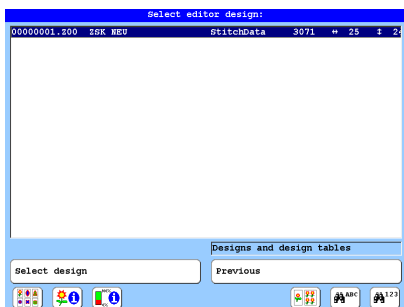
**The designs of the design tables for the positioning and for the final embroidery must have the same design starting point!**

## Preparation of the guideline (Example)

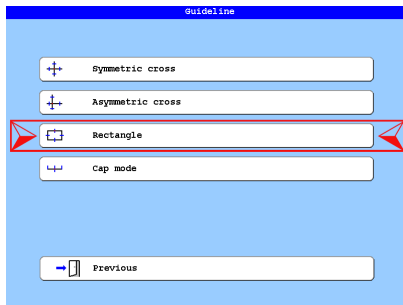
Use the *Editor* and the function *Guideline* to create a positioning aid/template for your designs to be embroidered.



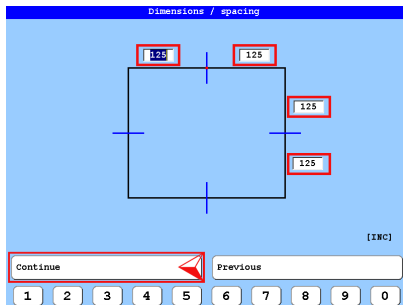
- Press button **[L5] Editor**.



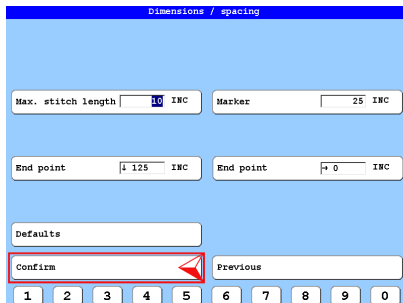
- Press the key **[ESC]** on the T8 control unit.



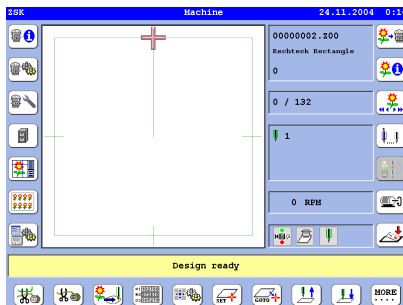
- Press the button **[L4] Rectangle**.



- Adjust the distance values (1 INC = 1/10 mm) according to your design to be embroidered later.
- Press the button **[L8] Continue**.



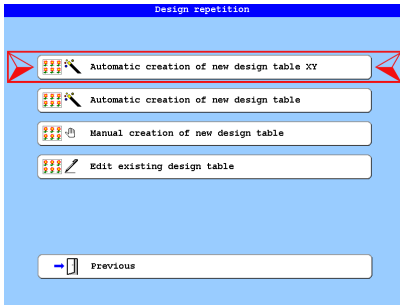
- Adjust the distance values (INC) according to your design to be embroidered later.
  - Press the button **[L8] Confirm**.
- ⇒ The template is automatically saved in the memory.



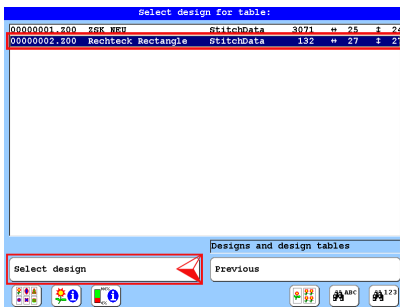
The figure shows the positioning template as a loaded design in the T8 control unit.

## Creating a new design table XY with the guideline (Example)

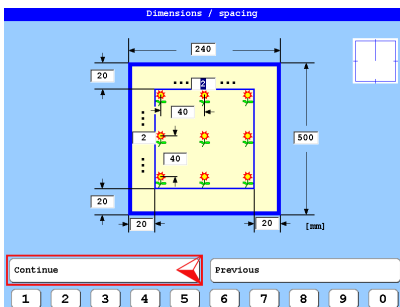
Use the positioning template and the function *Automatic creation of new design table XY* to create a design table based on your future design table for the design to be embroidered. Save the design table.



- Press the button **[L6] Design repetition** in the T8 basic screen.
- Press the button **[L2] Automatic creation of new design table XY**.



- Select the previously created positioning template in the table of contents of the memory (here: **00000002.Z00**).
- Press the button **[L8] Select design**.



- Adjust the distance values (mm) according to your design to be embroidered later.
- Press the button **[L8] Continue**.

- Adjust the filling type to your needs.
- Press the button **[L4/R4] Number of designs** and enter the number of designs (up to 9999) to be embroidered.
- Press the button **[L8] Continue**.

- Press the button **[R8] Previous** if the design table shown does not meet your requirements or if errors are displayed. Go back and change the settings until the design table is displayed accordingly.
- Press the button **[R8] Save**.

- Accept the specifications or adapt them to your requirements.

## NOTICE

**Be sure** to give a design name to identify the design table later in the design management or when design loading.

- Press the button **[L6] New name:**.

- Enter a distinctive name for the design table.
- To accept the name, press the key **[OK]** on the T8 control panel.

Save design table in memory


New design table number:


New number: 00000003.W00

Free design number

Free design version

New name: XY Position Vorlage

Capacity: 

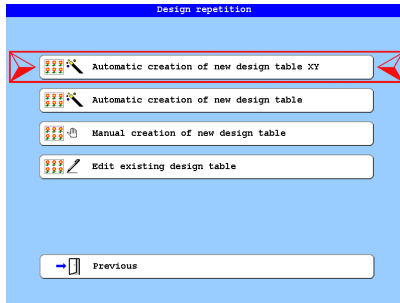
Confirm  Previous

- Press the button **[L8] Confirm**.

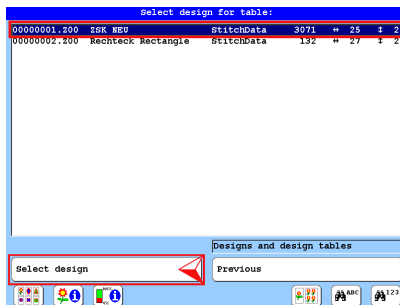
⇒ The design table is generated and stored in the memory.

## Creating a new design table XY with the embroidering design (Example)

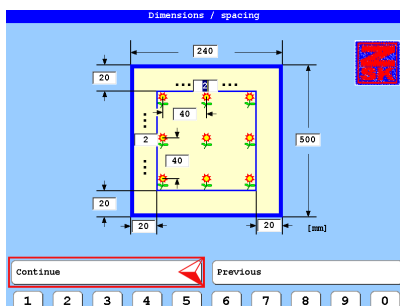
Create a design table with the design to be embroidered and the function *Automatic creation of new design table XY*. Use the same setting values for creating the design table as for the previously created design table with the template. Save the design table.



- Press the button **[L6] Design repetition** in the T8 basic screen.
- Press the button **[L2] Automatic creation of new design table XY**.



- Select the design in the table of contents of the memory (here: **00000001.Z00 ZSK NEU**).
- Press the button **[L8] Select design**.



- Enter the same distance values (mm) that you used previously for the created design table of the positioning template.
- Press the button **[L8] Confirm**.

- Specify the **Type of filling** that you used for the previously created design table of the positioning template.
- Press the button **[L4/R4] Number of designs** and enter the number of designs (up to 9999) to be embroidered, which you used for the previously created design table of the positioning template.
- Press the button **[L8] Continue**.

- Press the button **[R8] Previous** if the design table shown does not meet your requirements or if errors are displayed. Go back and change the settings until the design table is displayed accordingly.
- Press the button **[R8] Save**.

- Accept the specifications or adapt them to your requirements.

## NOTICE

**Be sure** to give a design name to identify the design table later in the design management or when design loading.

- Press the button **[L6] New name:**.
- Enter a distinctive name for the design table.
- To accept the name, press the key **[OK]** on the T8 control panel.



Save design table in memory


New design table number:


New number: 00000004.wj00

Free design number

Free design version

New name: XY ZSK 4x

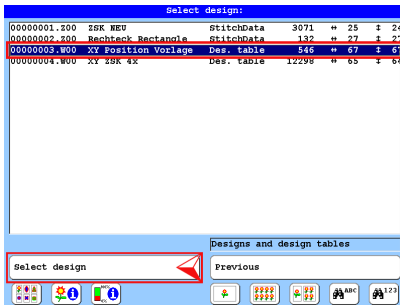
Capacity: 

Confirm  Previous

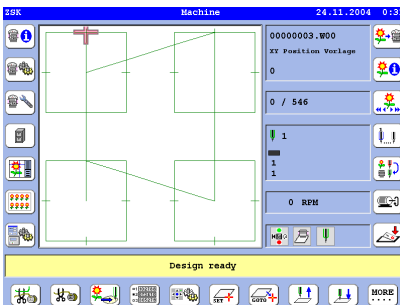
- Press the button **[L8] Confirm**.

⇒ The design table is generated and stored in the memory.

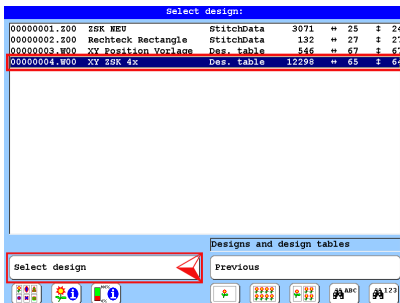
## Embroidery process (Example)



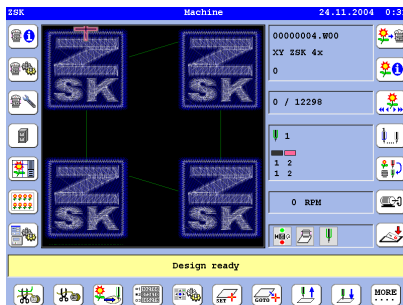
- Load the positioning template.
- Starting from the T8 basic screen, press **[R1] Select machine design >>> [U2] Select design from memory.**
- Close a possibly loaded pattern beforehand with the button **[L8] Select design.**
- Select the positioning template (here: **00000003.W00**)
- Press the button **[L8] Select design.**



- The illustration shows the positioning template as a loaded design in the T8 control unit.
- Embroider the positioning template.
- Place the applications, inserts etc. on the positions specified by the positioning template.



- Load the corresponding design table.
- Starting from the T8 basic screen, press **[R1] Select machine design >>> [U2] Select design from memory.**
- Close a possibly loaded pattern beforehand with the button **[L8] Select design.**
- Select the design tabale (here: **00000004.W00**).



- Press the button **[L8] Select design**.

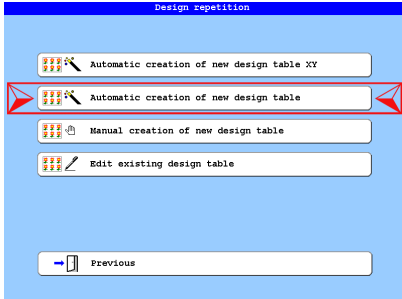
The figure shows the final design table as a loaded design in the T8 control unit.

- Embroider the design table.

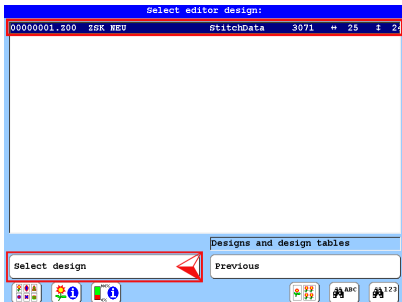
## Automatic creation of new design table

This is the simplest form of creating a design repeat table. In a schematic representation of the design repetition, the embroidery field dimensions and the always equal distances are entered, in which a design in lines and/or columns is to be repeated. The function is particularly suitable for filling in an embroidery area with a repeating design (badge embroidery/logo embroidery).

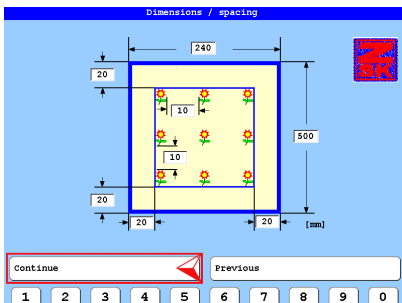
### Creation of a new design table automatically (Beispiel)



- Press the button **[L6] Design repetition** in the T8 basic screen.
- Press the button **[L3/R3] Automatic creation of new design table**.



- Select the design in the table of contents of the memory (here: **00000001.Z00 ZSK NEU**).
- Press the button **[L8] Select design**.



- Enter the distance values (mm) you need for the design table to be created.
- Press the button **[L8] Continue**.

- Press the button **[L1/R1] Type filling**.

- Use the buttons **[L1/R2] - [L8/R8]** to select the filling type that meets your requirements.

- If necessary, enter the start needle and activate the function with the button **[L3/R3]**.
- Press the button **[L4/R4] Number of designs** and enter the number of designs (up to 9999) to be embroidered.
- Press the button **[L8] Continue**.

- Press the button **[R8] Previous** if the design table shown does not meet your requirements or if errors are displayed. Go back and change the settings until the design table is displayed accordingly.
- Press the button **[L8] Save**.



Save design table in memory

New design table number:

New number: 00000005.W00

Free design number

Free design version

New name:

Capacity:

Confirm Previous

- Accept the specifications or adapt them to your requirements.

**NOTICE**

**Be sure** to give a design name to identify the design table later in the design management or when design loading.

Enter new design name:

a b c d e f g h i j k l m n o p q r s t u v w x y z

MTA ZSK 42x

Tab Switching to other characters  
Shift Switching to capital letters  
Del Delete character left of cursor

- Press the button **[L6]** *New name:*.
- Enter a distinctive name for the design table.
- To accept the name, press the key **[OK]** on the T8 control panel.

Save design table in memory

New design table number:

New number: 00000005.W00

Free design number

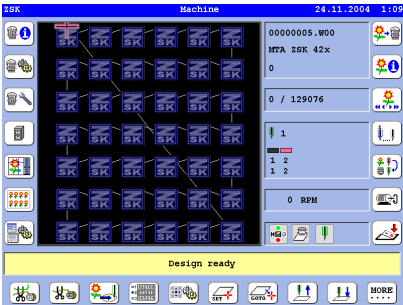
Free design version

New name: MTA ZSK 42x

Capacity:

Confirm Previous

- Press the button **[L8]** *Confirm*.
- ⇒ The design table is generated and stored in the memory.



The figure shows the final design table as a loaded design in the T8 control unit.

- Embroider the design table.

## Manual creation of new design table

Create a design table with the design to be embroidered and the function *Manual creation of new design table*. Save the design table. Start the embroidery process.

### Table navigation

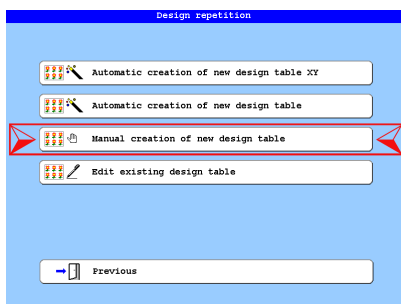
Use the key **[TAB]** in the T8 panel to move to the individual input points in the rows of the design table and use the cursor keys **[▲]**, **[▼]** to move through the design table rows. Enter the required table values.

For the individual input points corresponding buttons **[U1]** - **[U2]** are displayed in the lower screen area.

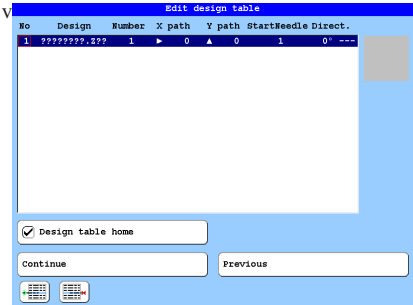
To enter numerical values, the buttons **[U1]** - **[U0]** with corresponding values are displayed.

	<b>[U1]</b> Copy row		<b>[U2]</b> Delete row
	<b>[U1]</b> Use design from stock		<b>[U2]</b> Use new design from stock
	<b>[U1]</b> To left		<b>[U2]</b> To right
	<b>[U1]</b> To top		<b>[U2]</b> To bottom
	<b>[U1]</b> Mirror design		<b>[U2]</b> Do not mirror design

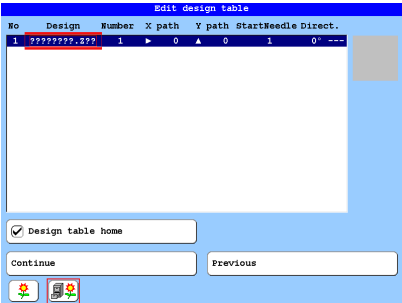
### Creation of a new design table manually (Beispiel)



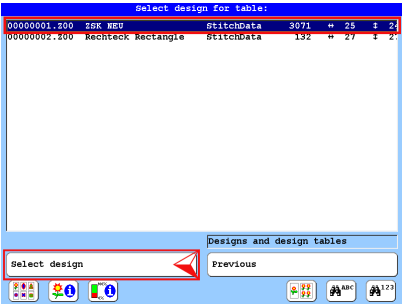
- Press the button **[L6]** *Design repetition* in the T8 basic screen.
- Press the button **[L4/R4]** *Manual creation of new design table*.



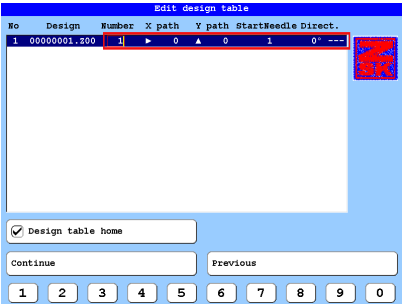
- Press the key **[TAB]** in the T8 control panel to enter the column *Design*.



- Press the button **[U2]** *Use new design from stock*, to open the dialog *Select design from table*.



- Select the design in the table of contents of the memory (here: *00000001.Z00 ZSK NEU*).
- Press the button **[L8]** *Select design*.



- Use the key **[TAB]** to move through each entry point of the first design table row and enter the required table values.

For the individual input points corresponding buttons **[U1]-[U2]** are displayed for input.

To enter numerical values, the buttons **[U1]-[U0]** with corresponding values are displayed.



## NOTICE

The input X and Y values are output in the design table generation before the stitch data of the pattern.

No	Design	Number	X path	Y path	StartNeedle	Direct.
1	00000001.200	1	0	0	2	0" ---
2	00000001.200	3	500	0	2	0" ---
3	00000001.200	1	0	494	2	0" ---
4	00000001.200	3	500	0	2	0" ---
5	00000001.200	1	0	494	2	0" ---
6	00000001.200	3	500	0	2	0" ---

- Use the button **[U1] Copy row** to create further lines for your table and adapt them to your requirements with the key **[TAB]** and the buttons **[U1]-[U2]**.
- You can remove too many or incorrectly created lines with the button **[U2] Delete row**.
- Press the button **[L8] Continue**, if you have created your pattern table.

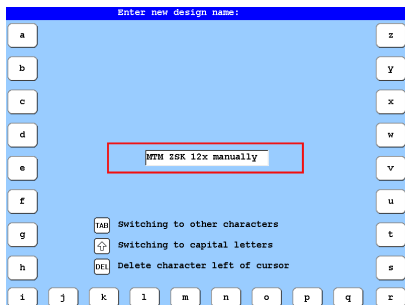
- Press the button **[R8] Previous** if the design table shown does not meet your requirements or if errors are displayed. Go back and change the settings until the design table is displayed accordingly.
- Press the button **[L8] Save**.

- Accept the specifications or adapt them to your requirements.

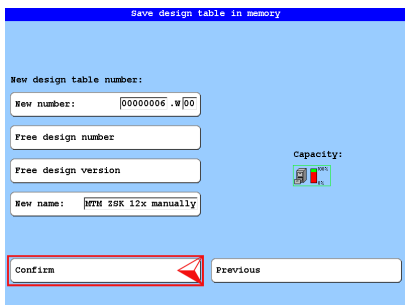
## NOTICE

**Be sure** to give a design name to identify the design table later in the design management or when design loading.

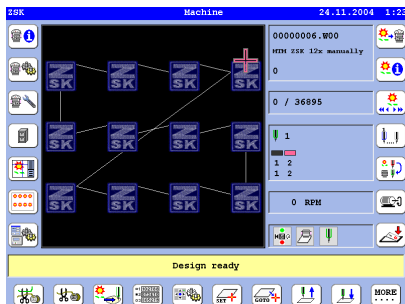
- Press the button **[L6] New name:**.



- Enter a distinctive name for the design table.
- To accept the name, press the key **[OK]** on the T8 control panel.



- Press the button **[L8] Confirm**.
- ⇒ The design table is generated and stored in the memory.



The figure shows the final design table as a loaded design in the T8 control unit.

- Embroider the design table.

## Edit existing design table

With the function *Edit existing design table* you revise an existing pattern table and adapt it to your new specifications. Start the embroidery process.

### Table navigation

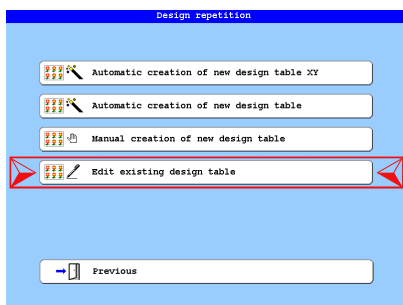
Use the key **[TAB]** in the T8 panel to move to the individual input points in the rows of the design table and use the cursor keys **[▲]**, **[▼]** to move through the design table rows. Enter the required table values.

For the individual input points corresponding buttons **[U1]** - **[U2]** are displayed in the lower screen area.

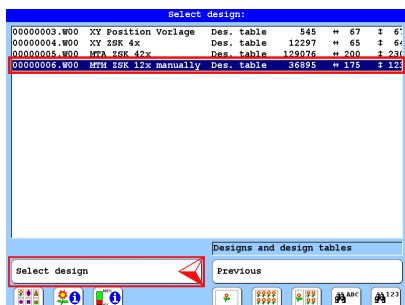
To enter numerical values, the buttons **[U1]** - **[U0]** with corresponding values are displayed.

	<b>[U1]</b> Copy row		<b>[U2]</b> Delete row
	<b>[U1]</b> Use design from stock		<b>[U2]</b> Use new design from stock
	<b>[U1]</b> To left		<b>[U2]</b> To right
	<b>[U1]</b> To top		<b>[U2]</b> To bottom
	<b>[U1]</b> Mirror design		<b>[U2]</b> Do not mirror design

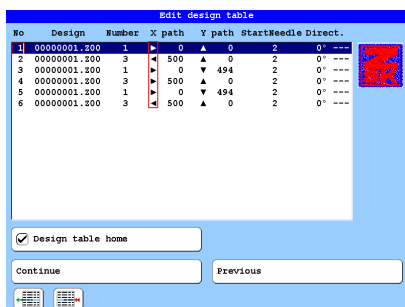
### Edit existing design table (Example)



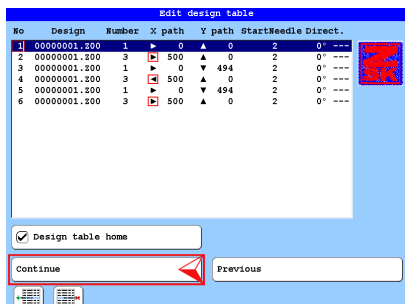
- Press the button **[L6]** *design repetition* in the T8 basic screen.
- Press the button **[L5/R5]** *Edit existing design table*.



- Select the design in the table of contents of the memory (here: **00000003.W00**)
- Press the button **[L8] Select design**.



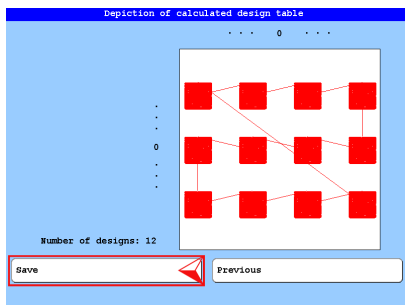
This is the pattern table created manually in the previous chapter. The table is embroidered from top right to bottom left. In our example, the pattern table is changed so that the embroidery direction of the table runs from top left to bottom right. For this purpose changes are made in the X-path column.



The direction symbols in the X-path column are rotated in rows 2, 4 and 6 with the buttons **[U1] To left** and **[U2] To right** in the opposite direction.

⇒ Thus, the embroidery sequence of the design table is realized from top left to bottom right.

- Press the button **[L8] Continue**.



- Press the button **[R8] Previous** if the design table shown does not meet your requirements or if errors are displayed. Go back and change the settings until the design table is displayed accordingly.
- Press the button **[L8] Save**.

- Accept the specifications or adapt them to your requirements.

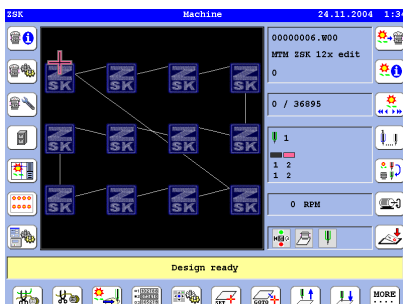
## NOTICE

**Be sure** to give a design name to identify the design table later in the design management or when design loading.

- Press the button **[L6]** *New name:*.

- Enter a distinctive name for the design table.
- To accept the name, press the key **[OK]** on the T8 control panel.

- Press the button **[L8]** *Confirm*.  
⇒ The design table is generated and stored in the memory.



The figure shows the final design table as a loaded design in the T8 control unit.

- Embroider the design table.







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Printed in Germany

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