EPCwin

THE HIGH-END SOFTWARE

ZSK Stickmaschinen GmbH

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Introduction

Welcome to the new EPCwin version 6.0.

Main focus regarding this update is the considerably improved design management. The new design directory constitutes the central starting point for all design activities, e. g. design export and import. An improved dialogue design and an extensive filter function bring about a much better overview of your designs.

In the following, a short list with the further major items in this update. You will find a more thorough description on the next pages.

- The organization of designs is made in design directories. These respond to alias names. Consequently, changing between the directories is possible simply by clicking on the alias name.
- The list view respectively pictogram view has been strongly expanded. It is easy to change between both forms of view, and from both views, the design activity can be started.
- The new filter function also finds designs spanning all directories. The filter criteria can be variably adjusted.
- All data belonging to one design are now saved in a file ending ZDF (ZSK-Design-Format); thus, the exchange of reference data between EPCwin users is made easier.
- We have strongly extended the meta data for a design, e. g. the new catchword function leads to a better description of the design. Hence, it is easier to rediscover.
- The undo-function must be mentioned as last major item in version 6.0. It is possible to take back the last actions any time and anywhere during the design creation.

In the following, there is a description of the individual items helping to comprehend the conversion step by step, and to optimally adjust your system for further use.

Concerning hardware requirements please note: an up-to-date Windows PC is sufficient for using the ECPwin. (e.g. Processor Intel i5, 8 GB RAM, simple graphics board, hard disk, or SSD). However, we recommend a monitor with 24" and FullHD-resolution, i. e. 1920 * 1080 (16:9). A resolution of 1920 * 1200 (16 : 10) would be better. EPCwin 6.x is not designed for ,,4k"- monitors. In order to be able to work with these monitors, the Windows scaling must be increased as a rule, which in turn entails that the assistant domain of EPCwin is not presented correctly. Enjoy Trying!

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First start of the new version 6.0

Before updating to the version 6.x, we strongly recommend to carry out an update of the design data. Furthermore, please execute a parameter backup. Both backups should be saved on an external hard disk (e. g.) for the case of having to revert to these data at a later time. The Windows directory of the backup should be given a meaningful name. e. g. EPCwinBackupPreVersion60.

Assistant for converting design directories					
This assistant helps you to transfer all your directories to the new format step by step. Select "transfer directory" to convert it to the new format. If you don't need this directory, click on "Skip directory". You can determine the Alias name or take the suggestion. The function "Organize directories" allowed you to setup Alias name and sequence in the future. Go to Design management -> Organize directories -> Create new directory.					
Directory name and path Alias: DesignData Path: C\EPCBeschreibung60\EPOwinD	ata\DesignData				
List of design directories Directories	Transfer directory Skip directory Preview directory				
	Exit				

When you start the new version for the first time, the back adjustments are automatically taken over. After that, an assistant will be started which helps you with taking over your earlier designs.

One by one, all used design directories up to now, are offered for taking over. The suggested alias name is the name of the Windows directory. However, you can assign a new name. With button *Transfer directory*, the shown directory will be converted into the new structure. You can skip directories which you do not need. With preview you can be shown the directory's designs.

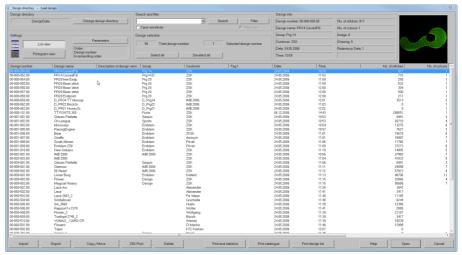
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After the conversion is finished, you will be asked to enter your password for version 6.x.

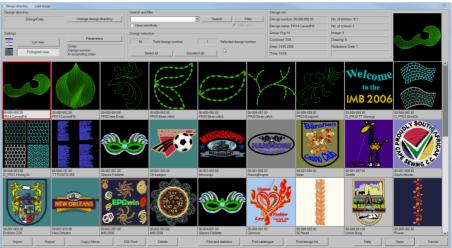
New Design Management

On the two following pictures you see both presentation modes of the design management:

List view:



Pictogram view:



Now, you find descriptions of the individual operating groups:

Change Design Directory

Selection	t directory										X
Selec	at organized design c	lirect	ory 110								
1	DesignData	2	Hausmesse-2012	3		4			5		1
6		7		8		9		j	10		
	Short cut				Brow	/se:				11 20	
C:\EP	CBeschreibung60\El	POwi	inData\DesignData								
Desig	gn directory for free a	cces	s								
	Open									2	
	Path:					_					1
	,										
Parar	nters for change of d	irecto	ory								
Ch 🗆	ange block directory	/too									
Lock	design directory										
	Access protection	of de	esigns and directories	(only	/ multi user systems)						
I	Mark locked desig		directory [12-345-678.0	10* as							
		ock a	Il directories								
	Organiz	ed di	esign directories			н	elp		ЭК	Cancel	

In the upper part of the dialogue, you can chose organized design directories directly. This is done by clicking of the requested directory, or by entering of the index number under Short Cut. Maximally, 50 directories can be organized. *Browse* changes the directories in 10 steps.

In case a design directory is not organized, you can enter a path for access. *Open* loads this directory.

The following parameters are adjustable:

- Change block directory too: if there is also a block directory in the basis path of the new design directory, this block directory will be activated.
- Lock design directory: in the case of more than one user having access to the design directories, access to a directory or design are only allowed, if no other user has opened the directory respectively design.
- Mark locked designs: designs which have been opened by another user, are marked with an asterisk. Please note: this function leads to longer loading times when setting up more substantial directories.

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Organize Design Directories

Directory sequence Design directories 1: DesignData 2: Hausmesse-2012	Create new Windows folder Create new design directory	
3: 4: 5: 6:	Import existing directory Change alias name	
7: 8: 9:	Remove directory	
10: 11: 12: 13:	Setup / change directory group	Help
14: 15:		OK
Directory name and path		Cancel
Alias: DesignData		

In this dialogue, you can process the list oft he organized design directories

With a click on the arrow icon, you can move the marked directory in the list up respectively down.

- *Create new Windows folder*: This function allows you to create a new folder for your computer or file server.
- *Create new directory*: With this function, you create a new directory. It will be located at the end of the list. You can change the position in the list of the new directory with the arrow icon.
- *Import existing directory*: An already existing directory will be integrated into the list. Design directories of EPCwin version 5.x and older will be converted to the new format.
- Change alias name: Please enter the new name and confirm with OK.
- *Remove directory*: the marked directory will be removed from the list. Please note: only the record in the list is deleted. The designs remain on the storage medium.
- Setup / change directory group: With this function you can summarize design directories into a group. Within this group, a design number can only exist once. Up to now, the control was limited to the current directory. In order to make up a group, please click on the requested directories. Clicking once more will remove the directory from the group again.

The directories of a group obtain the addition "group" in the list.

Parameters

Column filter			Column sequence
All on All off			Columns
Design number Design name Description of design v Group Customer Com. No. Tag 1 Tag 2 Tag 3 Tag 4 Tag 5 Tag 6	 Tag 8 Tag 9 ersion Tag 10 ✓ Date ✓ Time ✓ No. of stitches ✓ Number of colours Max. repeat Design size X Design size Y ✓ Image ✓ Drawing ✓ Paference Data 	 Stitch Data Multi-Head Head selection Schiffli Design type Remarks Base material 	Design number Design neme Description of design vers Group Customer Tag 1 Date Time No. of stitches No. of colours Image Drawing Reference Data
Tag 7 Parameters Open design with single			Help
Switch off ToolTip in pic	e click in pictogram view togram view		
🔽 Hide leadings null in de	sign number		OK Cancel

With the buttons list view and pictogram view, you switch between both modes of presentation. You can influence the view under Parameters.

- *Column filter*: Here, you can determine which columns are shown.
- *Column sequence*: You can change the sequence of columns. For this, please click on the column designator and move the sequence with the arrow icons.
- *Open design with single click in pictogram view*: Normally, a design in version 6.0 will be opened by a double click on the corresponding pictogram. Upt to version 5.x, only a single click was necessary to do this whereas a double click was necessary in the list view. In order to recover compatibility with the old version, it is possible to reactivate this feature with this button.
- *Switch off ToolTip in pictogram view*: With slow network drives, the ToolTip function has a restrictive effect on the speed of display.
- *Hide leading null in design number*: Basically the EPCwin shows you the design numbers always with 10 digits, even your number is e.g. 123 only. Now you can switch off all "0" in front.

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Search

Please enter the search keyword into the corresponding search field. The search procedure will be started with Search. The first found hit will be marked. Clicking again on Search will find the next hit. When the end of the list is come at, the search will start all over again.

The search is carried out in all columns, however, only in the current directory.

In case *observe upper and lower case* is hook marked, only the exact wording will be found.



💽 Filter d	design									l	X
Filterin	ng directories										
Cu		DesignData Hausmesse-2012				4	Sep	otemb	er 20	15 🗖	1
A	All design directories					<u>Мо</u> 31	1 🕻	Mi Do	Fr 4	-	6
	Select directories					7 14 21		9 10 16 17 23 24	11 18 25	19 2	3 20 27
						21 28 5		23 24 30 1 7 8	25 2 9		4
Filter	definition										
	Column	Operation			Value			Valu	е		
	Design number	Between	•	10		300					
	àroup	Contains	•	Animals							
	Date	• Between	•	1.8.2015				_			
		•	v								
🗆 Ca	ase sensitivity				Filter confunct	ion	۰	AND	0	OR	
					[ОК			Cance	el
								2			

Contrary to the search function, you can search in the filter function in a number of directories. It is possible to combine several search criteria. You can set up an "OR"-operation (one or more criteria must apply), or and "UND" operation (all criteria mus apply). In addition, the exact wording can be enforced by *observe upper and lower case*. Up to 4 single filters can be defined. They will activated by setting hooks. The settings remain active until the next change of the single filter.

Filtering directories: Please chose the directories in which you want to search.

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Filter definition: A name of column can be chosen as filter criterium. It is possible to define an operator which needs in turn entries of value according to the chosen column.

The found designs are shown in the design list. Moreover, the alias name of the directory will be added. You can start all actions from this special filter directory. . When the filter is active, this will be shown by a hook under the button *Filter*. With this hook, you can temporarily switch on/off the filter again.

Sorting of Designs

It is possible to reorganize the sorting of designs by clicking on the head of column. Clicking again reverses the sorting direction. The currently set sorting parameters are shown in the field *sorting*.

Width of column

The width of the column can be changed by pulling at the column divide. A double click adjusts the width to the optimal value, referring to the longest entry in the column.

The adjusted width of column will be saved and reconstructed when the dialogue is opened again.

Design Selection

The selection of a design is done by clicking on the line respectively the pictogram. In the list view, the line is highlighted in colour. In the pictogram view, a red frame is drawn around the design. The Info button is impressed. The design is opened by a double click on it.

If you want to select several designs, please press [Ctrl]respectively [Shift] simultaneously to the left mouse button. In so doing, the Windows notation is applied. [Ctrl] extends the selection by the clicked design. [Shift] extends the selection by the section between the lastly selected and the current design.

In the info tray "design selection" atop of the list with designs you will find information regarding the complete number of designs and the number of selected design.

Select all: all designs will be marked.

Deselect all: all existing marks will be removed.

Design info

The most important data of the design selected lastly are shown at the top on the right. If you move the mouse in pictogram view, a field (ToolTip) with the most important data will appear. You can stop the ToolTip function under *Parameters*.

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Design Actions

Underneath the design list respectively pictogram view, you will find the action buttons.

[m]	port

Stitch data Multi-Head		Stitch data Schiffli		Image and vector data (*.dxf)		
STC • ZSKTC	(*.Z00)	C ZSK NC	(*.NCE)	Pictures (*.BMP,*. JPG,*.GIF)		
🚮 O ZSK old	(*.DSZ)	C Saurer SLC	(*.SAS)	🕖 O Vector data (*.dxf, *.ai, *.wmf, *.emf)		
🗰 O Tajima	(*.DST)	C Lässer	(*.MST)	O Vector data (*.cmx)		
Garudan O Barudan	(*.DSB)	C Saurer SHC	(*.PAT)	EPCwin Reference data		
Melco	(*.EXP)	C Hiraoka	(*.DAT)	win Reference Dat (*.zdf, *.zip)		
Melco (*EXP) C Hiraoka (*DAT) Reference Dat (*zd(*zip) Source path DAZSK-Maschinen Delete entry Help Import Exit						

First, please choose the EPCwin design directory into which you want to import the file. After that, click on *Import*.

Please select data mode and adjust the source path. The source path which has been adjusted at last will be shown.

You get into the data selection with Import. Please select the file(s) you intend to import.

Please note with regard to the import of stitch- or EPCwin reference data: If the design number is already existent in the destined directory, the conflict manager will be called up. Here, you can specify, whether the existing design shall be written over, or a new design number shall be created, or a further version for the already existing number shall be added.

Among the previously known graphic formats also PNG and PDF files can now be imported as a template for digitizing.

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PDF Converter parameter						
Parameters						
Page number						
300 Resolution (dpi)						
Velue serve Pl. 503						
Value range [1, 50]						
Help OK	Cancel					

For PDF files, you can determine the following dialog, the page number and resolution too.

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EPCwin Version 6.0

time stamp **F**

-

Exit

Export

Stitch data Multi-Head		Stitch data Schiffli		Image and vector da	ata (*.dxf) —
📻 о zsk тс	(* .Z00)	C ZSKINC	(*.NCE)	🔀 © Pictures	(*.BMF
📻 🔿 ZSK old	(*.DSZ)	C Saurer SLC	(*.SAS)	🕖 🔿 Vector dat	a (*.DXF
🗰 🔿 Tajima	(*.DST)	C Lässer	(*.MST)	EPCwin Reference d	lata
Garudan C Barudan	(*.DSB)	C Saurer SHC	(*.PAT)	win C Reference	e Dat (*.zdf)
Melco	(*.EXP)	C Hiraoka	(*.DAT)	win C Reference	e data 5.x
Parameter for export-					
🐥 🗖 As an e-ma	· 🤮	🙀 🗖 compress writir			name
🗖 Determine f	ile name during export				
	C - Directory + Pictogra				

Please mark the design to be exported and click on *Export*. Choose data format and destination path. The following parameters can be set depending on the data format:

3

Help

- As an e'mail: the destined file is attached to a new mail.
- *Compress writing*: A zip archive with the destined files is created. The name of the archive can be determined, optionally with timestamp.
- *Determine file name during export*: You can enter the file name, otherwise, the standard name for this kind of data format will be taken..
- *Generate TC-Directory* + *Pictogram*: with TC, a directory with pictograms will be generated on the data carrier, so that it is possible e. g. to show the designs on the machine.

Reference data archives you create with Version 6 are not readable anymore in Version 5!

To do this, use the format reference data to 5.x Note that the reference data are processed accordingly! For example, the design name will than have only 16 characters. Other design settings (colour collections, design history, etc.) are also removed.

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Copy / Move

Copy / Move					
Destination directory-					
Hausmesse	-2012	Change	e design	directory	
C:\EPCBeschreibung6	D\EPCwinData\Hat	usmesse-2012			
Help	Move	Сору	2	Cancel	

The marked designs can be copied respectively moved into another ECPwin design directory. The destination directory must be organized for this action.

Design number already existing in de	stination directory		X
Design directory: DesignData			Design directory: Hausmesse-2012
	Design number 00	-000-050.00	Design number 00-000-050.00
	Date 24	.05.2006 10:59	Date 02.09.2015 15:24
	No. of stitches 91	7	→ No. of stitches 916
	Show of	lesign head	Show design head
Design name PR14 CurvedFill			Design name PR14 CurvedFill
Version			Version
Help	Overwrite	Overwrite all	Cancel
	Skip	Skip all	
	Overwrite	all old designs	
	New de	sign version	
	New de	sign number	

In case the design number already exists in the destination directory, the conflict manager is called up.

Overwrite: The existing design is written over. A click on *Overwrite all* ensures that designs are written over when further conflicts arise. This button will be reset during a new copy procedure.

Skip: The design will not be copied/moved.

Skip all: proceedings are analogous to those of function Overwrite.

Overwrite all old designs: In case the design in the destination directory is older than the one to be copied, it will be overwritten. When the design is older, it will also be overwritten during further conflicts.

ZSK-Pool	

<u></u>					
ZSK machine selection					X
Select machine 110					1
Maschine 1 Maschine 2					
	Browse:			11 20	
Machine path-					
D:\ZSK-Maschinen\Maschine1					
Parameters	Functions				
←¥→ Yes Clean design	Write	Select design and w	rite TC		
2 1/10 Min stitch length					
Yes Rotate	Setup	Setup machine: -Setup alas name	and nath		
No 90		- setup default para			
Yes 180	Directory	Open machine direc	tory		
No 270		- Delete design - Copy design to Ef	POwin		
Don't display this dialogue if you start function	n from directory		lelp	Close	

The encompasses the same function as in EPCwin 5.x. You can directly import into the adjusted design directories of your machine. You can attribute parameters to each machine.

Clean design: all stitches shorter than the adjusted value will be removed.

Rotate: the design will be rotated by the adjusted value before editing. This may be necessary for e. g. embroidering caps and T-shirt.

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Delete

The marked designs will be partly or completely deleted depending on the adjustment.



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Right Mouse Key:

	· ·	
	Export Move / Copy ZSK Pool Delete	All actions can also be released by the right mouse button. The entries <i>Stitch data as mail</i> and <i>Reference data as</i> <i>Mail</i> are selectable as buttons. If <i>Stitch data as Mail</i> is
	Print and statistics Print catalogue	selected, a new mail with attached TC stitch data file will be opened. Upon action $ZSK - TC$.
	Print design list	You can also be shown the design head of the design
✓	Stitch data as mail > ZSK - TC > ZSK - DSZ > Tajima	selected at last as further function. However, no changes are possible here.
	Reference data as mail > Reference data	
	Design history Change design number Design Head	

Print and statistics and Print catalogue

The Print and Statistics module is necessary. Please take further information from the News 4.0.

Open

The marked designs will be opened. It is possible to have opened 8 designs at the same time at most.

Design history

No.	User	Type of chan	Date	Time
1	René	Created	13.04.2006	15:08
2	René	Changed	24.05.2006	11:11
3	f.gebauer	Changed	28.06.2016	11:07
4	f.gebauer	Changed	28.06.2016	11:08
Desig Descr Date: Rema			Ciamon Ciamon	
Desig Descr Date: Rema Custo	n name: Glamour ription of design versic 28.06.2016 / 11:08		Clamon	Fastilian Franktion

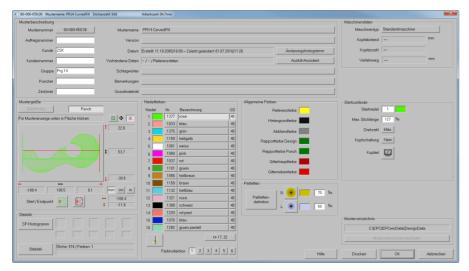
In this dialog you can check when a pattern has changed. By selecting a row the design state will be shown below.

With *Reset to latest version* all previous versions can be deleted and the selected one will be the actual version.

Open opens the selected version. Now you can for example save sample parts from the earlier version in a block. Note - you can not save an old version.

Change design number

You can change the design number directly. It is not necessary to open the design anymore.



Design Head

The new design head has a clear design: the most important information with regard to a design is arranged readily comprehensible.

The information is summarized into groups.

Group Design Description: please note – the texts entered under design description may not include | (vertical line). This is controlled during input. There also exists a text length control.

Design number

Selection

00-000-051

00-000-051

00

lowest no. + 1

Nr + 1

00-070-713 highest no. + 1

OK

Input

Design Number: Please enter directly the design number for the design into the input field of the dialogue.

New version: the first available version number for this design number will be filled in. 99 versions for one number are possible.

Selection -> No. + 1: here, the next free design number is shown, starting from the current number.

Selection -> lowest + 1: here, the next free design number is shown, starting from the smallest number.

Selection -> highest + 1: here, the next free design number is shown, starting from the highest number.

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Order Number: 80 characters

Customer: 80 characters

Customer Number: 80 characters

Group: 80 characters

Puncher: 80 characters

Draftsman: 80 characters

Design Name: The design name is filled in a separate dialogue. 80 characters are possible. **Version**: this field is for

Design name	X
PR14 CurvedFill	
15/80	G OK Cancel

a specific description regarding this design version, e. g. how it is different from the main design.

Date: the date of creation and the last alteration date are shown.

Existing Data: here, the existing data components of the design (picture, drawing and reference data) are itemized.

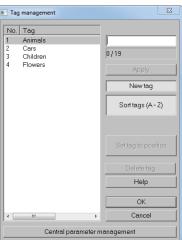
Tags: It is possible to create up to 10 tags for each design. Purpose is to describe the design more accurately, to be able to find it again more easily with the filter function. Hence, you can search specifically for designs with particular tags.



Click into the corresponding field and enter the tag. With button *Overtake tag to selection*, the current tag will be taken over into the list of tags. The list folds up when you click on the arrow on the right beside it.

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Tag Management opens a further dialogue with which you can manage your tag list. *Apply* changes the word edited above in the list. *New Tag* prepares the input of a new word. With Overtake it will be set at the end of the list. *Set Tag to Position* moves the tag to the required position so that it is found on a better place, and has not to be scrolled. *Delete tag* deletes the currently marked entry from the list.



Х

New Version

Cancel

Notice: 255 characters

Basic Material: 255 characters

Please enter a line break in notices and basic material with [Ctrl] + [Return].

Data List Assistant:

With this dialog, you can simplify the filling for the design-head like Customer, Group, Tags and Base material. For this you must first create the default lists using the dialogues customer management, group management, tag management and basic materials management.

tomer / Customer number							
Customer 25X	*	ZSK.	GiS 20				
stomer number	•	10	20				
Group Prg 14	•	Contraction Sequin	Repeat	Сар	Shoe	T-Shirt	
	<u>ر ک</u>	<u> </u>	repour			1 Onit	
Tag 1	•	Animals	Cars	Children	Flowers	1	
Tag 2							
Tag 3							
Tag 4							
Tag 5							
Tag 6							
Tag 7							
Tag 8							
Tag 9							
Tag 10	•						
e material							
		Jersey	Pikee	Leather	Wool	Organza	Cord
		Polo					
Edit 3/79		Customer managem	ent Group management	Organized tags	Base material management	Help	OK Cance
tup Assistent automatically a							

In the left column of this dialog, choose from the drop-down list the desired entry. The little dustbin next to it will delete the entry. More easy is it by clicking of one of the programmable fields. To give each tag an entry use the button *Edit*. For each field appears a dropdown list. Now you can place field by field your entries for the particular tag. By clicking again *Edit* the programming mode is switched off again.

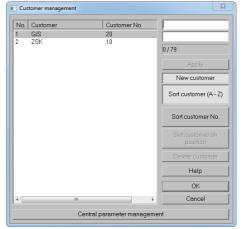
• *Setup Assistant automatically at new design:* The Data List Assistant will start automatically when a new design will be called up.

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• *Auto complete*: While you are writing in a field already existing words will appear to fill the field automatically.

Customer Management:

In the customer management, you can create a list of your customers.



To enter a new customer select the button *New customer*. Write the customer name and confirm with [Enter]. Automatically you will be in the customer number field. After you have given the number, another [Enter] accepts the entries in the list.

<u>Note</u>: If you want to change the entry please switch off the button:

New customer

Choose the customer with a double click and change the entry.

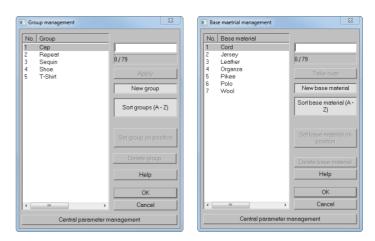
Sort customer (A - Z) or Sort customer No. sorts the list by A to Z or by number. If you do not want to sort alphabetically, you can put customers frequently used, to the top of your list.

To do so switch off *Sort customer* (A - Z) or *Sort customer No* and select *Set customer on position* and choose the new position for the list.

Delete customer will delete the selected customer.

Group Management, Tag Management and Base Material Management

Using the following Dialogs will be the same as it is described in the customer management. See also central parameter management page 26.



Size of Design

Drawing: In the preview, the drawing is depicted. The sizes of the designs also refer to the drawing.

Punch: In the preview, the stitch data are depicted. The start and end point are marked by green (start point) and red (end point) crosshairs.

Values: For the drawing respectively punch data, the width and height of the design are specified. In addition, the spacings with reference to the start respectively end point are shown, and the spacing start point – end point for the X and Y axis respectively.

Measuring Unit: The measuring unit can be switched between millimeters, centimeters and meters.

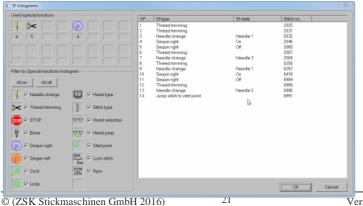
Start / End Point: This dialogue is fort he definition of the start respectively end point of the design. Depending on the setting, a spring stitch is included in the beginning respectively the end for the adjusted start respectively end position. In case Additional *movement* is selected, an additional movement is included at the beginning respectively end during the stitch edit.

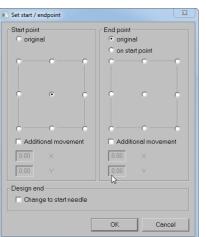
If *Change to start needle* is activated, there is a change back to the starting needle at the end of the design.

With this function, the manual setting of the special functions 60 to 62 becomes unnecessary. The start respectively end point is calculated anew upon each saving process.

SF-Histogram:

In this dialogue, you can see the number of used special funcitons and their chronological sequence.





Statistics:

The statistics function is in the design head now.

The possibilities for calculation of the statistical values have been extended.

The applied special functions are listed in the upper area. Below that are listed the number of boring stitches, sequins and consumption length of the W-head.

In order to calculate the usage of yarn, the following parameters can be set.

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Arrange according to colours: Each colour is listed separately.

Number of repetitions: Here, please indicate the multiplier. Any usage will be multiplied by this value.

List according to head groups: You can define the head group with a design with head selection. In case several heads are needed for running a design, please enter here the first and last head of the group. The list of results summarizes the yarn usage of the colours of this head group.



Calculation for this head: You can also have specifically calculated the usage of yarn for a design with head selection. The option Arrange according to colours must be active.

Factors for satin respectively lock stitch:

The set factors are applied to the net length. As from ECPwin version 6.0, there is a difference between satin stitch and lock stitch. For the case that the inclusion angle between two stitches is smaller than 30 degrees, the stitch is classified as satin stitch.

You can define with the filter function which special functions shall be shown.

Version 6.0 (06/2016)

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Needle Colours

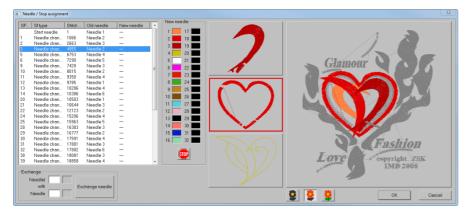
Needles: By clicking on a colour, you change into the colour definition. Here, you can mix the colours, or determine it from a colour table of a yarn producer. For this, the option "Use colour tables" must be selected.

With button >> 17.32 you switch to the other needle level.

Colour collection: As from now, you can create for each design up to 6 colour collections.

Needle / Stop assignment:

With this feature, you can set very easily the colour assignment in your design. The actual design part is selected in the list and will be marked (in the middle of the



Design part list) in a red frame.

Above that is the predecessor, behind the successor.

In the overview, the design part is depending on the display mode, highlighted (left button). When selecting a new needle (colour), the referring design part will get a new colour and will appear as a New needle in the list.

The next design part is automatically selected.

Left side below you can replace the needle assignment in the design.

If you want to change needle "5" into needle "7" throughout the whole design enter in the top field "5".

In the bottom field enter number "7" and to confirm the change use the button *Exchange Needle*.

In the list you can see the new assignment.

All changes you have done in the Needle / Stop assignment will be performed with the OK button.

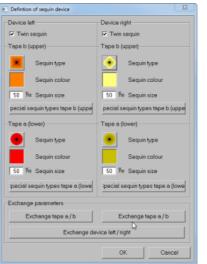
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Cancel will reject the changes.

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Sequins

The sequin definition has been taken over from version 5.x.



Start conditions

Here, in this area you define the special functions status which shall apply at the start of a design.

Start needle: The design begins with this needle.

Max. stitch length: This value indicates how long a stitch can be maximally. Longer stitches are divided and edited as spring stitches.

Rpm: The machine begins with this revolution number.

Head selection: The machine activates the selected head selection.

Type of head: The machine activates the selected type of head.

Design Directory

Normally, a design is saved in the design directory from which it was opened, a new design will be saved in the currently set design directory.

For the case that a design is to be saved in another directory, the button *Change design directory* offers the possibility to choose another organized directory. From then on, the design is saved in the new directory. The old version of the design is retained in the previous directory.

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<u>Print</u>

The printout of the meta data is carried out with this function.

EPCwin Version 6.0

Machine Data

Type of machine:

Machine parameters	Machine list										
Machine name	 ZSK machine list 	0	Own machine list								
Machine type Standard machine	Insert new ma	chine	Overwrite	machin		Delete ma	chine from	list			
Machine series	Machine name	Repeat	Max Verfahrweg	Stickfeldtiefe	FHea	Needl.	WHea.	Zuführ	K.Hea	Needl	
Normal head	SGFA-0112-1300	1300.00	1300	1400	1	12	0	0	0	0	
	SGFA-0412-480	480.00	480	1000	4	12	0	D	0	0	
No. of heads 0 1n	SGFA-0609-300 D	300.00	600	1400	6	9	0	D	0	0	-
No. of needles per head 0 1n	SGFA-1206-24/4 Q	162.42	650	1400	12	6	0	0	0	0	
	MCFB 0612-600	600.00	600	700	6	12	0	0	0	0	
W-Head	MCFB 0612-600	600.00	600	1000	6	12	0	0	0	0	
No. of heads 0 1. n	MCFB 0612-600	600.00	600	1200	6	12	0	D	0	0	
	MCFB 0809-480	480.00	480	500	8	9	0	0	0	0	
Zuführungen (Draht) 0 1n	MCFB 0812-480	480.00	480	500	8	12	0	0	0	0	
KHead	MCFB 0812-480	480.00	480	700	8	12	0	0	0	0	
No of heads 0 1.n	MCFB 0812-480	480.00	480	1000	8	12	0	D	0	0	
No. of heads 0 1n	MCFB 1009-400	400.00	400	500	10	9	0	D	0	0	
No. of needles per head 0 1. n	MCFB 1012-400	400.00	400	500	10	12	0	0	0	0	
	MCFB 1012-400	400.00	400	700	10	12	0	0	0	0	
Size	MCFB 1212-350	350.00	350	500	12	12	0	0	0	u	
Repeat 0.00 mm	MCFB 1212-350	350.00	350 480	700	12 10	12 12	0	0	0	0	
	LCFB 1012-480 LCFB 1209-400	480.00 400.00	480	700 500	12	9	0	0	0	0	
max. Verfahrweg 0 mm	LCFB 1209-400	400.00	400	700	12	9	0	0	0	0	
	LCFB 1212-400	400.00	400	500	12	9	0	n	0	0	
Stickfeldtiete 0 mm	LCFB 1212-400	400.00	400	700	12	9	0	0	0	0	
	XCFA 1812-350	350.00	350	700	18	12	0	ñ	0	0	-
	17101 14 1012-330	330.00	000	100	10	14	~	0	~		

In version 6.0, more detailed information for the machine is possible. The machine values can be set manually, or taken comfortably from the ZSK machine list. The design head shows type of machine, head distance, travel length and number of heads. These data are needed for designs with head selection. Please enter the additional values in the machine parameter dialogue. Just in case the machine is not in the list, e. g. is an outside product, values can be filled in directly. It is possible to save those in an own machine list provided they are given a machine name. For this, please switch to *Own machine list* and click on *Insert new machine*.

With *Overwrite machine* you modify the records in the list with the changements you have made.

Delete machine from list removes the selected entry from the list.

If you have chosen a Special machine with a W. or K-Head a dialog will appear.

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💽 Start head type					
1.F.1	• Normal head				
	C W-Head				
K	C K-Head				
OK Cancel					
-					

Here you can select the starting head type in the design.

This is followed by the settings for the start stitch type

Start stitch type for W-Head	1	X
👷 🔿 Cord/braid	Setup machine parameters	Parameters
👷 🕛 Coil	Setup machine parameters	Parameters
👷 🔍 🤄 ZigZag	Setup machine parameters	Parameters
👷 🔿 Stitching	Setup machine parameters	Parameters
		OK Cancel

If you want to set the start parameter for the machine select:

Setup machine parameters

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This function allows you to set the correct parameters for your production in the EPCwin already.

With a click on the button *Parameters*, the following dialog will appear.

Parameter W-Head stitch type zizag			X
Parameter set	 135 •	Start angle	•ve₩
160 y ₁₀ Stroke 1 (Zigzag) 20 y ₁₀ Stroke 1 (Pantograph)	160 %o 20 %o	Stroke 2 (Zigzag) Stroke 2 (Pantograph)	
0 1n ZigZag design			
Z axis contrary turn	0 •	Z axis angle	
190 °Z axis contrary turn	100	Parameters	
Value range [1, 100]			
	Load from TC file	Default values	
	Help	OK Cancel	

Now you are able to set the start parameters for your stitch type.

By using the ZSK TC code the set parameters will be written into the stitch data. As soon as you import the stitch data, you can decide if the ZSK machine should use your start parameters or not. If not, the machine will use the actual parameters.

Did you find out the correct parameter by test series on the machine it is possible to write them back into the ZSK TC code.

Back at the EPCwin you can assign the parameters into your starting design for instance.

To do so, open the design and go into the design head. Select *Start stitch type* and than *Parameters*. Use the button *Load from TC file* and select the particular TC file.

EPCwin Version 6.0

Undo-Function

The version 6 now has the so called Undo function which has been requested for a long time (finally \odot). You can activate this function in the basic setting under tab *General*. Furthermore, please fill in the number of the saved undo steps. The higher the number, the more memory space is occupied in RAM by this function. With a well equipped PC having 8GB RAM, it is possible to adjust the maximally possible steps.

Please note the following with regard to the functionality of the undo respectively redo feature in the EPCwin.

As contrasted to the familiar Windows applications, ECPwin has no menu bar at the upper window border. There, you can activate the undo function by clicking on the appropriate icon. Parallely, as a rule, there is always the possibility to prompt the undo with hot keys[Ctrl] + [Z], respectively the redo with Ctrl] + [Y]. In EPCwin, there is only the hot key function.

A further limitation results from the summary of several modifications within one function (e.g. object editor), after you have left it.

Example: You are situated in punching and move to the object editor with [Backspace]. There, you carry out several modifications. Within the Editor, you can take them back step by step with [Ctrl] + [Z] until the beginning of this object editor function. If you confirm the modifications with [Return], all these modifications are summarized. Therefore, an undo is only possible as a whole. Undo restores the status that existed before the object editor function.

In parallel to the new undo function, there still exists the automatic temporary storage. In so doing, designs are saved in adjustable intervals on the hard disk. By clicking on the life belt in the main menu, you can open an older version of the design.

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Central parameter management:

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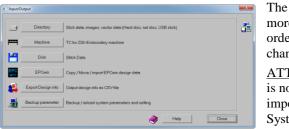
You can change the setting of the central parameter management in the basic setting under the tab page working mode.

Central parameter management		X
Path for central parameter mana	agement	
C:\EPC\EPCwin\EpcSystemDa	-	
- Syncronize the following parame	eters with the central parameter management	t
Design pathes	Parameter sets	🗖 Colour table
C ZSK-Pool	Head selection	Machine list
	🗖 Stencils	List of embroidery frames
	Stitch sequences	Tags
		Customer
		Groups
		Base material
		OK Cancel

In the Central Parameter Management you are able to store particular parameters on a file server. For this purpose you determine first the path for the central parameters. Then you select the parameters which should be administered in the CPM. The EPCwin will load all the parameters after a program start. If you do have more than 1 System you are able to access those parameters for your other systems as well. Put in addition with all systems the same path. Check mark the parameters which you want to have synchronized.

Note that every user can change the parameter! Because of this effect it is absolutely necessary to have an arrangement among the users who is allowed to change the parameters in the CPM.

Input / Output menu:



The Input/Output menu is now more clearly formed and the orders of the functions are changed too.

<u>ATTENTION</u>: With Version 6 it is not longer possible anymore to import designs from an EPCunix System.

Should you not have imported all your designs from the Unix system until now, it is necessary to do this before you do the upgrade to Version 6.

Parameter-Backup

Parameter backup	x				
Automatically backup					
Path for automatically backup					
C\EPC\EPCwinData\ParameterBackupData					
Last backup					
C\EPC\EPCwinData\ParameterBackupData\CM_21002_Version_60_Date_2016_06_30_1					
Reload last backup					
Manually backup —					
Select all					
📰 🔽 Settings 🔽 🖓 General View					
System parameters					
C Definition of lists					
TrueType-Monogram parameter					
Path for manually backup					
C\EPC\EPCwinData\ParameterBackupData					
Create manually backup					
Reload manually backup					
Help Close					

With the help of the parameter backup you can protect all opposed values of the EPC wins. In addition, the EPC will store all 14 days the parameter automatically. The window for this function has been redesigned. In Version 6 it will be distinguished between automatic and manual backup. The top section controls the automatic Backup. Here you can enter the location for the Backup. The button *Reload last Backup* will load the last Backup.

In the lower area you can selectively start a Backup or reload them. In addition, the scope of the Backup can be set. This function can be used when you move the EPCwin to another computer. Appropriately it would make sense to use an USB stick. In this case you have to give the path to the USB stick.

With the button *Create manually Backup* you will store the parameter. After the EPCwin is installed on your 2^{nd} computer you can reload the parameter.

First, select the location on the USB stick and then select the button *Reload manually Backup*. The parameters are stored in a separate sub-path whose name contains CodeMeter number, version and time.

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Update Mode:

You will find the Update Mode in Utilities -> System Check. Select the button *Update Check*. The following dialog will appear:

	×
commended) tation from ZSK) K upport advice you)	Deys
Install now	Help
	ration from ZSK) K ppport advice you) 07 2016 15:08

If your computer is connected to the Internet, you can adjust the EPC so that it will prove if a new version is available. This will happen after every program start automatically.

For this purpose, you can set the update mode. With the first option you switch this function off, if e.g. there is no internet connection or you do not have a Flat rate. The second option will search for update at every program start. The third option will search for updates every X-days. The option 4 and 5 can be used only if ZSK Support prompted you to do so. With option 4 you can join the Beta-testing part.

Option 5 is an individual update and can be set only if ZSK Support advices you.

The button *Search now for updates* will start a search query. If a new version is available it will be displayed accordingly. New features are listed in the text box.

The button *Start download and install* will download the update. After that the EPC will shut down automatically and start the installation routine. An assistant will guide you to install the software properly.



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New Icons are available.

In the main menu of Version 6 all the icons are revised.

If you still prefer the older icons, you are able to switch them back on. To do so, please go to *Utilities* > *Default settings* > *Display*. After you have demarked the New icons, the EPCwin has to be restarted.



¢.

Recently edited

In the main menu, beside Design Management, is a new menu item located. *Last edited*. Recently used designs are in this list. Here you are able e.g. to open, export, and print your last design(s).

To copy, move or even delete is in this menu prevented.

In the previous versions, at the same position in the main menu, this function was only for load scanned or imported images.

This is still possible, because all the images which have been imported already are available.

In the left bottom side you will find a button *Import*, which allows you to load all different image files like (jpg, pdf, png)

Another possibility is to use the button *Start download only*.

This option will download the update only on your computer. The installation can be done later with the button Install now. Perhaps you don't want to do both the EPCwin will ask you if you want to do it later.

The location to save the update can be set in *default settings -> System paths*. Do you have more than one EPC system, you can set the path e.g. on a file server. The path has to be set in every EPC. If one system run the update it is not necessary to download the software again for the other EPC's. Just make clear which operator will do the update first.

Online-Support

If you have any issues with the EPCwin, the system does have now the ability to connect your computer with the ZSK Support, to make or to show you procedures in certain situations. To be able to have a connection with ZSK Support you have to start the TeamViewer. An Internet connection is definitely necessary.

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To use the Team Viewer please go to *Utilities > System check*. Select Online Support.



The "TeamViewer QuickSupport" starts up. In the dialog you will see your own *ID* and a **Password**. The ZSK Online Support need to know both numbers. This can be done via telephone or e-mail.

One of our Support employee will help you and is connected with your computer.

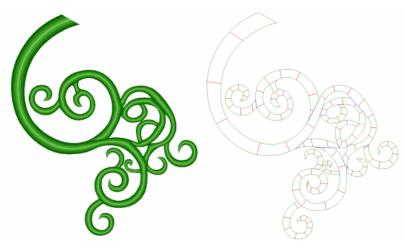
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News and Improvements from Version 4.10-05 to Version 5.00-00

Punch

• Program 15 Branched Satin Stitch

By using this new kind of calculation it is possible to calculate branched satin stitches in one object conveniently. Until now, for each tiny branch a separte object had to be set up. Cross overs between the branches had to be punched separately. In the new programme 15, the sequence is identified automatically. If the endpoint of an object is relocated, a new "routing" of the partial areas is effected.



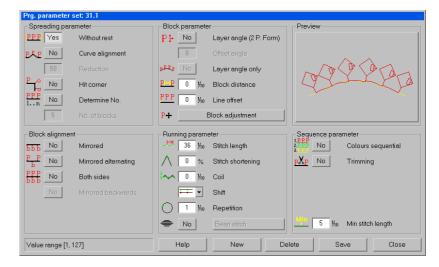
The input is done is one go, e. g. by taking over a ready outline. You can separate branches with aimed cuts. The overlap areas on these cuts are identified automatically according to arrangement stem <-> branch. Besides the manual input of cuts there is the automatic calculation of cuts. These can be modified in the Editor as well as the manual cuts. For each branch the stitch directions are determined separately. You can allocate to each of these stich directions separate stich distances. Stitch directions are also automatically calculable. Thus, you can fill with programme 15 complex figures with many side branches fully automatically. As in all automatic programmes, the calculation parameters are manifold so that any

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stitch rhythms can be realized.

Program 31 und 32 Chaining and Arranging in Circle

With this latest version, programme 31 and programme 32 have been completely revised. Central modification point is that a block must no longer contain the way to the next necessarily. Rather, block entry and exit may be on the same place. The way is calculated automatically on the division line and stitched down with the known stich line parameters of programme 20. There are many further news of programmes 31 and 32, mostly new parametres. In programme 32 (Arranging in Circle), the division parametres differ due to the circular arrangement contrary to the allocation on a contour (programme 31).



Division Parametres

Other than the known division parametres with or without rest and an adjustment of curves, there is now the possibility to move to curves. Here is set a block in the corner in the angle bisector. Furthermore, a fixed number of blocks can be indicated. The programme calculates the interim stitches. During the division without rest, the the overhang is allocated to Width and interblock space.

Block parametres

If the block has a defined position, the position angle of the allocated blocks can be influenced.. On the one hand this results from the course of curve, on the other hand from angle of offset position.. At "0", the block stands vertically on the contour. If all blocks shall be allocated with the same angle, it is possible now to set this correspondingly in the programme. Distance between blocks and offset of lines is also possible. The adjustment of blocks offers more possibilities now. Height and width are separately adjustable in %. If the division without rest is effected, you can have adjusted the block 's size

proportionally. If a constant hight is requested, only a width and distance adjustment is effected on division without rest. If the block shall stay original, an adjustment of distance will suffice.

Block direction

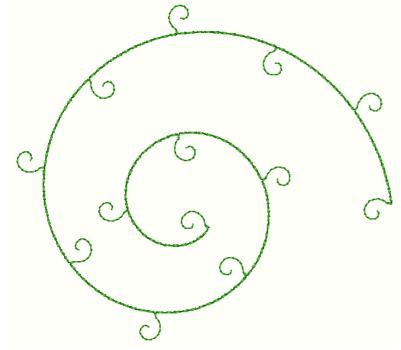
Until now, the block only could be mirrored normally, or round the division line. Now, it can be mirrored alternately, or calculated on both sides. If a layer angle has been defined, it is also possible to mirror the block backward.

Runningparameter

You already know the running parametres from programme 20, they influence the stitches between the blocks. All possibilities of the simple way are available now. For special cases you can chose bean stitch.

Sequence parametres

Apart from the minimal stitch length for shift of block, there exist 2 further parametres. If a block has several colours, these can be processed sequentially, first run colour 1, second run colour 2 etc. If the blocks shall be distributed without on a line without transition, it is possible to set between them an automatic thread cut. The start fixing and end fixing stitches must be included in the block.

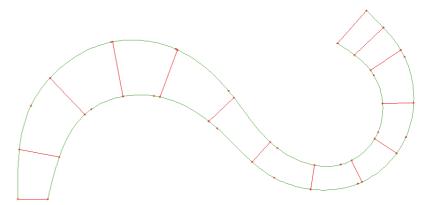


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Satin stitch (Programm 1 – 6)

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• You can call now an automatic creation of stitch positions when entering stitch directions. The stitch directions are generated vertically onto an imaginary center line.



• You can chose in the object editor's main level of a satin stitch object the corner type of all corners contained in the object, e. g. all corners can be switched to mitered corners. Until now, each single corner had to be selected and adjusted.

Programm 14

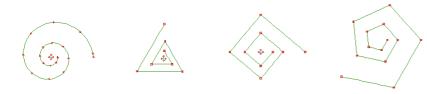
- Until now, the fringing had been carried out irregularly. In the new version, it is possible to program a fringing frequence with a certain number of stitches. This sequence then is repeated on the edge.
- You initiate with [F10] the shortened enter process with when entering the outer contour. Entering additional contours is not needed. This adjustment is saved until switched off with [F10].

Programm 20

- This programme has been extended by an automatic fix- respectively lock stitch function. Both functions are switchable separately from each other. You can set the length of the fix stitch as well as the swing at a time.
- You initiate with [F10] the shortened enter process with when entering the main line. Entering additional lines is not necessary. The end point lies at the end of contour. This adjustment is saved until switched off with [F10].

Geometry

• Apart from a revision of the standard forms (circle, ellipse, rectangle and polygon) the spiral function has been extended. When entering the end point, the spiral is drawn in a preview, so that you can determine the endpoint more easily. At the same time, you can modify with the scroll wheel between the spiral distance during upon entry. In unison with pressing [Shift], the modification takes place in big steps. If the distance between the positions is to be increased respectively diminished continuously, you can adjust the percentage with [Alt] + Scroll Wheel until you obtain the requested result.



• In the "rectangle with round corners" function, you can adjust the radius of the corners with the scroll wheel upon entry. Here, the steps also get bigger when pressing [Shift].

Creation of contours (Spline) in Punch und Design

The creation of contours has been extended by several functions. The most important changes have been made in Snapping in the straight line function. Upon [Shift] + <Left> the snap point is looked for exactly in the extension of the straight line. Until now it could happen that the snap point set off laterally. On the circular arc (4-4) it is possible now to enter a fixed radius. In that case a half circle with precisely that value will be included into the contour.. Depending on the position of the cursor, the location of the half circle changes. With [Alt]+[Tab] you can switch between the last two used enter modi, e. g. between straight line function (4-3) und half circle arc (4-4). During the drawing, the contous are entered in original colour and not in reference colour as previously.

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Editor

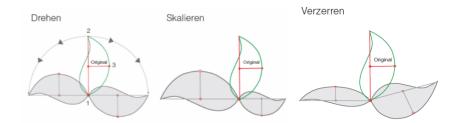
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- The stitch filter dialogue has been revised. Stitches "from to" and "longer than" can be searched for now. Furthermore, the current stitch is filtered, if the filter criterion applies there.. Example: change of needle is lying ahead; filter criterion is change of needle. Until now, only the change of needle after next was filtered, now the next (i. e. current stitch) is jumped at.
- The selection sequence now can be programmed. For this, go to standard settings > Selection -> determine selection sequence. Please chose a type of selection and click on arrow up respectively arrow down.
- Marker and maximum stitch length can be shifted now.

Block

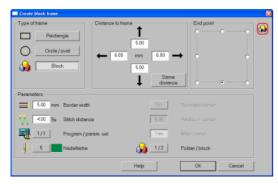
• 3-point-Form

Long-term ZSK-customers maybe remember this possibility of block manipulation. Upon frequent request this function has been restored.For all those who do not know this function, here a short description. After a block has been selected respectively after loading a block from the block directory, up to three points can be defined which best reflect the position of a block (see picture below). If blocks already have been provided with three point, these are shown directly after the loading process. Now, by clicking on point 2, the rotation angle is modified. If, simultaneously, the [Shift] button is clicked, angle and size (proportionally) are adjusted. If you click on point 3, the block is compressed around the main position (Point 1/2). If, simultaneously, [Strg] is clicked, a distortion of the block is effected. Other than with the box, you can influence angle and size without having to shift in between.



• Creating block frames

Here, a frame in form of a centered line object is automatically created. This from can be a rectangle, a circle, or a free form. You can deposit the free form (closed contour) in a block. The distance frame to block can be adjusted separately in all directions. You can deternine the terminal point. Width of margin, stitch distance, parametres (programme 1) and needle colour are adjustable. With rectangle form you can also chose round corners with adjustable radius. Corners can also be done as mitered corners.





Adjusting end of block

With this function you can adjust the end of block exactly in accordance with the entry of block vertically respectively horizontally. The adjustment is carried out by shifting of the last stitch respectively inserting a stitch, or by rotation of the block.

• Divide Line

The divide function is now valid for all lines within the block. Until now, the block was to have only one line. Furthermore, length of line and colour of line are adjustable.

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Input - Output

Direct machine output with optimized and checked transport code (TC) With the EPCwin version 5, ready designs can be transferred directly into the design directory of networked ZSK embroidery machines. Up to 50 networked machines can be served. You determine for each machine an alias name and a path, as well as the parameters like cleaning of short stitches and turning of design (e. g. for caps and T-Shirts, socks). You can either govern the content of the machine directory as text directory or as pictogram directory. You can delete designs respectively re-assign them into the EPCwin directory. This function is called under in-/output in the main menue, or in the EPCwin directory with right mouse button on a design.



• Automatic TC-output during Saving

In addition, this version offers the opportunity to generate the transport code (TC) automatically when saving a design. In order to activate this function, switch from main menue to In / Output, after that to General Path. Please click into Automatic TC output when saving. The dialogue install TC path appears. There, you fix the path and parametres. You can also determine, whether a filing shall ensue upon [Strg]+[S].

TC path Path: D\ZSK-N	Maschinen\TC-Plad		
Z Ho Yes No Yes	Clean design Min stitch length Rotate 180 270	I⊽ Also at [Strg] + [S]	OK Cancel

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Version 6.0 (06/2016)

Design head Colour Definition

- In the colour definition dialogue in the design head, now there is a rational method ot type in the colour numbers. For this, please open the dialogue for the first colour. If necessary, also indicate yarn manufacturer and colour card. Click in the field of the colour number and enter appropriate number. If you press [Enter] now, the colour number for the next needle is shown. You can immediately type in the colour number for this needle and confirm [Enter] again. If, by chance, the number for a needle is correct, this is confirmed with [Enter]. If you enter a colour number which is not included in this colour card, you stay in "enter" for this needle.
- Entries colour number, material and thread strenght are exchanged now on "Change colour" respectively selection of used colours. These entries were not exchanged previously.

Ansicht

- A colour- respectively programme linkage has been included into the display, i. e.if a colour is switched off in stitch data, the reference data of this colour are switched off, too. If the reference data shall be visible all the same, the colour must be switched on in the reference data. In order to deactivate this linkage, it can be switched off in the standard settings. Please note that this linkage also has to be switched off for the punch- and design editor.
- For a better overview, several measures have been taken in order to impart to the user the current work mode graphically. For this, the head lines in the assistant are written boldly and the current function is underlined. In the programme window stands now proselection of objects when manual stitches are entered. The presented type of programme is preselected and is started activatedly in the new object as soon as [Enter] or <Right> are operated. When starting the object, the head line changes to object input active. At the same time, the cursor changes its colour (orange). Likewise, in editor, the display changes to "object editor active" and the colour of the cursor changes. In editor, the Display in the stitch list has been modified, the legibility has improved. The current stitch is shaded in blue in addition.

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More improvements

Punch

- "Alert" appears with a closed satin stitch without stitch positions.
- The mitered corners of a middle line are drawn in purple.
- The pre-view in programme 35 is drawn in operation mode Shiffli,too.
- Programme 1
 - In case the corner type is changed on a contour point, the corner stitch position now is also changed before the calculation. Until now, e. g. the contour width or a supporting point had to be moved in order to take over the modification of the corner stitch position.
 - In the case of especially big centre line objects, e. g. a square with 20 cm edge length, the stitch positions were missing after one corner.
 - The input area was raised to 120% in the case of shortening of stitches. Thus, it is possible to generate in tight curves a cascaded stitch shortening.

Contour

- The display of supporting point number has been corrected.
- Now, there is an improved stabilization in the case of cutting out contour sections if the original line is closed roundly.
- Selction of existing contour with [Ctrl]: previously it could happen that the same contour was shown twice in the selection list..

Geometry

- Geometry: In the case of spirale function, a possibly set repeat rule was not recorded. Equally, the centre selections of the other geometric figures were not provided with the repeat rule.
- Error in the case of creation of spirale has been removed: it could happen that the EPCwin crashed with big spirales.

Editor

• Programme 14: the set of parametres of the special rhythm area can be modified now.

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• Programme 20: If you change the parametre set of a contour (main or additional line), you are asked whether this new parametre set is to be valid only for this line, for all additional lines, or for all lines, including main line.

Version 6.0 (06/2016)

- If a design line is copied in the Editor, it springs back to the original position.
- Now, the modification of maximum stitch length functions in Shiffli..
- As a consequence of miscalculation, e. g. loops in prg. 14, the object editor stood in rectangle or bypass mode, it was not possible to switch to single selection.

Block

- After setting up a repeat rule, the repeat presentation for design is automatically switched on in the view.
- Direction of block: The Offset acts now in case of same breadth, same height, same size. Furthermore, you can fix, whether the offset after action shall be set back to "0".
- Blockfilter marker and object now can be deactivated with 3.5 respectively 3.6.
- Box respectively 3 points are drawn anew after change of applications (e.g. interrupting EPCwin by reading a mail and after that fetching back the EPCwin window again to the foreground).
- Now, in Block tools the automatic programme chaining respectively arranging in circle (programme 31 respectively 32) can be started directly with the selected block.

Design Management

- If a design version with picture was saved under a new design number, the IDP entry had not been adjusted.
- The last page in the pictogramme presentation of the desing management is depicted completely filled, if the current design is on the last page. If the last opened design is on a prior page, this design is depicted at the left on the top, and the page is filled from then on.
- If you want to save a design, and have meanwhile changed the path (like opening a design from another directory), the design had been saved in the other directory without caution. Now, there is a confirmation prompt.

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Standard Settings

- In standard settings -> display -> system colours -> 8 basic colours, you can freely define now the 8 previously fixed colours (white, yellow, red, orange, blue, green, pink and cyan). If, e. g. you only work with white background, it is recommendable to change to the colour black. Persons with colour deficiency for example can adjust "Red" and "Green". The colour of hair cross as well as mark thickness is adjustable now, also the colour of the bounding box respectively 3-point form.
- The stitch strenght for stitches respectively contours is adjustable. The input area for selections has been extended from 6 to 10.

Passwords

- The password dialogue has been revised. Time-limited passwords from now on can be calculated as group Multi Head and Shiffli.
- From now on, the password is also checked in case of selecting a new input area.
- The "option was activated" notice only appears in the case of password groups (Release all, Multi Head und Shiffli) and upon loading from a file. Otherwise, there will be only a confirmation by on-screen display of the key respectively clock symbol.
- From now on, the final passwords (key symbol) are always displayed in spite of a time-limited possiblity for this option. Previously, in this case the clock symbol was displayed.
- Activated options (demo or finally) can be switched off temporarily now.

Note

Updating from Version 1.x/2.x/3.x/4.x to Version 5.0. is subject to a charge. You need new passwords for Version 5.0; these are available from <u>atelier@zsk.de</u>. .

DEMO days installed with Version 1.x/2.x/3x/4x are retained and do not expire.

- Minor error correction in calculation and viewing
- New history function in printing. The history of repeat changes is now listing in a table with the colour of the first needle, the first needle number and the number of stitches in this sequence.
- Correct counting of thread trimming in statistik of schiffli design

News and Improvements from Version Version 4.10-02 to Version 4.10-03

• Minor error correction in calculation and viewing.

News and Improvements from Version 4.10-00 to Version 4.10-02

- Input-Output
 - When loading Tajma code, a thread cut is implemented now in case a certain number of successive spring stitches. You can chose freely the number of spring stitches. Upon entering "0", the function is deactivated.
 - Tajima-Output: If the special function 60 or 61 is at the end of the design, the spring stitch tot he starting point was carried out deficiently. Especially, if the way to the startin point is extremely long.. The same happens if you chose fort he definition of the final point "starting point". In this context it should be mentioned to please take note that "121" is entered in the design head for maximum stitch length if the output is determined for a Tajima machine.
 - The output in Lässer format with the function "General Path" is possible again.
- Diverse Automatic program
 - Dissolve program 34 TT-Monogram: no needle change to needle 31 is put in any longer.
 - Program Satin Stitch: Fault in the ZIGZAG underlayer calculation has been removed.
- Sequin
 - The sequin type rhomb will be drawn now correctly even with asymmetric size.
- Design head
 - With input of needle colours an error with the colour list of a product line has been removed. Now, the last used product line remains adjusted, even if the colour number exists in another colour list.

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News and Improvements from Version 4.00-07 to Version 4.10-00

• Sequin

- You will find now in the design head an extended sequin adjustment. Please click in corresponding sequin dialogue on the button special shapes. There, you can adjust asymmetric sequins. The sequin's size as well as the size of its hole are separately adjustable for width and height. If the hole is not in the middle, it is possible to set the distance to the sequin's edge. Thus, you can reproduce in this dialogue many special shapes of sequins, e. g. round or square hanging sequins, symmetric or asymmetric O-rings etc.
- In order to have an overview over the current active sequin during the punching, a trueview depiction is presented in the assistant respectively in diverse dialogues. Shape and colour of the active sequin are shown.
- The sequin's size has not been adjusted for change of design between two open designs.
- Program 35 (sequin on line)
 - Hanging sequins are supported now.
 - The mechanical order of the shuttle machine's sequin device is different from that of the multi head machine, this fact is considered now when creating stitches.
 - The number of stitch repetitions is adjustable now under parameter "more stitches". This parameter is available for the following stitch modi: 2 point row, I-Stitch und E-Stitch
 - New parameter area special stitch parameter:
 - No intermediate stitch: sequins are set without interim stitch, i. e. directly in succession.
 - The repetition of the intermediate stitch is adjustable.
 - The intermediate stitch can be effected as bean stitch. This is already known from program 20.
 - One time over: After all sequins are set, on the backward move, all stitches are repeated without sequin. (only 2 point row)
 - Alternatively other tape backwards: on the onward sequin positions, sequins of another tape are set in the backward movement. (only 2 point row)
 - If the tape of a single sequin is switched in an automatic object, it is disabled for calculation.

• Program 12 (Cross stitch)

- It is possible now to calculate only one cross.
- Upon input of cross way the first cross can be deleted with [Backspace]
- The end point is alterable now.
- Insert of crosses error removed: as soon as was scrolled in insert mode, the system could shut off. Anyway, all inserted crosses so far were deleted.
- Design
 - No more display of repeats in the adjustment of parametres set of a design automatism.

• Creating contours / Parallels

- Straight line function: the correct lengths for x / y and total length are shown in the assistant.
- Roundly closed spline without corners (e.g. circle): Parallel is now roundly closed even when no automatic corner creation is activated.
- The parallels program has been revised: the corner creation was not correct in some special cases.

• Punching

- In case ,,change to starting needle" is switched on in the design head, there was no switching back to the last needle in the design, if you go on punching.
- The rasterization and limit in length of the manual stitches, now is also valid for the first manual stitch.
- Schiffli: Cord device stitches are drawn thickly now.

• Diverse Automatic program

- Is a parallel used for a middle line object, this always led to mitre corners despite the fact that the button ,,mitre corner" [F10] was not switched on.
- Error correction while calculation of the area underlayers in conjunction with mitre corners.
- The stencil calculation in program 10 is now done correctly, even if the outer contour is closed.
- In one chaining object (Prg 31 and 32) a stitch sequence sub program (prg 6) was not calculated.
- Chaining: When chaining deactivated objects up to sequins, the sequins now are processed correctly; before that sequins were completely ignored.

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- Program 14 Interlocking: The interlocking rows are carried out without pickup running now. Meaning row 1 from left to right, row 2 from right to left etc.
- Program 14 Interlocking: it is possible now to switch to sharp ("V") turn also.
- Program 34 TT-Monogram: a thread trimming within a letter is now done at the right position.
- Editor

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- The shortcut keys [H] and [Strg] + [V] can be used again in the main layer of the Editor.
- If [End] is clicked on in Editor, the last stich is really marked and not the second last.
- If the last point of a closed contour is moved, the snapping with [Shift] is treated correctly.
- When switching the two satin stitch contours, the approaching respectively mitre corners are also switched.
- A new support point can be inserted under stitch position in program 14.
- Until now if a chaining object (program 31 and 32) being the last one in a design was resolved, the newly generated objects were not calculates. Now, after the resolving, you stand at the first stitch of the resolved object.
- The block now can be copied into the temp clipboard (block 1.1) in the automatic programs 13, 14, 31 and 32 with [F9].

Global Editor

- Now, the main dialogue + PS table are blended out when clicking the parametre setting respectively block change. Thus, the button "Ready" cannot be used there. Up to now in this case the ECPwin was blocked.
- A crash could happen in the Global Editor in case a chaining program (31 resp. 32) is included in the design.
- Block
 - The block selection mode marker and object is no longer present wihtout punching data.
 - Block selection "Last Block is carried out now when chosing the button area. Up to now, only [3][7] did function.

- The user guidance when changing block names has been revised. After changing a block name, the next block can be selected directly. Up to now, the changed block had to be de-selected first.
- The boring stitches may be deleted now with function SF (look for and replace), if the special function boring is deleted. The prompt only appears if the deleting function of the special functions is done without enquiry.
- The function "load block into new design" now also works in Shiffli.
- Help Level
 - With [ALT] you can switch to horizontally resp. Vertically in function change measure and measure system.
 - With [F3] you can put block markers, e. g. a middle cross directly onto the picture.
 - The help line length fixed at last is now recorded permanently. To date the length was backset to 30mm if mirroring a block.
 - The help line length now can be set permanently under [F11] to ,,automatic (size of design)". If only one picture exists, the help line is drawn from picture edge to picture edge.
 - Move grid: Due to the repeated difficulties to position a (repeat)grid, automatic scrolling has been disabled. Scrolling and positioning of grid continually were interfere each other. You can only scroll now with the Cursor button. The grid is exclusively moved with the mouse. With [Strg] and the

<Scroll wheel> you can zoom, also with [-].

• Repeat grid: it could happen that the adjustment for the repeat grid was partly lost. It was possible that the parameters "Show repeat grid" and "Grid secundary line" switched off automatically.

• Design Management

- In the basic setting, the option "prompt override design" has been included. If you activate this option, you will get an alert during each data saving process, whether the existing design is to be overrode.
- When entering a new design number, the number of version can be determined now. Previously when changing a design number, the version always was set to 00.
- During the import of a design e.g. from diskette, it could happen that an existing design was written over every time that a path was changed in the design head. In this case, there was no check, whether the design already existed in the newly chosen path. Now, a free number is offered.

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- Shuttle: Upon [Return] in the repeat input of the design head, only the repeat is evaluated now. Previously the entire design head dialogue was closed.
- Lifebelt (Back up copies)

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- The maximum number of back ups fixed in the basic setting, is observed now.
- A confirmation prompt has been included before the delete of back ups.
- Input-Output
 - The output of diskettes functions again, also after having called up print and statistics.
 - Infrequently, design extracts were not printed correctly. Instead of printing the required extract the masked out extract was printed.
- Misc.
 - In the overview, the cord and loop stitches are no longer drawn thickly; this is for a better view.
 - In the Yes/No/Terminate dialogue, you can zoom with the <Scroll wheel> + [Strg].
 - A colour card from Madeira Frosted Matt was included.
 - When using a colour table in the design head, the colour card used at last stays active.

News and Improvements from Version 4.00-06 to Version 4.00-07

- Windows 7 is now supported.
- The time limited passwords works now, when the password request has been mailed to ZSK from the EPCWin.
- Sequin
 - Vereinfachte Bandumschaltung beim Punchen. Mit [A] und/oder [B] kann während des Punchens das Band temporär umgeschaltet werden. Dazu muss die entsprechende Taste gedrückt werden. Beim Loslassen der Taste wird automatisch auf das vorherige Band zurückgeschaltet. Es sind auch beide Tasten möglich für AB.
 - Simplified change-over of the tape when punching. With [A] and/or [B] you can exchange temporarily from one tape to the other while punching. Therefore you must press the corresponding key. When releasing the key, the last used streamer will be activated automatically. Both keys are also possible for AB.
 - The "Print and Statistics" Option support also the Twin Sequin and the different sequin forms. Equally support is the Twin Sequin and sequin forms when TC-Exchange between the GIS Base Pac and EPCWin.

Block

- The error when loading a block in a new design is corrected. An additional stitch has been inserted, when in the design head the Start point has been applied in the center of the design.
- The function Delete Block has been totally revised. There were sometimes errors in the data structure when deleting blocks.
- Already copied or loaded designs, when F2 (copy block) the first stitch of the block has not been copied. Instead of that a 0-stitch has been added.
- Graphical errors when using the bounding-box have been corrected.
- The block creation under Object [F3] [6] works now also when the first object of the design has been selected.
- When a block has been loaded with [Strg] + [V] you can now directly load the block again with [Strg] + [V] without confirming the one before.
- When a block has design lines with repeat rules, these will be correctly processed.

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- In the function "assign repeat rule " [4][4][4] punching data's will be now processed.
- Program 34 TrueType-Monogram

- The order of embroidery inside the letters has been improved, particularly on overlaps.
- The dialog for parameters can be confirmed with the right key and cancelled with the middle key of the mouse.
- The zero-stitch has been eliminated when doing thread trimming.
- There is a new TT-Font Editor.

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- Replace outline : The outline in Program 14 and 15 will be closed.
- The calculation of an additional move at the design start- and end point has been corrected.
- If there are two or more needle changes directly in a row, each needle change can be deleted immediately.
- The parallel function has been revised. Superfluous points on straight lines have been deleted.
- An error when creating contours in combination with [Alt] and Straight has been corrected.
- Input/Output
 - When reading from Tajima (DST) there was a displacement when there was a move in the STOP function.
 - When output on TC, you can adjust the maximal needle quantity. This should avoid problems on the machine when having needles on the design that doesn't exist on the machine. E.g. needle number higher then 15. These needle changes that are higher then the maximal needle adjustment will be converted into Stops. To get a needle change, you can adjust now a needle assignment when output on TC. E.g. Needle 16 -> Needle 1.
 - In the function " Print and Statistics, the dialog " Attitude on functions " doesn't appear anymore.

News and Improvements from Version 4.00-04 to Version 4.00-06

- You can activate at most 2 computers with 1 CodeMeter. So far only one computer could be activated.
- ZSK Twin-Sequin
 - In the Editor you can exchange the tape [a] or [b] while running, without selecting the stitch before.
 - In the design head, in the dialog for the definition of the sequin, it is now possible to exchange the tape and the sequin device. The design will be automatically adjusted to that change.
 - In the statistics, the quantity of sequins for tape a or b will be separately counted.

• The filter in the editor finds now again sequin belonging to objects, e.g. from Program 35.

Repeat Rule

- When Program 42 is called for the first time, an automatical refresh will be done. The neighbor repeat will be drawn. The same will be considered when changing parameters inside a repeat rule.
- Default values for the numerical creation of repeat rules, will be saved, e.g. Total high, quantity above/below.
- When creating a vertical repeat rule, the X offset can be adjusted to half a repeat.
- When changing a design, the right repeat rule will be activated.
- The repeat rule will now also passed on to calculated lines that have been done with a drawing automatic (e.g. Honey comb). The same will be considered for both new lines on the function cut line.
- When a punchdata block is copied based on a repeat rule, then the thread trimming is adjustable at the block borders.
- In geometry the default value will be considered when clicking on the right key of the mouse, also when a supporting point has been already defined.
- The error in the parallel program has been corrected. It appears in corners with a straight outcome, which occurred mainly at the end of a straight line function.
- The length of a drawing line will be shown at the input and in the editor.
- The last block selection can be reactivated with [3][7]. The condition is, after abandoned the block function, that nor editing nor inserting has been done in the design.
- The adjustments for the repeat grid on multi head designs with head selection has been simplified.
- In the Output ,, General Path ,, the file can also be written directly in the root directory of the drive e.g. D:\. This was before only possible in a subdirectory.
- The EPCwin dialogues are also now available in Chinese translation.

News and Improvements from Version 4.00-01 to Version 4.00-04

- Old designs that contain Pro 34, will be opened now correctly.
- No Zero Stitch will be inserted at the beginning of a design when the start point has been set automatically, e.g: Start in the center.
- The automatical arc [4] [4] can be now designed to the left and to the right. Until now it was only possible on the top or on the bottom.

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• The sequin size in Prg 35 will be shown correctly at the assistant menue.

- An error on the satin stitch underlayer has been corrected.
- The last used repeat number (or rule) will be adjusted automatically when opening a design.

Now the sequin tape of the ZSK-Twin sequin can be changed in the editor without an error.

No error during the activation process of the CodeMeter

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News and Improvements from Version 4.00-06 to Version 4.00-07

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- The time limited passwords works now, when the password request has been mailed to ZSK from the EPCWin.
- Sequin
 - Vereinfachte Bandumschaltung beim Punchen. Mit [A] und/oder [B] kann während des Punchens das Band temporär umgeschaltet werden. Dazu muss die entsprechende Taste gedrückt werden. Beim Loslassen der Taste wird automatisch auf das vorherige Band zurückgeschaltet. Es sind auch beide Tasten möglich für AB.
 - Simplified change-over of the tape when punching. With [A] and/or [B] you can exchange temporarily from one tape to the other while punching. Therefore you must press the corresponding key. When releasing the key, the last used streamer will be activated automatically. Both keys are also possible for AB.
 - The "Print and Statistics" Option support also the Twin Sequin and the different sequin forms. Equally support is the Twin Sequin and sequin forms when TC-Exchange between the GIS Base Pac and EPCWin.
- Block
 - The error when loading a block in a new design is corrected. An additional stitch has been inserted, when in the design head the Start point has been applied in the center of the design.
 - The function Delete Block has been totally revised. There were sometimes errors in the data structure when deleting blocks.
 - Already copied or loaded designs, when F2 (copy block) the first stitch of the block has not been copied. Instead of that a 0-stitch has been added.
 - Graphical errors when using the bounding-box have been corrected.
 - The block creation under Object [F3] [6] works now also when the first object of the design has been selected.
 - When a block has been loaded with [Strg] + [V] you can now directly load the block again with [Strg] + [V] without confirming the one before.
 - When a block has design lines with repeat rules, these will be correctly processed.
 - n the function "assign repeat rule " [4][4][4] punching data's will be now processed.

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- The order of embroidery inside the letters has been improved, particularly on overlaps.
- The dialog for parameters can be confirmed with the right key and cancelled with the middle key of the mouse.
- The zero-stitch has been eliminated when doing thread trimming.
- There is a new TT-Font Editor.
- Replace outline : The outline in Program 14 and 15 will be closed.
- The calculation of an additional move at the design start- and end point has been corrected.
- If there are two or more needle changes directly in a row, each needle change can directed be deleted.
- The parallel function has been revised. Superfluous points on straight lines have been deleted.
- An error when creating contours in combination with [Alt] and Straight has been corrected.
- Input/Output
 - When reading from Tajima (DST) there was a displacement when there was a move in the STOP function.
 - When output on TC, you can adjust the maximal needle quantity. This should avoid problems on the machine when having needles on the design that doesn't exist on the machine. E.g. needle number higher then 15. These needle changes that are higher then the maximal needle adjustment will be converted into Stops. To get a needle change, you can adjust now a needle assignment when output on TC. E.g. Needle 16 -> Needle 1.
 - In the function " Print and Statistics, the dialog " Attitude on functions " doesn't appear anymore.

News and Improvements from Version 4.00-04 to Version 4.00-06

- You can activate at most 2 computers with 1 CodeMeter. So far only one computer could be activated.
- ZSK Twin-Sequin
- In the Editor you can exchange the tape [a] or [b] while running, without selecting the stitch before.
- In the design head, in the dialog for the definition of the sequin, it is now possible to exchange the tape and the sequin device. The design will be automatically adjusted to that change.

- In the statistics, the quantity of sequins for tape a or b will be separately counted.
- The filter in the editor finds now again sequin belonging to objects, e.g. from Program 35.
- Repeat Rule
 - When Program 42 is called for the first time, an automatical refresh will be done. The neighbor repeat will be drawn. The same will be considered when changing parameters inside a repeat rule.
 - Default values for the numerical creation of repeat rules, will be saved, e.g. Total high, quantity above/below.
 - When creating a vertical repeat rule, the X offset can be adjusted to half a repeat.
 - When changing a design, the right repeat rule will be activated.
 - The repeat rule will now also passed on to calculated lines that have been done with a drawing automatic (e.g. Honey comb). The same will be considered for both new lines on the function cut line.
 - When a punchdata block is copied based on a repeat rule, then the thread trimming is adjustable at the block borders.
- In geometry the default value will be considered when clicking on the right key of the mouse, also when a supporting point has been already defined.
- The error in the parallel program has been corrected. It appears in corners with a straight outcome, which occurred mainly at the end of a straight line function.
- The length of a drawing line will be shown at the input and in the editor.
- The last block selection can be reactivated with [3][7]. The condition is, after abandoned the block function, that nor editing nor inserting has been done in the design.
- The adjustments for the repeat grid on multi head designs with head selection has been simplified.
- In the Output ,, General Path ,, the file can also be written directly in the root directory of the drive e.g. D:\. This was before only possible in a subdirectory.

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• The EPCwin dialogs are also now available as a Chinese translation.

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- Old designs that contains Pro 34, will be opened now correctly.
- No Zero Stitch will be inserted at the begin of a design when the start point has been setted automatically, e.g: Start in the center.
- The automatical arc [4][4] can be now designed to the left and to the right. Until now it was only possible on the top or on the bottom.
- The sequin size in Prg 35 will be shown correctly at the assistant menue.
- An error on the satin stitch underlayer has been corrected.
- The last used repeat number (or rule) will be adjusted automatically when opening a design.
- Now the sequin tape of the ZSK-Twin sequin can be change in the editor without an error.

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• No error during the activate process of the CodeMeter

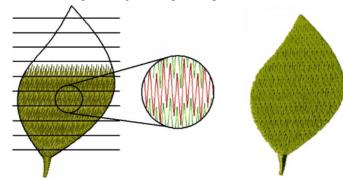
New features and improvements from version 3.61-09 to version 4.00-01

Punch

• Program 14

• Interlocked Satin stitch

With the help of this new stitch type, you can easily fill areas with an interlocked (Iceberg stitch) satin stitch. Up to now, this was only possible with the punching of complex sequences of manual stitches.



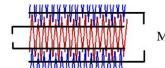
An already defined area is split into many rows and one by one processed. According to an adjustable interlocked sequence the rows will be interlocked. The interlocking method can be influenced by parametres like overlapping and displacement.

The interlocking rows or regions can be generated manually or automatically.

- With the manual input, each interlocking line will be defined manually.
- With the automatic creation of interlocked stitches, you input only one interlock line. With the adjustable parameters Maximal stitch *length* and *intermediate area*, parallel lines will be created automatically to the defined interlock line, so that the complete object area is covered. Each individual line can be manually optimized in the editor. Moreover, the parameters can also be modified. For this you select the interlock line and by [F11]you have access to the dialog of parameters.

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Intermediate area Without overlapping

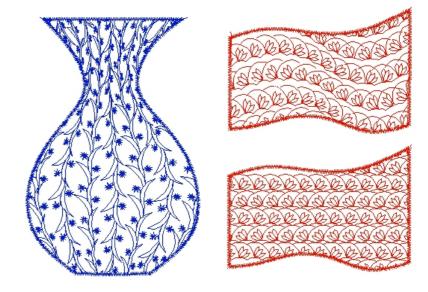


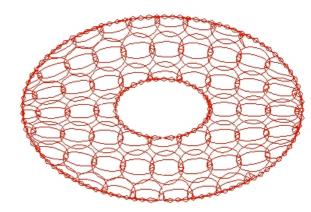
Maximal stitch length

• Macro

This new stitch type of program 14 replaces program 13. The stitch macro will be selected from the EPCWin block directory. With parameters like block distance, line distance, shift and mirror, you can influence the way of spreading of the macro inside the area.

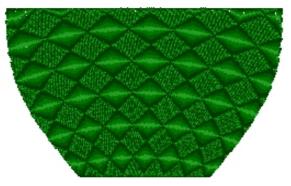
On curved stitch directions, size adaptation of the macro will create a 3D effect. On small locations the blocks are made proportionally smaller and on large they will become bigger.





The already existing stencils from program 10 will be also applied in program 14. In the calculation, the basic rhythm, which divides long stitches, can be activated or deactivated. Thereby will be distinguish between inside and outside of the stencil. This creates e.g. a satin stitch effect inside the stencil and a step fill effect outside of it. (See image). In program 14 there is no distortion function for the stencil. The size of it will always be proportional.

Through a curve stitch direction, you can reach 3- dimensional effects in the stencil fill. (See image)



- More improvements in program 14
 - The overlapping is now adjustable as an absolute value. According to the adjusted quantity, the stitch rows will be embroidered double, when two areas have a contrary course.
 - From rhythm 1 8, the result of the stitch rhythm effect can be mirrored.

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• The covering stitches can be provided with a "swing" (light zigzag). The stitches will be moved to left and right of the running line according to the adjusted value.

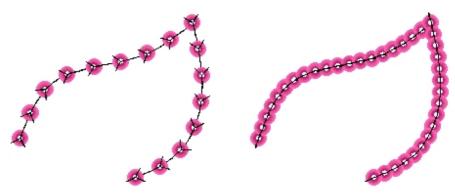
Program 35 Automatic Sequins on a contour

6 different stitch variations are available. Other parameters have further influence on the stitches which fix the sequin. The result is a variety of stitch effects, which can be controlled in the parameter set in the preview. Sequins can be spread overlapped or with a distance between them.

\odot	2-point row	\bigotimes	3-point row
$\langle \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$	Y-Stitch	€	I-Stitch
吏	E-Stitch	\bigotimes	V-Stitch

While generating the stitches, the program ensure, that the last stitch before setting the sequin is set in the upper respectively in the back area. (09:00 - 03:00 hs). Consequently a 'shoot' of the sequin against the thread will be avoided.

This method demands more stitches, but its necessary to reach a high and trouble-free production.



The end point can be selected freely. If it is settled in the middle of the contour, the contour will be automatically divided and calculated in two segments. Between the segments, pick up running stitches will be performed automatically.

Surfaces with sequins can also be filled fast and individually. Therefore you can draw with the drawing program parallel lines with the desired distance. With Program 35 you just snap those lines and they will be filled automatically with sequins. Advantage: You can optimize and modify each and every line in the editor.



EPCwin Version 4.0

• Support of the new ZSK Twin Sequin Device

With the help of this new developed ZSK Twin Sequin, it is possible to embroider for each sequin device two different types of sequin, which will be conducted alternately on top of each other (a and b). To punch designs for the Twin device, you have to adjust this sequin definition in the design head.

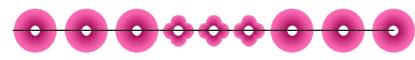
With the setting dialog will be opened. Now you can define separately for the right respectively for the left sequin device for lower tape and for upper tape. Size, colour and sequin shape are adjustable.

While punching, with special function 50 respectively 51 you activate the sequin device. Each tape can be selected with the following key combinations:

[F9][1] = Activate tape a (lower)

[F9][2] = Activate tape b (upper)

[F9][3] = Activate tape a and b (both sequins will be set at the same time). Works only with the same sequin size, but with e.g. different shapes.



Note: With EPCWin 4.0, the denomination of the sequin device has been changed. From 1 to R (ight) and from 2 to $L(\mbox{eft}).$

• Support of sequin sizes up to 22mm A sequin size until 22mm can be selected.

More improvements in punching

- With [Alt] manual stitches will be set incrementally angled. The stitches will be set e.g. in 90° vertically or horizontally. With [F4] you can adjust the angle, like 15° and 45°.
- With [F4], the length of the manual stitches can be limited. According to the adjusted value and the cursor direction a manual stitch will be set. The limitation will be shown by a small line on the rubberband.

Definition of contour (Spline) in Punching and Drawing

• If you are working with the Arc Mode [4][4] and a point of the arc has been set, with [Strg] a semicircle will be shown. Depending on the position of the cursor the semicircle will be open on the upper or the lower side.

Editor

• After changing parameters in the parameter set, the object will be automatically calculated without pressing[Return]. This option is adjustable under *Default Setting/Editor*.

Block

• The block tools [F4] has been revised.



Alignment

With this new function any design part can be aligned left,- right or centred related to a preassigned block (Master block). The block can also be adjusted into the same height, width and size of the master block.



Likewise an alignment line (horizontal or vertical) can be defined, on which blocks can be aligned.

These alignment lines can be activated/deactivated under the View function [F2].

Block tools

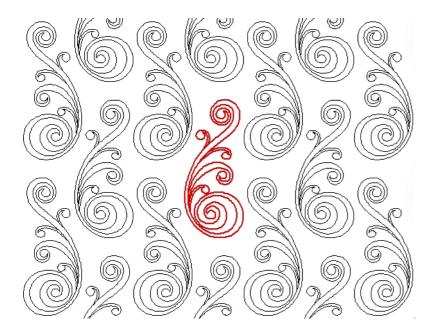
• **The Automatic repeat in the X and Y axis**

This new function allows to repeat drawn and punched design parts with a repeat rule. There are vertical-horizontal- and circle repeat rules. The horizontal and vertical rules can be combined.

An assistant helps while adjusting the parameters. Therefore e.g. a design part can be repeated n-times oriented to an adjusted total height. The distance between each part will be calculated automatically. At the same time an alternate mirror of each part or of the whole design can be adjusted.

Using the graphical creation of the repeat rule, the parameters will be automatically generated while moving and distorting the repeat-block. The repeat of drawing lines is virtual; it can't be selected. When a drawing line of the main repeat is edited, the repeat lines automatically change at the same time. Thus a repeat connection in all four directions is easily to control and to optimize.

If punching data's are in the block, they will be copied according to the repeat rule.



Blocktools

Marking

Apart from the marking of the centre of the block, the block dimension can be marked with corners and /or edges. Size and colour of the marker lines can be adjusted.

Load block in new design

With this function a new design will be directly opened into which the selected block will be automatically copied.

D Punched stitches and contours will be converted into drawing lines.

Drawing

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Program 42

Program 42 serves now to select and activate repeat rules which where assigned before in block tools. New drawing lines are drawn with the activated repeat rule. The former functionality of program 42 will be simulated with a repeat rule. If there is no repeat rule defined in the design, this special norm will be defined automatically at the first call of program 42. Respectively left and right a repeat of the head distance or Shuttle repeat will be shown.

Design Administration

Print and Statistics – New program option

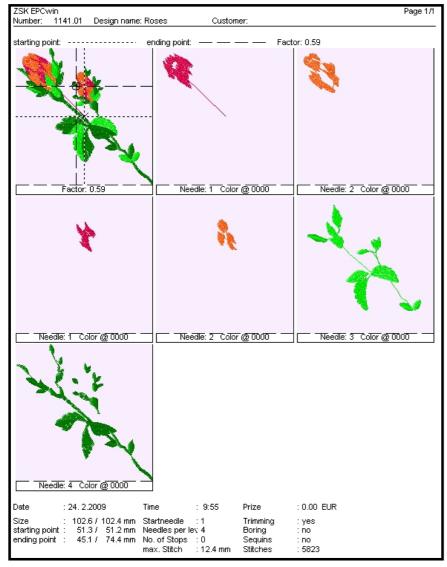
This new program option offers considerably more possibilities to print designs as the former standard print program.

The main new functions are:

- Needle sequence in embroidery order a design part between each needle change, in its colour and chronological order, will be printed out as pictograms (see picture on next page)
- Print of colour catalogue up to 16 different colour settings of one design can be printed on an A4 size page
- Print of directory catalogue up to 16 different designs can be printed on an A4 size page

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- Specific filter functions for:
 - Histogram of special functions (chronological order of special functions)
 - Statistical summary for e.g. consumption of thread



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The start – and end point can be independently of each other adjusted in the design head. Until now the function "start at centre" has been used. Therewith, the start point was always in the centre of the design. The endpoint was always controlled with the special functions: 60,61 and 62.

The new functions summarize both. In a dialog, the start point can be placed e.g. at a right lower and the end point at a right upper position. When saving the design, a jump stitch will be inserted at the beginning and the end of the design. An additional offset movement can be added to the start- and endpoint.

Display

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- Under View [F2] the dialog for the repeat representation [*] has been revised. Now we distinguish between the representation of only one repeat and a full repeat. The repeat can be shown in original colour or the repeat colour. Other adjustments are:
 - Separate activation of the left and right representation
 - Number of heads in full repeat respectively number of needles for Shuttle embroidery
 - For complex designs with head selection, there is a special representation, in which the stitches of every head will be shown in a different colour. With the help of a repeat grid or help lines, you can control during the creation of the design, if the head is exceeding its allowed working area. Please note, that the "real" side movement of the frame is shown in the design head. When calculating , repeat jumps will be accordingly considered.

In general

• Support of the wheel of the mouse

Zoom function with [Ctrl] + <Wheel>. Rolling the wheel to the back, means [Page up] and to the front [Page down].

In the Editor [F6] the rolling of the wheel causes a run through the stitch list. Rolling to the front means a line down at the stitch list and to the back a stitch up at the list.

• With [Ctrl] + [Tab] you can exchange between multipresent designs.

Design head

EPCwin Version 4.0

More improvements

Punch

• In Shuttle embroidery you can always set sequins, even when in the meantime the editor has been used.

Contour

- When snaping a closed contour and thereby the startpoint is moved, the transitions between curve and straight will be correctly calculated.
- Program 12 Cross Stitch
 - Until now, the start point of the grid was always at the last stitch, respectively, when cross stitch objects have been done, the start point could be taken over from that last cross stitch object. The program has been changed to the effect, that the cross stitch grid lies at the start point of the measure line, when the cross size or position has been defined by 2 points.
- Program 31 Chain up blocks
 - If there are objects of program 14 in program 31, they will be now correctly chained up.

Block (Operating speed)

• In connection with block operations, the working procedure has been considerably accelerated, especially when building and processing blocks in punching. There is no calculation when saving or loading a block. Certainly it will be, when changing size or rotating it.

Representation

• The representation of designs in the True View I/II has been revised. The procedure will be executed without any interruption. Furthermore, the sequins are shown more vividly in the True View. The order of embroidering stitches is considered, in which stitches laying under the sequins are not shown.

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Fonteditor

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New fonts could be created until now only based on TrueType fonts. Those fonts are converted automatically and need to be adjusted only at few points. Now the additional possibility to create Fonts from scratch is given. This can be based on a scanned image of a font. The created fonts are used identically to the fonts created from TrueType, so the fonts are scalable and can be used with shortest point connection.

With this it is now possible to create fonts where no TrueType pattern exists. The base line and the upper line are now movable for the complete font to make an overall size correction. The new red buttons are used to distort the letters at one side only. So the adaptation to embroidery specific needs is simplified.

With the new version it is quite simple to copy and paste single contours from one letter to the other to make it simple to extend letters maybe from A to Ä. The selection of the character to edit using the ASCII table is simplified.

• New software protection with WIBU CodeMeter (CM)

EPCwin 4.0 is protected against illegal use with a new protection system, the CodeMeter from WibuSystems. As the dongle before, the CM Stick is plugged to the USB-Connector of the computer. The necessary software drivers have to be installed in case of an update. Choose point 4 during the installation. When updating to EPCwin 4.0, the existing dongle **must be** replaced by a CodeMeter.

C 2 P 2 P

Note

Updating from Version 1.x/2.x/3.x to Version 4.0. is subject to a charge. You need new passwords for Version 4.0; these are available from <u>atelier@zsk.de</u>..

DEMO days installed with Version 1.x/2.x/3x are retained and do not expire.

<u>NEW SECURITY DONGLE:</u> Starting from EPC version 3.60 it is essential, that you install the new version of the Wibu-SYSTEMS security software, to support the new CodeMeter hardware.

New features and improvements from Version 3.50-06 to Version 3.50-09

Working Speed (large designs with many stitches)

- In connection with blocks, the workflow has been speeded up in several positions, especially the composing and processing of blocks within punching. If a block is saved or loaded, it will not be calculated any longer. If, however, this block has been increased, made smaller, or turned before, it will be newly calculated.
- The drawing of designs in TrueView-Display II has been revised. The drawing procedure is carried out without interruption.
- The print out of a design section has been optimized. Tip: If you want to print out a section in TrueView, please define the section first, and only second adjust the print view to TrueView.

Pictures

- An error treatment for non-supported *.jpg Formats has been implemented.
- The Temp folder is now automatically emptied after the converting of picture files.

Shiffli Embroidery

- The placing of sequins is now also possible when the Editor was called up in the meantime in Punching.
- It is possible now to adjust the start number of repeats, even if the requested new number is the last number of repeats in the design.
- During code output Lässer, the "Acting on Functions" is automatically adjusted on "Lässer".

Programme

• During programme 31 and 32, the corners in the contours for the used blocks are taken over aright. Up to now, corners were not taken over, but changed into curvy supporting points.

dxf Import

• Lines with up to 2000 supporting points are duly supported now. The change from straight lines to curves has been revised.

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New features and improvements from Version 3.50-05 zu Version 3.50-06

Punching

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- The default stitch direction for program 10 and 14 is memorized correctly now.
- The last used type of contour entry ([4] [2] [4][4]) in program 14 again is activated after input of stitch
- position.
- During program 31, sequins again are worked off correctly.
- Several problems in choice of head selection have been removed.

Contour

- The limitation in length in the straight line function [4][3] is now carried out correctly.
- In the contour creation it is now possible to switch over with Alt Gr into straight line mode.
- If a contour is finished with pressed Alt-button, the next contour will not begin in the straight line mode.

Block

- The pivot in block (target) was not shown sometimes.
- Block Increasing/Decreasing/Distortion with punch data:
 Until now point of reference changing data was the opposite holder of the box.
 In the new version you can chose whether the first stitch of the block it to be the point of reference. For this you have to click shiftably in the settings/Editor the tick in section block reference point. Then, the first stitch of the block ist the reference point for the calculation. If [Strg] is pressed when moving the holder, then the opposite holder is the reference point.

Diskette

• No more errors when editing in Tajima-Format in connection with trimming.

Misc.

- Now, further resolutions (1280x800, 1280x960, 1400x900, 1440x960, 1400x1050) are supported by
- directory- and block-pictogram depiction.
- After a new installation, the offered back-up path can really be used.
- The drawing speed of reference data of objects with many contours respectively stitch directions has been increased.

New features and improvements from Version 3.50-03 zu Version 3.50-05

Program 10

• Stitchtuft-Automatic: Under the parameters you can activate the Stitchtuft function to calculate an object. The divided areas will be done one after another, without any transition stitches. Long distances between areas will be automatically trimmed.

TT-Monogram

- You can now insert stitch directions in the converted objects of TT-Monogram. An already existing or inserted stitch direction can be changed into a miter corner. For this, you click on the stitch direction line (not a point). With F3 you activate the miter on or off.
- When calculating the fixing stitch sequences, it will be consider the real width of the satin stitch, according to the adjusted pull compensation.

Satin Stitch

• The problem with centerline is resolved. In certain cases, the width was changed to 0.

Design management

• A problem with the protection in the administration of designs for Schiffli has been resolved.

New features and improvements from Version 3.50-01 to Version 3.50-03

Program 14

- The area underlayer is always divided now when stitch length bigger 0 is chosen.
- Box -> [F11] -> Distance: The changing of stitch distance is now also applied to objects of program 14.

Program 20

- Free end point on side lines is supported again.
- Sometimes in Global Editor, the calculation was wrong and one movement too much was calculated.
- Closed side lines are now calculated perfectly. The number of movements now corresponds to the adjusted value in the parametre setting.

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• Bean stitch: Shortening of stitch bigger 99 % is supported now.

Program 34

- The &-symbol is shown now in the symbol table of program 34. Please call this symbol table with [ALT][F1]
- After inserting symbols via symbol table, the pull compensation is no longer filled with incorrect values.
- In the new version of Font Editor the special symbols & % etc. are depicted correctly.

Editor

- An absolute changment of border width for satin stitch can be carried out now in Global Editor with any number of decimal places.
- Error when breaking off function "extending contour" has been removed.

Design

• Double wabenhoehl: an area was not filled completely when the reference point had been shifted far away from the middle.

Design Management

• The real way of proceeding in X-direction in the design header is shown now with designs with head selection respectively needle selection.

In-Output

- Tajima: The setting for *"Jump Stitches as stitches for movement* "remains.
- Lässer: When loading in a design, no "hieroglyphs" are entered into the area for name of design and customer.
- The setting for the picture in "view of print" remains.

Other

• The breaking off of design function in TrueView-Mode with Q is effected now without noticeable delay.

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• The user surface is also available now in French and Chinese.

Version 6.0 (06/2016)

Note

The update to version 3.5 is free of charge for all licensees of version 3.0.

Updating from Version 1.x/2.x to Version 3.5. is subject to a charge. You need new passwords for Version 3.5; these are available from <u>atelier@zsk.de</u>. .

DEMO days installed with Version 1.x/2.x/3x are retained and do not expire.

New features have been added to the following parts of the program:

- Punching
- Contour (spline)
- Point/Corner/Straight Line
- Block data
- Design manager
- Input / Output
- Display
- Data capacity for punch designs
- TT monogram

The following parts of the program have been improved:

- Punching
- Point/Corner/Straight Line
- Block data
- Contour (spline)
- Design
- Schiffli design
- Link image
- Design manager
- Input / Output

New functions

Punching

- When stitches are being input manually, grid lines, help lines and outlines or contours can now be approached with [Shift] + <Left>.
- In addition to the conventional round sequin, other shapes are now offered as well in the design head.



- Satin stitch
 - Circle input [F7]: The width can now be set numerically as well.
 - Center line input [F8]: The ratio of side 1 to side 2 can now be varied. Until now, the division was always the same. Select 50:50 to set an equal ratio between the sides.



As before, the 9 most recently used border widths are offered. Special programming allows the system to switch between the two most recently used values when [F11] is pressed (as with program selection).

- In the parameter set of programs 6 and 10, the stitch sequences and stencils are selected in a new dialog which also permits scrolling.
- Program 14: The short-long rule can now be deselected.
- Programs 14 and 15: The jagged parameter input is now made in a separate dialog that can be called in the parameter set of the relevant program.

Contour (spline) in punch and design

- In the straight-line mode [4][3], a length restriction can now also be set, so that you only have to stipulate the direction of the straight line. The corner is automatically placed at a distance from the preceding corner corresponding to the set length. In addition, the cursor now engages in increments of either 15° or 45°.
- When entering under [4][1] and [4][2], it is now possible to switch temporarily to the straight-line mode [4][3] with [ALT].
- When entering stitch direction markers, you can now enter vertical, horizontal or sloping direction markers $(15^{\circ}/45^{\circ} \text{ increments})$ with [ALT].
- In arc mode [4][4], press [Ctrl] + <Left> to switch automatically to [4][1].

• Parallels

- The 9 most recently used parallel spacings are offered again. Special programming allows the system to switch between the two most recently used values when [F11] is pressed.
- Double-sided parallels can now be created. This function is available with drawing line creation and in the drawing line editor.
- The maximum deviation of the parallels can now be entered in $^{1}/_{10}$ mm increments. With lower accuracy, fewer reference points are used.

Point/Corner/Straight Line

- In the move contour function (punch/design) a reference point can now be inserted with <Right>. Caution: This cancels the option of moving the line into the box with <Right> in the drawing line editor. To call this function, press [F3].
- Contours and drawing lines can now be extended. For this purpose, the initial and final points must be selected in the editor, and [Insert] pressed. You find yourself in the contour definition function with the full range of options available.
- Auxiliary lines in program 20 can now be detached with [F2] for insertion at a different place. It is now no longer necessary to press [Shift] for insertion. It is sufficient to select the desired position with <Left>.
- Special function editor extended: Function [F7] allows the order of special functions in the stitch list to be changed. This function is primarily required in designs with head selection or where the head type changes (F, K and W heads), when the correct embroidery sequence depends on the order of the special functions.
- The two outer contours for satin stitch (1) and curved Ziegelhöhl (16) designs can now be swapped to obtain a different stitch calculation.

Block data

- Block names can now be edited in the pictogram directory of the block manager [3][9].
- The *Reduction of points* [4] [,] [9] function reduces the number of points on a drawing line. The function is applied to all drawing lines in the box. The *Accuracy* (1/10mm) parameter monitors the permitted deviation from the original line. This function can be used when importing vector formats (dxf, ai, emf), for instance, if the number of points for contours is too large.
- Blocks can be converted from multi-head to schiffli and vice versa. Special functions contained in the block are converted if possible. Functions that cannot be converted are removed during reading-in.

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Design manager

- Protective mechanisms when several EPCwin systems are working at the same time on one directory:
 - This function is selected in *Settings / General / Access protection of designs and directories*. This function is deselected when Version 3.5 is installed as an update or for the first time, or re-installed.
 - A design that is currently being processed is marked by an * in the final column of the directory. This design can now no longer be opened by another user. It is barred from access. After it has been processed, it is automatically released for access again.
 - Access to the directory is barred for others while one user is loading or saving a design, or importing a design from a disk, for example, copying a design from the directory or saving an image after scanning. For this reason, the forenamed operations should be completed speedily in order to restore access to the directory to other users.
 - The function in the text directory allows all barred designs to be released for access again manually in exceptional cases if the automatic release function has failed. This could be caused by a power failure, computer, network or software problems etc..
 - To ensure the function operates correctly, it is essential that different computer names are used.
- Conversion between multi-head and schiffli

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- Designs can now be converted from multi-head to schiffli. Special functions contained in the design are converted if possible. Functions that cannot be converted are removed.
- During conversion from schiffli to multi-head, a thread trimming operation is now inserted with *Needle bar off*, depending on a variable jump stitch length.

Input / Output

• The read-in routines for DOS disk formats ZSK TC, Tajima and Melco have been optimized so that several designs can be read in from disk in a single operation.

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More than 90 edited fonts are now available. During the update operation, the updated TT monogram font files were installed in the directory *.../EPCwin/GiSFonts 350 01.*

If you wish to use these updated fonts in EPCwin, copy all or individual TT monogram font files to your data directory. Note that any fonts stored under the same name, including ones that you have edited, will be **overwritten**. The copy path is usually as follows: *Program Files/EPCwin/GiSFonts_350_01* to .../*EPCwinData/GiSFonts*.

Improvements

Punching

- During fast jump stitch entry ([Ctrl]) in multi-head, each click is now recognized as a jump stitch. Previously, roughly every second click was a stitch point.
- Satin stitch
 - The fault occurring whereby the jagged function in satin stitch was not carried out or not executed correctly with certain underlay parameter settings has been corrected.
 - Normal stitch direction markers are now no longer drawn into the corner of a contour.
 - In the case of corners with a straight run-out (square with oblique) the corner stitch direction markers are now "pulled in" as if by a magnet as well.
 - The stitch direction markers for miter corners are drawn more reliably into the corner of a contour.
 - If an additional stitch direction marker is omitted between two consecutive miter corners, an error message to this effect is now issued.
 - Circle input [F7]: Object creation can now be aborted while the stitch direction marker is being entered as well.
 - Center line
 - When entering a closed center line, corners are now accepted as miter corners as well if the opening is moved. With parallels, miter corners are also incorporated.
 - If satin stitch with center line is called for a second time, the key for miter corner [F10] is shown as having been pressed if miter corner is on.
 - In the event of two miter corners occurring in close succession within the center line, a stitch direction marker is now incorporated at the half-way point.

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- **Reading Lässer data:** The *Small thread guide*, *Large thread guide*, *Thread tension* and *Lock device* special functions can be specifically filtered out. This allows the number of special functions in a design to be reduced to allow faster working.
- **Reading and writing Lässer data:** Support for thread trimming special function
 - **Punching:** The *Needle bar off* function is punched with *Trimming* in the design.
 - **Output (MST):** During the output you define the subroutines for fixing (6 10) and starting (1 5). The selected subroutines are inserted in the correct position before *Needle bar on* or *Needle bar off* during code output to MST.
 - **Reading in (MST):** During reading-in, subroutines contained in the code are replaced by *Needle bar off* and *Trimming*. One subroutine each for starting and fixing is stored in the design and offered again during subsequent output.

General

• Widescreen TFT monitors are now fully supported as well, so that a circle, for example, is also actually displayed as a circle. For this purpose there are separate screen factors for X and Y. To determine the two factors first set both screen factors (X/Y) to 1 in *Settings / General*. Now open a new design and create a square with sides 15 cm long in *Geometrie Rectangle* (numerical input). The zoom factor must be 1. Take a ruler and measure the actual horizontal and vertical lengths of the square on the screen. Calculate *Screen factor Y* as follows: 15 / horizontal side length. Now enter the two values in the associated fields (3 places after the point) under default settings.

• Data capacity for a punch design has been doubled:

- Maximum number of reference data/stitches/parameters = 1,200,000
- Maximum number of programs in a design = 8000
- Maximum number of special functions in a design = 12000
- Maximum number of markers in a design = 4000

• New TT Font Editor Version 2.02

- Support for miter corners.
- The character height can now be entered to allow editing with realistic size proportions.

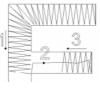
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• The measuring function can now be called with [Ctrl][L].

- If it cannot be calculated, a normal corner is automatically converted into a miter corner (rather like a dunce's cap).
- Underlay prog.
 - The last stitch of the center underlay now swings out again as it changes over to the cover stitches, so that it is longer.
 - When changing over from the underlay to the cover stitches, the minimum stitch length is now taken into account as well.
 - The failure to shorten the center underlay at the end of satin stitch objects now no longer occurs.
 - Other faults relating to satin stitch underlay have been remedied.
- Program 20 step-lines
 - If several lines go out from the start point and the end point lies on one of these auxiliary lines, the stitches are now calculated.

• TT monogram

• Different filling sequence in the case of letters with horizontals (e.g. Arial 'E'). Now the vertical is embroidered first, bypassing the middle horizontal. The system then fills the horizontal before resuming with the vertical.



- In the case of satin stitch filling without division, overlapping occurs not only with filling in the opposite direction, but also for filling in the same direction if filling has been interrupted for a horizontal.
- Various minor faults affecting stitch calculation have been corrected, in particular with underlays and changeovers to the cover stitches.
- The font preview is no longer shown immediately when the parameter dialog is called.
- If the used font is not present in the system (e.g. reference data are from another EPCwin), a message to this effect appears on the screen.
- If needle 0 is set, an error message to this effect is issued.
- Programs 10 and 14
 - A contour in programs 10 and 14 can now also be closed with [Shift] for start point round and with [Shift] + <Left><Left> for start point square.
 - Program 14: There is now better adherence to contours during stitch filling if additional stitch paths have to be inserted in order to switch to the correct side.
 - Error messages are now issued in the event of loops and contour overlaps in program 14. In addition, the error is marked.

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- Programs 31 and 13 chain-up blocks
 - Manual jump stitches in the block now remain as jump stitches. Previously they were converted to stitch points.
- Cross boll
 - It is now possible to set the stitch distance again in the parameter set.
- Parameters
 - If a stencil or stitch sequence is edited when a design is open, the opened design is now no longer closed when editing is concluded.
 - When working in the parameter editor, the fault arising in certain cases of all stencils being drawn on top of each other has now been corrected.
 - Needle design/head selection
 - Long delays no longer occur after selection when using needle designs and head selections.
 - The *View* function now operates correctly in the on-screen dialog for needle designs and head selections if one or more entries in the design column is selected.
 - If a needle design is selected, the needle design concerned is now copied into the design under another number, if the number already exists in the design but refers to a different needle design from the one selected. The same problem has also been corrected with head selection, stencil and stitch sequences.
 - Numbers in the 1000 1999 range are now included when a needle design number is allocated automatically.

Point/Corner/Straight Line

- Selection
 - If you go back from [3][5] marker ([3][6] object) to [3][1] when determining the type of selection in the editor, the object/marker filter is automatically deselected again, in other words you are returned to single selection.
 - The stitch list now shows the number of the current stop, with the exception of multi-colored designs in schiffli.

- The icon for program type is now displayed correctly in the selection list. It always shows the program type for the following selection line.
- If the editor is called with [F6], the first stitch is now preselected. This allows a special function to be edited with [F12] or the [comma key] directly in the number pad as well.

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- Satin stitch
 - If a corner stitch direction marker is clicked on in the editor, the relevant corner reference point of the contour is also moved at the same time.
 - In the case of center lines, the first reference points of the contour can now also be deleted without the object width changing.
 - The software no longer crashes in satin stitch with center line if the miter corner is switched on with a stitch direction point (not center line reference point).
- Program 20 step-lines
 - The end point is automatically moved as well if it is positioned at the beginning or end of the contour and this contour point is moved. When entering the end point the cursor color changes to green if the cursor is approaching a contour end.
- Program 34 TrueType monogram
 - When resolving a monogram object (34), the envelope function is taken into account.
 - All underlay parameters of a resolved object can be adjusted, also the parameters of a miter corner.
 - When an object is resolved, the contours are converted correctly.
 - The selected envelope function remains in place after a density change with Global Edit as well.
 - The stitch distance of the object is now shown correctly in the editor assistant.
- Program 12 cross-stitch
 - The entered cross path in program 12 is now also displayed directly in the main editor [F6], so that it can be selected reliably.
- Programs 31 and 13 chain-up blocks
 - The block number used is now displayed again in the object editor assistant.
- General
 - When inserting a point in a contour, a corner is now added directly if the insertion point is located between two corners. The same applies to straight lines.
 - If a drawing object is deleted, the reference lines of the object are now not deleted at the same time. Consequently, these lines are still available to use again.
 - After a new design parameter set number has been entered, it is now no longer necessary to confirm it again with *OK*.

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- Head selection
 - A repeat jump can now be edited, whereas previously it was deleted instead.
 - If the head selection has been modified, the associated repeat jump is now calculated and verification requested.

Block data

- With 'load block' the last stitch in the design is now no longer moved at the same time. An additional stitch is inserted if the loaded (copied) block is moved by more than $\frac{5}{10}$ and the first stitch in the block is an insertion point.
- If a block is deleted or the loaded block is removed with [ESC], the last special function / the last marker before the block remains in place.
- If two objects are only separated by a manual stitch and the second object is selected with [3][6], for example, this block can now be deleted correctly without generating a data structure error.
- The problem with 'shift block', whereby blocks were not shifted correctly after trimming or a needle change followed immediately by an automatic program, has been remedied.
- If the embroidery sequence in the film strip is altered, this can now be confirmed with <Right> as well.
- Box now rotates <u>counter-clockwise</u> (in a mathematically positive direction) when the numerical input function [F11] is used.
- When [F11] is pressed in the box, the point of rotation is now taken into account even if the box only contains drawing lines.
- Point of rotation in the box
 - The point of rotation is now shown as a target.
 - The point of rotation can now be placed deliberately with [Shift] (grid, approach help line).
- Copy/save block: If a block was distorted/mirrored before saving/copying, the objects it contains are now calculated and/or resolved.
- After distorting/zooming the stitch direction markers are now trimmed on the outer contour.
- The problems in the object editor that occurred because an end point was not inserted in objects with program 20 when reading blocks created with EPCwin version 2.5 and below have now been remedied.

Contour

- Closing a contour is now supported in the straight-line function [4][3] as well.
- Changes to arc contour definition mode [4][4]
 - If contour input is interrupted the unfinished contour is now no longer left behind as a green line.
 - [Delete] can now be used for deletion up to the start of the contour.
 - When one arc follows on from another, the join is executed as a corner with <Left><Left>. A smooth transition is achieved by a single click. The same applies when an arc is followed by a curve.
 - [F4] (contour mode) is now available only at the first point of the arc.
 - When [Backspace] is pressed during arc input, contour definition is now no longer blocked if the first point of the arc is deleted again.
- If the 'result OK?' inquiry is answered with 'No' when using a parallels function, you now remain in the input function for parallel spacing.
- With 'repositioning opening', types of contour point (curve, straight line and corner) are now transferred correctly.
- The function for defining contours has been reworked with regard to contour parts.
 - In drawing lines that are used to create a new contour (punch/design), a reference point is no longer added.
 - Part lines that are cut out for pasting track the original line more closely thanks to additional reference points.
 - A curve / corner is incorporated automatically when two part-lines are joined, depending on the included angle.
 - If, in contour definition, a line was accepted in its entirety by clicking on the first and last points of the original line, distortion occurred. This happened only if the original line had a small number of reference points.
 Note: If a line is to be accepted in its entirety, simply click on the line with [Ctrl] + <Left> and confirm with <Right>.

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Design

- If, when defining contours for drawing lines, the first point entered is deleted with [Delete], the program now no longer switches to the object editor of the last drawing object.
- Geometry
 - A joining point is now applied to the objects.
 - Stabilization points are not required with full circle as this is closed round.
 - With arc the number of points now depends on the included angle (usually lower).
 - In the case of default input with [Return] or <Right>, [Shift] is now supported for approach.
- In the case of drawing stitch direction markers, the corners that are to be approached are now marked permanently in color.

Schiffli Design

- The cut bored hole is now calculated more cleanly during the changeover from arc to straight line.
- The proportional size change was canceled with [Shift] + [Cursortasten] only in programs 20 and 23. [Shift] did not work in programs 21, 22 and 24. Proportional size change is now canceled in all 5 programs with [Shift]. Caution: In programs 20 and 23, releasing [Shift] no longer switches over to square. The current proportions are retained.
- The preview in the design parameter sets no longer disappears if you click onto the preview field.
- Crashes no longer occur when an older design is loaded with a drawing object (program 24, sloping grid).

Link image

- The link is now confirmed with <Right>. Press [Delete] to delete the link marker.
- The *Next link* function presets the correct default position for the previously linked image, in other words if you are linking from bottom to top, the default position is reset to bottom and not, as previously, to left. This now allows several images to be linked in succession.

Design manager

- With *Create Directory* the number of the design that cannot be correctly incorporated in the new directory is output.
- When converting from schiffli to multi-head designs, drawing objects are now converted correctly.

Input / Output

- Reading Lässer data: If the maximum number of special functions is exceeded, reading in the design is terminated. Afterwards the number and distribution of special functions is displayed.
- ZSK code: Output now also supports stop instead of needle change.
- The problem within the print preview, whereby the image could not be adjusted although present in the design, has now been resolved.
- The size of a dxf design is now transferred correctly when read in.

General

- The drawing speed of the reference data has become faster.
- In the overview window only reference data are now drawn if stitch data or parts thereof are deselected. This also helps to accelerate the display refresh rate.
- With 'move grid' in a design with head selections, the position of the first head is now marked by two yellow vertical lines.
- The legibility of the head numbers specifically for designs with head selections has been improved.

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- In repeat view, reference data are now drawn correctly ([2][*][4], [2][*][5], [2][*][8], [2][*][9]).
- Additional data structure errors are correctly automatically. If automatic correction is not possible, the error is displayed in the editor. The area containing the error can be deleted with [Delete].

New features and improvements from version 3.00-02 to version 3.00-06

New functions

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• When reading Tajima stitch data, STOP functions can be converted to change of needle.

Improvements

Speed

- Working on pictures can be effected smoothly and quickly again..
- The speed of drawing of contours and lines has been increased

Contour

- When the opening of contours is shifted, one corner is retained.
- With closed contours, the corner symbol is shown, when the opening is angular.

Editor

• If a point is inserted in a sub line of progamme 20, only this point will be moved after the insertion, and not additionally the connection point of this sub line.

New features and improvements from version 3.00-01 to version 3.00-02

Improvements

TT-Monogram Program 34

- The execution of automatic connections has been optimized.
- The determination of distance between the letters has been revised. This function is vital for implementing the special function "trimming" between the letters.
- The function "stitch in the middle between two letters" has been improved.

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Copy Designs from EPCunix to EPCwin

• This function is working correctly again.

IMPORTANT

The new version converts the contours (splines) of existing designs. Designs that were created or edited with Version 3.xx can no longer be opened with Version 1.xx or 2.xx. Before performing the update, therefore, make a backup of your designs and

blocks.

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New features have been added to the following parts of the program:

- Contour (spline)
- Punching
- Editor
- Block data
- Basic design
- Schiffli design
- Import vector data
- Help tools
- Design head
- Statistics

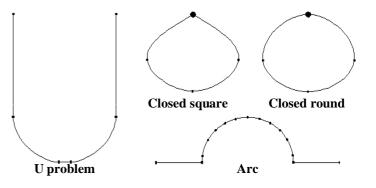
The following parts of the program have been improved:

- Punching
- Editor
- View
- Block data
- Basic design
- Graphics
- Directory
- Design head
- Input / Output
- Print

New features

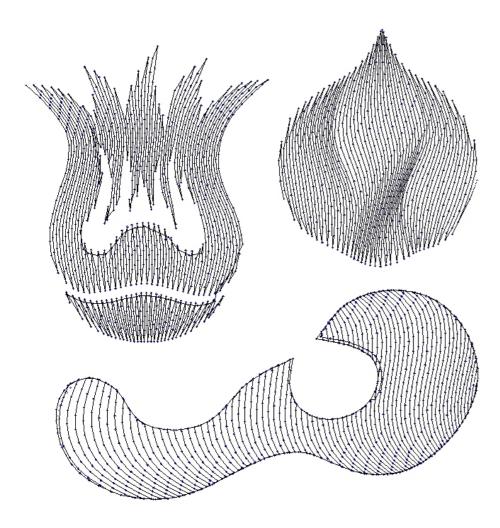
Contour (spline)

- The following options have been added to the contour function:
 - There are two new types of reference point:
 - Smooth transition from a curve to a straight line and from a straight line to a curve, e.g. U problem; the transition is selected with [4][2] or [4][1].
 - Straight line after a corner; this type of reference point is set in the editor.
 - Selective closing of a contour:
 - The contour is closed round with [Shift] <Left> on the contour start point
 - The contour is closed square with [Shift] <Left><Left> on the contour start point
 - Integration of arcs [4][4]in a contour
 - In the straight-line mode [4][2], a length restriction can be set, so that you only have to stipulate the direction of the straight line. The corner is automatically placed at a distance from the preceding corner corresponding to the set length.
 - The number of reference points for a contour has been doubled from 1,000 to 2,000. For program 10 and 20 this means that all contours together (outer counter and all holes or the main line and all auxiliary lines) can now have 2,000 reference points.



Punching

- New program 14 for curved filling in complex areas
 - Input of one or several curved stitch direction markers
 - Input of holes [F2]
 - Input of areas with a different stitch rhythm [F3]
 - Input of dividing lines [F4]
 - Input of secondary areas [F5]



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- Program 20 Step-lines
 - Free start and end point independent of main and auxiliary lines
 - The main line can now have up to 5 paths (auxiliary lines up to 4 paths)
 - Stitch repetition with growing and lateral deflection (swing) to give the stitch a more pronounced 3D effect (bean stitch)



- True-Type monogram 34
 - Calculation of center line underlays
- Input of zero stitches (X = 0 and Y = 0 movement) in schiffli with [F7]

Editor

- Changing embroidery sequence and selection of blocks with the aid of the "Film strip" for schiffli designs.
- Insertion of zero stitches in schiffli. First select a stitch. You can then insert any number of zero stitches with [F7].
- True-Type monogram
 - Resolve object into reference data
 - Editing reference points
 - Editing stitch direction markers
 - Repositioning the end point

Block data

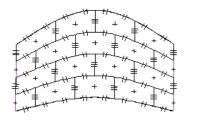
• While a block is being moved, the view tool can be switched on with [V]. This function is necessary because a different view is often required when selecting a block and for fitting.

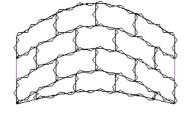
Design

• Creation of multiple parallels with the parallels function when defining contours.

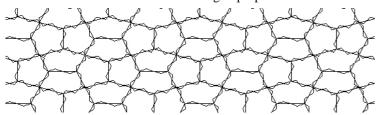
- When stitch direction markers are being entered (program 40), a corner that is to be approached can now be entered directly with <Left><Left>. The corner to be approached is automatically transferred to the punch object.
- The color for the stitch direction markers is now saved separately.

- Program 25 Curved brick filling
 - Calculation with consistent number of rows; the brick height varies
 - Calculation with consistent brick height; the number of rows varies
 - Calculation of swing stitches

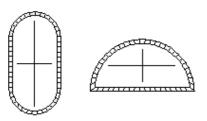




- Program 21 Wabenhoehl
 - Dual execution with flexible hexagon proportions



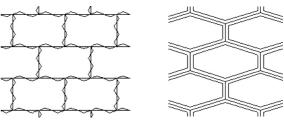
- Program 34 Oval bored hole
- Program 35 Semicircular bored hole



• Repeat fitting with hoehl-type filling (Bohrhoehl 20, Wabenhoehl 21, Ziegelhoehl 22, Stoffhoehl 23 and Grid filling 24)

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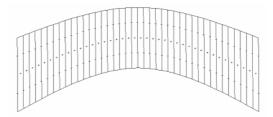
• Calculation of swing stitches or border help lines with programs 20 to 22



• Program 24 Grid filling

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- Defining a shear angle
- Activation of punch preparation. With this function you can "snap" each individual grid line with program 20 [Strg]<Left> when punching the object. Program 20 Step-lines adopts the grid filling rhythm. This applies only if the step length set in program 20 is at least as long as the grid step length.
- Preview in the parameter set for filling programs 20 to 25
- Program 1 Satin stitch
 - Input of dividing lines
 - Any combination of step rhythms



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• Program 44 Step-lines with auxiliary lines



Import vector data

- The import of *.dxf files has been revised.
- *.emf, *.wmf and *.ai files can now be imported as well..

Help tools / measuring

• The help tools now enable you to select a ruler with [F4].

Design head

• When making entries under *Customer* and *Group*, you can now define a selection list. The default texts are activated and defined under menu items *Utilities / Definition of lists*.

Statistics

• With the statistics function for schiffli, you can calculate the yarn consumption for each needle or each color. For this purpose, state how many needles and levels (1 or 2) the machine has. The number of special functions, bore points and sequins in the design is also counted.

General

- Screen resolutions up to 1600 * 1200 pixels are now supported.
- Integration of a warning that is triggered when the maximum number of stitches, special functions, objects etc. in the design is being approached. This function is automatically performed during interim saving and can be called from the main menu.
- Setting basic colors, e.g. for start and end points, insertion point, reference point etc. under *Settings / View / System colours*.

Improvements

Punching

- With small step-line objects, a stitch is always inserted on the contour or in the corner if *Shift* is set to $\frac{1}{2}$ or $\frac{1}{3}$.
- With program 31 Chain up objects, zero stitches are no longer calculated in corners.
- With program selection [F11] the preselected program number is now calculated correctly. The defaulted program number is different from the one that was most recently used. This fault has been eliminated in both design and punch.
- With satin stitch, a straight starting stitch is now calculated even if it is shorter than the set minimum stitch length.

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- With the combination of jagged and sharp ("V") turn with programs 2 to 4 or program 5 types 2 to 8, long reversing stitches are no longer calculated. This fault occurred only in certain circumstances.
- With the combination of jagged, sharp ("V") turn and free end point with programs 2 to 4 or program 5 types 2 to 8, the running stitch line is not placed over the already calculated stitches. This fault occurred only in certain circumstances.

Editor

- The system remembers the current view setting when you exit the editor and recalls it the next time you call the editor irrespective of the entry in Settings.
- You can now switch a reference point from a curve to a corner and vice versa with the right mouse button.
- Find and replace special functions
 - The special function can be either replaced or deleted.
 - Under multi-head, if a needle change is to be edited, the stitch area for the relevant needle is depicted in color.
 - If a head selection (multi-head) or needle pattern (schiffli) is being replaced, the associated head or repeat jump can now be edited as well.
 - With the schiffli special functions thread brake and large and small thread guide, the values can now be edited.
- The border width of a satin stitch object with a center line can now be edited with [F11] in the object editor main mode as well.
- When [ESC] is pressed in the object editor, running now starts at the beginning of the object concerned.
- When a parameter set was being edited in the global editor, the global edit dialog was still visible in some cases, depending on the monitor resolution. When a button was clicked in this dialog, e.g. *Ready*, the system blocked.

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• After View [F2], the marking of the currently selected stitches is once again visible.

View

• Colors can now be faded out in schiffli as well.

Block data

- When the block directories are displayed, the block path is now shown in the header.
- The size of the bounding box is now calculated correctly. In some cases the calculation gave rise to a bounding box that was much too large.

Design

• With *Geometry Circle* the numerical input for the circle now refers to the diameter, not the radius.

Directory

- When a design directory is selected, the system asks whether the block directory is to be changed as well. The block directory at the same level of the directory structure as the new design directory is the one that is activated.
- The entire text directory or only marked sections can now be printed.
- If the image of a design is deleted, the IDP identifier is now edited in the design head as well.

Graphics

• Sequins are now shown with a central hole in True View.

Input / Output

- SLC output faults eliminated, e.g. the zero stitch at the end of the design has been eliminated
- Elimination of fault associated with the output of stitches in Lässer code with more than 16,384 increments (~1.63m)
- Disks formatted for Lässer and Hiraoka can now accommodate other files as well
- Lässer code can now be output with thread trimming as well
- With ZSK old, switching the disk code between DOS(*.DSZ) and ZSK now operates correctly
- Jump stitches for trimming/needle change can now be generated when outputting to Tajima with or without movement

Print

• The syntax for the design number is now Number. Version, e.g. 12345678.01

General

• The fault that occurred when deleting designs in the backup directory has been eliminated

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New features and improvements from version 2.50-03 to version 2.50-04

Improvements

Output Lässer MST-code

• Outputting the MST-code for Lässer machines, a slight displacement of design in connection with the Lässer Editor during frequent repeat or colour changes (ATC) could happen. The EPCwin software has been adjusted now to guarantee an exact correspondence between the Lässer code output "MST" with the Lässer Editor.

Note: When "MST" design data with frequent repeat or colour changes have been output with EPCwin version 2.50-00 up to 2.50-03, and those design data are read back in with the new EPCwin version 2.50-04, a slight displacement of design is possible. In this case we recommend to newly output this design on the basis of the original reference data with EPCwin version 2.50-04 onto Lässer code "MST".

Rearrange sequence of blocks

• Thread trimming in moved blocks will remain

Copy blocks

• Problem with resolve of objects has been solved.

New features and improvements from version 2.50-02 to version 2.50-03

Improvements

Punching

- TT-Monogram
 - The running underlayers have been improved.
 - The problems which occured during *Connection way: Original* have been solved.
- Improvement of stitches at the contour under program 10.
- It is possible now in Shiffli to enter a normal stop function without colour change for designs with colour stop.

Editor

- When activating filter [F6] in the Editor, the first filtered stitch was not preselected;
 - "Stitches shorter than ", "Max" and "Marker" did not function in Shiffli .

- With fill objects (Prg 10), it was possible to open holes and contour.
- In Shiffli, [F11] (jump stitch) will not be evaluated anymore.
- TT-Monogramm: No more crash, when the line is edited after [F4].
- From now on, a TT-object can be deleted in object editor with [Delete].

Block

- When crossing from Editor design line to Box (with [F3]), the contour now jumps back to its original position.
- *Chain up* and *Spread* is functioning again when the last geometric object, or the last edited design line has been loaded into the block with [F3] respectively.
- During loading a block, revs number 0 is no longer put in at the partial block limits now.

Design

• All design lines got the colour of the last line in the Shiffli design, after converting a Shiffli design to Multi-Head.

Measuring

• When the function measuring is chosen in the main menue, there is no more immediate scrolling.

Graphics

• In the presentation of rapports for designs with interchange, the needle colour in the rapports left of the main rapport is correct now.

Input / Output

- Incorrect writing of needle pattern has been resolved in NC.
- Shifting between ZSK old and TC is functioning now.

TT-Monogram Fonteditor

• Now, it is possible to chose another language in the TT – Fonteditor.

New features

Punching

• Now, it is possible to enter more than 9 repeats under program 20.

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Graphics

• From now on, screen resolution 1200 * 800 will be supported.

New features and improvements from version 2.00-01 to version 2.50-01

New features have been added to the following parts of the program:

• Punching

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- Editor
- Block
- Design
- Graphics
- Directory
- Design head
- Input / Output
- Printing

The following parts of the program have been improved:

- Punching
- Editor
- Block
- Image
- Design
- Help tools / measuring
- Design head
- Input / Output

New features

Punching

- The image section remains unchanged in case of [Backspace] if the stitch is deleted after a trimming operation or color change.
- In the default settings for the *Editor* tab you can now decide whether the object is to be calculated immediately after the reference data have been entered.
- TT monogram
 - An envelope box is now available with one-line monograms.
 - The letters' start and end points are now freely definable in the TTFontEditor.

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• New transition variants are available between letters.

Editor

- The options available for *Enable barred objects* are Yes, All, No and None. .
- Drawing lines can now be copied with [F2] without relocating them first with . <Left>.

Block

- The selection parameters for rectangle and surround are now: ٠
 - Single stitches too: block sections can consist of a single stitch.
 - Only complete drawing lines: only complete drawing lines are selected.
 - Only complete design objects: only complete design objects are selected.
- You can now switch between Move block and Rotate block with [F5] as well. .
- Moving a box with the cursor keys can now be accelerated with [Ctrl]. .
- In the default settings for the *View* tab you can now decide whether the center ٠ mark is to extend as far as the block limits.

Design

- In Spread the Mirror parameter is now available as well.
- Both repeat types can now be used in a design at the same time. The full repeat (design program 42) now pays due regard to lines for which an individual repeat (executable in the block toolbox [F4]) was selected. These lines are not repeated. With *Delete repeat* in program 42 the individual repeat can now be deleted as well. Thereafter all lines are repeatable again for program 42.

Graphics

- Design repeat lines can be selected and deselected under View. ٠ The shortcut is [2][,][,].
- *Repeat view* can now be selected with the shortcut [2][*] as well. ٠

Directory

Schiffli designs can now be converted to multi-head designs. ٠

Design head

The total work time expended on each design is now stated in the header of the ٠ design head dialog. This information is also exported with Export design info under Input/output.

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Input / Output

In the default setting you can now specify whether the computer's floppy disk • drive is to be designated drive A or B.

Printing

- A print preview is now available.
- You can now print out a special function histogram as well.
- You can determin whether white drawing lines are to be printed black.
- You can initiate printing with [Ctrl]+P.

General

The position of general dialogs (e.g. Outcome OK? Yes/No) is now retained during a session. You can therefore position the dialog unobtrusively on the screen.

Improvements

Punching

- In the case of objects (program 20) with a lot of auxiliary lines, the system generated jump stitches to a certain position in the design; this problem has been eliminated.
- Improved snap behavior with large zoom factors.
- The satin stitch direction is now correctly determined once the contour is entered.
- The running underlay no longer "swings" to the center line on the first path . with running.
- If three paths are selected with running, the final two paths now "swing". •
- With Cut out contour, superfluous stabilization points are no longer inserted.
- The current speed display in the assistant is now correct if you go back with • [Backspace].
- [Shift] for Approach line now operates in the parallel mode as well. •
- The cross stitch grid for program 12 is retained in conjunction with the Measuring function if the cross parameters are zoomed or scrolled.
- A fault that affected contour definition in connection with snapping has been eliminated. If you initiated a new line by snapping, you could not start with manual points if you went back to the beginning with [Backspace]. This problem has been eliminated.

- A special function is no longer deleted if editing ([F6]) is aborted.
- If the zoom factor is smaller than 1, the red/green marker points are no longer drawn in the editor. The work is no longer "erased", therefore, if you run through the design.
- When creating a line parallel to a drawing line in the editor [F9], automatic corner formation is now executed on the first occasion as well.
- Execution of the *Cut on contour* function no longer trims masked drawing lines.
- You can now select and deselect design marker points under *View* when inserting in the editor.

Block

• The repeat copy of drawing lines within the box tools is now correct.

Image

• The problems relating to entering the dimension system with designs that contain only an image have been eliminated.

Design

- In the distribution line for the spread function, you can now enter corners with a double-click as well.
- Entered drawing lines are no longer drawn in the repeat if repeat view is selected.

Help tools / measuring

- The default values for markers are now retained.
- The color of the remarks is now updated in the assistant if the color is changed before a letter is entered.

Design head

• The grid colors are now retained and do not change back to red if you print the design.

Input / Output

• The correct percentage is now displayed when a large TC design is being read.

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New features and improvements from version 1.22-01 to version 2.00-01

New EPCwin options

- TrueType Monogram
- Schiffli Design Management
- Schiffli Basic-Punch
- Schiffli Editor
- Schiffli Design

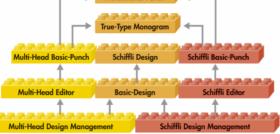
New features have been added to the following parts of the program:

- Punching
- Editor
- Block
- Global edit
- Design
- Measuring
- Graphics
- Directory
- Design head
- Input / output

The following parts of the program have been improved:

- Open / close design
- Punching
- Editor
- Global Edit
- Design
- Help tools / measuring
- Directory
- Design head
- Input / output





The modular program structure, matches your individual requirements ideally.

New EPCwin option: TrueType Monogram

- All Windows TrueType fonts are now available. Depending on your embroidery requirements, you can optimize an existing font with the TrueType font editor and save the result as a new font. Lettering can be applied to curves and any other form of a line. Numerous tools are provided for perfectly integrating texts in existing designs.
 - Use "Grab" to move the entire text on the curve or to correct the position of individual letters.
 - Functions are available for adjusting the text height and width; you can decide whether to adjust the width or the spacing of the individual letters.
 - You can select the position of the text on the line and the orientation of the letters.
- Numerous parameters are available for influencing the stitch calculation. The underlays are, of course, calculated automatically. You can determine the number and sequence of the area and running underlays.
- The program automatically calculates the shortest way between letters or a way defined at your choice.

Easy designing

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• Once determined, parameter sets can be saved and reloaded at any time.

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New EPCwin options for schiffli embroidery machines

EPCwin now offers all the benefits of scanning, drawing, punching and editing for schiffli embroidery applications as well. For this purpose, the proven functions of EPCwin have been extended to embrace new requirements. Optimum support is provided for the numerous embroidery processes associated with badges, logos, tablecloths, curtains, all-over designs and chemical lace embroidery.

Schiffli design management

- Optimum management of designs in image and text directories
- Realistic displaying of repeats (True View) with print function
- Programmable default settings for individual design types
- Transfer of schiffli embroidery designs from EPC (UNIX) as reference data
- Input and output of design data in the following codes:
 - NC ZSK neutral code
 - Saurer SLC (.sas)
 - Saurer SHC
 - Laesser
 - Hiraoka

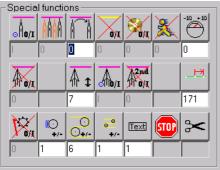
Schiffli editor

- Special editing functions for monitoring selection of special functions as well as examining and marking errors according to error type
- Controllable modification of stitch density referring to an object, a stitch type or the complete design
- Correcting and adjusting contours and stitch directions
- Editing and exchanging program parameter sets
- Cutting out, inserting and managing parts of designs
- Automatic modification of special functions when a part of a design is inserted
- Rotating, mirroring, enlarging, reducing and distorting of design parts with optimum adjustment of stitch density

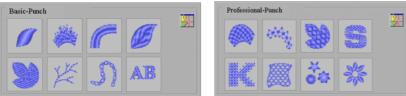
EPCwin Version 2.0

Schiffli basic punch

- Five different basic design types are supported:
 - Single-color designs
 - Multi-needle designs
 - Designs with color change stops
 - Repeat and color change (R&C) designs
 - Individual needle selection
- All the special functions required for schiffli embroidery machines can be quickly selected and monitored by way of a programmable menu.



• The extensive automatic programs in EPCwin for multi-head embroidery are available here as well.



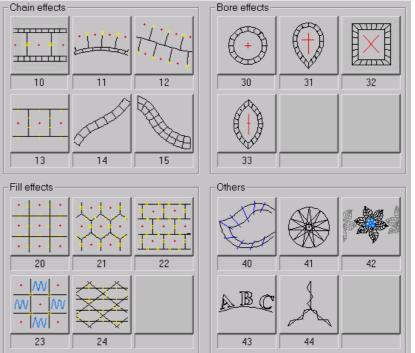
- Definition of special function start statuses for the machine in the design head.
- Special repeat grid with needle number display for each repeat. Adjustable color for main and auxiliary grid lines.
- Flexible repeat depiction: you can display either the adjacent repeats or all repeats either in the original colors or in a freely definable repeat color.
- Easy and flexible programming of needle designs for individual needle selection.
- Each needle can be assigned a color either according to a general rule or individually.

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Schiffli design

The schiffli design option is an extension of basic design. It makes available all the basic functions for drawing, including free-form curves (splines), parallels, geometric figures etc.

• New automatic design options (bohrstäffel, zugstäffel, double zugstäffel, zughöhl, bohrhöhl, stoffhöhl wabenhöhl, cross boll etc.)



• You can modify parameters and contours for all automatic objects.

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• Automatic repeat of design lines at the press of a key

EPCwin Version 2.0

New features

Default settings

• Four different default settings are now available for standard design heads, parameter sets, stencils, stitch sequences etc.. This allows you to save different default settings for different design types. This function is especially useful if several people within a company share a single version of EPCwin; each employee can use a different standard design head.

Punching

- When punching you can now change directly to the insert mode by pressing [Ins]. This enables you to determine the stitch at which you wish to make an insert and then to punch the new part of the design.
- New special functions:
 - Head type (SF 47, 48, 49): this special function allows you to choose between normal, braid and cornelli head types
 - Speed (SF 74): speed adjustment for ZSK machines
 - Fix end (SF 63): determination of stitch passages that are not to be modified in case of stitch optimization
- [Backspace] now deletes the special functions on their own without deleting the preceding stitch as well
- New parameters in program 30: cross boll
 - The pull compensation and limit parameters are now available in this program as well.
 - Maximum stitch length: stitches are divided if they are longer than the stated value. If the value is set to 0, the stitches are not divided. This function operates as it does in program 6.
- As soon as you select the boring function, the "boring cursor" appears on the screen. You determine the size of the boring diamond in the default settings. This special cursor enables you to see the actual distance of the borer from the outer edge when you are setting the boring points.

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Editor

- The filter function in the stitch list has been extended. You can now search for jump stitches and stitches that are shorter than the entered value.
- The options for editing special functions, "Exchange " [F4] and "Change" [F5], have been combined in "Edit special functions" [F6].
- You can now insert blocks from the block directory [L] or clipboard [Ctrl]+[v] while "navigating" in the editor.
- You can use [S] to set sequins directly while "navigating" in the editor. The insert mode is then automatically activated to attach the sequins.
- In the block film strip mode, animation of the block sequence can also be initiated with [F8]. You can still interrupt by pressing [Space bar] in order to adjust the interval time.

Block

- The box tools functions [F4] have been extended:
 - You can search for and replace special functions.
 - The drawing lines of a block can be repeated by way of a head selection. The color of the lines copied in the repeat can be selected in the design head.
 - The functions of global edit can also be applied to a selected block.
- A block can be slanted numerically (horizontally and vertically).
- Punch data blocks can be mirrored on a free axis.
- The number of stitches for a selected block is displayed.

Global edit

- In programs 13, 31 and 32 blocks can be exchanged for other blocks.
- You can convert objects into stitch data.

Help tools

• New parameters are available for creating a repeat grid. The head spacing stated in the design head is automatically adopted as the grid size. In addition, up to 10 divisions per repeat can be selected. The sequential number of the embroidery head can also be displayed in each repeat. The grid color can be selected separately in the design head for the main and dividing lines.

Measuring

- The measuring line remains when the second measuring point is entered. It is not removed until you enter a new first measuring point or exit the measuring function.
- You can now enter markers when measuring. Markers can be entered at the cursor position, the most recently entered measuring point or by stating an angle or distance [F11] from the most recently entered measuring point. The markers take the form of a cross and have the status of a help line. Markers created during a measuring operation can be deleted with [Backspace].

Graphics

• Stitches belonging to areas of cord, loop and braid embroidery are drawn bold. The line thickness for each of these three functions can be defined individually in the default settings.

Directory

- One or several designs can be selected with the right mouse button for sending as an e-mail, printing or deleting.
- The automatic backup function has been extended. Overarching several sessions, up to 200 backup copies are saved at fixed intervals (e.g. every 2 minutes). This gives you access to different versions of the same design; they are listed in a text directory with pictograms. The last action executed before the automatic backup is also listed. Determine the number of backups to be saved in the default settings.

Design head

- Color selection is now possible by the color tables of various yarn manufacturers.
- For repeat designs, the head spacings of all ZSK embroidery machines can be selected directly from a list.

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Input / output

- The compatible formats for reading in images are "jpg", "gif", "pcx", "ppm", "ras" and "tga".
- Stitch data designs can now overwrite on floppy disk and hard disk.
- "Create design with image" allows you to import new images directly from any directory.

Online help / assistant

• In the online help and assistant, the convention for indicating action to be taken at the keyboard is now [F1], rather than :F1:.

Other

- The size limits for a drawing have been increased from 40,000 to 80,000 lines and from 300,000 to 600,000 points.
- If you obtain the new passwords by e-mail, the options can be enabled easily and without the risk of errors by way of the file attached to the e-mail. Simply follow the instructions contained in the e-mail.

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Version 6.0 (06/2016)

EPCwin Version 2.0

Close design

• If several designs are open and the current design is closed, the special function status (e.g. needle color) is now correct for the new current design.

Punching

- Too many function keys were assigned when entering the reference data for a cross boll. This issue has been resolved.
- Cross boll: when the parameters are being defined and the distance entered, the number of points is set to 0 and vice versa.
- The cross stitch input grid no longer disappears when scrolling if you call measuring from the cross stitch input screen.

Editor

- In certain circumstances the scroll bar masked the film strip. This issue has been resolved.
- Locked objects are displayed after editing with the edit box and recalculation in global edit. You can now determine for each object individually whether it is to be enabled.

Global edit

• Design parameter sets (DPS) can now be selected as well with the "Change PS" function.

Design

- The most recently set spread parameters are retained during a session.
- Spreading geometric forms on a contour no longer gives rise to an additional geometry contour at the current cursor position after spreading.
- If you have switched to the box function via drawing and geometry and then called spreading, it was no longer possible to exit drawing. This issue has been resolved.

Help tools / measuring

- The joining line between the last stitch and the cursor is no longer retained when the help tools are called.
- The measuring result is now displayed correctly if the second measuring point is entered (snapped) with the shift key.

Directory

• In the pictogram directory, pressing [End] displays the last pictogram at the bottom right.

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Design head

• The color values and color texts for the needles are now reset if you exit the dialog with *Cancel*.

Input / output

- You can now format DD disks under Windows XP.
- On rare occasions special function 61 for disk output in the format Tajima/Melco/ZSK DOS caused a block in the program. This issue has been resolved.
- The remarks are now transferred in transport code (TC) as well.

New features and improvements from version 1.10-01 to version 1.20-01

New features have been added to the following parts of the program:

- Help tools
- Editor
- Input/output
- Stitch programs

Some parts of the program from which existing problems have been eliminated:

- Center line
- Block
- Stitch direction markers
- Contour
- Editor
- Design manager
- Contour
- Graphic depiction

New features

Help tools

- The help tools have been extended and restructured
 - The new help tools consist of help lines, remarks and the familiar grid function. You can call them from the main menu or, at any time when working with the editor, design functions or punching, by pressing :h:.
 - You can position help lines horizontally, vertically or at an angle. You can also determine the color and length of the help lines.
 - You can position remarks anywhere in the design. The font is selected from those provided by the Windows operating system. You can stipulate the character height, line spacing and font color.
 - You can, of course, use the view tool to select and deselect the grid (G), help lines (H) and remarks (T) individually.
 - Tools provided by the edit box enable you to transform selected lines into help lines (and remarks) and vice versa.

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Editor

- You can now move the edit box with the cursor keys. In case of a numeric input, the value is now entered with two places after the decimal point.
- With the parallel function provided by the Editor you can now generate several lines parallel to design lines at once, each with the same spacing. This function also allows you to deselect automatic corner definition.
- The dialog that follows the selection of *Total design* allows you to select the individual design levels (drawing, punch data, help lines and remarks) that are to be taken into account.
- After you have copied a block with :F2: in the edit box, you can now activate *View* with :F2: before moving the copy with the edit box.
- The block list can now be called in the editor with :f: and closed with the ESC key/middle mouse button.

Input/output

- You can now select a design directly from disk by double-clicking.
- The copy disk function has been extended to embrace the ZSK old, Barudan FDR III, Barudan FMC and Fortron formats as well.
- When a design is written to a disk with the ZSK old format, the access number is now output.
- Images are now depicted after scanning and other operations that involve storing an image.
- When the parameters are backed up, a subdirectory indicating the date (e.g., EPCwin_BackupParameter_11_11_2002) is automatically created in the selected target directory.

Stitch programs

- In program 33, monogram, you can now determine whether a stitch is to be inserted in the middle of the connection between two letters. The purpose of this function is to mask the connection stitch.
- Stitch direction markers entered in programs 1-6 are automatically trimmed so that they lie exactly between the two outer contours.
- When selecting a program, the list of used programs and parameter sets is now filtered so that each set appears only once.
- A new input sequence now applies to TrueType monograms in a design. You now enter the distribution line first, then the parameters, then the text.
- In programs 2 and 20 a stitch length of up to 999 $^{1}/_{10}$ mm can now be selected.
- When entering satin stitch, you can now enter additional stitch direction markers with : F6:, in case you have omitted any, before determining the end point.

- If a *Check repeat jump* is performed in *Check design*, the design is now automatically redrawn so that you can examine it immediately.
- Designs containing up to 600,000 stitches, 6000 special functions, 4000 objects and 2000 block marker can now be processed.

Improvements

Center line

- The center line function for satin stitch has been thoroughly revised in the new version to enable it to run much more smoothly. In the past minor program defects impaired working with what is an essentially good function. We have eliminated these problems from the new version, so that you once again have full access to this key function.
- The parallel (line) function has been improved; in particular, the opening point can no longer be incorrectly set with closed objects.
- The generation of stitch direction markers has been improved:
 - Miter corners are inserted automatically if, because of the shape of the curve, normal approach corners cannot be executed.
 - Disruptive stitch direction markers are no longer placed in segments between two corners that are especially short.
 - If corner stitch direction markers cannot be created for certain reasons, you can now enter them manually afterwards.
 - It used to be possible for automatically generated stitch direction markers to be placed on ones that were entered manually. This is no longer the case.
- Center line now allows the density to be edited before the end point is entered without blocking the system.
- If, with center line, a start/end stitch direction is selected when entering the end point and the editor indicates the occurrence of a fault, the editor is no longer blocked.

Block

- If you abort the movement of a block with the edit box, the design data are now reset correctly.
- When blocks are being read in, a descriptive error message is now issued to explain why a block could not be read in: e.g. "Too many marker", "Too many special functions" or "Too many objects".
- You can determine the mirror axis point exactly by snapping.
- A message is issued if monogram objects are stretched. They are no longer automatically converted to manual stitches.

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Stitch direction markers

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- The marking for an approach or miter corner is now retained once it is entered.
- If a fault prevented calculation of a satin stitch object and you sought to resolve the problem, typically by deleting or moving a stitch direction marker, pressing :Return: did not immediately initiate a calculation. The calculation is now performed straight away.
- Defective stitch direction markers are now displayed correctly.
- An error message indicating defective stitch direction markers is now issued in the assistant as well after entering.
- If you inadvertently pressed : ESC: when entering stitch direction markers in a satin stitch object and then selected "No" in response to the inquiry "Do you really wish to delete the object?", the EPCwin used to block.
- In case of intersecting stitch direction markers, the editor no longer jumps to the design start point when you seek to eliminate the fault.

Editor

- Aborting the input of a sequence of stitches gave rise to faulty reference data in the current design. This problem has been eliminated.
- Percentage editing of the stitch distance in the global editor is now effective with objects in program 31 as well.
- In some circumstances in the past the contours could be opened in program 10, so that the object could no longer be calculated.
- When the cross stitch grid parameters are entered, the grid cell size is now updated.
- Moving the grid did not operate properly in program 12, cross stitch. This problem has been eliminated.
- In some circumstances centering the object in the editor did not work. This was the case if an error was detected in the data after the reference data had been recorded.
- In program 20 the correct PS is now displayed for each auxiliary line.

Contour

- Creating contours: if a line was snapped with both ends to another line, inserting reference points sometimes caused the contour to be curved in the wrong place.
- When creating contours, a point is no longer inserted when a complete line is accepted.
- Snapping in the vicinity of an intersection of two lines sometimes caused a crash.

Disk

- A message is now issued if a disk is not formatted when it is being written.
- When loading data from disk, the standard design head is now taken into account.
- When a design is being written to a Tajima disk, the maximum stitch length is set to $121 \, {}^{1}/{}_{10}$ mm. If the maximum stitch length exceeded $121 \, {}^{1}/{}_{10}$ mm, an offset arose when the design was output.
- The offset problem associated with SF 60/61 and automatic jump stitch on/off has been eliminated.

Design manager

- Compressed reference data can now be loaded via the network as well.
- When sorting by date, due regard is now paid to the time as well.
- Punch data are now correctly deleted from the directory.
- EPCunix directories with up to 30,000 (formerly 10,000) entries can now be processed.

Graphics

- Markers are now drawn as well when redrawing with :F5: in the punch module.
- The icon illustrating the current basic geometric form now disappears when you exit the geometry function.
- The last special function in the design no longer disappears from the stitch list if it is followed by only a single stitch.
- If you start a new object in the punch module and then abort it, an ugly line no longer remains.
- Design lines are no longer drawn in the repeat or reference data color if repeat view is selected.
- Switching from punch to design with :F8: and then to the editor with :F6: no longer gives rise to an ugly line.

Other revisions

• Calculation of the design size has been revised. This is relevant with the printing and design head functions. In the design head the design size takes account of design lines only. Remarks and help lines are excluded. When printing, the zoom factor is now calculated only with the visible data in case of size adaptation.

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New features and improvements from version 1.08-01 to version 1.10-01

New features

- Design monogram with TrueType fonts
- All disk formats now supported with Windows 2000 and Windows XP operating systems as well
- User interface with dialogs in French
- Block list (Filmstrip): the special functions, stop and trimming, can now be set directly in the block list
- The zoom factor with centering (center design) function : C: now toggles between the initial factor and the calculated factor in all modes (punching, editor and design)
- The mirror function in the punching module has been revised
- With the box function, the numerical values are retained until the box is confirmed
- When determining the base point for the spread function, the point can now be entered with the snap function (Shift) as well
- When entering a circle for satin stitch, a size is now displayed
- Block selection using markers or objects can now be selected by a short-cut as well
- With the rotate (arranging in a circle) function, the center point is now marked
- The entrance and exit of a block are now marked with green and red dots
- The insert function in the editor can now be concluded with :Insert: as well as :ESC:

Improvements

- Frequent crashes when moving manual stitches in editing.
- Creating contours no longer consumes vast resources of the Windows operating system, blocks the system or causes icons to disappear
- Copying a block can now be aborted. Data are no longer superimposed in an uncontrolled manner
- Zero or very short stitches in program 10 are now suppressed
- After a special function is edited in the block list, the "film strip" no longer jumps back to the beginning
- After executing the refresh function in the block list, the "film strip" no longer jumps back to the beginning
- The move block function in the block list, executed with : F6:, is deactivated if no block is selected

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• The function for printing the design head has been revised

- The stitch list is now updated correctly if you jump to the end of the design with : End : in the editor
- The offset for the copy block function (F2) is now entered in the numerical values
- Boxes' markings are retained when scrolling
- Block selection via special functions now operates even if the desired special function is not the first one in a group of special functions
- Block selection via special functions now operates even if the special function appears exactly behind an object
- Block selection with the "From stitch length" function now operates even if the stitch is situated exactly between two objects without manual stitches
- Block selection via markers gave rise to problems if the marker was at the end of the design
- Continuous selection and filtering now available for special functions, markers and stitch length at object limits in the block list
- When entering auxiliary lines in program 20, the connecting points are now found correctly
- Sorting the directory now operates after copying from CD as well
- The sorting by design name in the directory is now alphabetically correct
- Incorrect head data with BMP images no longer trigger a crash. These images cannot be read because of the missing data
- The cursor no longer disappears when the base point is entered in the spread function
- The distribution line is no longer copied in the spread function
- In the true image, jump stitches are no longer drawn with special functions 60 and 61
- If special function 60 or 61 is followed by another special function, such as stop, the rubber band is now drawn correctly
- After switching to a different language, a message now appears to indicate that the program has to be restarted
- When a new design version is saved, the current version is now displayed in the header
- The routine that backs up system parameters no longer saves and loads in empty directories
- The cross stitch grid size can now be entered with No. of stitches > 1 as well
- The start needle is now entered correctly in the TC code
- With the view function, the objects' underlay stitches can now be selected and deselected independently of the cover stitches

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- When enlarging or reducing (not distorting) blocks with program 31, the chained blocks are no longer rotated in an uncontrolled manner
- When additional contours or stitch direction markers are inserted in objects, they are now drawn in the reference data color
- With the export design info function, 3 separating characters can now be entered
- The cross marking the center of a circle has been reduced in size

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- The parameter set display during the input of program 20 is now correct
- When entering a line parallel to an entire line, the line can now be selected with :Ctrl: + <Left> as well
- When entering pairs of points for satin stitch, the corner to be approached is now correctly adopted when the corner is entered
- You can now set a marker directly with :Div. : when continuously marking in the editor
- When entering dividing lines, the switchover from curve to straight line with :F4: was ineffective
- With monogram parameter input (33), the online help is no longer called when you confirm the dialog with Enter
- If you abort editing stencils or stitch sequences with :Del:, the software is no longer blocked
- The help index in English no longer contains any German words



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