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## 2 Basics of operation

## 2.1 Text fields, Masks and Projects

The software is based on the use of text fields and masks. Several text fields which belong to one workpiece are combined in a mask. A mask can contain max. 31 text fields. A text field can contain max. 50 characters or one graphic.

If more than 31 text fields are needed for the marking of a workpiece, several masks must be created. If a text field shall contain more than 50 characters, its content must be divided on 2 text fields. However, only one mask can be loaded and marked.

A mask can be stored also in a project. Beside the mask with all text fields a project contains also all other current adjustments on the control e. g. used marking head.

**Example** A mask e. g. corresponds to a type plate, the text fields correspond to the individual fields of the type plate like year of manufacture, serial number, etc.

The arrangement of a text field within the mask is determined by the X- and Ycoordinates of the text field. The origin of the coordinate system lies in the lower left corner of the marking area. DELPRÄGEN

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# 2.2 Switching on and off the control

### Switching on the control



#### Electronics damage to control possible!

Control must be switched off for at least 20 s before switching on.

Switch on MAIN SWITCH.

Control boots, axes of the marking head reference: the slide of the marking head moves in X-direction until the X-initiator actuates. Then it continues to move in X-direction by the value of "Overtravel" (see page 4-29). The slide moves likewise in Y-direction. The reached position is defined as basing point of the marking head. This basing point is the origin of the marking field.

After successful homing the main menu appears:



Main menu

Fig. 10393en



### Switching off the control

- 1. Save all changes of the current mask or project (see pages 4-19 and 4-20).
- 2. After no keys is pressed for a short time: switch off MAIN SWITCH.

#### 2.3 Brief instruction: marking a workpiece

- 1. Switch on control via MAIN SWITCH.
- 2. Select **b** Load file.
- 3. Select the desired file.
- 4. Select 🔯.
- 5. Enter the number of workpieces to be marked behind "Number".
- 6. Select we to start the marking. To mark another workpiece: select again.

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## 3 Working with masks

### 3.1 Creating a text field

Several text fields which belong to one workpiece are combined in a mask. A mask can contain max. 31 text fields. If more than 31 text fields are needed for the marking of a workpiece, several masks must be created.

**Type text field** 5 different types of text field are available:

- Text: text is aligned on a straight line.
- Circular text: text is aligned on the inside or outside of a circle.
- HPGL file: graphic file in the format \*.plt is inserted.
- DataMatrix Symbol: insert data matrix.
- Position: insert empty text field at a defined position.
- Alignment Depending on the type of the text field different alignments are available. For the types "Text", "HPGL file" and "DataMatrix Symbol":
  - Bottom left: The reference point of the text field lies in the lower left corner of the text field.
  - Bottom center: The reference point of the text field lies in the lower center of the text field.
  - Bottom right: The reference point of the text field is in the lower right corner of the text field.

The following alignments are available for the type "Circular text":

- Circle I left: the lower edge of the text is put on the circular arc; the text is aligned in the clockwise direction on the circular arc. The beginning of the text lies on the reference point.
- Circle I center: the lower edge of the text is put on the circular arc; the text is aligned in the clockwise direction on the circular arc. The center of the text lies on the reference point.
- Circle I right: the lower edge of the text is put on the circular arc; the text is aligned in the clockwise direction on the circular arc. The end of the text lies on the reference point.
- Circle O left: the lower edge of the text is put on the circular arc; the text is aligned in the anti-clockwise direction on the circular arc. The beginning of the text lies on the reference point.
- Circle O center: the lower edge of the text is put on the circular arc; the text is aligned in the anti-clockwise direction on the circular arc. The center of the text lies on the reference point.
- Circle O right: the lower edge of the text is put on the circular arc; the text is aligned in the anti-clockwise direction on the circular arc. The end of the text lies on the reference point.

#### Note

The origin of the coordinate system (0,0) always lies in the lower left corner of the marking area.

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## Creating a new text field

1. Select *File > New mask*.

"Mask Data" appears.

Textfield	1	🗐 Туре	Text	\$
KPos	YPos	Alignment		V [mm/s]
0.0	0.0	Bottom Left	\$	0
Height	Widthfactor	Spacing A	ngle	15
2.5	1.0	0.5	0.0 🚊	
Text:				DL
Font:	default.chr			💦 CHR
				Ľ.
Preview:				

Mask "Mask Data"

Fig. 10221en

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- 2. Enter the number of the text field behind "Textfield".
- Select the desired type of text field (see page 4-8) behind "Type". Depending on the selected "Type" a different number of further input fields are displayed.
- 4. Select the desired alignment of the text field (see page 4-8) under "Alignment".
- 5. Enter the X- and Y-position of the reference point (see Alignment on page 4-8) under "XPos" and "YPos".
- 6. Enter the marking speed under "V [mm/s]".

#### Note

Text field with V = 0 mm/s are not marked and are displayed in the preview in blue colour.

- 7. Enter the character height of the capital letters in [mm] under "Height". Heights from 0.5 to 99.9 mm can be entered. When marking a data matrix enter the "Dot size" in [mm].
- 8. If the characters of the text shall be marked wider or smaller than standard: enter a value unequal to 1.0 under "Widthfactor". Character widths from 0.1 to 10 can be entered.

0.5 causes half character width, 2.0 double character width.

9. If the spacing between 2 adjacent characters shall be larger than standard: enter a value between 0 and 10 in [mm] under "Spacing".

10. If the text shall not be marked on a horizontal line: enter the desired angle of rotation of the text in [°] under "Angle". A vertical text corresponds to an angle of 90 °.

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- 11. Enter the diameter of the circular arc in [mm] under "Diameter", if circular text is marked.
- 12. Enter the desired text to be marked behind "Text".

#### or

- Select 📕 OL to access the object list.
- Look for the number of the desired object.
- Select 💹 to return to "Mask Data".
- E. g. to mark the object No. 003: enter %003.

#### or

- Enter a wildcard, e. g. @TT.MM.JJ@ (see page 4-12).
- 13. To select the "Font":
  - Select 📴 CHR.
  - Select the desired font from the list (overview fonts see page 4-35).
  - Select 🔯
- 14. To see a preview of the text to be marked: select



### Editing a text field

A text field that is already created can be edited in the edit or service mode at any time.

1. If the mask in which the text field shall be edited is not the current mask: select *File > Open mask* in the main menu.

or

- Select Load file.

"Load File" appears.

🎇 Load File			IX
<u>N</u> ew Folde	r Delete File	<u>R</u> ename File	
	Files default.msk demo_datamatrix.msk demo_hpgl.msk demo_rundsatz.msk test.txt		-
Selection: c:¥ demo_datam	ninware4 <b>∿</b> nask atrix.msk		•
	Cancel	€ок	

Mask "Load File"

Fig. 10222en

- 2. Select the desired file (mask).
- 3. Select 🔯.
- 4. Select *Edit > Mask* in the main menu.

or

- Select Edit File.
- 5. Enter the number of the text field to be edited behind "Textfield".

or

- Select the desired text field with the arrow keys.
- 6. Edit the text field (see page 4-9).

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## 3.2 Working with wildcards

Instead of text also a wildcard can be entered in a text field. With wildcards variable information (e. g. current date or time) can be marked. The information isn't queried by the system until the marking takes place.

Wildcards are included by 2 "@" characters. Several wildcards can be combined. The characters . - , : / and the blank can be used together with wildcards, in order to obtain e. g. usual formatting of dates.

The following wildcards are available:

Type of wildcard	Entry	Result	Example
Day	Т	Day in the week	1, 2, 3,, 7
Day	ТТ	Day in the month (two-digits)	01, 02, 03,, 31
Day	ttt	Day in the year	1, 2, 3,, 366
Week	KW	Week (two-digits)	01, 02, 03,, 53
Month	ММ	Number of the month (two-digit)	01, 02, 03,, 12
Year	J	Date (last digit)	0, 1, 2,, 9
Year	JJ	Date (last 2 digits)	98, 99, 00
Year	JJJJ	Date (four-digit)	2005
Time	hh	Hour (two-digit)	00, 01, 02,, 23
Time	mm	Minute (two-digit)	00, 01, 02,, 59
Time	SS	Second (two-digit)	00, 01, 02,, 59
Counter	arbitrary number	Number which is increased automatically.	100, 101, 102,

Tab. 1

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Example:

A text field with the content: Date: @TT.MM.JJ@ Time: @hh:mm@ e. g. generates: Date: 19.01.05 Time: 09:26

#### 3.3 Creating objects

In addition to wildcards, objects can also be entered in text fields. The following objects are available:

- Counter.
- Date and time.
- User input: text field is reserved for data that are entered by the user just before the marking. The query of the data occurs automatically.
- Shift index.

4-12

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> Objects are saved in an object list and can be inserted in as many masks as desired. E. g. if a four-digit counter is needed on several different workpieces, which begins with 0 and ends with 250, this counter must be created only once.

#### Note

If "Autosave" is selected under *System > Options*, the current counter value is saved in the object list, too.

Objects are activated with a "%" character. Several objects can be combined.

#### Creating a counter

1. Select *Edit > Object List*.

or

- Select OL in "Mask Data".

"Object List" appears.

2. Select unimplemented object or object "Counter" to be changed and select ENTER.

"Counter Object" appears.



Mask "Counter object"

Fig. 10223en

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- 3. Enter the following values:
  - "Value": current value of the counter. Select "User" if the current value of the counter shall be queried from the user by a message (see also Fig. 10235, page 4-16).
  - "Begin": minimal value of the counter.
  - "End": maximal value of the counter. Select "User" if the maximal value of the counter shall be queried from the user by a message (see also Fig. 10235, page 4-16).
  - "Step": increment to increase the counter.
  - "Repeat": number of markings before the counter is increased one "Step".
  - "Digits": number of digits marked.
  - "Warning level": number of markings before "End" when the software displays a message that only x markings can be done before the maximal value of the counter is reached. When inserting -1 no message is displayed.
  - "Reset, Hour", "Reset, Minute": number of operating hours and minutes after that the counter is reset to "Begin".
- 4. To assume the object in the object list: select



# Creating the object "Date and Time"

1. Select *Edit > Object List*.

or

- Select OL in "Mask Data".

"Object List" appears.

- 2. Select unimplemented object or object "Counter" to be changed and select ENTER.
- 3. Select "Date and Time" in the field on the right.

🎇 Date and	Time Object			<u>_   ×</u>
Ob	ject Number	Date a	and Time	\$
Format	TT.MM.JJ hh:mm:s	s KW A-B-C		
20				
Day Code-A	0123456789ABCD	EFGHIJKLMNOP	QRST	
Month Code-E	0123456789AB	Year Co	ode-C 01234567	789
		<b>— —</b>		<b>—</b>
💌 F1	🔁 F2	F3	臣 F4	👿 F5

Mask "Date and Time Object"

Fig. 10224en

- 4. Enter the value "Format": format of the date/time (see "Working with wildcards" page 4-12).
- 5. If desired, also special formats of the date can be marked: Enter the letters A B C (if desired with separators) and the values of A, B and C in the lower rows:
  - "Day Code-A": 31 digits or letters from which the digit and/or the letter is marked which corresponds to the current day.
  - "Month Code-B": 12 digits or letters from which the digit and/or the letter is marked which corresponds to the current month.
  - "Year Code-C": 10 digits or letters from which the digit and/or the letter is marked which corresponds to the current year.
- 6. To assume the object in the object list: select



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# Creating the object "User Input"

1. Select *Edit > Object List*.

or

- Select OL in "Mask Data".

"Object List" appears.

- 2. Select unimplemented object or object "Counter" to be changed and select ENTER.
- 3. Select "User Input" in the field on the right.

				- 비스
Object Number	1	User Input		\$
Message		Enable Promp	t	
		4	10000000	
Default Data	Current Data		Length	
0123456789	0000		10	
📄 F1 🛛 🛱 F	2 📄	F3	薯 F4	🗑 F5

Mask "User Input"

Fig. 10225en

- 4. Enter the following values:
  - "Message": message that is displayed if the system waits for an input from the user, e. g. Fig. 10235. The message is only displayed if "Enable Prompt" is selected.

🧱 Question		- D ×
?	User Input Please read bar code.	
Please enter data: 0123456789		

Fig. 10235en



- "Default Data": data that is displayed in the message behind "Please enter data" (see Fig. 10235).
- "Current Data": enter nothing. These are the data that are entered by the user just before the marking.
- "Length": max. number of digits of the text to be marked.
- 5. To assume the object in the object list: select

#### Creating a shift index

1. Select Edit > Object List.

or

- Select OL in "Mask Data".
- "Object List" appears.
- 2. Select unimplemented object or object "Counter" to be changed and select ENTER.
- 3. Select "Shift Index" in the field on the right.

Object Numb	er 1	Shift Ir	ndex	
Shift start [hh:mm]		Tex	t	\$\$\$\$\$
0 📮 0 📮	S1:			0
4 🗐 0 📮	S2:			0
8 0	S3:			0
12 0	S4:			0
16 📒 0 📮	S5:			0
20 📄 0 📄	S6:			0
20 0	S6:			
🔫 F1 🖻	₿ F2	🔚 F3	鼮 F4	🗑 F5

Mask "Shift index'

Fig. 10226en

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- 4. Enter the following values:
  - "Shift start": enter the hour of the shift start in the first column. Enter the minute of the shift start in the second column.

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- "Text": displayed text, when the current time corresponds to the relative shift.
- "\$\$\$\$": enter nothing. This is a counter counting the parts that are marked in each shift. The counter is reset to "0" at change of shift.
- 5. To assume the object in the object list: select



### 3.4 Saving masks

- 1. Create the mask with all desired text fields (see paragraph 3.1, page 4-8).
- 2. Select File > Save Mask.

If a new mask is saved (mask doesn't have a file name yet) "Save File" appears.

If the mask has been saved once and therefore has a file name, the mask will be saved. The following steps are inapplicable.

or

- Select File > Save Mask As.

"Save File" appears.

<b>XX Save File</b> <u>N</u> ew Folde	r Delete File	<u>R</u> ename File
	Eiles default.msk demo_datamatrix.msk demo_hpgl.msk demo_rundsatz.msk test.txt	
Selection: c:\p default.msk	inware4\mask	<mark>⊛</mark> ок

Mask "Save File"

Fig. 10266en

- Enter file name you wish to give to the mask.
  The ending '.msk' is automatically added by the software.
- 4. Select 🔯.

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### 4 Working with projects

If the same masks are used on different marking units with different marking heads, the masks can be stored as projects. Beside the mask with all text fields a project contains also all current adjustments e.g. used marking head. If the mask is stored as project, these adjustments must be entered only once for each marking head. If the mask is to be marked again with one of these marking heads, just open the corresponding project.

## 4.1 Saving a mask and adjustments as project

- 1. Create the mask with all desired text fields (see paragraph 3.1, page 4-8).
- 2. Enter all other adjustments, e. g. used marking tool (see paragraph 7.5, page 4-31).
- Select File > Save Project As. "Save File" appears.

🎇 Save File		
<u>N</u> ew Folder	Delete File	<u>R</u> ename File
	iles	<b>^</b>
	ackupdata.prj lefault.prj	-
Selection: c:\pin	ware4\proj	
1990.	Cancel	<u>е</u> к

Mask "Save File"

Fig. 10267en

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- 4. Enter file name you wish to give to the project. The ending '.prj' is automatically added by the software.
- 5. Select 🔯.



# 4.2 Opening a project

Select File > Open Project.
 "Load File" appears.

🎆 Load File			
<u>N</u> ew Folder	Delete File	<u>R</u> ename File	
Selection: c:\pinv *.prj	les ackupdata.prj efault.prj ware4\proj	<mark>€</mark> ΩK	

Mask "Load File"

Fig. 10268en

- 2. Select the desired file (project).
- 3. Select 🔯.

Project is opened: mask which is stored in this project is opened, all stored adjustments are assumed by the control.

#### Note

The marking unit does **not** give a feedback to the control which marking head or which marking tool is attached to the marking unit. When working with projects the stored adjustments must be controlled by the user.

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#### 5.1 Preview on marking

1. To see a preview of the mask to be marked: select *Marking > Preview*.

or

- Select 🖳 in "Mask Data".

"Preview" appears.

X Preview	1
Counter 001 CE Counter 001	-
💽 Start 🖽 🚰 Edit 🔍 🐻 Cancel	

- 2. To scale up the view: select
- 3. To reset the view to normal view: select
- 4. To make still some changes in the mask: select a Edit.
- 5. To control the marking movements of the marking tool without marking the workpiece: select .

Marking head retraces the marking without movement of the marking tool.

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## 5.2 Starting the marking

1. Select *Marking > Start*.

or

- Select Start in "Preview".

"Print" appears.

2 Print	
월 (() (원	
- 🕂 Counter 001	
1 <u>// * &gt;&gt;</u> In 125 150 175 1	 
	h h
Number 🔲 🔲 El-Start Time M/A	

Mask "Print"

Fig. 10270en

- 2. Enter the number of workpieces to be marked behind "Number".
- Select , to start the marking.
  After the marking, the system indicates behind "Time" how long the marking has lasted in [s].
- 4. To mark another workpiece: select is again.

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### 6 Further functions

### 6.1 Importing data

Texts from files which are on an external storage medium (disk, net drive assembly) can be imported. The software assumes all characters from the file. These characters are inserted in one or more text fields of one or several masks.

1. Select *Edit > Data import*.

"Mask Data Import" appears.

	Data File Import
Import Path	Floppy Disk
Import File	
	Import Options
Active Line Number	Seperator
0	
Strip Spaces	Delete file when done
-> N/A	

Mask "Mask Data Import"

Fig. 10272en

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- 2. Select the desired "Import Path".
- To open the directory in which the file with the data to be imported is saved: select behind "Import File".
- "File Selection" appears.
- 4. Select the desired file.
- 5. Select

"File Selection" is closed.



- 6. Enter the import options (see also Fig. 10272):
  - "Active line number": enter the line number of the file with the data to be imported, from which the import is started. Each line of the file is used as a mask.
  - "Separator": enter the character that separates the individual texts in one line, e. g. ;. The entire text between separators is inserted into a text field of the mask.
  - "Strip spaces": select if you don't want to mark leading space characters.
  - "Delete file when done": select if the file is to be deleted after the import.
- 7. Select 🖳

"Preview" appears. Since the marking speed is by default set to 0 mm/s in new text fields, the text in the preview is displayed in blue colour.

8. Select Edit and enter a marking speed "V [mm/s]" > 0.

#### 6.2 Changing the mode

3 different modes are available at the control:

- Work mode: files (projects and masks) can be loaded and marked.
- Edit mode: files (projects and masks) can be loaded, changed and marked. It is also possible to create new masks and projects.
- Service mode: all operating functions are possible. E. g. also system parameters can be changed.

The mode of the control can be changed at any time. If the edit and/or service mode is protected with a password, (see page 4-34), the password must be entered.

1. Select *Edit > Mode*.

"Password Dialog" appears.

- 2. Select the desired mode.
- 3. If the desired mode is protected with a password, you have to enter the password: enter password.
- 4. Select 🔯.

Control is changed to the selected mode.

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# 7 System control

# 7.1 Reading out diagnostic data

Select System > Diagnostic.

"Diagnostic" appears.

Pinware Version:	Install \	lersion:	
4.3019 - NPAPI v1.3110	not ava	ilable	
Firmware Version:	Ambier	nt/Heat Sink Temp.:	
N/A	-1.0°C /	′-1.0℃	
Machine Status:			
MS-00001; MC-0001			
I/O Status:	Motor /	Motor / Supply Voltage:	
l:ffff; Q:ffff; S:00ffff	-1.0V /	-1.0V	
Homing Error:			
X:-1; Y:-1; COM:0;			
	an 🚍 an tha san as a		

Mask "Diagnostic"

Fig. 10247en

- Pinware Version: software version that is installed on the control.
- Install Version: version of the compact flash card.
- Firmware Version: software version of the motor card.
- Ambient/Heat sink temperature: temperature of the ambient air in [°C] and temperature of the heat sink of the motor card in [°C].
- Machine status:
  - MS: system status, 5-digit. Contains information about temperatures, voltage ranges and output drivers.

Digit	Description	Status	Description of the status
left-	left- Output driver most	0	Error.
most		1	OK.
2. from Supp	Supply voltage: voltage in	0	No voltage.
left	[V] that impressed to the motor card.	1	Voltage OK.
		2	High voltage.
		3	To high voltage, error.
		4	Low voltage.
		5	Too low voltage, error.

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middle	Motor voltage: voltage in	0	No voltage.
	[V] that is impressed to the motor.	1	Voltage OK.
		2	High voltage.
		3	To high voltage, error.
		4	Low voltage.
		5	Too low voltage, error.
2. from	Heat sink temperature	0	Sensor not attached.
right		1	Temperature OK.
		2	High temperature.
		3	Too high temperature, error.
right-	Ambient temperature	0	Sensor not attached.
most		1	Temperature OK.
		2	High temperature.
		3	Too high temperature, error.

Tab. 2

- MC: motor status, 4-digit. Each digit symbolises a coil of a motor (2 motors with 2 coils each). The two left digits contain information about motor 1, the two right digits contain information about motor 0.

Status	Description of the status
0	Motor coil not attached. Cable or coil can be defective. Depending on the software version the motor driver is switched off and displays the status "0" for both coils of a motor.
1	Motor coil OK.
2	Error during measuring of the motor current. The difference between set and measured current is too high.
3	Although the motor coil is switched off a motor current is measured. The circuit board, stepper driver or microcontroller can be defective.
4	Motor current too high. Output is switched off.
9	General error, e. g. motor voltage switched off.

Tab. 3

- I/O Status: status of the inputs and outputs in hexadecimal notation.
- Motor/Supply voltage: voltages in [V] that are impressed to the motor and the motor card.
- Homing error: status (0 = error, 1 = OK) of the homing of the X- and Y-axis. Number of the output to which the axes are connected.



# 7.2 Operating the marking head in manual operation

Select System > Manual Control.
 "Manual Operation" appears.

🧱 Manual C	Operation		×
€ F8.1 eft	<mark>ரி</mark> F6-Up	Stepwidth [mm]  10.0 ₽ F9-Bight	
	<mark>↓</mark> F7-Down		
		HPGL command	
Home	Needle	Close	
sk "Manual Ope	ration"	Fig.	10240

- 2. To move the marking tool manually: enter step width in [mm].
- 3. Select F6 to F9 to move the marking tool in the desired direction.
- 4. To operate the marking tool with HPGL commands: enter HPGL command and select *Send*.

#### Note

The motor card uses HPGL commands to control the marking head. The plotter language was created by Hewlett Packard to process vector data for plotters.

- 5. To move home the marking tool: select Home.
- 6. To move the marking tool up and down once: select *Needle*.

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# 7.3 Displaying marking head parameters

- Select System > Marking Head Parameters.
  "Markinghead Parameters" appears.
- 2. Select "MotorCard".

Markinghead Pa Mode MotorCard	rameters d	- ×
Marking Head	1 🔛 X Motor	■ E-Stop Y Motor
Current	900 🜲	900 🔶
Boost	300 👙	300 🗘
MaxPos	60.0	40.0
mm/step	0.250 🛟	0.250 🌲
Ramp <b>time</b>	90	85 🜲
MaxV	130 🛟	130 🔶
HomeV	50	50
Overtravel	4.5	0.0
🖻 F2 Load	📄 F3 Save	💹 Close

Mask "Markinghead Parameter", tab "MotorCard"

- Current: motor current in [mA].
- Boost: increase of the motor current in [mA] during ramping.
- MaxPos: maximum position in [mm] the marking head can reach. Accords to the marking field.
   Example: 90 mm in X-direction, 50 mm in Y-direction for marking head 5/9.
- mm/step: with coining heads: feed in [mm] after each drop of the coining tool.
- Ramptime: time in [ms] during which the motor current is increased.
- MaxV: travel speed of the marking head in X- or Y-direction in [mm/s] during deadhead.
- HomeV: speed of the marking head in X- or Y-direction in [mm/s] during homing.
- Overtravel: position of the initiator. An initiator is an inductive proximity switch. Distance of the initiator from home in [mm] in X- or Y-direction.



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# 7.4 Displaying marking head origin

Select System > Marking Head Origin.

"Markinghead Origin" appears.

🖹 Markinghead Origin			_	미凶
X Motor	0.0	Scale	RestPos	F
Y Motor	Origin 0.0	Scale	RestPos	8
		ise .		

Mask "Markinghead Origin"

Fig. 10249en

- Origin: origin of the X- and Y-axis in [mm]. For hand-held units it is useful to displace the origin in order that the marking isn't "turned upside down".
- Scale: the value "-1" causes a mirroring of the axes. Useful for hand-held units, see "Origin".
- RestPos: standby position of the marking head in [mm] in relation to the "Origin".

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# 7.5 Selecting the marking tool

Select System > Needle Parameters.
 "Needle Parameters" appears.

🞇 Needle Parameters			
	Needle Type	WE I	¢
	<b>₩</b> F4 Test		<u>छ</u> Close

Mask "Needle Parameters"



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- 2. Select the desired marking tool behind "Needle Type". Image of the selected marking tool is displayed.
- 3. If desired, change the parameters of the marking tool:
  - Turn-on delay: The needle of the marking tool is brought to oscillating by compressed air. Due to the mass inertia of the needle the oscillation achieves the entire amplitude only after short time. Then the marking tool is moved. This time in [ms] is the turn-on delay.
  - Turn-off delay: After switching off the compressed air the needle continues to swing still a short time due to the mass inertia. Only after this time (= turn-off delay) in [ms] the marking tool may be proceeded to the starting point of the next marking.
  - Frequency (only with WP needles): frequency in [Hz] with which the needle is brought to oscillating.
  - Needle on time (only with WP needles): time in [ms] during which the needle is brought to oscillating.
- 4. To test the marking tool: select **W** and hold the button.

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# 7.6 Setting options

# Selecting the language

Select System > Options.
 "Options" appears.

Solutions 2010	
Options	
Language Pinvvare Mode	
Language	
Select Language:	English 🗘
🛞 ок	🗑 Cancel

Mask "Options", Tab "Language"

- 2. Select the desired language.
- 3. To convert the software into the selected language: select

Fig. 10394en

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Operation

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# Selecting software adjustments

- 1. Select *System > Options*. "Options" appears.
- 2. Select "Pinware".

	Ontions	
Language Pinware Mode	e	
Autostart		
Autosave	<b>V</b>	
Serial Communication		
Auto-Data Refresh		
Tooltip		
Number of marking	1	
Default font	default.chr	<mark>₽</mark> € CHR

Mask "Options", Tab "Pinware"

Fig. 10395en

- Autostart: If selected the page "Print" appears directly when booting the control.
- Autosave: If selected the current mask is saved after each marking. Use this function if e. g. the current value of a counter is to be saved.
- Auto-Data Refresh: If selected changeable data (e. g. time, date) refreshed at once.
- Tooltip: If selected tooltips are displayed (short explanations to the field on which the mouse is).
- Number of marking: default how often a mask is marked. This value is displayed on "Print" behind "Number" (see Fig. 10270, page 4-23). The value "-1" corresponds to endless markings, the field "Number" will not be displayed.

E. g. if generally at least 10 markings are needed of all masks, "10" can be entered here, so that before each start of a marking the number doesn't have to be set manually to 10.

• Default font: font used by default when creating a mask. Select Left to change the font.



Changing the start mode of the control

- Select System > Options. "Options" appears.
- 2. Select "Mode".

📓 Options	<u> </u>
Options	
Language Pinware Mode	
Select Start Mode:	Edit Mode 🗘
Password Edit Mode	
Password Service Mode	
(→) ок	😡 Cancel

Mask "Options", Tab "Mode"



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- 3. Select the desired start mode:
  - Work mode: files (projects and masks) can be loaded and marked.
  - Edit mode: files (projects and masks) can be loaded, changed and marked. It is also possible to create new masks and projects.
  - Service mode: all operating functions are possible. E. g. also system parameters can be changed.
- 4. If the edit mode is to be made accessible only for a certain person subgroup and therefore is to be protected with a password: enter password.
- 5. If the service mode is to be made accessible only for a certain person subgroup and therefore is to be protected with a password: enter password.

#### Note

Passwords cannot be read out anywhere! Therefore if possible select a password which cannot be forgotten.



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#### 8 Fonts

15 different fonts are available in the software. By default the software uses the font 'litt.chr'. To select another font: select  $\bigcirc$  *CHR* in "Mask Data" and select the desired font from the list (see page 4-10).

For every individual of the 31 text fields of a mask you can select another font. As a result of the different layouts of the individual fonts however differences can arise in the character width, height and size.

## 8.1 Default font

Font: litt.chr ABCDEFGHIJKLMOPQ RSTUVWXYZabcdefgh ijklmnopqrstuvwxyz 1234567890

By default the software uses the font 'litt.chr' if no other font was selected.

Default font 'litt.chr'

Fig. 10283

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The 'litt.chr' consists of 96 characters. It contains the moving lines with the corresponding positions of the marking tools for all 96 characters. In addition each character contains the character height and broad of the grid. This is not the actually marked character height and broad, but the vertical and horizontal resolution of the character.

The default font has a vertical resolution of 7 steps. That is a letter is defined by a resolution of 7 steps, based on capital letters. Umlaut in capitalisation and special characters exceed the normal character height, lower case with descender such as g, p, q, y and special characters fall below the character height of 0.



This font is a proportionally font, i. e. the individual letters possess different character widths (e.g. a W is wider than an i). The following illustration clarifies the structure of the characters by the example of the Ö and y:



Fig. 10293

The default font results in a sufficiently good typeface despite the sharp-edged curves. The actual resolution of the marking depends on the resolution of the used marking head.

#### 8.2 Further fonts

In addition to the default font 'litt.chr' 14 further fonts are available:

- bold.chr
- d5x7.chr: dot font.
- euro.chr
- goth.chr
- lcom.chr
- ocra.chr
- rlit.chr: cyrillic font. .
- rtri.chr: cyrillic font.
- sans.chr
- scri.chr
- sima.chr
- simp.chr
- trip.chr
- tscr.chr

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Font 'bold.chr'

Fig. 10277



Font 'd5x7.chr'

Fig. 10278



Font 'euro.chr'

Fig. 10280

Font: qoth.chr ABCDEFCHIJKLMOPO RSTAUMXUZabrdefah ijklnmopgrstnowxyz 1234567890

Font 'goth.chr'

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Font 'lcom.chr'

Fig. 10282



Font 'ocra.chr'

Fig. 10284



Font 'rlit.chr'

Fig. 10285



Font 'rtri.chr'



Font 'sans.chr'

Fig. 10287



1234567890

Font 'scri.chr'

Fig. 10288



Font 'sima.chr'

Fig. 10289



Font 'simp.chr'

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Font 'trip.chr'

Fig. 10291

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Font 'tscr.chr'