

Chapter 17 "Various special functions"

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Chapter 17 of the GRAFIS Textbook deals with functions which could not be fitted into the themes of other chapters.

Topic of the first section is the *markingline* menu for generation of templates. The export functions in GRAFIS are the content of the second section. In the third section you will learn about designing your own call list.

The screenshot displays the GRAFIS software interface. On the left, a text window titled "New list Op_00000" contains a list of pattern pieces:

- Front:
 - 503 side panel
 - 504 centre panel
 - 505 top collar
- Back:
 - 510 side panel
 - 511 back (CB seam)
 - 512 back (CB without seam)

On the right, a diagram titled "Blazer Side panel" shows a grey silhouette of a blazer side panel with a vertical arrow indicating the seam line. Below the diagram is the text "Production piece".

At the bottom of the interface, a status bar shows navigation arrows and the resolution "381x 287 Pixel".

Below the diagram, a text box contains the following information:

Blazer
Side panel (production piece)
suitable for sizes 34 to 46
To be used in conjunction with pattern pieces 504 and 505 of this list, only !

17.1 Use of the *markingline* function for generating templates

Generating templates for stitching, positioning of other pattern pieces or embroidery is also part of production preparation. These templates have to be generated for all produced sizes. With the *markingline* function templates can be constructed.

The *markingline* menu

The *markingline* function opens after having clicked *markingline* in the basic menu. The following four parameters are to be set for the marking line

<i>ln</i>	medium length of the gap from bridge to bridge
<i>bw</i>	half bridge width
<i>cw</i>	cutting width (width of the gap)
<i>no</i>	notch height and width (tag)

markingline

<i>ln</i> = 100.
<i>bw</i> = 3.
<i>cw</i> = 5.
<i>no</i> = 5.

reset
measure

Clicking a line transforms it into a marking line with the set parameters.

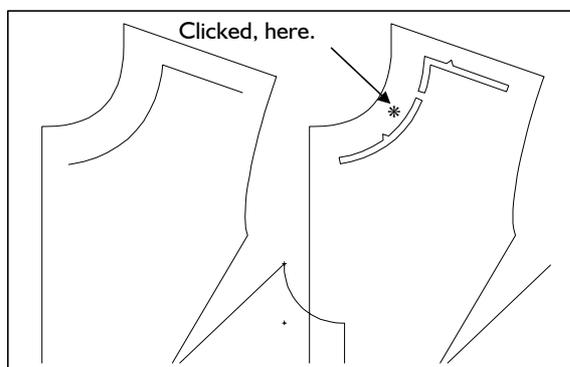
The side of the notches is determined by clicking. *reset* reverses the last transformation.

Step-by-step guide

- ⇒ Construct an auxiliary line along which the gaps are to be generated.
- ⇒ *Basic menu*-->*markingline* and set the parameters *ln*, *bw*, *cw* and *no*
- ⇒ Click the auxiliary line: the auxiliary line is to be clicked on the side on which the notches are to be generated
- ⇒ Complete the template, possibly as a new part

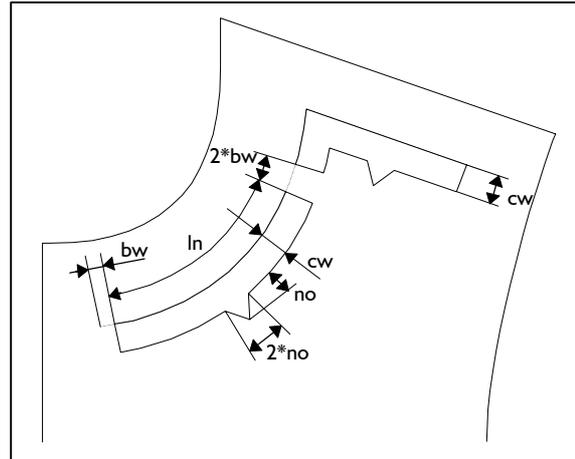
Significance of the parameters

The auxiliary lines to the neck and shoulder (Picture 17-1 left) were transformed into marking lines (Picture 17-1 right). The significance of the parameters *ln*, *bw*, *cw* and *no* is illustrated in Picture



Picture 17-1

17-2.



Picture 17-2

Exercise on *markingline*

Call the basic block 015 „bodice (ft) after OPTIKON“, relocate the dart and construct marking lines with a distance of 30mm to the neck and 20mm to the shoulder with the parameters *ln*=100, *bw*=5, *cw*=10 and *no*=10. The gaps are to end 20mm from the CF and side seam.

call

parallel

corners

separate

lengthen

link

markingline

enter parameters

click auxiliary line on the correct side.

reset

Reset and generate the marking lines with notches on the other side.

Reset and generate marking lines with different parameters.

Extras | *Size Table*

grading

The marking lines with the given parameters are shown in Picture 17-1.

17.2 Export of pattern pieces

GRAFIS pattern data can be exported in the following data formats at present:

- GRAFIS data transfer format
- Gerber Extended PN
- AAMA/DXF data format.

Data transfer ensues via interface files which are to be read by the other CAD system. The interpretation of the different GRAFIS symbols during output to an interface file is determined in the INTERFAC.SYS file (for GerberEPN) or AAMA.SYS file (for AAMA), see GRAFIS Help.

The required data format has to be selected before the data export menu appears. If only one data format is used it can be pre-set in the [LW:]\GRAFIS\GRAFIS.INI file with the DATAINTERFACE parameter.

With DATAINTERFACE=0 all data formats are available for selection.

Topic of this section is the explanation of the GRAFIS application for data export. Information on configuration of the data formats is also contained in GRAFIS Help.

Data export can ensue with the options

- protocolled or
- without protocol.

For the **Protocolled export** a protocol is to be set up, first. Click the *export* function in the basic menu. All patterns for data export are processed and protocolled; the interface file is not exported. Export can, then, be started at any time, also after modification of a piece, via the *File | Protocolled export* pull-down menu. Use this option if the pieces are to be exported, again at a later date with other body measurements or altered x values.

Export without protocol is started from the *File | Export without protocol...* pull-down menu. All pattern pieces for data export are processed but not protocolled. The interface file is exported, immediately. Use this option of the piece is to be exported once.

The steps for data export are identical for both options.

export
grain line
text line
outline
lines:
single
all
-cutting
bols
single
all
stack point
reset
last
all
ame
output
gr+outl+sa
part:
ious
xt
est run
rading
stack

Step-by-step guide (short)

If the GRAFIS grain line symbol for the grain and all other symbols are to be exported the following short steps can be followed:

- ⇒ Click *gr+outl+sa*
- ⇒ Check interface file name (GRAFIS screen upper left) and edit if necessary with *file name*
- ⇒ Start *output* to interface file

Step-by-step guide (long)

- ⇒ Determine *grain line*
- ⇒ Determine *outline* of the pattern piece
- ⇒ Select internal lines or all lines for output
- ⇒ Select point symbols for output
- ⇒ Check interface file name (GRAFIS screen upper left) and edit if necessary with *file name*
- ⇒ Start *output* to interface file

The individual functions and options have the following significance:

grain line

First, the grain line of the pattern piece is to be determined. Click the grain line outside, following the right principle. With this function the grain line can be corrected, also.

text line

This function is active for data export in AAMA format, only. With *text line* the annotation line can be determined. When clicking the right principle is to be considered.

outline

Most CAD systems, especially layplanning systems, have a clear distinction between outlines and internal lines. Internal lines and symbols must not lie outside the perimeter. In this case the outline must be determined. Clicking on *outline* opens the respective sub-menu with activated *determine* function. Now, the perimeter of the piece is to be clicked outside the piece; it is indicated by red lines. The *mirror at* function is active for data export in the GerberEPN format, only. With *mirror at* a fold can be determined along which the piece can be unfolded in the layplan.

lines

In the next step the internal lines to be output are to be determined. Activating

single enables output of individual lines to be clicked,

all outputs all internal lines of the piece.

The *+/-cutting* switch is significant for GerberEPN and AAMA interface formats, only.

symbols

Selection of symbols such as arrows, drillholes, repeat symbols or buttonholes ensues by activating *single* for output of individual symbols to be clicked, separately and *all* selects all symbols of the size.

Notches are output together with the line to which they are attached.

stack point

determines the stack point of the graded nest. The stack point is marked as a round point. The function is active for export with protocol, only. In the other case *stack* is to be used.

reset

last or *all* resets the last selection or all output selection.

file name

GRAFIS automatically offers a file name for the export file. In a dialogue window the data format and the file name are indicated, constantly. The file name is pre-set with [style name].[part no.], e.g. INES_001.005 for the export file of the fifth part from style INES_001.

The set directory is always [GRAFIS drive:] \GRAFIS \[construction system] \INTERFAC\ [collection], e.g. C:\GRAFIS\DAMEN_2\ INTERFAC\ANGEBOT\ for a style created in the „Ladies construction system after Hohenstein“ in the ANGEBOT collection (see section 1.5).

If a file with the same name exists already the new data is added (for GRAFIS data format, only) or overwritten.

A different file name or path can be given with the *file name* function.

output

Clicking **output** starts export of the export protocol (for the protocolled export function) or output of the file (for the export function without protocol).

part:

In the lower part of the function strip frequently used functions can be found:

- previous* activate previous part
- next* activate next part
- test run*
- grading*
- stack*

17.3 Designing the call list

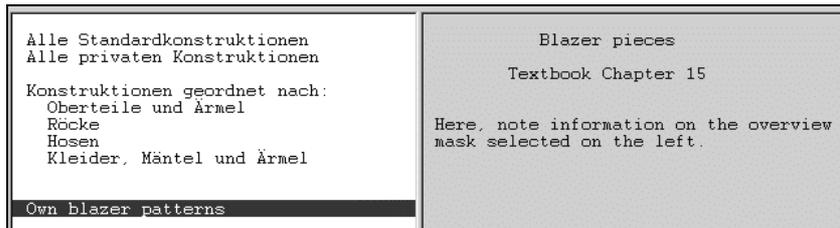
Step-by-step guide

- ⇒ *Extras | Call List / Edit Programs*
- ⇒ Open one or more new lists
- ⇒ Enter constructions as computer language programs, styles and grade rule patterns
- ⇒ Design the graphic and mask for the construction
- ⇒ Design the list with:
 - alter the order of construction entries
 - insert empty lines
 - insert sub-headings

Create a new list

In each list (also sub-list) a new list can be called up (a new sub-list). The file name under which the list is saved in the PROG sub-directory consists of the characters „op_“ and five numbers. The 32-digit comment is the name of the list.

entry: new space duplicate collect
delete
edit: entry program info-mask bitmap
print: program info-mask list
delete: info-mask bitmap
overlook



Picture 17-3

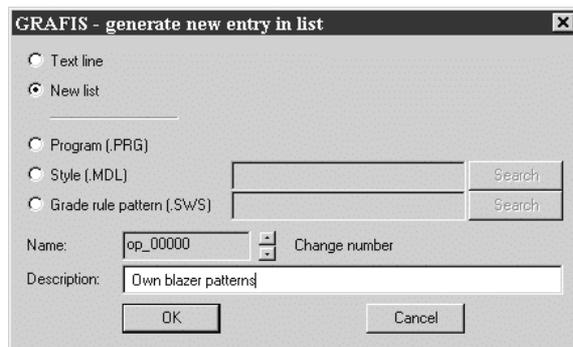
Create a new list „own blazer patterns“ to be called from the overview list (Picture 17-3). Start via *Extras | Call List / Edit Programs*. The application for the call list with list of constructions (left), information on the selected construction (centre) and the menu for designing the call list (right) appears.

First, click on *overview* in the right menu strip and, then, on *new*. Select „**new list**“, determine the number for the *op_* list and enter a name for the new list (Picture 17-4). The new list call is added to the end of the overview list.

Enter constructions

To enter a new construction (computer language program, style or grade rule pattern) click on *entry: new* and select the respective type:

- program (.PRG) = GRAFIS computer language program for basic blocks
- style (.MDL) = GRAFIS style with all parts
- grade rule pattern (.SWS) = GRAFIS grade rule pattern saved as template.



Picture 17-4

Select the respective file (except for programs) with the <Browse> button. It is copied in the directory \PROG of the construction system. Set the required number and enter the short name for this entry.

Enter a number of different pattern pieces which have been saved as grade rule patterns in the list „own blazer patterns“ and design the corresponding graphics and masks with *Edit: Graphic* and *Edit: Info Mask* (Picture 17-5).

Generate a GRAFIS style with various parts. Enter this style in the call list. Entering styles in the call list is useful for basic types which are utilised as a basis for style development. When calling a style GRAFIS calls all parts and inserts them into the processed style.

The status line at the lower edge of the call list indicates whether the list entry is a PRG (=computer language program), SWS (=grade rule pattern) or MDL (=style) type.

Graphic and mask for the list entry

For each entry an information mask is generated as standard. For the selected entry the info mask can be edited with double-click or *edit: info mask*.

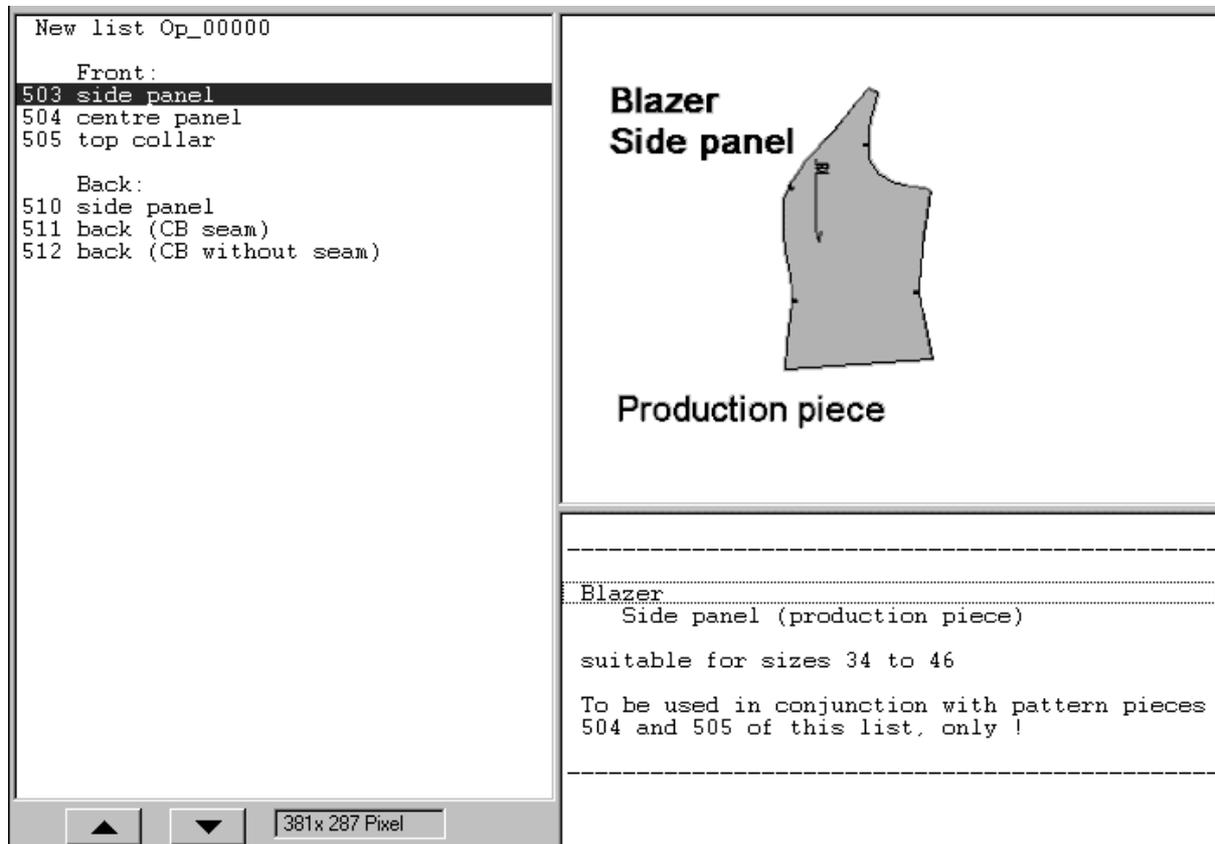
With each list entry a graphic can be saved, also (bitmap, recommended size 381x287 pixel). Select the list entry for which a graphic is to be generated and, then, click on *edit: graphic*. The Windows graphic program „Paint“ is started with the required file name. Create a bitmap in the recommended size and quit „Paint“.

The new info mask and graphic appears only after having selected the list entry again.

Design the list

Select a list entry such as „dresses, coats and sleeves“ in the overview list. Click the  button below the list. The selected entry is moved up or down.

The menu function *entry: space* enters an empty line



Picture 17-5

before the selected list entry.

The function *entry: new* with the selection „space“ enters an additional line for text for ease of structure.

Further functions of the menu

entry: duplicate and *entry: collect* are active in the list „all private constructions“, only. *duplicate* is active for program entries, also so that these can be copied for further program development.

entry: collect starts collecting computer language programs, grade rule patterns and styles which are not featured in any list in the sub-directory \PROG. Use this function if you have imported computer language programs with *Extras | Ex-/Import Programs* but have not entered them into the call list, yet.