

Documentation for GRAFIS Version 8

Contents:

- New in GRAFIS Version 8
- Textbook Chapter 16 „Layplan I”
- Textbook Chapter 17 „Layplan II”
- Textbook Chapter 18 „Programming Language I”
- Textbook Chapter 19 „Programming Language II”

New in GRAFIS Version 8

Layplan

From Version 8 GRAFIS contains a layplanning application which fulfils industry standards. It is started as a separate application and can be run parallel to the GRAFIS Construction. According to requirements, it is used to different extents in industry, trade and education. The following is permitted amongst others:

- layplanning of all production patterns of the current style,
- combination of pattern pieces from different styles in one layplan, also across construction systems,
- single and folded layplans,
- transfer of optimised layplan onto new layplan to be created,
- grouping of pieces,
- creation of fusing group and much more.

Technical parameters such as material type, grain, number of pieces per style and repeat markings are considered as well as layout parameters for buffer (global, piece-specific, direction-specific), shrinkage, material fault. During layplanning, pieces can be rotated or mirrored.

The application of the new GRAFIS layplan is described in detail in the new Textbook Chapters 16 and 17.

Product Data Management System (PDM)

The Product Data Management System (PDM) allows for generation of forms in which data from GRAFIS style files, layplan files and finished measurement tables are processed and displayed, automatically. For this software, separate training and possibly on-site installation is required. Example forms can be sent on request.

Basic Blocks

In the construction system „23-Werte-Hohenstein DAMEN_5” the new constructions „Jacket with princess line”, „Blazer” and „Two-piece sleeve for Jacket and Blazer” by Prof. H. **Brückner** were

added. A documentation about these constructions is available in German language only.

In the construction systems „**Müller & Sohn**”, the basic blocks were re-processed. As basic provision for menswear, the Rundschau Verlag offers the „Basic block blouson” and the „Basic block trouser with pleats”. Womenswear is supplied with the „Basic block for fitted jacket” and the „Basic block trouser with pleats”. A documentation about the above basic blocks is available in German language only.

The basic blocks of the **UNICUT System** are available in re-processed form. For the womenswear sleeve constructions, the control options for ease were extended. For menswear, new basic blocks for shirt, jackets, and gilet (waistcoat) are included. The shape and figure types for men have also been extended.

Toolbox

The toolbox buttons in GRAFIS Construction and Layplan can be assigned by the user. The use of the 10 buttons is determined in the GRAFIS Set-up. The settings are then, saved in the file \GRAFIS\GRAFIS.INI in the sections [TOOLBOX2] or [TOOLBOXS]. Possible alterations should be noted as the GRAFIS.INI is overwritten during subsequent updates.

Plot/ Print

With immediate effect, not only the plot frame but all visible pieces can be moved. To move a pieces into the plot frame <F3> no longer has to be pressed, first.

Clicking on „automat. wrap” optimises the number of horizontal and vertical single sheets as well as portrait / landscape to the least amount of single sheets. The selected scale applies.

Prepare and switch text in different languages

A text file can be saved in different languages. For placed text, switching between languages ensues via the pull-down menu Finished Measurements | Languages. If the required language is not available it has to be added to the file \GRAFIS\Masscode.dat. The code for the language should be exactly three digits of the international telephone code, e.g. 049 for German and 044 for English.

The text file is to be saved under

\TEXTE\049\ in the German version and
\TEXTE\044\ in the English version.

The file name must be identical in both directories.

The text is to be set with „from file”. The text may not be edited to ensure switching between

languages functions, properly. Possible alterations are reset during test run / grading as the text is always loaded from file.

New text blocks for x values, z values and calculated finished measurements

In addition to the text blocks for part number, part name, size etc., text blocks for x values from the record, x values of the basic block, global x values, z values and calculated finished measurements are also available. These new text blocks are also assigned, automatically with the respective value for each size. The numbers are entered into the window between { }. The number of decimals corresponds with the setting for z values. The number of decimals can be set by entering {x} (x- number of decimals). It applies to the edited text until new settings are made. The text

```
ease: {X1..}
ease: {1}{X1..}
ease: {X1..}
ease: {0}{X1..}
```

appears in GRAFIS as follows, given that two decimals are set for z values and X1 equals 250.123:

```
ease: 250.12
ease: 250.1
ease: 250.1
ease: 250.
```

Symbols / Direction construction

When aligning symbols, a new menu function „in base p.” is available. This calculates the basic direction in each size exactly in the base point. So far, only the function „click l” was available. When using this function, the basic direction is calculated at a relative position on the line which does not always equal the point to which the symbol is attached.

Part Organisation

The arrow keys „Up” and „Down” and the „Home” and „End ” keys can be used for selecting another part in the part list. In the sub-window „Part parameter”, the Tab key is active.

In the „Part parameter” window, the amount to be entered has changed. From now on, the amount of the selected part per style is to be entered in normal and flipped orientation. The grey field below indicates the sum of both numbers.

A further field in the „Part parameter” window is used for assigning a piece category. Piece categories can be used in the layplan, see Chapter 17.

Part Organisation / Part Connection

Via the new menu function „insert connection part”, parts from another style are selected and transferred as connection parts. The date of the last

alteration of the source part and the name and path of the source style is saved to ensure the alteration service. This information can be found in the „Part parameter“ window in the part list.

Connection parts can be inserted in two variations depending on the switch „insert with complete record”:

„insert with complete record” active / set:

Only parts which are not daughter parts (=parts of generation 0) can be inserted with this option. The parts are transferred with the complete construction record and the x value tables. The transferred parts can then, be graded in all sizes as long as the global x values are adjusted. In these parts, x values can be altered and record steps can be added. NB: When updating these parts, x values are updated and possible record steps are overwritten. Therefore, record steps may only be added to a connection part if it is never to be updated. Otherwise, the required objects must be donated to a new part with *insert*, first.

„insert with complete record” inactive / not set:

The objects (lines, points) of the part are transferred without the construction record and x value list. Adding new record steps is not possible. These parts can be used for measuring, stacking and can be compared with other parts. These parts cannot be graded. They are available in the transferred sizes, only.

Connection parts are indicated by „>” in the first column of the part list. If the part is altered in the source style, a „!” also appears in the first column. If the source style or the part in the source style is no longer available, a „?” appears. Detailed information about working with connection parts can be found in the Textbook Chapters 16 and 17.

Detailed information about the individual buttons in the user interface „insert connection parts” can be found in the GRAFIS Help (function key <F1>). Information about updating connection parts is contained in Chapter 17.

Export protocol ...

If the check mark „collate AAMA files” is set, all selected pattern pieces are collated in a *.DXF and a *.RUL file. Both files obtain the name entered in the field below and are generated in the pre-set directory (see field „target file”, lower left).

Programming Language

From GRAFIS Version 8, a new programming language for generation of basic blocks and construction components is available. The individual steps for creation of a basic block are entered as text. Basic blocks should be developed in the programming language when a company-specific fit or a complete component solution is to be developed. It is to be considered that the programming language is an abstract form of pattern development. Apart from an excellent knowledge of pattern construction and experience in the application of GRAFIS, an extended period of familiarisation is required. The rules of the programming language are explained in detail in Chapters 18 and 19 of the Textbook Part II. It has been extended substantially compared with the previous programming language and now allows for the creation of dialogues.

The programmes of the previous programming language continue to run, naturally.

Dialogue „Open / Save Files” for styles, collections, layplans

From Version 8 names for styles and collections can have long file names (more than 8 characters). Special characters are not permitted. Spaces are permitted. However, the file name may not start or end with a space.

From Version 8 the collection directory can be divided into 7 levels. In the collection Alpha a sub-collection Alpha1, a sub-sub-collection Alpha2 and so on can be created. The number of levels is set in the file \GRAFIS\GRAFIS.INI in the section [OPTIONS] via the value for MDL_FOLDERS. MDL_FOLDERS defaults to 0 which corresponds with the methodology of Version 7 and earlier.

Copying styles has also been simplified. The style simply has to be clicked with the right mouse button and „copy” is to be selected from the context menu. Then, change to the directory into which the file is to be copied and click the right mouse button, again. Now, select „paste” from the context menu. The „paste” function is only active if no file of the same name exists in this directory.

To rename a style click slightly longer onto the style, holding the left button pressed slightly longer.

Write-protected style are indicated by a small padlock. Clicking with the right mouse button in this case, offer „remove write-protection”. The write-protection may be removed, only if no other user is working on this style.

Detailed information about the individual buttons in the user interface „Open/Save Files” can be found in the GRAFIS Help (function key <F1>).

Z values

From Version 8 z values can be altered, retrospectively. The record step in which the z value was entered is indicated in the z value list. A z value can only be deleted if it is no longer required for the correct record. When resetting the GRAFIS record the z values relating to the record step are also reset.

In z value calculations, x values of the basic block can also be processed; example: X1.2 for the second x value of the first basic block.

Pull-down menu Grading

The new menu function „Grading Production Patterns” first, grades all parts. Then, all draft patterns are processed with test run. The production patterns are thus, available in all sizes; all other parts are available in the base size, only. This saves memory and styles are loaded more quickly.

Import of Grade Rule Patterns

With immediate effect in addition to import of data in the GRAFIS data format, Gerber Extended PN format, AAMA/DXF format and HPGL format (style perimeters without grade rules) import of data in the ISO format (cutter data = only style perimeters without grade rules) is possible.

The new menu function „cycle import grade rule patterns” immediately opens the dialogue for selection of another pattern to be imported after having completed loading a part. The next part is inserted, automatically into the next free part in the GRAFIS part list.

System Maintenance

For installation of new construction systems and adjustment of company-specific requirements the following additional programmes are available:

- Construction System Manager (generate and edit construction systems, adjust figure types and measurements)
- Symbol Manager (generate and edit symbols)
- Measurement Code Manager (generate and edit measurement groups and measurement codes for the function *finished measurements*)
- Converter Help for conversion of old programming language programmes into the new programming language

The application of these programmes requires special training.

Help

Detailed information about the new features in GRAFIS Version 8 can be obtained from the Help menu via the function „New in Version 8”.

Viersen, 15 November 2003