EUROCAD Newsletter

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Contents

Information and useful advices

1. We made it our goal to make our software competitive and that is why our customers` suggestions are of utmost importance in helping us improve the software. For that, we would like to thank them. In our continuous attempt to improve the applications, the V11 version of the EuroCad package there were added some new features that are meant to help the users. Also, it is possible that the new functions automatically solve some problems that the users might have had so far.

2. Most of the new features are already on the new version of the applications and they are also explained in the EuroCad Newsletter. This is why studying the Newsletter is highly recommended. The current document includes only the latest changes of the applications, compared to the previous version. If you have an earlier version of the EuroCad package, you should read all the Newsletters released in the meantime.

3. The version to which this document refers to can be downloaded manually from our website, www.eurocad-systems.com, the download section or fully automatically, using the EuroCad Shield application. Using the EuroCad Shield software you will be able to see if the latest version from the website is supported by your license. Also you will be able to automatically update the EuroCad applications.

Warning! **You can update your software only if your system is still in the warranty period or if you have a service contract for the EuroCad software. To check your warranty period please check the EuroCad Shield.**

4. To find out what software version you are using, you can check the date shown on the splash image, when opening the application, or check the EuroCad Shield.

5. For more detailed information regarding the new functions you can check the V11 version of the EuroCad User Manuals or the Appendix which will be available in the days to come. If you do not have the Appendix yet, please contact someone from our technical support department.

   For any problems, questions or suggestions you might have, please feel free to contact your distributor.

New features in EuroCad

EuroCad Pattern Designer

1. The "Trace+" function

In Draw tool mode was added a new function called "Trace+". Using "Trace+" function, the user can create new patterns from the already existing ones just by clicking on the interior contour of patterns. Once the function is selected:

- all the patterns from the working area will be colored in grey and all points will be selected - excepting the intersection points.
- a new window will be displayed where the user has two options" Accept" and "Exit".

The new pattern will be obtained by making first a simple click to the needed area, which will be displayed in a different, color, and then by press "Accept" button from the displayed window.

The new obtain pattern will have the properties of the initial pattern: design line, seam allowance, restriction etc.

Note! A warning message will be displayed for the cases when the function can not be applied.

2. Import Gerber

The user has now the possibility to import the annotation from the Gerber CAD Systems. A new combo called "Annotation" was added to the "Import Gerber files" window. Once the user select the Gerber zip file in the "Annotation" field will be displayed a list which contains all the annotation files created by the user in Gerber Cad System. The user must select the needed annotation file. The line designed in Gerber will be imported as a text line. The text from the annotation file will be displayed in the edit field for the text. For the cases when it is not needed to import the annotations, the user must select "None" option from the annotation list.

3. Perpendicular on a segment

The new version brings improvements regarding the way how to design a new perpendicular line on a segment. Two new options were added in the "Draw" tool mode, in the right side panel: previous perpendicular and next perpendicular which allows the drawing of a perpendicular on a selected segment and drawing a perpendicular from a point on a segment.

4. Symmetry axis

It has been improved the way is applied the function "Create symmetry axis". It is possible now to display the point order of the two points which define the symmetry axis:

- for the cases when the symmetry axis is defined by segment selection, the point order will be given in clock wise direction
- for the cases when the symmetry axis is defined by points selection, the point order will be given be the initial selection

Note! The point order of the symmetry axis will be displayed only when the symmetry axis is selected.

5. Set background image for patterns

A new feature has been added to Pattern Editor to allow the addition of background images on patterns. This new function it is in "Pattern tool" mode and called "Edit background image".

By pressing the button "Edit background image" a window will be opened that allows to the user to add edit and assign the selected image on a pattern that belongs to the actual model. In this window the image can be resized by changing either the dimension either by changing the resolution of it. The image will be placed on a pattern so the matching point of the pattern to match with the reference point defined by the user on the image. So in order to mark the reference point on the image from the edit window the user has to make a click on it in the desired position. If the edit image window is opened when it was not selected any pattern, it will be possible only to edit the properties of the imported images, and it will not be possible to assign any image to the pattern, but some assignments of the images that were made previously may be lost if are deleted the images used on the patterns from the actual model.

6. MTM Alterations Mode

In an environment where items are custom made to an individual's unique style and measurements it is important to provide the perfect fit of the garment. Made To Measure Alteration module meets the complex needs of the custom made to measure clothing industry.

The principle of obtaing the individual pattern for the customer specific measurements : create the base pattern by using traditional pattern desgin algorith and apply MTM Alteration Mode. The result will be a new pattern obtained for the specific customer measurements.

Base pattern	Apply Alteration Mode →	MTM pattern

The Alteration mode contains two sections:

    a) Alteration rules section
    b) Alteration product section

a) Alteration rules section

Rules :		Alterations for the selected rule :			Variables :	
Rule name		Points	X Move	Y Move	Variable name	
Rule 1		33, 34, 51	-(v1+v2)/2		v1	
Rule 2		53, 81	0.25*(v1-v2)	v1+v2	v2	
Rule 3		82, 103, 106, 115	v1	v2		

| + | - | | + | - | | | + | - |

Close

The Alteration rule section contains three different divisions:

- **Rules division**: the rules division contains the rule that will be applied to the base pattern in order to obtain the MTM pattern. A rule can be added to the list by pressing the **"+"** button. Each new added rule will be named automatically "Rule 1, 2, 3, etc.". The rule name can be

changed by double click in the rule name field. To delete a rule, select it first and then press "- "button. A rule is defined only once for a model.

- **Alteration for the selected rule**: there are three sections:
- **Points**: for each rule the user must choose which points from the base pattern will change their position and in which direction. Once the rule is selected the user must click on the " + " button from the alteration division. A new window will be displayed. Using this window the user can select the specific point to which will be applied the alteration. The points can be selected one by one or by multiple selection (using window selection or using SHIFT key from the keyboard). Once the points are selected press the "Apply" button.
- **X / Y Move**: after the specific points are selected, the user must set the value and the direction in which the points will move. The value is set by using different formula which contain specific variable which are set in the "Define variable" window. The formulas that can be used here are identical with the ones that are used into the measurement table. The point movement can be done either on X direction (in this case the user must set the alteration formula into the X Move row) or in Y direction (in this case the user must set the alteration formula into the Y Move row) or the points can be moved both on X and Y direction in same time (in this case the user must set alteration formula both on X and Y Move row).
- **Variables:** The user must set in this section the variables name. The variables are common for all the rules. In order to add a variable press " + " button. The new added variable will be automatically named " v1,2,3..etc". In order to delete a variable, first select it and then press " – " button.

b) **Alternation product section**

In this window it will be defined the altered model by following the steps:

- Select size: in this area will be displayed all the sizes of the initial base pattern. The user must select the size or the sizes to which will be applied the alteration. The user has the possibility to check or uncheck all the sizes from the list.
- Select rule: in this area are displayed all the alteration rules that were created in the previous step, to the "Alteration rule" section. The user can select one or more rules witch will be applied to the specific points. The user has the possibility to check all or uncheck all the rules from the list.
- Define variables: in this section are displayed all the variables from the selected rule. The user has here the possibility to set the variable value according to the customer needs.

Using the "Add" button all the selected sizes that will be alternated will be added in a batch. A batch can be modify in order to add/remove a new size or add/remove a rule by using the "Modify" button. Also the user has the possibility to delete a batch, first it has to be selected and then press "Delete" button.

In order to generate the MTM file press the "Generate product" button. The user has also the possibility to set the path where will be saved the MTM file.

Note! The alteration are applied in function by 0 position of the patterns on the marker

EuroCad MTM Server

EuroCad MTM Server is a stand alone application that creates multiple project (model) files in queue mode. This application needs information files generated from body scanning and also project (model) files; new project (model) files which have the information from the body scanning files will be obtained.

More detailed information regarding the EuroCad MTM Server application can be found in the EuroCad MTM Server documentation.

EuroCad Photo Module

1. Short cuts tab

The version brings improvements regarding the possibility to customize the short cuts for different commands. A new tab was added to the Settings window, called "Shortcuts". This window contains a command section, where the user can select the command to which will be assign a new key combination. The user has also the possibility to read a short description of the selected command. If the selected command has already assigned a shortcut, the user can change it by typing the new combination in the "New key combination" field.

2. Manual grid detection

For the cases when the grid detection is not accurate due to some different factors, the user has now the possibility to apply a manual detection of the grid.

![EuroCad logo]

EuroCad Spread & Cut Planner

1. Import Gerber

The user has now the possibility to import the annotation from the Gerber CAD Systems. A new combo called "Annotation" was added to the "Import Gerber files" window. Once the user select the Gerber zip file in the "Annotation" field will be displayed a list which contains all the annotation files created by the user in Gerber Cad System. The user must select the needed annotation file. The line designed in Gerber will be imported as a text line. The text from the annotation file will be displayed in the edit field for the text. For the cases when it is not needed to import the annotations, the user must select "None" option from the annotation list.

![EuroCad logo]

EuroCad AutoMarker

1. Group bundles when double spreading

During double layer spreading, there are some situations when patterns are cut extra, because they have no pair. They are single patterns in the product. For these situations, our system comes with the solution of grouping two by two sizes, when it is possible.

To solve the situation, it was introduced a new option in "Nesting Options" Tab called: "Pair same bundle on double layer". When this option is checked, similar sizes (duplicate sizes in the marker) are grouped together two by two.

   Example: Marker having 4 sizes:
   -   2 of 50L sizes
   -   2 of 52S sizes
   • Marker without option "Pair same bundle on double layer" checked, generates half from duplicate patterns on the marker plus the single patterns for each product from the marker – which generates the extra pattern
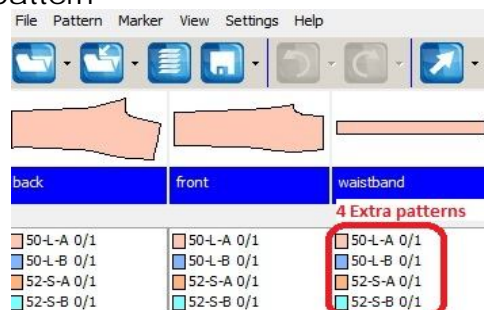
   • Marker with option "Pair same bundle on double layer" checked, generates one single complete product for each two identical products loaded.
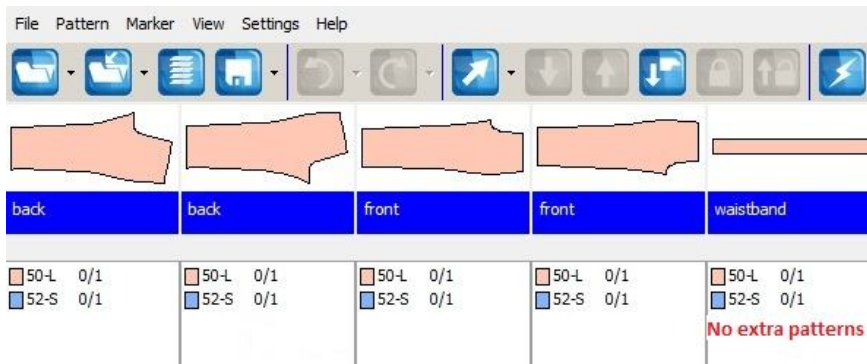
2. Edit cut section on patterns

To optimize cutting path on a pattern contour it was introduced a new feature named: "Edit cut order" available in menu displayed on right mouse click on a pattern.

This feature allow user to set cutting sections on pattern contour (cut line of pattern) and to establish cutting direction for each section. The pattern contour can be split on sections just by pressing Add button positioned bellow sections list. The new sections will be created considering displayed points which can be: only graded points, only points with deviation from smooth bigger than angle introduced by user or all points from pattern contour. Start or end of one section can be adjusted manually by selecting the section and making right or left click on pattern image.

All settings made in this window can be applied only to selected pattern, to all identical patterns from bundle or to all identical patterns from size.

The cutting order set on pattern is saved in the marker and will overwrite any other setting from Cutter settings: butterfly cutting, pattern cutting direction, start point etc. considered as partial nested. During share mode the re-nesting is done on the entire order.

3. Start point for opened patterns

There are some situations when contours can become opened during cut export. Contours can get opened when:

- Overlapped curves or lines are eliminate
- Lines overlap contour and set up to be eliminate
- Patterns are between frames during export cut from Cut Here module.

For these cases the start point will be chose to be in one of the edges that result because of the opened contour. The start point is considered from all, in such way to get the smallest void path for the blade.

There are two exceptions from this rule:

- When start point is set up to be "As defined in project": in this case if the start point set up in project is on that section, it will be kept and section will be cut starting from the defined in project point.
- And when the user defines sections on pattern, using "Edit cut order" function. In this case, the start point of the piece will be the Start point for section 1.

4. Marker report: Splice Table

In nesting application, there is a function that helps the user to find where can be applied splices. The splice position is now displayed into an optional table in Marker Report. To generate this table, it is necessary to check in "Report Settings", the "Splice" option.

In the Splice table, the user can identify a current number for each splice that corresponds to the splice order number in the marker. Also, in the table are displayed, the beginning and the end of each splice, expressed as dimension, and measured from the beginning of the marker to the splice edges.

This table is positioned in marker report, under mini-marker image for both formats: .pdf and excel.

5. MTX file: locked pieces information

The MTX is a file that has all basic information necessary to create a marker. Starting with this version, beside this basic information, the mtx file will contain also the information, if a pattern is locked or not in the stock area and which patterns have this property.

6. Core display

In "Automatic nesting" window was added a taskbar on which are displayed the number of available cores and the number of licensed cores. In order to display the task bar, the user must uncheck the option "Hide multi core panel" from User option tab. By using the power meter from the Automatic nesting window the user can increase or decrease the number of cores that are active during the nesting process.

7. Text size for the export files to plotter/cutter

A new option was added in "General Settings" tab / Special cutting options, called "Text Font Min Size". The same option was added to the Plotter export options as well. The option was added in order to improve the control over the text size. Using this option the user has now the possibility to adjust not only the maxim text size but also the minim text size. The text resize is done as it follows:

- the text will be resized so it fits on the grain axis
- for the cases when the text is bigger than the value set at Max Font Size, the text will be adjust to the set value for the Max Font Size
- for the case in which after the previews resizing articulated above the text will have the dimension smaller the the value set at "Minimum dimension" then when will be resized the text it will be taken in consideration the following two cases:
  a. if the user don't want to split the text into multiple rows then the text will be resized in order to achieve the value set at "Minimum dimension text"
  b. if the user wants to split the text in multiple rows, then the text will be resize in order to achieve the value set at " Maximum dimension text" (if it is possible)

8. *Trim overlapped pieces to cut export*

This option was added for the special cases when are accepted on the marker overlapped patterns and the user wants to cut and validate totally one of the overlapped pattern and to trim the other.

In order to arrive trimmed a pattern in the window of cut export it have to be followed the next steps:

- in the nesting zone the user will force manually the overlap of some patterns. In order to validate the position of a overlapped pattern is pressed the CTRL key and make click inside of the invalid pattern
- it will be checked in the window "Cutter settings" tab General settings the option " Trim the overlapped patterns"
- it will be exported at cutter the pieces

Nesting marker	Cut export
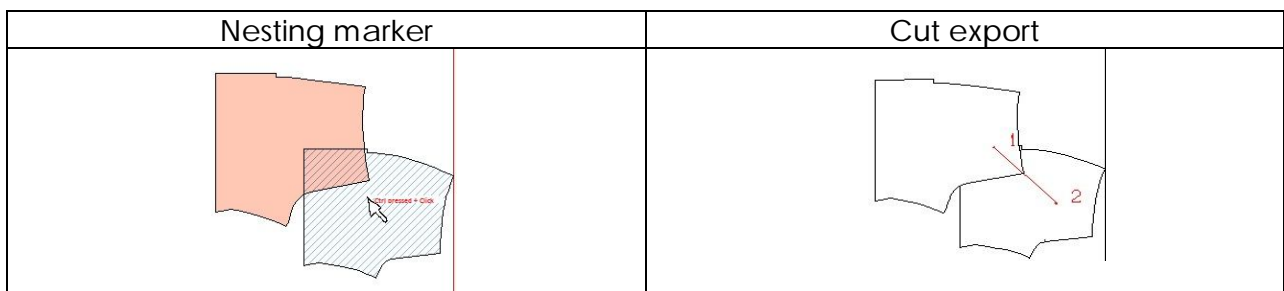
9. *Print efficiency for plotter export*

It is possible now to print the information regarding the marker efficiency at the plotter export. A new option was added to Settings / Plotter Settings / General Settings / Side text settings called "Print efficiency". If this option is checked the marker efficiency will be printed at the plotter export.

10. *Import Gerber*

The user has now the possibility to import the annotation from the Gerber CAD Systems. A new combo called "Annotation" was added to the "Import Gerber files" window. Once the user select the Gerber zip file in the "Annotation" field will be displayed a list which contains all the annotation files created by the user in Gerber Cad System. The user must select the needed annotation file. The line designed in Gerber will be imported as a text line. The text from the annotation file will be displayed in the edit field for the text. For the cases when it is not needed to import the annotations, the user must select "None" option from the annotation list.

⚠ Fixed errors

EuroCad Designer

1. Pattern cut

In the new version was modified the way it is apply the pattern cut function. If a pattern contains an auxiliary pattern, once the cut is done, it will be cut / kept the auxiliary pattern as well.

*2. Import *.iba *.vet files*

When it were imported the files IBA & VET which have the grain axis defined out of the pattern contour, it was deled the axe and drawn inside the pattern keeping the imported position of the patterns and modifing in some cases the direction of the grain axis.

Now this problem it was fixed by moving the axis inside the pattern withowt changing the direction of the axis.

EuroCad AutoMarker

1.   Import internals from LayS files:

A LayS file can content many internal axes. Some of them are used as text information support; others are used to construct different shapes inside the patterns. Until now, all these axes were imported as text axes, and the user could not make the difference between them to cut or plot export.

Starting with this version, the axes that are used as text support are imported as text axes and the axes that are used to represent different shapes inside the pattern are imported as internal lines. This way, because there are different settings to set up layer for exporting these elements, the user can opt to send to cutter or to plotter only the elements that he needs.

In work for the next version

EuroCad Pattern Designer

1. Export cut.

It will be added the Cutter Settings Tab.

EuroCad AutoMarker

1. Copy / Paste button for the nested patterns

On the next version, will be possible to copy/paste the nested patterns.

2. Shade marker and size by size

On the next version will be add a new function "Groups will be kept on each shade". For the cases when the marker was both shade and size by size, if the option is checked then the patterns that belong to one shade will be limited on the left side of the same shade group and the free patterns will be limited on the closer left shade group.

3. Cut Export –trim pattern bigger than frame

Patterns longer than frame length set by user on Conveyor settings will be trim in order to be exported to cutting machine. On actual version all patterns longer than frame length set by user on Conveyor settings are not exported in cut file.

4. Export –variable frame for conveyor

In order to avoid problems generated by cutting same piece on different frames (small alterations on contour generated by fabric transportation for ex) it will be introduced possibility to export for cutting machine variable frames. The frame will be calculated automatically in such a way to include complete patterns on it. User just has to introduce a minimum and a maximum value for the cutting frame.