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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 X9 version of the Gemini 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 Gemini 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 Gemini 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.geminicad.com, the download section or fully automatically, using the Gemini Shield application. Using the Gemini 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 Gemini 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 Gemini software. To check your warranty period please check the Gemini 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 Gemini Shield.

5. For more detailed information regarding the new functions you can check the X9 version of the Gemini 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.

6. For any problems, questions or suggestions you might have, please feel free to contact us:

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e-mail: sales@geminicad.com
OR
Contact your distributor.
New features in Gemini

1. **Piece Tool - rename pieces from <Piece properties table>**

Now is possible to rename automatically two or more pieces from properties table list. The user can also add or delete characters at the beginning, at the end or inside the piece names.

**Location:**

*Piece Tool mode/ Pieces properties table– Search/Replace button*

**Functionality:**

There are two possibilities that can be used to rename the piece names:

- **a) Replace automatically the name of all or of several pieces**
  - the replacement of all or of several pieces name, which were selected from piece properties table
  In the **Search** field will be edit the character „*“.
  In the **Replace** field will be insert the desired text that would appear after replacement, by pressing the button **Replace or Enter key**.

- **b) Rename the piece/pieces by adding a text in front/back of the existent name**
  - adding a text in front of the piece name
    In the **Search** field will be insert the text in front of which will be add the new text.
    In the **Replace** field will be insert the text that will be add to the initial text followed by the character „*“.
    In order to add the new text the button **Replace or Enter key** must be pressed.
  
  - adding a text at the end of the piece name
    In the **Search** field will be insert the text that must appear at the end of the words.
    In the **Replace** field will be edit the text that will be add to the initial text followed by the character „*“.
    The button **Replace or Enter key** will be pressed in order to add the new text.

**NOTE**

In the **Replace** field can be edited numbers, letters or other allowed characters.
2. **Piece Tool - saving the pieces arrangement in <Piece properties table>**

The pieces arrangement can be made in the *Piece properties table* according to piece name, fabric name, etc. The last arrangement made by the user will be saved by pressing the button *Accept*. The last saved arrangement will be displayed when the *Piece properties table* will be reopened.

3. **Piece Tool - Flip matching**

The new function comes to help the users that prepare asymmetrical models which will be cut on stripes and plaids fabrics. An asymmetrical model is for example a jacket where left front is created from one piece and right front is created from two pieces. For this situation in production is desired as both, left front and right front, when will be placed on nesting area to have symmetry of stripes and plaids.

**Location:**

*Piece tool*/*Piece properties-panel*/*Flip matching*

**How it works:**

In the piece properties panel it was added a new option, *Flip matching*. In order to be correctly applied the new function must be followed the next steps:

- The pieces that need to be matched must be placed in the sewing position;
- In a common point must be created manually to one of the pieces a matching point with offset 0;
- Select all pieces that follow to be part to the dependency group and apply *Create automatically matching points*

After the previews steps were completed must be selected the piece/pieces on which *Flip matching* must be applied, and one of the followed options can be selected:

- *None* - it is set by default, the result is no flip on matching points;
- *Flip x* – will make horizontal flip to the matching point;
- *Flip y* - will make vertical flip to the matching point;
- *Flip xy* - will make horizontal and vertical flip to the matching point.

The settings will be taken into consideration only if the pieces which are desired as being pair to be into the same dependency group. One of the pieces from the same group will have selected the option *None*, and to the ones who need flip matching will be applied one of the options: *Flip x*, *Flip y* or *Flip xy*.

**NOTE**

The effect of the *Flip matching* can be seen on the nesting part when the fabric restrictions are made. The new function increases the markers efficiency.
4. **Grading Tool - the possibility to change the colors for grading axis**

To highlight exactly which is the X and Y axis after rotating them, it was introduce the facility to color the axis.

**Location:**

*Settings/ Colors/ Colors for different internal elements/ X on grading axis and Y on grading axis*

**Functionality:**

Go in the above specified location and set the desired color for the X and Y grading axis.

5. **Grading Tool - align grading according to an attached auxiliary piece**

The possibility to align temporary or permanently the graded sizes according to selected points belonging to an attached auxiliary piece it was implemented. After the alignment is made, to the points belonging to the piece will be added the grading of the auxiliary piece.

6. **Measure and Check Tool - magnetize a measurement on a notch**

This implementation gives the possibility to magnetize a measurement to a notch, when the notch is very closed or overlapped to a main point if the notch and the main point have different grading steps.

To magnetize the measurement to a notch the CTRL key must be pressed during notch selection.

7. **Measure and check Tool – the measurement of the auxiliary pieces**

This option facilities the measurement of the auxiliary pieces belonging to the imported projects who contain multiple auxiliary pieces with open contour, in most of the cases overlapped on certain sections.

In order to measure easily the contour of the auxiliary pieces, in *Measure and Check tool* select the function *Measure perimeter*. Before measuring the auxiliary contour must be made a click on it. On click the ends of the selected segment will be numbered with 1 and 2. When the numbers are displayed, the measurement will be made from the point 1 to the point 2.

8. **Measurement Table - show offset for measurements**

It offers the possibility to view the differences between the base size and the other sizes from the size set for measurements saved in *Measurement table*.

**Location:**

*Measurement table/ Right click on a measurement/Show offset for measurements*

**Functionality:**

In order to display the differences between the base size and the other sizes from the project, in *Measurement table* must be done right click on a measurement. From the list that appears on right click will be selected *Show offset for measurements*. To hide the differences must be selected *Hide offset measurements*. 
9. **Measurement Table - Multiple selection using keys (Ctrl/Shift keys)**
This function allows the selection of two or more rows, in order to delete the measurements.

**Functionality:**
To select consecutive rows from *Measurement table*, it is necessary to select the first row, press the SHIFT key and keep it pressed until is selected the last row.

In order to select rows that are not consecutive, the *CTRL key* must be pressed when the rows are selected.

Once one of the above selections is made, the measurements from the selected rows can be deleted by pressing the *Delete key*.

10. **Garment Tool – focus in the seam allowance field**
To optimize the workflow, when the function *Edit seam allowance* from *Garment tool* is applied, the user can edit directly the seam allowance width, without making click into the edit box.

11. **Garment Tool – create notch at the intersection between a piece and an auxiliary piece**
**Location:**
*Garment tool mode/ Create intersection notch*

**Functionality:**
Select the function *Create intersection notch*, make click on the attached auxiliary piece and then make click on the piece contour where the notch will be placed. The notch will be created at the intersection of the auxiliary piece with the piece.

**NOTE**

The obtained notch is a distance notch. If the auxiliary piece will be moved or deleted from main pattern, the created notch will keep the position on pattern.

12. **Made to Measure – the possibility of using radical and trigonometric functions**
In geometrical design was implemented the possibility to use SQRT and trigonometric functions.

**Location:**
*Made to measure*

**Functionality:**
Select the desired function form MTM right menu, and in the parameters fields can be inserted the following syntaxes:

- to calculate SQRT:
  
  \[\text{sqrt}(\ldots)\]
• to calculate trigonometric functions:
  \( \sin(\ldots), \cos(\ldots), \tan(\ldots), \text{ctan}(\ldots) \)

The parameters for those functions must be written between round brackets, after the name of the function, with comma between parameters.
The parameters may bring their own expressions containing various calculations (using dimensions, measurements, geometrical points, operations, etc.).

NOTE
SQRT it’s working only for positive values

13. Made to Measure – new parameter (angle calculation)
For working with angles a new type of geometric parameter has been implemented.

Location:
Made to measure

Functionality:
By select a function that works with angle, for example Edge point of the dart – angle, the following syntaxes will be displayed:

Create a new point \( P_n \) representing the dart edge beginning in point _, having its peak in point _, and the angle _, on the left side.

In the angle field can be written syntax like:
\( < P_2, P_1, P_3 > \) - it is able to return an accurate angle value.

Where:
- \( P_1 \) - geometrical peak point;
- \( P_2 \) - geometrical left point;
- \( P_3 \) - geometrical right point;
- \( \langle P_1P_2P_3 \rangle \) - is the returnable angle value for the above expression.

The geometrical points used in the above syntax correspond to the existent geometrically construction.

In the parameters field can be written syntax like:
\( [P_1, P_2] * <P_2, P_1, P_3, \sin> \) - will return the value for the corresponding trigonometric functions calculated for the respectively angle.

Where:
- \( [P_1, P_2] \) – the distance from point \( P_1 \) to \( P_2 \);
- \( P_1 \) - geometrical peak point;
- \( P_2 \) - geometrical left point;
- \( P_3 \) - geometrical right point;
- \( \sin \) - the sine of \( <P_1P_2P_3> \).
14. **Show values for seam allowances**
This function allows displaying the seam allowance values on each segment of the selected pieces.

**Location:**
*Tools bar/Show seam values*

**Functionality:**
To show/hide the seam values the button *Show seam values* must be activated /deactivated. The seam allowance font of the displayed values and the text from the internal axis can be edit from Settings/Design/ Dimension font settings/ Text font max size and Text font min size.

**NOTE**
To be shown the Seam values, the seam allowance must be displayed.

15. **Check the fabric type**
It was introduced a new function that check if the pieces from the project have a fabric type assign for each piece. If are pieces without fabric type defined, a message will appear.

**Location**
*Settings/Technical/General technical settings-Check fabric name*

or

*Check pieces ready to cut- Check fabric name*

**Functionality:**
When a project is saved with the option *Check fabric name* checked from Settings, at the project import in Cut Plan and Nest Expert applications, is made automatically a checking of fabric type. An informed message will appear if exists pieces without fabric type assigned.

16. **Restriction to opening/ processing a project**
This function help the users to protect their projects to be opened/modified by using other Gemini licenses (other Gemini dongles). Therefore, the access for a project can be limited to one or several dongles.

**Location:**
*Settings/General/Access model level*

**Functionality:**
There are two access levels for projects:

**Limited access level**
Uncheck the option *This project has unlimited access* and use the buttons “+” and “-“ to add/remove the dongle serial numbers from the list on which the project can be open/modified.

**Unlimited access level**
By checking the option *This model has unlimited access* all projects can be opened with any dongle serial number.
17. **Import DXF standard – Grain axis**  
The possibility to set certain lines as grain axis on DXF standard files import it was implemented.  
**Location:**  
*Import Standard DXF/Advanced/Use layer definition/ Dxf layer table – Grain axis*  

**Functionality:**  
The *Grain axis* field provides to the user the possibility to define the layer that will be recognized as grain axis on DXF standard files import.

18. **Export PLT – export fabric type**  
**Location:**  
*Settings/Plotter settings/General settings/Piece information- Export project name*  

**Functionality:**  
By checking this option, it will be exported to plotter the fabric name. The fabric name will be displayed on the grain axis.

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1. **Export PLT – export fabric type**  
**Location:**  
*Settings/Plotter settings/General settings/Piece information- Export project name*  

**Functionality:**  
By checking this option, it will be exported to plotter the fabric name. The fabric name will be displayed on the grain axis.
1. **Display rulers on the marker**

   **Location:**
   There is a new button on the program interface: Show/High horizontal/vertical ruler

   **Functionality:**
   Press Show/High horizontal/vertical ruler. The rulers will be displayed in the left and bottom side of the marker. The rulers can be moved on the screen in two ways:
   - **Freely by mouse drag**
     Position the mouse cursor in top of one of the rulers, keep left mouse click pressed and drag the mouse in the desired position. In the bottom information bar, nearby *Efficiency, Length* ... was added also *H ruler* and *V ruler* – representing the offset between marker edge and ruler position.
   - **With a precise offset measured from marker edge, using H ruler/V ruler**
     Double click on one of the *<H ruler>*/ *<V ruler>* options from information bottom bar. In the displayed edit, the user will input the offset representing the new ruler position.

2. **Replicate marker**

   Now we have the possibility to create a new marker by simply replacing the sizes into an already existing marker. In the new marker the pieces will be positioned identical with the pieces from the reference marker, also all pieces will maintain the corresponding pieces properties from the reference marker (restrictions, block etc.).

   This function is very useful when the markers are very difficult (checks markers) and have very different piece properties from one piece to the other. For these situations the markers can be processed semiautomatic. By using this function, the time for creating these markers will be considerably reduced.

   **Location:**
   *File*/ Replicate marker position

   **Functionality:**
   The function allows the user to reproduce the piece positions from a reference marker into a new marker. The result will be new marker already nested. Together with the piece position will come also the piece restrictions too.
   
   The workflow will be as follows:
   - Open the order (the opened order contains many markers one of them being already nest)
   - Select the marker that follows to be nest
   - Access the *File/ Replicate marker* function, choose from the opened window the order that follows to be used as reference and from which the user wants to copy piece position and click on *Open* button.

   In this moment all piece positions and restrictions are copied from selected marker into the marker opened for nesting.

   The piece repositioning will be firstly done according to piece reference point (for the pieces which don’t have a defined reference point the repositioning will be done according to the beginning point of the grain axes).

   To access this new function it can be used also different orders but only if both of them are made with the same model.
NOTE

After using the „Replicate marker“ function, piece placement has to be manually adjusted to confirm the piece positions.
In case of different piece quantities in the current marker than reference marker; the user will get a warning message: Some pieces could not be repositioned.
The piece repositioning can be done also according to piece center. If this repositioning type is required, it will be necessary to contact Gemini CAD technical support.

3. Import DXF Standard – define layer for the grain axis
The possibility to set certain lines as grain axis on DXF standard files import it was implemented.
Location:
Import Standard DXF/Advanced/Use layer definition/ Dxf layer table – Grain axis

Functionality:
The Grain axis field provides to the user the possibility to define the layer that will be recognized as grain axis on DXF standard files import.

4. Export PLT – fabric type
Location:
Settings/Plotter settings/General settings/Piece information- Export project name

Functionality:
By checking this option, it will be exported to plotter the fabric name. The fabric name will be displayed on the grain axis.

5. Export CUT – export PLX/DXF
Location:
Settings/ Cutter settings/ Export type – PLX – DXF

Functionality:
By checking this option, when will be made the export it will be generated a file PLX – DXF.
**Gemini Nest Server**

1. **Generate mini marker in JPEG format**
   **Location:**
   Settings/General/ Output settings/ Output JPEG settings

   **Functionality:**
   If the user needs the mini markers in JPEG format, he will have to check the “Output Jpeg folder” in the Gemini Nest Server application. The user will to set the output path, where the Jpeg images will have to be saved.

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**Fixed errors**

**Gemini Pattern Editor**

**Automatically reading the file names imported from Gerber on saving**
It was implemented the reading of the file name from the zip file. When it will be saved as *.gem file, in the Save window, file Name it will be displayed the name of the model found in the *.zip file.

**Gemini Nest Expert**

**Show all annotations**
All the annotations written in the Annotations field from Marker report will be displayed.

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**In work for the next version**

**Gemini Pattern Editor**

1. **Bulge function**
   It will be able to select the bulge direction: clockwise and counter clockwise

2. **Set values for seam allowance on more segments from different pieces**
   On a feature version it will be possible multiple selection of segments from different pieces. This multiple selection will allow you to setup a value for seam allowance in the same time.