Gemini Newsletter

03.05.2012

<table>
<thead>
<tr>
<th>Document type</th>
<th>Technical documentation</th>
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<tr>
<td>Related to</td>
<td>Gemini CAD Package, release X9 / 11 April 2012</td>
</tr>
<tr>
<td>Document version</td>
<td>Release 1.0 / 11 April 2012</td>
</tr>
<tr>
<td>Developed by</td>
<td>Gemini Cad Systems - Iasi, Romania</td>
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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.ro  
OR  
contact your distributor.
New features in Gemini

Gemini Pattern Editor

1. Import extension information from Assyst

In Assyst, the decision of cutting/drawing/drilling/punching with a certain tool from the cutting machine for an internal element is established by the user that assigns an extension to each element. For each category of internal elements there are 8 different extensions (starting from 0 till the 7 extension). Such an extension contains information about the dimension of the element.

For example, an internal point, on different extensions in Assyst, can have both different sizes and shapes. In this case on the cutting machine must be used different drilling tools. Also a contour on different extensions in Assyst, can be cut or can be draw, that is why on the cutting machine must be used different cutting and drawing tools.

When the cut file is created from Assyst, in the file there is only the information that must be used a different extension for an internal element. The file does not contain also the information about the dimension or about the shape for the extension.

Starting with this version of Gemini Pattern Editor we are able to correlate the extension from Assyst for the internal elements with the layers from Gemini.

For this, on Assyst Import, in the window that appears, when the “Settings” button is pressed the extensions can be set for each internal element.

![Internal elements settings window](image)

Here in the left side of the “Internal elements settings” window there is a list with all internal elements for which the extensions can be set. When a click is made on an internal element, in the right side of the window will appear the list with the extensions (from 0 till 7) and the necessary settings for that internal element. For an internal element from a certain extension from ASSYST can assign a corresponding layer from Gemini.

**Note!** For drill holes and notches must be set also the type length and width for each extension. When an extension is checked in the “Layer association” list the “Notch setting” will be applied for it.
2. **Different color for the attached auxiliary piece**
Now a different color can be set for auxiliary pieces that must be attached to a main piece.

3. **Don’t rotate the text axis on nesting**
In the Gemini Pattern Editor, in the “Internal line” menu properties there is a new option: “Don’t rotate on nesting”. This new option is available only for the internal lines with the type “Text”.
If this new option is checked, when the pieces will be rotated on nesting, the text axis will not be rotated too; such as the line and the text from the line will keep the orientation from Pattern Editor.

4. **Measurement on the seam line extracted as internal element**
The seam line extracted as an internal element in the “Garment tool” mode can be now measured using the measuring tools. The obtained value can be also added in the measurement table and can be used on composed measurements.

**Note**! If the piece is graded, when the internal seam line is extracted as an internal element, the seam line will not have grading. So, when the measured value is added in the measurement table, this will be displayed to all sizes but will belong only to the base size.

5. **Keeping the name of the points when a piece is copied**
Now when a piece is duplicated in the same model or a piece is copied from a model to another one, the point’s name from the piece will be kept.

6. **Checking same name for different points from the pieces used on derivate grading**
Now on both checking functions from Gemini Pattern Editor will be verified also the point’s name of the pieces. If there will be two points, which are used on the derivate grading, with the same name, an error message will be displayed in the “Pieces with failures” list. When a click will be made on the error, the pieces that have this problem will be selected.

7. **Add pieces in subgroups**
In Gemini Pattern Editor application there is the possibility of adding pieces to a subgroup when the dependency groups are created. As a result, in Gemini Nest Expert application, all the pieces from a group will be kept together on nesting without stripes and plaids fabrics.
The subgroups are created very easily, same like the dependency groups, in the same window. To create a subgroup, the right mouse button must be pressed on the name of a group from the “Edit dependency group” window; from the displayed menu the option “Add subgroup” must be selected.
Also the subgroups can be created automatically by checking the “Add in subgroup” option from the “Create automatically matching point” window.
1. **Import extension information from Assyst**

In Assyst, the decision of cutting/drawing/drilling/punching with a certain tool from the cutting machine for an internal element is established by the user that assigns an extension to each element. For each category of internal elements there are 8 different extensions (starting from 0 till the 7 extension). Such an extension contains information about the dimension of the element.

For example, an internal point, on different extensions in Assyst, can have both different sizes and shapes. In this case on the cutting machine must be used different drilling tools. Also a contour on different extensions in Assyst, can be cut or can be draw, that is why on the cutting machine must be used different cutting and drawing tools.

When the cut file is created from Assyst, in the file there is only the information that must be used a different extension for an internal element. The file does not contain also the information about the dimension or about the shape for the extension.

Starting with this version of Gemini Pattern Editor we are able to correlate the extension from Assyst for the internal elements with the layers from Gemini.

For this, on Assyst Import, in the window that appears, when the “Settings” button is pressed the extensions can be set for each internal element.

Here in the left side of the “Internal elements settings” window there is a list with all internal elements for which the extensions can be set. When a click is made on an internal element, in the right side of the window will appear the list with the extensions (from 0 till 7) and the necessary settings for that internal element. For an internal element from a certain extension from ASSYST can assign a corresponding layer from Gemini.

**Note!** For drill holes and notches must be set also the type length and width for each extension. When an extension is checked in the “Layer association” list the “Notch setting” will be applied for it.
2. **Estimate the maximum number of products**

The maximum number of products from one nesting represents the maximum number of products estimated to fit a marker, which will have the length as close as possible to the recommended spreading length. This is an estimated number because on one marker can be nested different sizes and because of this, the length will be shorter or longer. Until now the maximum number of products from one nesting was set manually by the user. Now, the maximum number of products from one nesting can be also automatically estimated. The automatically estimation of the maximum number of products from one nesting is made accordingly to a target efficiency, to the recommended spreading length, to the fabric width and to the pieces area (calculated as an average for all pieces from the model).

To estimate automatically the maximum number of products must be followed the next steps:

- set the target efficiency; this value is set in the “Product estimation area” from the “Automatic spreading settings” tab from the “Settings”; accordingly to the set value the maximum number of products will be estimated such as the efficiency to be as much as possible closer to the target;
- set the recommended spreading length;
- set the fabric width (if more than one fabric is used, will be considered the smaller width from all the fabrics);
- press the “Estimate” button from the right side of the “Maximum number of products” field.

When using several models in order to correctly estimate the maximum number of products from the nesting, will be considered the model with the maximum area for the pieces.

3. **Export CUT – exporting marker rectangle**

Now for the cut files the marker rectangle can be exported too. For this, in the “Cutter Settings” on “Layer settings” tab was added a layer setting also for the marker rectangle. So if for the marker rectangle will be selected a layer that has a command, the marker rectangle will get into the cut file.

4. **Start/end overcut for the contour of the closed pieces**

Until now the overcut in the start and stop point of one piece was applied only for the pieces with opened contour or for certain angles from the pieces. Now there is the possibility of applying the start and stop overcut also in the start and end point of a closed piece.

To apply the overcut also in the start and end point of a closed piece, the option “Force overcut on start points” from the “Tool settings” window must be checked.
5. LayS import in Cut Plan

On the current version is possible to import Lay-S files into Gemini Cut Plan. This import will generate in background a model which contains only the sizes and the pieces existent in the Lay-S file. This will allow you to generate a planning for an order (ORD files with several markers).

How to import the Lay-S

In order to import a Lay-S file in Cut Plan it must be pressed the button: "Load project from file", and from the opened window it will be pressed the button: "Open Assyst lay-s", that will determine the opening of a window from where it can be loaded the Lay-S.

In function of the number of styles contained by the Lay-S there can be two situations at the import in Cut Plan:

A. The Lay-S file contain one style

When it was selected the Lay-S that will be imported, in the table Index and Style name, it will appear the name of the style used in the Lay-S, and a index number that it is checked by default. In order to import the style it will be pressed the "OK" button and all the patterns and sizes will be loaded in the "List of pieces and sizes from the project".

B. The Lay-S contain two or more styles

In the table Index and Style name it will appear the styles contained by the Lay-S. The user has the possibility to load from the table list one or some styles by uncheck the index. If it will keep checked all the indexes it will be imported all the stiles after pressing OK button.

In the import window, in the filed "Model" it will be displayed the name of the first style from the table list and the "List of pieces and sizes" will contain the patterns and sizes used for that style.

After it were selected all the patterns and sizes, from the filed "Model" it will be selected the second style used in the lay-s and from the "List of pieces and sizes" it will be selected all the patterns and sizes.

And it will be repeated the same procedure until it were selected all the patterns and sizes from all the styles, after press "Import" button and it will be generated a order that will contain two or models in function of the number of styles from the Lay-S.

Observations:

Considering that Lay-S is imported in Cut Plan as a model the information regarding spreading type and marker width are ignored, and that’s why the user must be warned and advised to make the spreading and marker settings after importing the Lay-S.

Workflow:

Special cases to take care:

a. Spreading type and fabric width: these are not model properties and are ignored on import from Lay-S

b. Piece quantity: the piece quantity will be exactly as it is in Lay-S (not in Assyst model). The user must be warned to not use option like “Single pieces” in Marker definition when import Lay-S in Cut Plan
“Single pieces” in Marker definition has as effect suppression of duplicates pieces (similar with double layer – half of pieces from Gemini).

c. Shrinkage: If user has applied shrinkage on pieces, the imported pieces will be already shrunk and the value on shrinkage will be 0.

d. Matching for Stripes & plaids - not implemented

Gemini Nest Expert

1. Import extension information from Assyst

In Assyst, the decision of cutting/drawing/drilling/punching with a certain tool from the cutting machine for an internal element is established by the user that assigns an extension to each element. For each category of internal elements there are 8 different extensions (starting from 0 till the 7 extension). Such an extension contains information about the dimension of the element.

For example, an internal point, on different extensions in Assyst, can have both different sizes and shapes. In this case on the cutting machine must be used different drilling tools. Also a contour on different extensions in Assyst, can be cut or can be draw, that is why on the cutting machine must be used different cutting and drawing tools.

When the cut file is created from Assyst, in the file there is only the information that must be used a different extension for an internal element. The file does not contain also the information about the dimension or about the shape for the extension.

Starting with this version of Gemini Pattern Editor we are able to correlate the extension from Assyst for the internal elements with the layers from Gemini.

For this, on Import Assyst Project, in the window that appears, when the “Settings” button is pressed the extensions can be set for each internal element.

Here in the left side of the “Internal elements settings” window there is a list with all internal elements for which the extensions can be set. When a click is made on an internal element, in the right side of the window will appear the list with the extensions (from 0 till 7) and the necessary settings for that internal element. For an internal element from a certain extension from ASSYST can assign a corresponding layer from Gemini.
Note! For drill holes and notches must be set also the type length and width for each extension. When an extension is checked in the “Layer association” list the “Notch setting” will be applied for it.

2. **Index unique on bundle**
   In the Gemini Nest Expert application, the user has now the possibility to change the instance index display from the bundle. This can be done in the “User options” tab from the settings on the “Instance options” area. For the instance index display there are three options:
   - no bundle index – in this case no index will be added to the size even the size is many times in the marker;
   - unique per size – in this case a unique index will be added to each size;
   - unique per model – in this case a unique index will be added per model, such as will not be any size on the marker with the same index.

3. **Rotation restriction for the text axis on nesting**
   In Gemini Nest Expert when the pieces are rotated on nesting, according to the rotation restriction, all text axis that had checked in Pattern Editor the option “Don’t rotate on nesting”, will keep the initial position.

4. **Align pieces according to the stripes and plaids subgroups created in Gemini Pattern Editor**
   There are situations on nesting on materials with different lines, when it is necessary for the pieces to be disposed in a certain order. These situations appear when, for efficiency reasons, is desired like in the same lay to exist layers from different materials with different lines, or when the material is poor and cannot be used a normal nesting with stripes and plaids.
   For these kinds of situations the solution is that in the Gemini Pattern Editor application to be created alignment subgroups.
   The subgroups are created very easily, the same like the dependency groups, in the same window. To create a subgroup, the right mouse button must be pressed on the name of a group from the “Edit dependency group” window; from the displayed menu the option “Add subgroup” must be selected.
   To use these subgroups in the nesting, in Gemini Nest Expert must be checked the next options: “Align stripes subgroups” and “Align plaids subgroups” from the “Marker Settings” window, “Fabric type”, “Stripes and plaids” area. For these cases, it is not necessary to define preliminary any stripes and plaids report.
   The application will try to position the pieces that belong to the same subgroup, with the matching point on the same line or column (this line where the matching points will be placed is not display on the nesting). If the application does not succeed this placement (because the width does not allow), the application will display a warning message for the user; the user will have to try to group again the pieces in Gemini Pattern Editor, such as to allow to all the pieces from a subgroup to be placed on the nesting, by respecting the alignment.

5. **Checking same name for different points from the pieces used on derivate grading**
   Now on Gemini Nest Expert import will be checked also the points name of the pieces. If there will be two points, which are used on the derivate grading, with the same name, an error message will appear in the “Error details” list from the “Assistance” windows. The user must go back in the Gemini Pattern Editor and fix the points name problem.

6. **Add seam line in Gemini Nest Expert**
   The user has now the possibility to add a seam line on a piece directly in Gemini Nest Expert. For this, select the piece and go to the “Edit piece” function. In the “Cut piece” window that appears, beside the functions that were until now, there is also the new function of adding a seam line on a piece. The seam line can be added only for the selected piece or to all identical pieces in the same instance or to all identical pieces in the same product.
7. **Add notch on the thermal bounding group**

Utility:
It was added this utility in order to mark clear the correct position of the thermal bounding group after it was prepared for cutting.

How is applied the mark on the thermal bounding group
In order to add a notch on the bounding group, first it has to be checked from Settings tab Nesting options “Add notch to group outline”, and also here it can be chosen the type of notch that has to be added.
After it was checked this option it can now be created the bounding group.

**Note!** The notch it is added only if the bounding group it is made with the outline type “Bounding box” or “Min bounding box”.

When a bounding group is created, there is now the possibility of adding a mark on the bounding contour, mark that is actually a notch. This is available only for the groups created with the outline type “Bounding box” or “Min bounding box”. After the mark from the bounding group is created, the notch will act like any other notch and if is necessary will take the settings from the cutter export.

To choose if a mark is added on the bounding group contour the option “Add notch to group outline”, from the “Nesting options” tab, must be checked. Here there is also the possibility of choosing the notch type for the bounding group. For each notch, the length and the width can be set.

If this option is checked in the settings, when you create the group, in the “Bounding group properties” windows the option “Mark the group by a notch” is available when the outline type is “Min bounding box” or “Bounding box”. So the user can choose to add or not a notch on the group contour by checking or unchecking this option.

To have the possibility of adding a mark for all the markers that will be created in Gemini Nest Expert, the option “Add notch to group outline” must be checked in the “Defaults” tab.

**Note!** When “Replicate group” function is used for a group, the notch will be added only if the initial group has the notch.

8. **View mode modification**

The way how all the settings made by the user for “View” mode are saved was changed. Now, after the user checked what to display or not on the nesting, one of the “Custom view 1” or “Custom view 2” options must be pressed while the “CTRL” key is pressed. These two options are now displayed at the end of the view list. The software will memorize the preview settings made by the user, and they will be displayed when selecting one of the “Custom view 1” or “Custom view 2” buttons. This information will also be stored in the configuration file of the application.

If one custom option was used and in the view list are checked or unchecked other options will not be checked any custom option.

9. **Export CUT – exporting marker rectangle**

Now for the cut files the marker rectangle can be exported too. For this, in the “Cutter Settings” on “Layer settings” tab was added a layer setting also for the marker rectangle. So if for the marker rectangle will be selected a layer that has a command, the marker rectangle will get into the cut file.

10. **Start/end overcut for the contour of the closed pieces**

Until now the overcut in the start and stop point of one piece was applied only for the pieces with opened contour or for certain angles from the pieces. Now there is the possibility of applying the start and stop overcut also in the start and end point of a closed piece.
To apply the overcut also in the start and end point of a closed piece, the option “Force overcut on start points” from the “Tool settings” window must be checked.

11. **Export cut – extend segment on marker edge when tubular fabric is used**
On the current version the user can now to extend the segment on the marker edge even if the tubular fabric is used.

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**Gemini Shield**

1. **Measurement units’ decimal numbers**
In the “Settings” window was added the “Measurement units’ decimal numbers” area where the user can choose the decimals that will appear for each measurement unit that can be used in Gemini application.

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**Gemini PLT Spooler**

1. **Possibility of printing different types of lines**
There is now the possibility of printing different types of dashed lines if the hpgl files contain this information. To print the lines how they were exported in the file in the Spooler the profile settings must be set “According to HPGL”.

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**Fixed errors**

**Gemini Nest Expert**

1. **Import LayS – import gap from Assyst Style**
There were some situations when the gap that was defined in the Style from Assyst was not imported in Gemini Nest Expert. This problem was fixed.

2. **Model update – when many designs are used in one order**
When one model has many designs and the order is created with more than one design, when the model update is used, appeared a message that announced that in the model there are many pieces with the same name. This is wrong because there are not many pieces, actually is the same piece that belong to different designs.
This problem is now fixed and the user can make model update even when many designs are used in one order.
In work for the next version

Gemini Nest Expert

1. Improvement for the mark from the bounding group
   On the next version the mark from the bounding group will be added so that the notch to not touch the pieces from the group or the notch to intersect the pieces contours as little as possible.

2. Upgrading the insert function
   On the next version the insert function will be upgraded so that the optimization of the marker to fit properly in due time and to maximize chances of insert with a minimum length elongation of the marker.