Gemini Newsletter 19 .05.2009

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1. New facility in Gemini

Application	*No.*	*New facilities or modifications in program:*
Gemini Pattern Editor	**1.**	In "Garment tool mode", there is a new function called ***"Define pattern and symmetrize the pattern"***. This function will help the user to symmetrize a pattern partly or completely across to a line. For ex: If the user wants to create an internal pocket facing, for the trousers side pockets. The user must follow the next steps to be able to obtain by symmetrizing a section from a pattern: - Select the pattern where you want to apply the function in "Shape tool mode", - Click on the ***"Define pattern and symmetrize the pattern"*** function, - Select the defining points for the line used to make the symmetrical area - Select a point from the pattern contour to indicate the symmetrical area width or input directly this width. **Warning**: The symmetrical area width represents the distance between the defined segment for symmetry and the place where the symmetrical area will end up.
Gemini Pattern Editor	**2.** **3.**	On this version the user can move one or a group of points with a desired value according to its last position. To move such a point in this way, the user must input the distances for the new position in the dX and dY fields under the ***„Move by"*** message. Here the user must input the vertical distance in the dY field and the horizontal distance in the dX distance. After this, he must click on the **„Apply"** button to refresh the point(s) position. In ***"Shape"*** tool mode the user has the possibility to set as graded points all those curve points that has the angle smaller then the value set in ***"Gemini Pattern Editor Settings"*** in the ***"Grade points detection margin"*** field. This can be done using the ***"Detect grade points by angle"*** function. Before using this function, the user must set the ***"Grade points detection margin"*** from ***Technical Gemini Pattern Editor Settings***. This setting must be done in the ***„Technical"*** tab from ***„Gemini Pattern Editor settings".*** Here, next to the ***"Grade points detection margin"*** message the user must input the accepted number of degrees between the curve point tangents or between a curve point tangent and a line. Thus, all those curve points that have this angle smaller or equal to the set value will be convert into grade points.
Gemini Pattern Editor	**4.**	In Gerber, every interior element (as axis, interior points, and auxiliary drawings) has as property a letter. For every letter it is a command, which can be a cutting ore writing command. For the ***files imported from Gerber***, that don't respect the initial settings it can be done a correspondence between letters and commands, in the import window. When these kind of files are imported, at the Cutting settings, for each letter will be edited the proper command. On the new version the user can use all letters to assign a cutting or plotting command.
	5.	Now, the user can rotate a pattern automatically on a vertical direction according to a line defined by two selected points. Now there are two options for the ***„Rotate the pattern until the line between selected points becomes horizontally"*** function: ***„Align horizontally"*** and ***„Align vertically"*** that can be accessed by making a click on the button extension. To align the pattern according to the selected point on vertically, the user must choose the ***„Align vertically"*** option.

Gemini Pattern Editor	**6.**	In the ***„Import DXF"*** files window, was added a new option called ***„Simplify patterns"***. This option was added for DXF files which contain patterns with too many points on contour. If you check this option the pattern contour will be simplified by removing a number of points. . The points removing will alter the pattern contour according to deviation allowance that is set in the "Simplify patterns" edit. The margin that you set influences the number of removed points. If you set a big value in margin edit, the program will remove many points but your patterns will be imported with an alter contour. On the contrary, if you set a very small value in margin edit, the number of removed points will be small (or may be no point removed) but the contour will be imported with a bigger accuracy according to original shape. In this situation it is recommended to try import the files with different values set for deviation allowance in order to find the right value.
Gemini Pattern Editor	**7.**	There are changes made for taking over the grading from the intersection points, when the ***"Trace mode – drawing around the contour of the existing patterns"*** function is applied. If there are graded points when passing from one pattern to another, the grading will be taken over to the new pattern as it follows: -if both points (from Pattern 1 and from Pattern 2) has the same grading for all four grading tables (grade, drop, spec and extra) on the new pattern the grading will be taken-over from the passing thru point. -if one of the two points (from Pattern 1 and from Pattern 2) has "0" as grading for all four tables (grade, drop, spec and extra) on the new pattern the grading will be taken over from the point where the grading is different then "0".
Gemini Pattern Editor	**8.**	There is a new function in Gemini that allows the user to modify a selected curve dimension. This function is available in ***"Shape tool mode"*** and in ***"Grading tool mode"***. In „Shape tool mode" the new function is called ***„Change curve length".*** In this work tool mode the curve length can be changed only on the base size or, on each size separate. In ***„Grading"*** tool mode, this function is called***„Grade curve length"*** and it is available for the manual grading too. Here, the curve length can be changed only for each size apart. The selected segment that follows to be resized will change its shape according to the choused distortion mode. Thus, the user can choose one of the following: - Resize the curve without changing the edges point positions. - Resizing by moving on horizontally the first edge point. - Resizing by moving on horizontally the last edge point. - Resize the curve by moving on vertically the first edge point. - Resize the curve by moving on vertically the second edge point. - Resize the curve by moving diagonally the first edge point. - Resize the curve by moving diagonally the second edge point. - Resize the curve by moving diagonally both edge points. - Resize the curve by moving on vertically the first edge point. - Resize by moving along the second edge point tangent.
	9.	The scaling factors used at the plt or cut files export are now displayed in the bottom export PLT window.
Gemini Pattern Editor	**10.**	A new function was added in ***„Shape tool mode"*** that allows the user to link faster the patterns points to the geometrical layer. After activating this function, called ***„Connect graded points to the geometrical layer"***, the user will have only to indicate by a simple click a graded point and then the geometrical point according to which he wants to define the previous selected graded point. This function can be used in the repetitive mode, to connect many graded points to the geometrical layer. To end up applying this function, the user must click on the „Apply" button from the steps window displayed while the function is active.

Gemini Pattern Editor	**11.**	In the manual grading mode ***„Modify the shape of the pattern on the base size without changing the other sizes”*** the user can apply the following functions from **Shape tool** mode: - change a point position using the keyboard arrows; - reposition a point by editing the X and Y coordinates related to the pattern origin or related to the last point position - change a curve length - align points position - edit the tangents angle values for a curve that begins and ends into the selected point All these functions are identical with those from **Shape tool mode** and are displayed automatically in ***“Grading”*** tool mode in the right side panel after activating the ***„Modify the shape of the pattern on the base size without changing the other sizes”.***
Gemini Pattern Editor	**12.**	In **„Grading”** tool mode, when the cursor is placed on top of a graded point, the point name will be displayed into a hint. Also, when a point is selected in “**Grading** tool mode”, in the right side panel will be displayed that point name. This new functionality is useful for the user when editing the derivate grading formulas.
	13.	When the **„I”** notch angle is changed manually by mouse drag when the notch peak is selected, the notch direction will be drawn with a dotted line until the place where the notch will be released on the screen. The rotation direction peak point can be magnetized on top of different elements such as: - Graded point by keeping Alt key pressed - Internal technical points, intersection points contour, parallels to the contour by using the advanced magnetizing with Ctrl + Alt key pressed. By keeping Shift key pressed the user can rotate the notch from 15 to 15 degrees related to the current position.
Gemini Pattern Editor	**14.**	There are changes regarding tacking over the grading from an intersection point for the ***„Create a new pattern from patterns intersection”***, ***“Cut with the first pattern selected from the second one”*** and ***“Join patterns in a new pattern”*** functions. If there are graded points to the patterns intersection, the grading will be taken over this way: -if both points (from Pattern 1 and from Pattern 2) has the same grading for all four grading tables (grade, drop, spec and extra) on the new pattern the grading will be taken-over from the passing thru point. -if one of the two points (from Pattern 1 and from Pattern 2) has “0” as grading for all four tables (grade, drop, spec and extra) on the new pattern the grading will be taken over from the point where the grading is different then “0”. - if where the pattern intersects there is no graded point, or if the existing graded points has different grading between them and different than “0”, then the point that results on the new pattern will have a proportional grading between the neighbor points from the resulted pattern.
Gemini Pattern Editor	**15.**	For ***Walking patterns*** function from ***Measure and Check tool***, the second point set on fixed pattern and onwalking pattern represent now the end point for sewing simulation (not only the simulation direction).

Gemini Cut Plan	**1.**	In Gemini Cut Plan, in the import .gem window, at the selected project preview the patterns will be displayed with the color chosen by the user. When the fabric filter is used for each fabric type, the displayed image in the preview window will be changed. Thus, if the current cut plan is made only for the main fabric for example, in the preview area will be displayed only those pattern made from this fabric type.
	2.	The scaling factors used at the plt or cut files export are now displayed in the bottom export PLT window.
	3.	In the ***„Cut plan settings"*** window on the ***„Plotter settings"*** tab, there is a new setting added, called ***„Export marker's dimensions"***. When this option is checked, in the PLT file header will be exported the information regarding the exported marker length and width. This information will be displayed in the Gemini PLT Spooler application, above the preview area.
Gemini Nest Expert ***Gemini Nest Expert***	**1.**	On the latest Gemini Nest Expert version, it is possible to import CUT files generate by other CAD systems. In the import menu is added a new option called ***„Import CUT"***. When this option is activate, an windows opens and the user must follow the next steps to import cut files. - The user must select the cut file that needs to be imported. To select the cut file, the user must click on the browse button that can be find next to the ***„Cut file name"*** field. After selecting the cut file, in the ***„Cut file name"*** field, the program will display automatically the file name and the file path on the disk. - The measure unit used at the import file can be automatically detected into the cut file. If the CUT file doesn't contents information about the measure unit, the user can choose it manually. - The program will create automatically a MRK file having the same name and path with the imported CUT file. The user can change the path and the MRK file name obtained after importing the CUT file. - The imported marker width can be detected automatically or can be set manually by the user in the import window.
	2.	In Gemini Nest Expert the accepted overlapping margin is 0.4 mm. Before this margin couldn't be edited by the user. This is possible on the latest version and for this, in the ***„Marker settings"*** window exists the ***„Maximum allowed pieces overlap"*** setting, where the user can edit this margin according to the equipment used to draw and cut markers.
Gemini Nest Expert	**3.**	Gemini Nest expert application can be used as a markers server for MRK and PT files generate on other Gemini stations. Thus, the user can create marker files, which will be saved in the ***"Entry folder"*** set for the markers server. Automatically, the Gemini Nest Expert application set as marker server will start to nest the markers. The markers will be nest completely in the period of time set in the ***Nesting Server Settings*** window. The nested markers will be saved in the ***Exit folder.*** Even more, the use can choose to export the nested markers directly into PLT format. The PLT files will be created according to the settings from the PLT export window and it will be saved in the ***PLT Folder.*** To set a Gemini Nest Expert application to work as Server, the user must activate the "Start Nesting Server" option from ***"File"*** menu.
Gemini Nest Expert	**4.**	On the latest version the user can scroll the marker area using the key board. For this are assigned the following keys: Right scroll – ***D*** key Down scroll – ***S*** key Left scroll – ***A*** key Up scroll – ***W*** Key The user can assign to these scroll functions any key from the key board in the ***„Key board"*** tab from ***Gemini Nest Expert*** settings.

Gemini Nest Expert	**5.**	In the ***„Gemini Nest Expert settings"*** window on the ***„Plotter settings"*** tab, there is a new setting added, called ***„Export marker's dimensions"***. When this option is checked, in the PLT file header will be exported the information regarding the exported marker length and width. This information will be displayed in the Gemini PLT Spooler application, above the preview area.
	6.	The scaling factors used at the PLT or CUT files export are now displayed in the bottom export PLT window.
Gemini Nest Expert	**7.**	There ware added new options when the CUT files are exported to the Plotter/Cutters. These options will become active when the ***"The cut machine is of cutter/plotter type"*** option is checked in the ***"Cutter settings"*** window from Gemini Nest Expert application. The new settings are: ***1.*** ***„Draw elements for each pattern"*** – When this option is checked, first time will be drawn all elements set to be drawn from all patterns in the marker and then will start cutting all elements set to be cut. By default this option is unchecked. ***2.*** ***„Drill holes are cut before all patterns"*** If this option is checked all drill commends will be exported at the beginning in the cut file. By default this option is unchecked. 3. There is also the possibility to edit the commends for Pen Up1, Pen Up2, Pen Down 1 and Pen Down 2 in the file.
Gemini Nest Expert	**8.**	There is a new group of settings for those who wants to export the cut files for the Conveyor Cutters in the ***Gemini Nest Expert Cutter Settings*** window. When the ***"Use conveyer command"*** option is checked, the user can make the conveyor settings. Automatically, after checking this option the cutting order will be checked and also the export cut type used previously. If the user chooses to use the conveyor commend, he won't be able any more to use the export on bands for the CUT files. The conveyor settings available: 1. Frame size (represents the cutter table dimension and according to this dimension will be set the cutting order) 2. Format command 3. X offset 4. Export conveyor sign 5. Y offset
Gemini PLT Spooler	**1.**	Above the preview zone of the ***Gemini PLT Spooler*** application will be edit the length and the width of the selected marker if it was checked the ***"Export marker's dimension"*** option from ***User options / Plotter settings*** window, when PLT file is created in Gemini Cut Plan or in Gemini Nest Expert.

2. Fixed errors

Application	*No.*	*The corrected error*
Gemini Pattern Editor	**1.**	In Piece tool mode, when you cut off a pattern with another one, in the situation in which the grading are calculated being proportional, the grading will be automatically calculated being proportional to the neighboring points on the resulted pattern and not on the initial pattern.
	2.	When you change the notch orientation, the new angle will not be always display as „Absolute angle". If „Absolute angle" option is not checked then, this option will remain unchecked after you will change the notch orientation.
Gemini Nest Expert	**1.**	The measurement unit of the fabric consumption will be applied for the "**Used**" and "**Wasted**" column.

3. Information and useful advices:

1. Most of the latest facilities and the fixed errors were included according to the customer suggestions and therefore we thank them for their contribution to improving our program. Concomitantly we strongly advice you to read with attention every modification that was done. It is very possible that the new facilities, that were asked by our users, to easy your work as well ore to resolve automatically different problems.

2. All new facilities are implemented in X8 version of Gemini Applications, which was realized on *12.05.2009*. If you don't have implemented this version, we advice you to make an update from our web site: www.geminicad.com, section Download. The Gemini Application version that is used by you in present can be read on the image that appears when each application is been lunched.

Warning! You can update your software only if your system is still in warranty period or if you have a service contract for software.

3. In the User Manual, version X8 and in the ***Appendix 15*** of the User Manual, version X8 was introduced specific explications for all the new modifications that were added. We advice you to ask for this Appendix in case you don't have it already. You can find all the modifications in the electronically version of the manual as well (using the HELP of the application).

4. We advice you to skim throw all these new modifications and use them, in order to easy the automatically pattern projection made by using Gemini Cad Systems.
Success!

The most important modifications that were added and which we advice you to use are the following

Application	***Number from modification index***	***Explications***
Gemini Pattern Editor	**8**	Change the curve length
	10	New method of graded points connect to the geometrical layer
	14, 15	Manually modification of the grading, name of the grading points.
	1	Define an segment and get the pattern symmetrical
Gemini Cut Plan	**1.**	Preview the loaded model
Gemini Nest Expert	**1**	Import CUT file
	3	Nesting server for Gemini files
	4	Scroll at the nesting area
	7, 8	New settings for the cutter

In working for the next version

Application	*No*	*Working on:*
Gemini	**1.**	The CUT/PLT file export will be changed. Each technical element will be set separate if it will be drawn, cut, drilled etc, by assigning the corresponding layer. There will be 10 layers for these: 5 layers for drawing and 5 layers for cutting. It will exist also the concept of CUT/PLT file profile. To each layer will correspond a different mark line shape (continuous lines, dotted lines etc) and a different color. These elements are added specially for plotter cutters. Also these line types will be able to be used to display on the screen the elements corresponding to patterns.
Gemini Pattern Editor	**1.**	Gemini Photo Digitizer will be included in as a working mode in Gemini Pattern Editor application. Thus, the captured pictures will be included in the pattern file. Therefore, if you want later to make any correction to the pattern, or add internal elements that were not added during digitizing, you can work always directly on the pattern picture. This also enables the user to draw more complicated elements, like spirals, curves, parallels, etc, that are not available in Photo Digitizer.
	2.	On next version, in Grading tool, will be posible to select many points fom different patterns in order to apply different operation simultaneous.
	3.	We'll add a new function in Gemini Pattern Editor software which will help the user to nest patterns without open Gemini Nest Expert application. Therefore, when the user will need to make a marker from one *.gem file he will be able to do this directly in Pattern Editor.
Gemini Cut Plan	**1.**	A "Docket (production technical sheet)" will be generate, where will be stored existed information in Cutting Plan File.
Gemini Nest Expert	**1.**	Will be able to delete or add pieces directly in the zone where the pieces are shown for nesting.
	2.	On the pieces from nesting will be possible to set segment addition and pieces addition as well.
	3.	Will be able to export from Gemini Nest Expert more cutting plans in order to be printed.
Gemini PLT Spooler	**1.**	In Gemini PLT Spooler the user will have the possibility to use different printing profiles. This working mode will help specially those users, which are using PLT and cut files, generated by other CADsystems which require calibrating different the plotter or specific settings.