

# What's New in OMEGA 2.5

GERBER OMEGA 2.5 includes many new features for improving design and workflow. These are some of the major improvements to OMEGA 2.5:

- ◆ Improved Adobe Illustrator AI, CS, PDF, EPS, and Postscript import capabilities
- ◆ Improved designing and displaying of vinyl-only jobs
- ◆ Clipping Paths or image masks
- ◆ Dimensioning tools
- ◆ The ability to embed images into a .PLT file
- ◆ The ability to design and output by layers
- ◆ More fonts included with new seats of OMEGA 2.5 and upgrades
- ◆ And more!

Review this document and see OMEGA Help for details on using these exciting features!

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## System requirements



*Note: OMEGA 2.5 is compatible with Windows® 2000 and Windows XP. OMEGA 2.5 is not tested or supported for use with Windows ME, Windows 95, Windows 98, or Windows NT 4.0. See Getting Started for detailed hardware and software requirements.*

- ◆ Recommended hardware:
  - ◆ Pentium III or later
  - ◆ 512 MB RAM minimum
  - ◆ 2 GB hard disk (20+ recommended)
  - ◆ CD-ROM drive
  - ◆ Ports: 1 parallel, 2 serial , and at least 2 USB
  - ◆ VGA Color Monitor (minimum resolution 1024 x 728)

## OMEGA 2.5 defaults

The defaults for layers and embedded images is OFF, making OMEGA 2.5 behave similarly to previous versions of OMEGA. This has been done to allow customers to transition into the features they want to learn at their own pace.

- ◆ Designing occurs on a single layer like previous versions of OMEGA. Layers can be added by using the New Layer command in Layer Manager.
- ◆ The layer manager is not shown when Composer opens. You must select the option in the View menu.
- ◆ Legacy PLT files and other file types import and open flattened onto the current layer .
- ◆ Non-OMEGA files that are opened or imported (AI, PDF, EPS, CMX, etc) are flattened onto a single layer. This can be changed and preferenced in the Open or Import dialog box in Composer.
- ◆ If layers are used, the Edit All button is ON so you can edit all objects at once even if they are not on the same layer.
- ◆ The Output by Layers option is OFF so jobs have a single print order (not layered) for the entire job.
- ◆ GSPPlot will output layered images as a single layer job with a single print order.
- ◆ Images remain linked or not embedded.

# New Features and Enhancements

## Improved Postscript and PDF import/export using (GSP 2.5) filters

OMEGA 2.5 now has new file conversion filters that allow for the import of postscript and PDF file types. The import filter list has been reorganized and filters have been renamed for clarity.

File Type	Updates Adds:
Adobe Illustrator (AI)	7.0, 8.0, 9.0, 10.0, 11.0 (CS)
Portable Document Format (PDF)	PDF 1.3 (Acrobat 4), PDF 1.4 (Acrobat 5), PDF 1.5 (Acrobat 6)
EPS	Supported from Adobe CS 2 and lower
PostScript	Level 2 and 3, EPS, PS (Level 2 and 3)

- ◆ Text *does not* need to be converted to curves in other design programs to be imported into OMEGA when using GSP 2.5 filters. However, text appears in OMEGA as outlines that are not editable.
- ◆ If using GSP 2.1 filters, it *does* need to be converted.
- ◆ If GerberColor spot colors or GSP vinyl colors are assigned in Adobe Illustrator using the included Illustrator Palettes or Corel Draw, these colors import into OMEGA with the colors and names intact.
- ◆ Layers, overprints, gradients, clipping paths, strokes, dashed strokes, images and other features from the original file are maintained in OMEGA. Advanced gradients and other features are automatically converted to images with clipping paths.
- ◆ Files can be converted as vectors or as images. If converted as images, the resolution of the file can be chosen.
- ◆ The OMEGA 2.1 AI and EPS import filters remain available to allow for duplication of previous conversions and to import files from Illustrator version 1.1 through 8.
- ◆ The Harlequin Postscript Option is no longer available or supported. All the functionality is included in OMEGA 2.5 Postscript import capabilities.

## Improvements to vinyl-only designing

Designing and displaying vinyl-only jobs has been improved in OMEGA 2.5:

- ◆ The vinyl-only display mode has been removed. This allows for vinyl-only objects to be moved “to front ” and “to back ” of each other consistently and without display issues.
- ◆ The same vinyl color in vinyl-only jobs can be in front or in back of other objects.
- ◆ Vinyl-only objects of the same color such as rectangles, circles, or imported objects must now be combined using the combine option in the Arrange menu to knock out one shape from another.
- ◆ Vinyl-only text combines automatically.

- ◆ Legacy files from previous versions of OMEGA and GRAPHIX ADVANTAGE combine automatically to make shapes knock out.
- ◆ Vinyl-only jobs can be designed with layers. If using layers, the same vinyl color can reside on different layers, offering the ultimate in display and output stacking flexibility.
- ◆ If EDGE fills are added to a vinyl-only job, OMEGA displays in a print-order mode instead of a vinyl-only mode. Vinyl-only objects will show knock-outs automatically but you lose the to-front and to-back flexibility mentioned above.

## Clipping Paths or Masks

Clipping Paths are like cutting holes in a piece of paper and placing it on top of an object so only the parts that show through the holes are visible. Clipping paths limit the display of specified objects by drawing only the parts of the objects that fall within the path and not the parts that fall outside. The Clipping Path container (“Clipper”) and the clipped object (“Clippee”) must be on the same layer and the path must be in front of the clipped object.

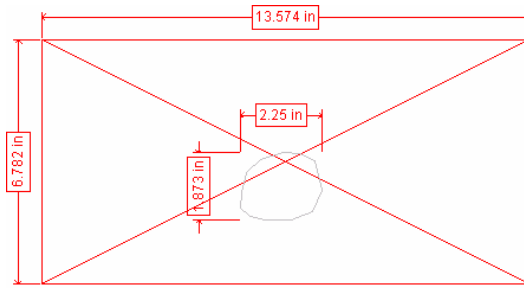
To make a clipping path, select the Clipping path container and the clipped path using the shift key. In the Shape menu select **Make Clipping Path**.

Clipping objects can consist of a single object, or multiple objects that are grouped together to act as a single clipped path.

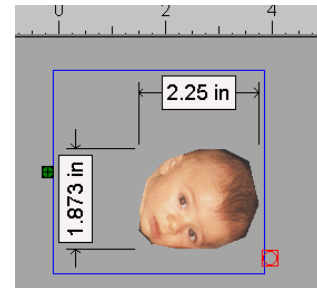


- ◆ A new command, Select Clipping Paths has been added to the Select menu.
- ◆ Images, vectors and text can all be used as the clipper or the clippee.
- ◆ Clipper objects become grey wireframe, once turned into a clipping path.
- ◆ To make clipped objects behave like they were combined, they should be grouped together.
- ◆ Clipping path containers and clipped objects become grouped after they are made into a clipping path.
- ◆ All fills, strokes, and cuts attributes are removed from the clipper. As a suggestion, clipper objects should be copied to the clipboard before turning them into a clipping path then paste back after to assign strokes and fills.
- ◆ To assign a cut to a clipping path, you must assign a cut to the clipped object (clipper) before making the clipping path.
- ◆ Only the area inside the clipping path will output.

- ◆ GSPPlot reduces material usage by eliminating the area outside of the clipping path.



The larger dimensions represent the overall size of the image in Composer. The smaller dimensions are the clipping path.



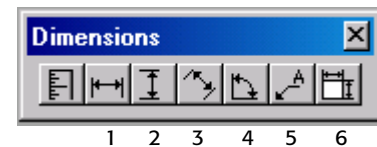
GSPPlot reduces the material usage by eliminating the area outside of the clipping path.

## Dimensioning

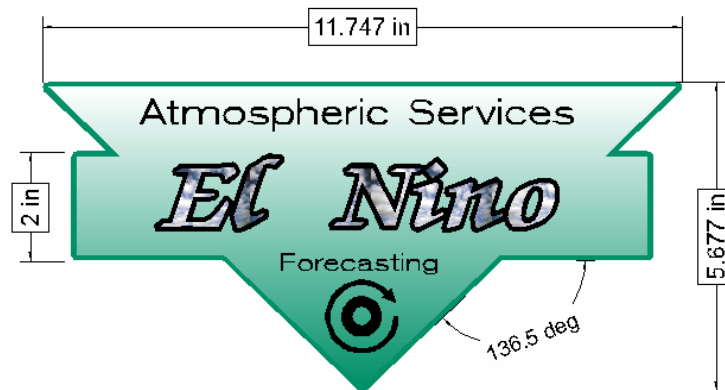
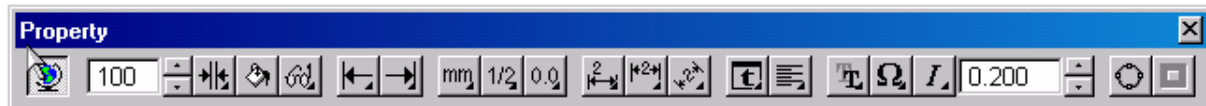
Dimensioning allows you to measure objects, distances, and angles and post these measurements on the job. You can choose whether or not to output these dimensions when printing from GSPPlot. See "Other GSPPlot feature changes" for more details.

### OMEGA 2.5 Dimension tools include:

Horizontal (1), Vertical (2), Aligned (3), Angular (4), Annotation (5) and Object dimensions (6).



The dimension Property tool bar allows you to edit the look of the dimensions and the units of measurement.



- ◆ Six new dimension tools have been added to the main toolbar.
- ◆ The Property toolbar has been added for changing the dimensions display properties.
- ◆ Dimensions can be placed on separate layers so they can be hidden or output separately.
- ◆ Dimensions can be paper printed or EDGE printed, making it easy to create a proof or installation layout.

## Embedded Images

Images used by PLT files can now be embedded in the PLT file instead of having a link to the original image file. If an image is embedded in a PLT file, then the original image file does not have to be present as a separate file for rendering to occur.

To embed a linked image, you can either click the “Embed Images” checkbox when importing image files, or select the image and click the Embedded checkbox in the Image Fill dialog box.

- ◆ A checkbox has been added to the Image Fill dialog box. When checked the images is embedded, if unchecked it remains linked.
- ◆ The OMEGA default for embedded images is to keep them linked as in previous versions of OMEGA.
- ◆ Legacy PLT files will remain linked until they are changed to embedded.
- ◆ Once an image is embedded, it cannot be unembedded. It must be deleted, re-imported, then saved as a linked image (not embedded).
- ◆ If an embedded image is the only object being exported, OMEGA displays a message box that allows the original image, or the Composer display image, to be exported.

## Layers

Working with layers is like drawing on transparent sheets. You can put related objects on one transparent sheet and move it in front of or in back of other sheets, delete it, choose to view it or not view it, and more. It’s a snap to do the following with layers in OMEGA 2.5:

- ◆ Put an image on one layer, all the logos on a second layer, and all the text on a third.
- ◆ Put all vehicle graphics one layer, and all window graphics on another.
- ◆ Put your design on one layer and dimensioning objects on another.
- ◆ Add notes to layers for future reference.
- ◆ Hide a layer so you can focus on a particular portion of a job.
- ◆ At output time, layers get merged into a single unified job as the default. You can also select which layers to output or you can choose to treat each layer as a separate job.

## Using Layers in Composer

To use layers, simply select “Show Layer Manager” from the View menu to open the Layer Manager utility window. Every new job has a single default layer called “Layer 1.” To view objects on a layer, double click on a layer name in the Layer Manager.

- ◆ .PLT files from previous versions of OMEGA open with one layer that is named the same as the .PLT file name.
- ◆ Even with a single layer job, you can change the to-front/to-back order of objects in a job by clicking and dragging in the layer tree.
- ◆ Create additional layers by clicking on the new layer icon, then start dragging and dropping objects onto the different layers.

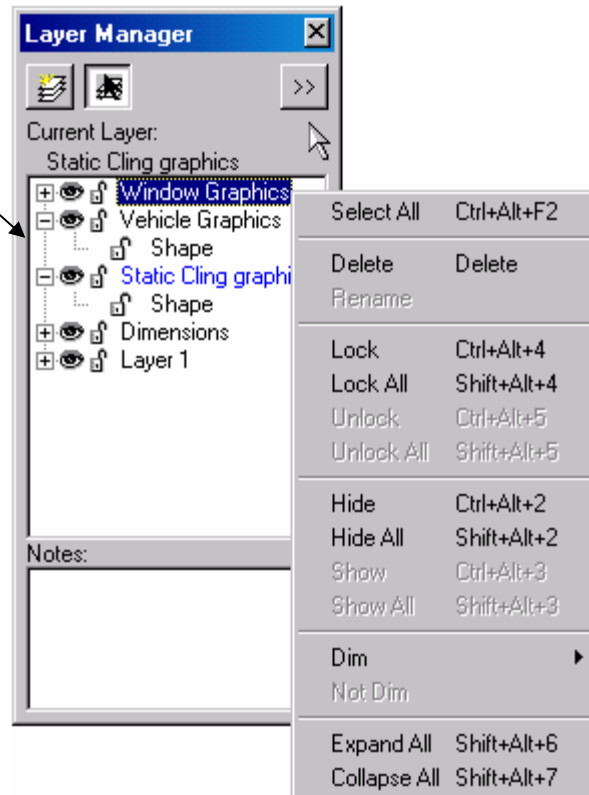
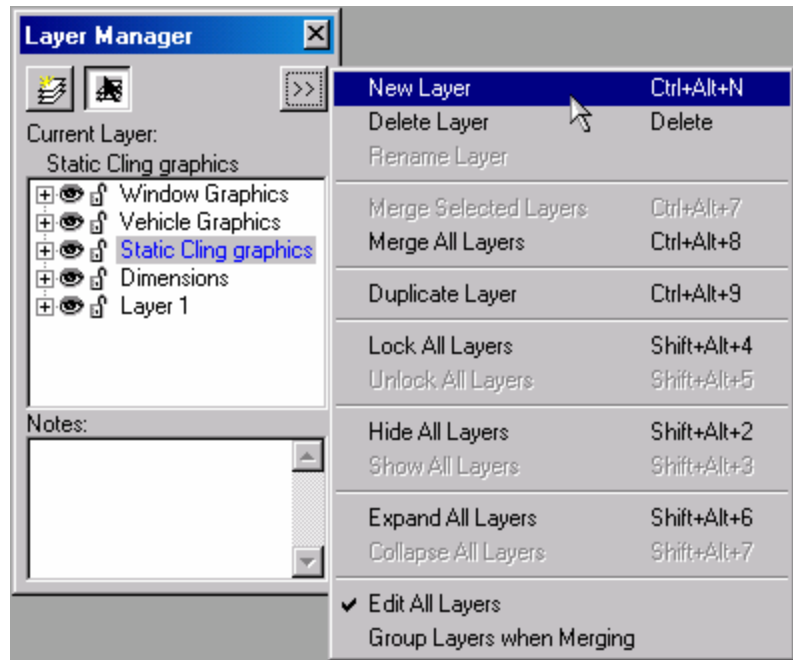
## Layer Manager

Layer Manager is a window where all actions for layers are performed. It provides direct and immediate access to all layers and their properties as well as some object properties.

Choose the double arrow button in the Layer Manager to view different options for layers. This is called Layer menu.

Some layer features and capabilities are shown here.

Other layer functions can be accessed by right-clicking on an object in the Layer tree.

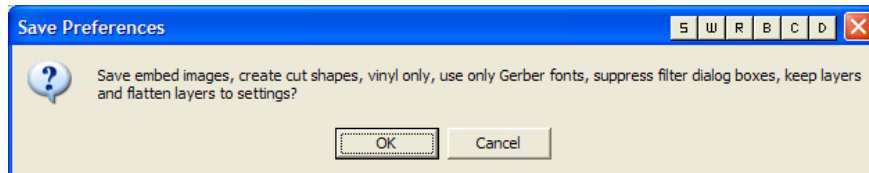


## New Layer Features

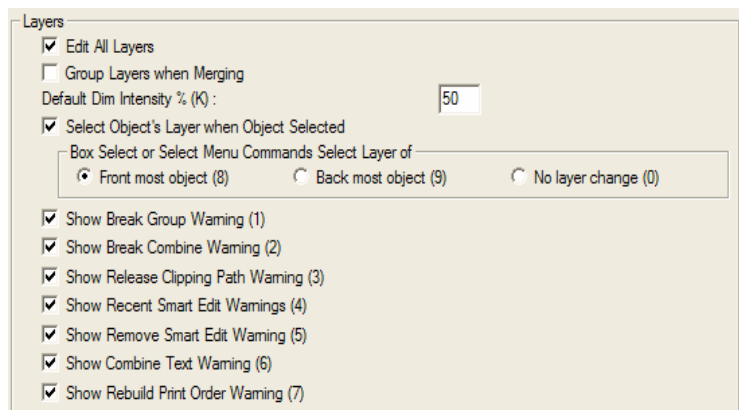
- ◆ Layer Manager is movable and dockable and the width can be adjusted.
- ◆ Creating new objects and layers – New objects get placed onto the “Current Layer.” The current layer is chosen either by clicking on a layer name or by selecting an object. The current layer name is displayed above the layer tree and is shown in the Layer Manager as highlighted or as blue text.
- ◆ Move objects onto different layers by either clicking and dragging them in the layer tree, pasting them, or importing them onto the current layer.
- ◆ Selecting – Select or deselect objects by clicking on them in the Layer Tree. The selection is also shown on the work surface.
- ◆ Reordering – Rearrange objects and layers by dragging the layer or objects above (in front of) or below (in back of) other layers or objects in the Layer Tree.
- ◆ Hiding – Hide or display layers or objects on the work surface by clicking the eye icon or choosing the Show or Hide commands in the right-click menu. Hidden layers can still be output.
- ◆ Locking – Lock or unlock layers by clicking the lock icon or by choosing the Lock or Unlock commands in the right-click menu. When layers are locked, you cannot select or edit objects on that layer. You can also lock specific objects in the layer tree. Locked layers and objects can still be output.
- ◆ Notes – you can add design or production notes to each layer of a job.
- ◆ Edit All button – If this is on, objects can be edited even if they are not on the current layer. If this is off, you must first select a layer name to make it active and then select or edit any objects on that layer. Objects on all other layers are locked.
- ◆ Merge layers – Multiple layers can be merged into a single layer. The topmost layers are in front of lower layers in the viewing order.
- ◆ Grouping and layers – Objects from different layers that are grouped are automatically moved to the same layer. When objects get selected and grouped, all members of a group are moved to be on the same layer as the last selected object.
- ◆ Objects from different layers *cannot* be outlined, distorted, warped, shadowed, or have shape effects applied to them. They must be moved to the same layer by either clicking and dragging, merging the selected layers, or grouping
- ◆ The same vinyl color or GerberColor Foil can be assigned multiple times to objects on different layers. These colors can also be output multiple time by using the “Output by Layers” capability in GSPPlot. See the “New Layer Features in GSPPlot” for more details.



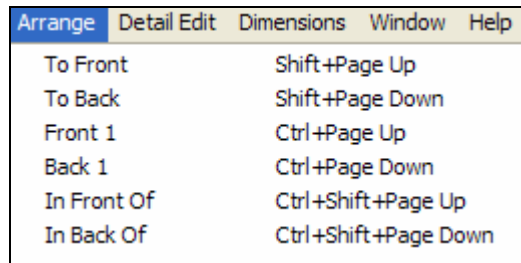
- ◆ Pasting and Layers – Layer information is not preserved when using the clipboard. Objects are pasted to the currently selected layer, not necessarily the layer from where they were cut or copied.
- ◆ Opening OMEGA 2.5 PLT Files with Layers – To prevent unwanted changes to PLT files, Layers are always maintained when opening OMEGA 2.5 PLT files with layers. When opening PLT files from previous versions of OMEGA or GRAPHIX ADVANTAGE with a single layer, the file name is used as the layer name.
- ◆ Opening non-PLT files with layers – When opening AI, PDF, EPS or other file types with layers, you have two choices: keep the layers or flatten them into a single layer.
- ◆ Importing files with and without layers – when importing files (even when importing PLT files with layers), you can choose to keep the layers if there are any, or to flatten the incoming layers into the current layer or new layer. If a file is imported and flattened onto a new layer, the file name is used as the layer name.
- ◆ Importing objects – The Import dialog box lets you import objects onto the current layer so no new layers are added, import onto a new layer, or maintain the original layers from the imported file. If a file is imported onto a new layer, Layer Manager even gives the imported new layer the same name as the imported file, making it easy to track where objects came from.
- ◆ Open/Import Save Preferences – the Preferences push button in the File > Open/Import dialog box has been changed to include the saving of the new settings. Click OK to save the settings and click Cancel to preserve the previous settings.



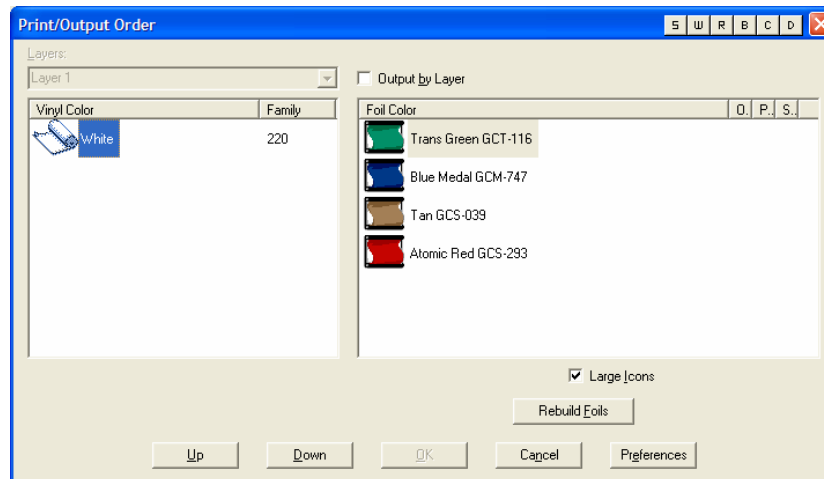
- ◆ Tools > Options > Layout – A Layers group box has been added to allow control over how the current layer is chosen and offers the control of new layer warning messages.



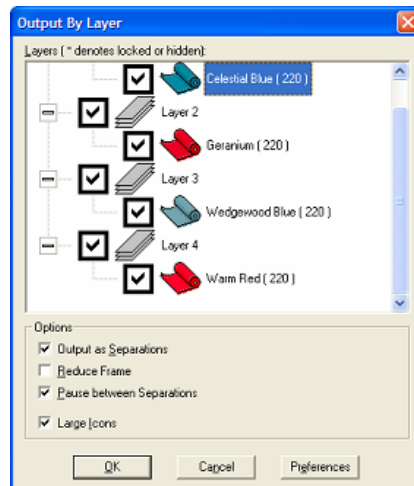
- ◆ Arrange Menu – In Front Of and In Back Of. To change the stacking order of an object on the work surface, select the object to be moved then select the object on the work surface that the originally selected object is to be in front of or in back of.



- ◆ In the Print/Output Order dialog box –
  - ◆ A single flattened print order is created for layered jobs if the Output by Layer checkbox is turned off. This is the OMEGA 2.5 default setting.
  - ◆ If the Output by Layer checkbox is on, vinyl output order and GerberColor Spot Color print order can be controlled on a layer basis.



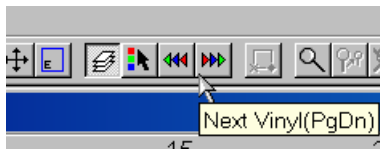
- ◆ File Menu > Output by Layer – You can now choose which layers and vinyl colors to output from Composer to GSPPlot.



## GSPPlot Feature changes due to Layers

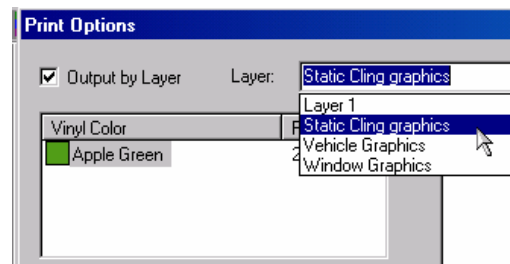
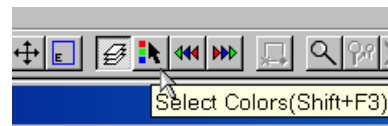
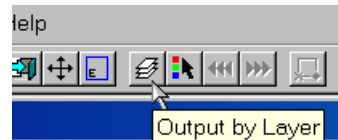
Not only does Composer in OMEGA 2.5 offer great new layers functionality for designing, but GSPPlot also offers new flexibility for outputting layers.

- ◆ The GSPPlot default when outputting a file is to merge all layers into a single job with a single print order. This forces jobs with layers to output like previous GERBER OMEGA jobs.
- ◆ Layered jobs can also be Output using Layers. If a job is output using layers, each layer is treated as a separate job. Outputting by layers can be useful in the following ways:
  - ◆ Choose to output only certain layers.
  - ◆ Design several components into a single PLT file using layers, but output each component separately. In the GSPPlot toolbar, turn On Reduce Frame and turn Off Rewind Between Layers.
  - ◆ Over print one layer on top of another by choosing the Rewind Between Layers command in the Select Colors dialog box. Turn Off Reduce Frame to maintain proper registration between layers. This technique allows the same spot color or vinyl color to be assigned on different layers and output multiple times in the same job.
- ◆ If Output by Layers is on, you can cycle through different layers of a job for viewing or output by clicking on the Next Vinyl or Previous Vinyl icon in the GSPPlot toolbar.



### ➤ Output by Layers can be turned off or on in several locations in GSPPlot.

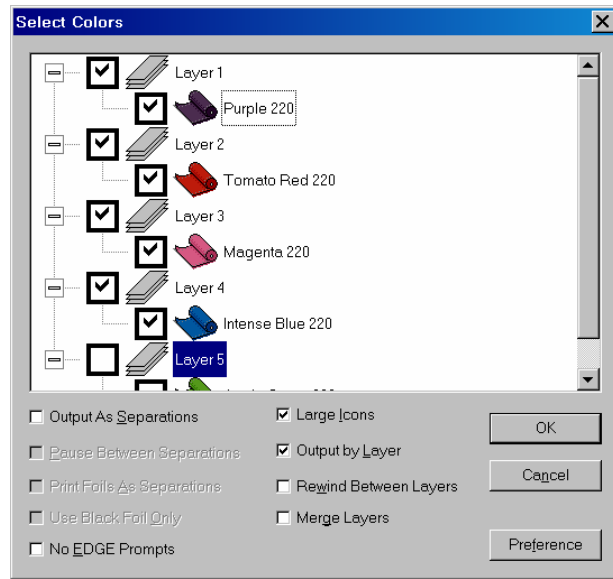
- 1 Click the Output by Layer icon in the toolbar. This icon is grayed out if a job only has a single layer.
- 2 Open the Select Colors dialog box by clicking the icon in the toolbar or from the Setup menu.  
Once in the dialog box, turn Output by Layers on or off.
- 3 In the Print Options dialog box, turn on the Output by Layer checkbox. If on, you get a separate print order for each layer. If off, you get a single layer print order.



◆ The GSPPlot Select Colors dialog box offers additional check boxes for:

- ◆ Large Icons
- ◆ Output by Layer
- ◆ Merge Layers
- ◆ Rewind Between Layers
- ◆ Output As Separations

See the chart below for different ways to Output by Layer using the Select Color dialog Box.



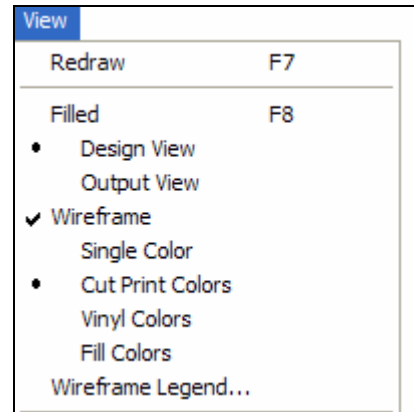
### GSPPlot output chart

Output by Layers	Flatten Layers	Rewind After Layer	Reduce Frame	Output Result
Off	NA	NA	ON Saves vinyl and foil	All layers are merged and then printed. Prints like a single EDGE or MAXX job. Default setting for GSPPlot.
On	On	On	ON Saves vinyl and foil	Allows layers to be selected and flattened to a single job. Selected layers print like a single EDGE or MAXX job.
On	Off	Off	ON Saves vinyl and foil	Each layer outputs as a separate job For printed EDGE or MAXX jobs, this means that each layer gets a separate vinyl prompt and cutting target, and all colors of one layer will print as a separate job. The same spot or process colors on separate layers will print multiple times because each layer is a separate job.
On	Off	On	OFF Maintains registration as layers print on top of each other	For printed EDGE or MAXX jobs, each layer will output as a separate job but each layer will print on top of each other. The same color on separate layers will print multiple times.

# Other Feature Changes

## Other Composer feature changes

- ◆ View menu – You can work in the Wireframe or Filled mode. A check mark next to the View menu options indicates the current mode.
  - ◆ Filled mode displays the job with the vinyl fill colors visible.
  - ◆ Wireframe mode can be modified to suit the way you work through the View menu or on the View tab of the Tools > Options dialog box.



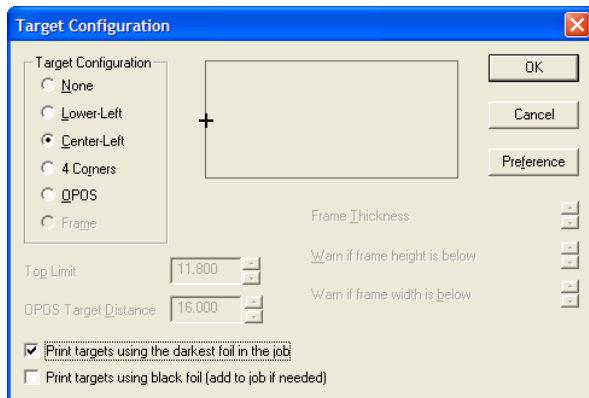
- ◆ Text on the work surface – The TOWS toolbars is now moveable and dockable. Font, font height, degrees of slant and degrees of line rotation can be set regardless of the current Composer mode.

Showing and hiding the secondary toolbar has changed. When the secondary toolbar is displayed, the button shows a toolbar with an X in it. If it's not displayed it will just be a toolbar.

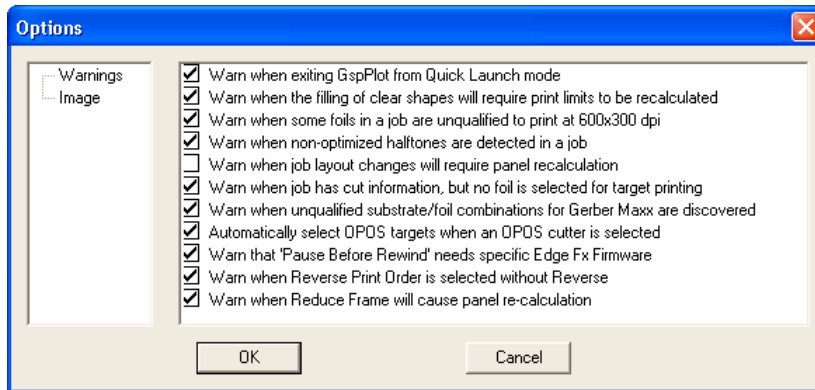


## Other GSPPlot feature changes

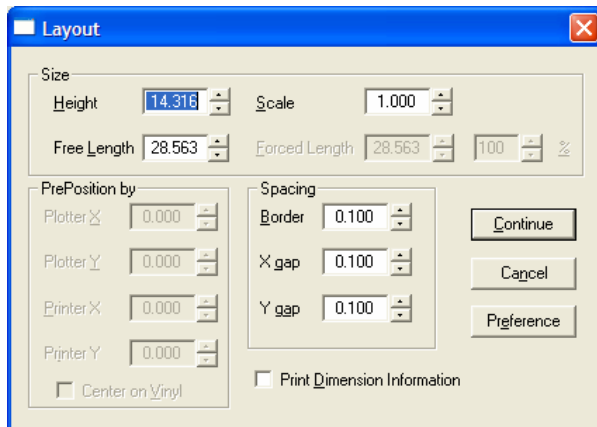
- ◆ QuickPlot names – Composer now always supplies a file name to QuickPlot to better help identify files in GSPPlot, even if that file name is just “Composer 1” or “Composer 2.”
- ◆ Target Configuration dialog box - additional check boxes for Print targets using the darkest foil in the job and Print targets using black foil (add to the job if needed).



- ◆ Warning messages – Four new messages have been added to the Warning messages dialog box:
  - ◆ Automatically select OPOS targets when an OPOS cutter is selected
  - ◆ Warn when Reverse Print Order is selected without Reverse
  - ◆ Warn when Reduce Frame will cause panel re-calculation
  - ◆ Warn that “Pause Before Rewind” needs specific Edge FX Firmware.

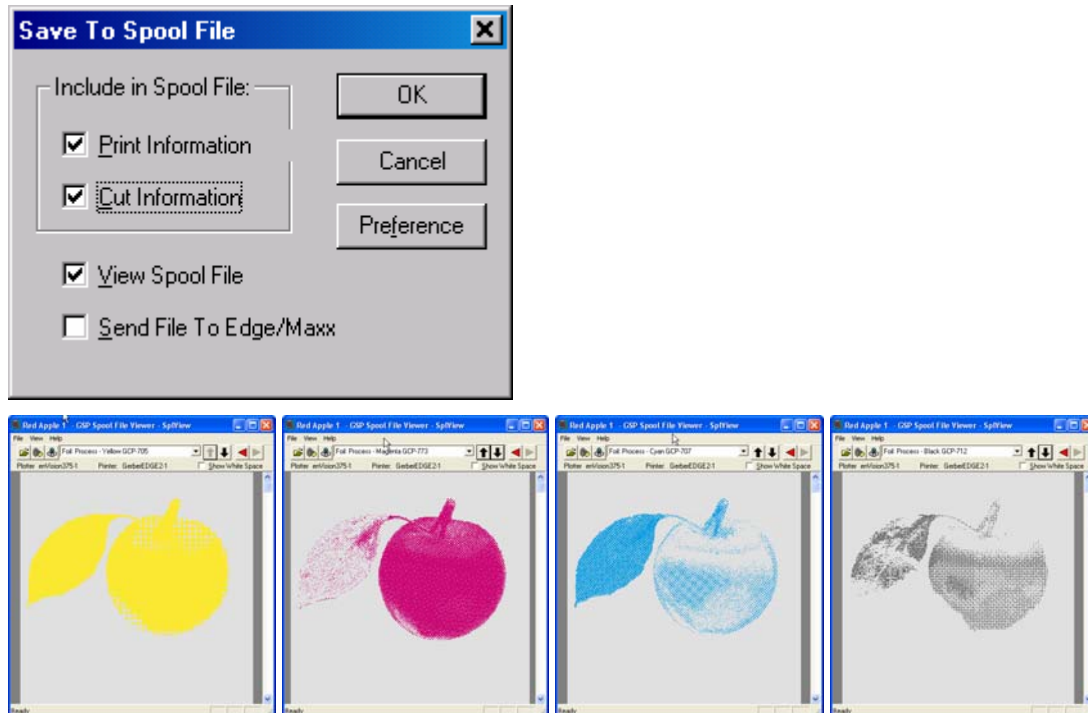


- ◆ Print Mode in Print Options – The Print Mode drop down list is now also available in the Print Options dialog box in addition to the Device Select dialog box. This setting allows the operator to choose 300x300 or 600x300 dpi for Edge printing.
- ◆ Layout dialog box – Print Dimension Information check box added. When checked any dimension information in the job will print in GSPPlot.



## Other OMEGA 2.5 feature changes

- ◆ Spool file viewer – A new Utility called SpIView allows actual output data in spool files to be viewed by color. This can serve as a preflight check to reduce any unexpected output. Open Spool Viewer by turning on View Spool File in the Save to Spool File dialog box or from File > View Existing Spool File or from the OMEGA program group.



- ◆ OMEGA 2.5 Font CD – OMEGA 2.5 requires the OMEGA 2.5 font CD to load fonts (both URW and Gerber), Gerber Libraries, GCA files, and the Braille option. When installing OMEGA 2.5 a message appears saying you must have the font CD. Older Font CDs will no longer work with OMEGA 2.5
- ◆ True Type font conversion – Character spacing now works with converted TrueType fonts when entered using Enter/Edit Text box. This is no longer limited to only Gerber fonts.
- ◆ Gerber Vinyl and Foil Palettes – The new palettes to be used with Adobe Illustrator and CorelDRAW now list both the vinyl color name and vinyl family such as 225 or 220. The palettes are located on the OMEGA CD. See Help topic "Using Gerber Palettes in Adobe Illustrator and CorelDRAW" for complete instructions.
- ◆ USB support for third party plotters – You can now install third party plotters using the USB port. See the topic "Adding or deleting a local plotter" in Help for complete instructions.

- ◆ ColorID – Color ID now allows CMYK and RGB values to be entered in as a source color that can be matched by target palettes.

