



**User Manual
Go Sign V4**



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1 INSTALLATION

1.1 General

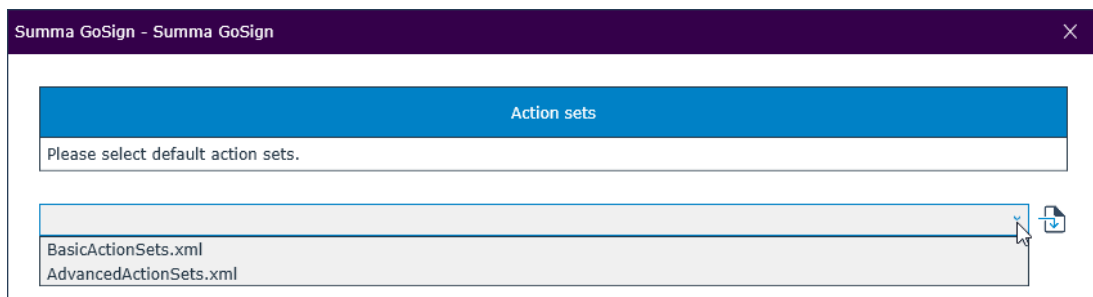
Summa GoSign is a Windows-based production tool acting as the perfect link between the design software and a Summa Roll Cutter. It allows you to manage your preferred workflow with great flexibility. Enjoy automated cutting options, custom configuration of action sets, easy plug-ins for design programs and much more.



NOTE: The program is copy-protected with a license code. Different license codes can unlock different options in the program.

1.2 Installation

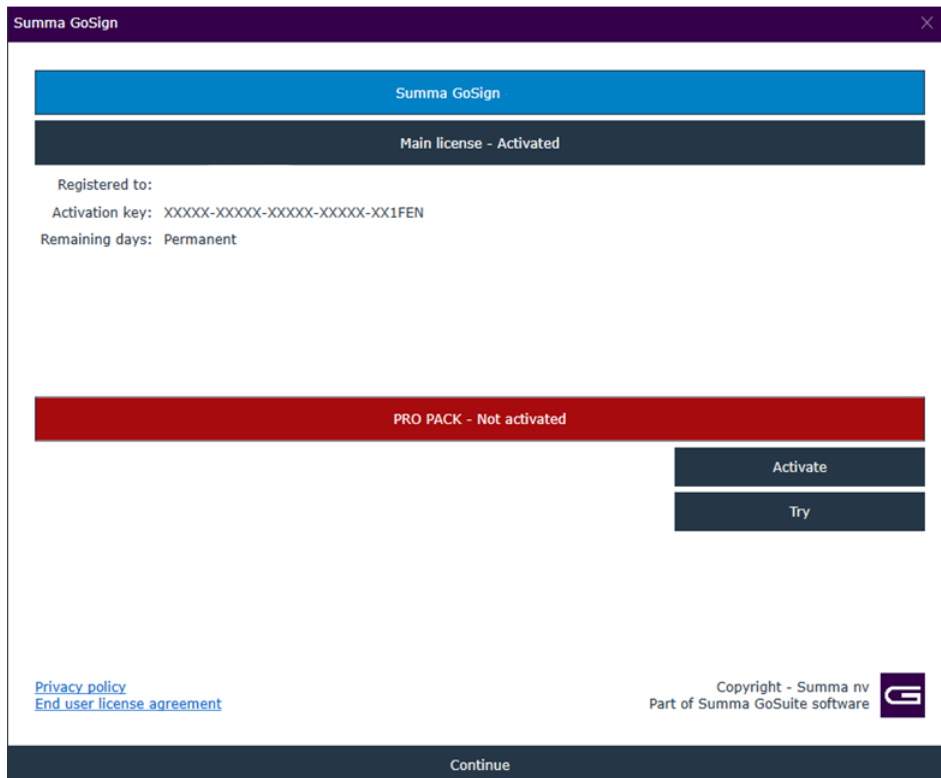
1. Double-click the installation program to start the setup. Follow the on-screen instructions to complete installation. The following screen appears.



2. Choose the default action sets. There are two options:
 - *BasicActionSets*: Only the basic required action set. Can be used when methods are assigned to colours in your design software.
 - *AdvancedActionSets*: Includes advanced actions. Useful when methods are assigned to layers in your design software.

Click the drop-down button, click the set of your choice, then click **OK**. The activation procedure start automatically.

- Follow the on-screen instructions to complete the activation procedure. When finished, the following screen appears. You can now activate or try the Pro Pack by clicking **Activate** or **Try**.

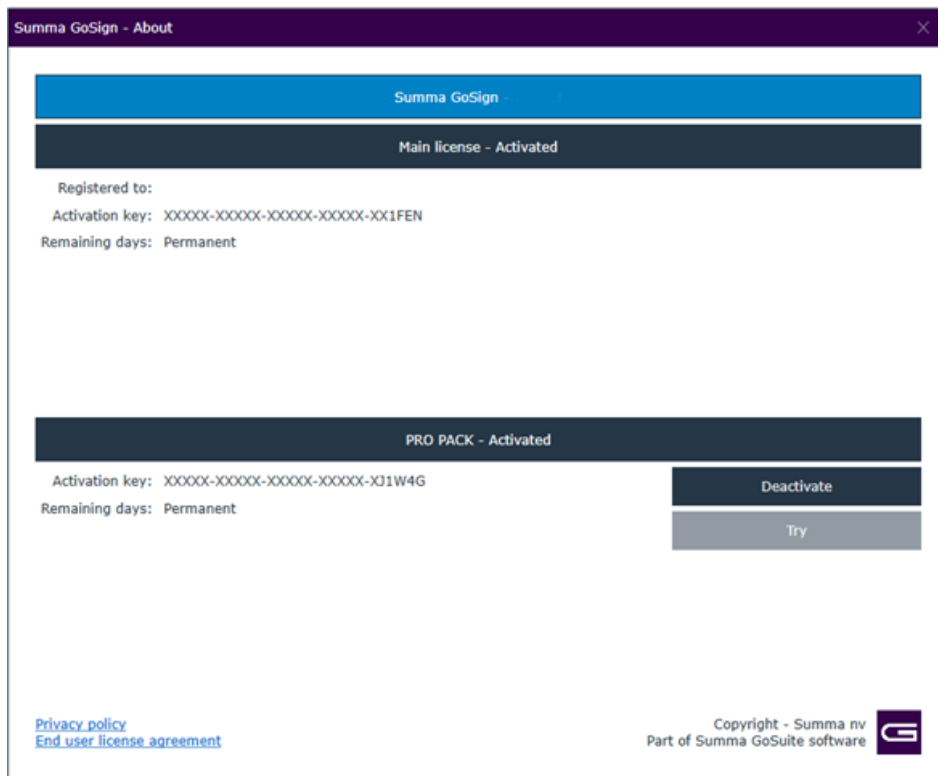


- When clicking **Activate** to activate the Pro Pack license key, follow the on-screen instructions to complete the procedure.



NOTE: The license key is sent to you by email.

5. Complete the activation procedure and click **Continue**. The following screen appears, giving an overview of the licenses.



6. Click **Continue** to launch GoSign.

1.3 Setup

When GoSign is launched for the first time and there is no cutter configured in the software, the setup window opens as follows:

The screenshot shows the 'Summa GoSign - Device' window. It features a purple title bar with standard window controls. The main area contains five text input fields: 'Name' (containing 'New device'), 'Address', 'Device family', 'Device model', and 'Device serial number'. Below these fields are three tabs: 'Auto detect', 'Manual input', and 'Plot to file'. The 'Manual input' tab is selected, displaying a table with three columns: 'Address', 'Device model', and 'Device serial number'. To the right of the table is a circular refresh icon. At the bottom of the window are 'OK' and 'Cancel' buttons.

There are two ways to add a cutter:

1. By autodetection
2. Manually



NOTE: If the cutter is connected to the computer by means of USB, it can only be added to GoSign by autodetection.

You can also choose to output the cutting job to a file instead of to a cutter.


All these procedures are described on the following pages.

This screen can be accessed at any time via [Devices](#) > [Edit](#).

1.3.1 Adding a cutter by autodetection

1. Make sure that the cutter is switched on and the media is loaded.
2. Make sure that your computer is connected to the cutter (this can be by means of USB or Ethernet).



3. Click  to detect your cutter. The name of your cutter will appear in the dialog window.

The screenshot shows a dialog window titled "Summa GoSign - Device". It contains several input fields: "Name" (New device), "Address" (USB 1), "Device family" (SummaCut), "Device model" (D140RFX), and "Device serial number" (XXXXXX-XXXXX). Below these fields are two tabs: "Auto detect" and "Manual input". The "Manual input" tab is active and contains a table with the following data:

Address	Device model	Device serial number
USB 1	D140RFX	XXXXXX-XXXXX

Below the table is a "Search" button. At the bottom of the dialog are "OK" and "Cancel" buttons.

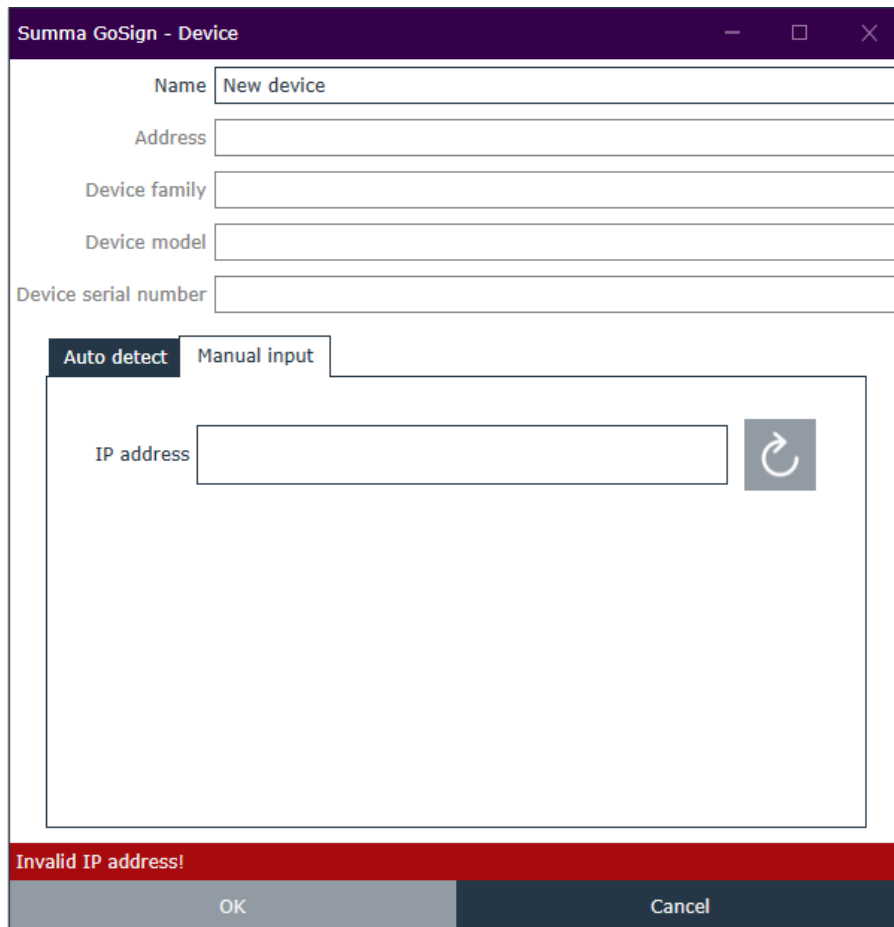
4. Click the connected cutter that you will work with.
5. Click **OK** to confirm.




NOTE: The **Name** field is useful for identifying a cutter in case there are multiple cutters connected to one computer.

1.3.2 Adding a cutter manually

1. Click the **Manual Input** tab and fill in the IP address of your cutter. Refer to the manuals of the cutter on how to get the cutter's IP address.



2. Click  to detect your cutter. The name of your cutter will appear in the dialog window.
3. Click the connected cutter that you will work with.
4. Click **OK** to confirm.



NOTE: The **Name** field is useful for identifying a cutter in case there are multiple cutters connected to one computer.

1.3.3 Plot to file

1. Click the **Plot to file** tab.
2. Change the parameters as necessary.



NOTE: Both the minimum possible width and length are 100 mm, the maximum possible width and length are 50 m.

Summa GoSign - Device

Name

Address

Device family

Device model

Device serial number

Auto detect Manual input Plot to file

Device family

Width mm

Length mm

Output directory

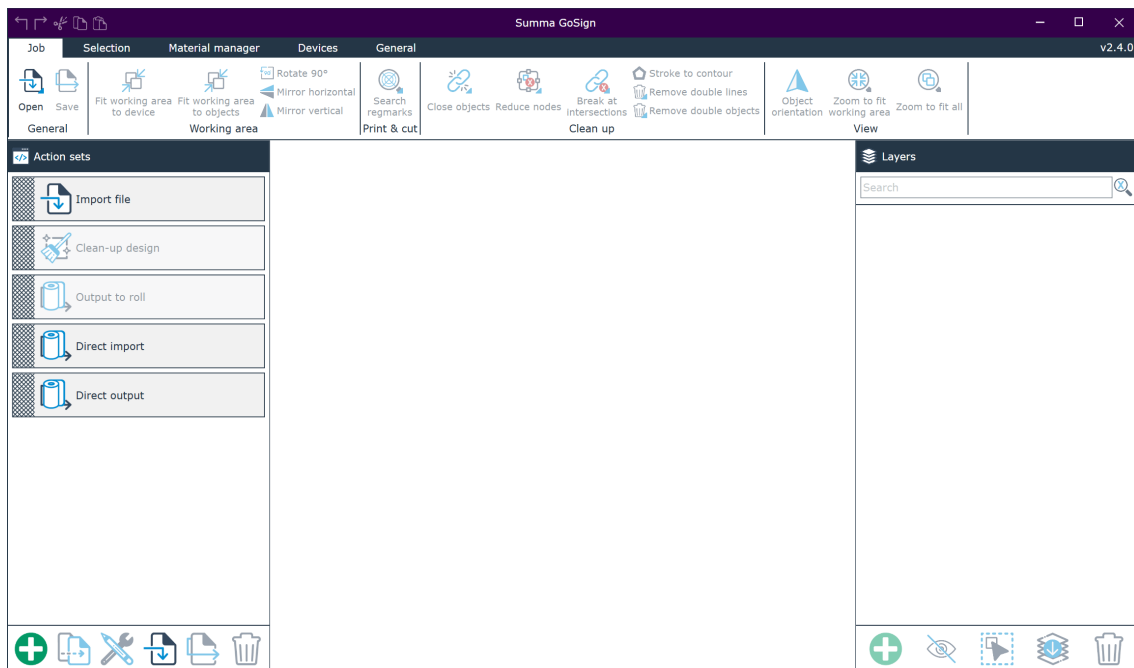
OK Cancel

3. Click **OK** to confirm.

2 STANDARD PROGRAM

2.1 Main window

The window of the program Summa GoSign consists of four main areas. The ribbon contains five tabs. On the left side, there is a docked window with the action sets. On the right side, there is a docked window with layer information. In the middle, a job preview will be shown. If multiple jobs are opened, they open in docked tabs of the middle window.



All docked windows can be set floating. To do so, click the window name and drag it to where you want it. There are also keyboard shortcuts that allow you to dock the window left, right, top, bottom or in the rest of the free space.

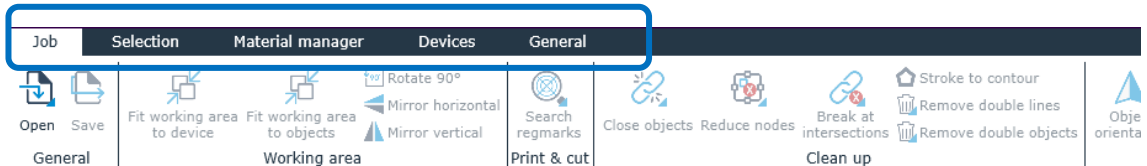
2.2 Quick access toolbar

The title bar is also the quick access toolbar and includes the following commands: undo, redo, cut, copy and paste.



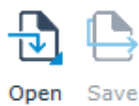
2.3 Ribbon

The ribbon contains five tabs.



2.3.1 Job tab

This tab contains some basic editing features that can optimize job cutting. Most of those functions can be included in the import action set. A default import action already includes some of these functions. You can create additional specific import actions that also include these features.



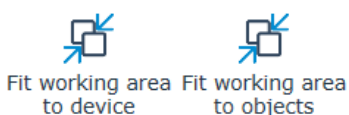
Click **Save** to save a job. They are stored as SGP job files. Click **Open** to open a job. Jobs include the original cut data that was imported, and settings related to material and tools. Thus, if copies of previous jobs are needed, they can easily be created using the settings used previously.



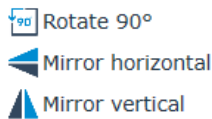
Export

NOTE: The basic version of GoSign allows importing the following file types:

- SGSJ files (*.sgsj; *.SGSJ)
- PDF files (*.pdf; *.PDF)
- DXF files (*.dxf; *.DXF)
- OXF files (*.oxf; *.oxf2; *.OXF; *.OXF2)
- SGP files (*.sgp; *.SGP)
- SVG files created with SVG 1.1 (or newer) Full (*.svg; *.SVG)
- CF2 files (*.cf2, *.CF2)



Click **Fit working area to device** to reset the working area to the device size. The cutter needs to be connected and the media loaded. Click **Fit working area to objects** to use the bounding box of all your objects as working area.



Click Rotate 90° to rotate the job 90° CCW. Click **Mirror horizontal** or **Mirror vertical** to mirror the job horizontally or vertically. The objects do not have to be selected first; clicking the action automatically selects all objects before the action is performed.

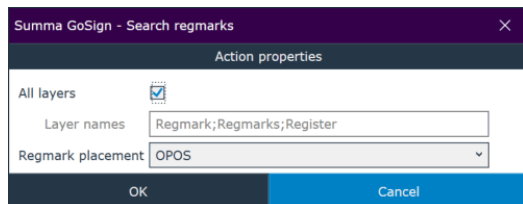


NOTE: OPOS jobs cannot be rotated or mirrored.



Print & cut

This function searches for the registration marks on certain layers. Usually the registration marks are recognized while importing the file. In some cases, however, additional registration marks may have been added on special layers or the file to be imported may not have been prepared correctly. In that case, this function can be used to scan each layer for registration marks. First, right-click the icon. A settings window will open.

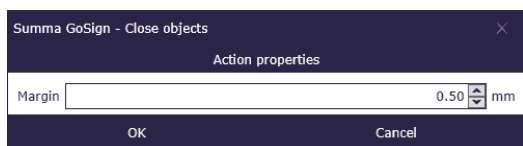


You can scan all layers or enter the name of a specific layer to be scanned and searched for OPOS marks. If Pro Pack is installed (see p. 41), random registration marks can be searched for. In this case, more parameters appear to define the shape and size of these random registration marks. Set all the parameters to the desired value and click **OK**. Then click **Search regmarks**. If registration marks are found on the selected layer, they are given this property and are made clearly visible on the screen.



Close objects

This function checks whether all objects are closed. When an object is not closed, this function will close it. This action is applied to all objects. The standard import action will do this automatically (see section 2.4).



Right-click the **Close objects** icon to define the maximum distance that can be covered to close an object. The maximum allowed value is set at 3 mm.

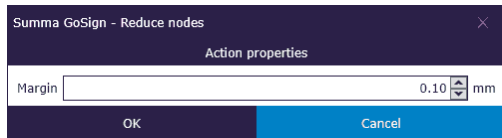


NOTE: The higher the chosen value, the more cut data and quality can be lost.



Reduce nodes

This function can be used to reduce the number of nodes. This action is applied to all objects. If the distance between three nodes is less than the set value, the middle node is deleted. The two nodes that remain are connected with a line.



Right-click the **Reduce nodes** icon to define the distance below which the middle nodes must be deleted. The maximum allowed value is set at 3 mm.



Break at intersections

This function breaks curves at intersections and is usually used in combination with other clean-up functions. It isolates common parts of different curves so that those double parts can be deleted. The disadvantage is that after this, some curves will be open, which can negatively affect the sorting process. The maximum allowed value is set at 3 mm.



NOTE: The higher the chosen value, the more cut data and quality can be lost.



Stroke to contour

This function automatically converts all strokes to contours. Sometimes jobs are poorly designed, and a contour line was defined using a brush or other less appropriate tool, rather than by a single line. In that case, the program can convert those double lines into a single line. The inner lines will be deleted, and the outer line will be kept. We recommend not relying on this feature too often but instructing designers to define correct cut lines.



Remove double lines

This function automatically selects all lines (open curves) and deletes any double lines. Right-click the icon to set the maximum distance. The maximum allowed value is set at 3 mm.



NOTE: The higher the chosen value, the more cut data and quality can be lost.



Remove double objects

This function automatically selects all objects (closed curves) and deletes any double objects. Right-click the icon to set the maximum distance. The maximum allowed value is set at 3 mm.



NOTE: The higher the chosen value, the more cut data and quality can be lost.



Object orientation



Object orientation

This function reveals or hides the orientation of the objects. When you click it, a triangle appears at the starting point of each object, indicating the direction of the curve. Click the triangle to reverse direction, if necessary.



Zoom to fit working area



Zoom to fit all

These two shortcut keys allow you to easily zoom in on all objects or the work area.

2.3.2 Selection tab

This tab contains the basic editing functions such as duplicate, resize, ...



Click this icon to select all objects in the job. Individual objects can be selected by clicking on them. A group of objects can be selected by drawing a selection frame around them; the objects must then be completely inside the frame. Hold down the shift key to add objects to the already selected group. Black selection handles will appear around the selected objects if the node selection option is not activated. Use the outer selection handles to resize the objects. Use the middle one to move the objects around.



Click this icon to reveal or hide the nodes of the selected objects. The selection handles disappear, and the nodes are displayed as squares. The starting point is a square just slightly larger than the others.

Once the nodes are selected, certain properties can be adjusted. Editing the nodes is not possible. Click a node to make it the new starting point. Clicking on the starting point node reverses the direction of the curve (can be made visible by making the starting point visible with the action in the **Job** tab).



Click this icon to zoom in on the selected objects.



Duplicate

Click this icon to duplicate the selected objects. The duplicate is placed 5 mm higher and more to the left so that it is clearly visible.



Group Ungroup

Click one of these icons to group or ungroup the selected objects.

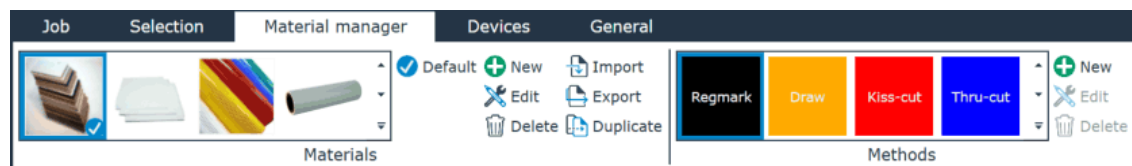


This function allows you to resize and reposition the selected objects. The anchor point of an object ("object origin") can be changed by clicking one of the circles. The object can then be moved by changing the X and Y values. This allows you to align objects. The object can be resized by changing the width and height values or the percentage value. You can lock the proportions by clicking on the padlock icon. The origin point remains stationary when the size of the object or group of objects is changed.



Rotates the selected objects. First enter the rotation value, then click the icon. The bottom two icons are used to flip the selected objects horizontally or vertically. When rotating and flipping, the center point always remains stationary.

2.3.3 Material manager tab










GoSign includes a materials database that contains some standard materials and can be customized to meet specific needs. The material manager offers the advantage of working with methods, which means you only need to select the material you want to process, and then the material manager automatically chooses the correct tool and settings to process the job.

Some RIPs allow selecting the material to be selected already when printing the job. In that case, you do not need to select the material type again in Summa GoSign. This tab is not used when processing a job, but to predefine settings for different materials.

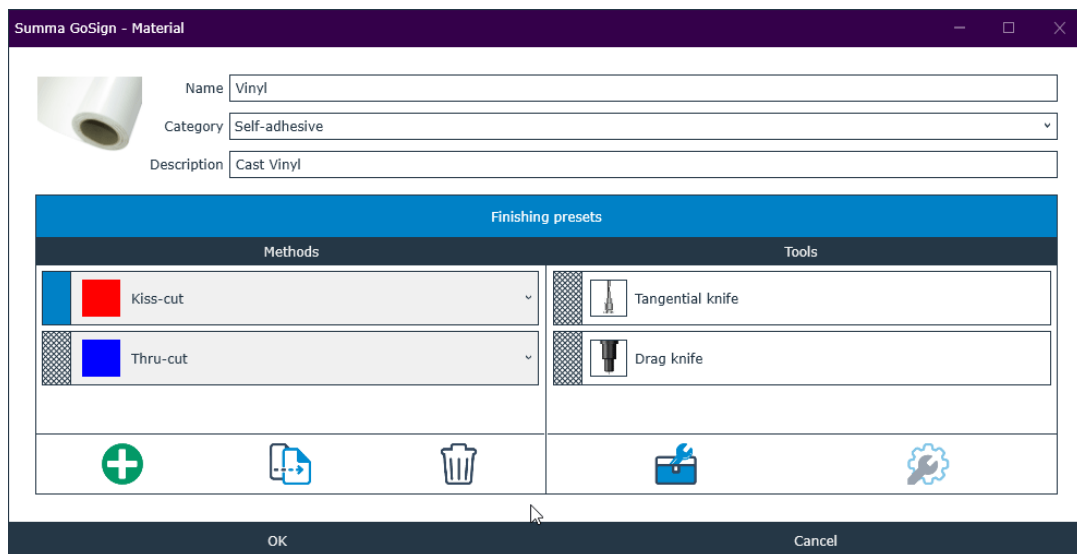
NOTE: In this tab, the default properties of the materials, methods and tools are chosen. So, if a job is processed and a setting needs to be changed just for this one time, change it in the layer window and not in the **Material Manager** tab.

2.3.3.1 Materials






-  **Default** : Set the selected material as default material. If no material is defined in the cut data file, Summa GoSign will automatically use the default material.
-  **New** : Create a material.
-  **Edit** : Edit the selected material.
-  **Delete** : Delete the selected material. A material cannot be deleted when it is being used.
-  **Import** : Import a material.
-  **Export** : Export the selected material to use on another computer.
-  **Duplicate** : Duplicate the selected material.

2.3.3.1.1 Editing a material



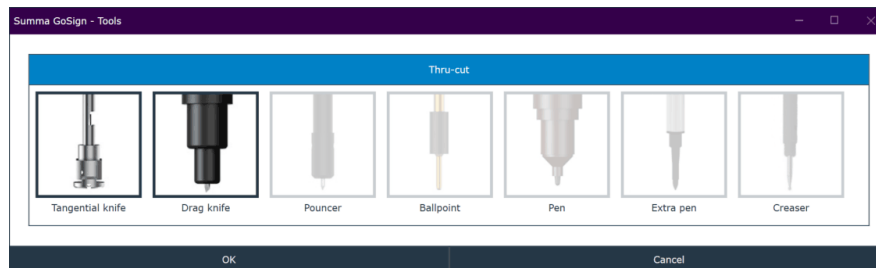
- **Name** and **Category**: A material type is primarily defined by its name and is part of a category.
- **Description**: Add a description that clarifies the material type or add additional information that may be relevant for processing the material.
- **Methods** are chosen in the design program and are linked to a certain tool appropriate for this material.

-  : Create a method.
-  : Duplicate the selected method.
-  : Delete the selected method.

- **Tools:** Click the cross-hatched area of a method to see which tool is linked to it.



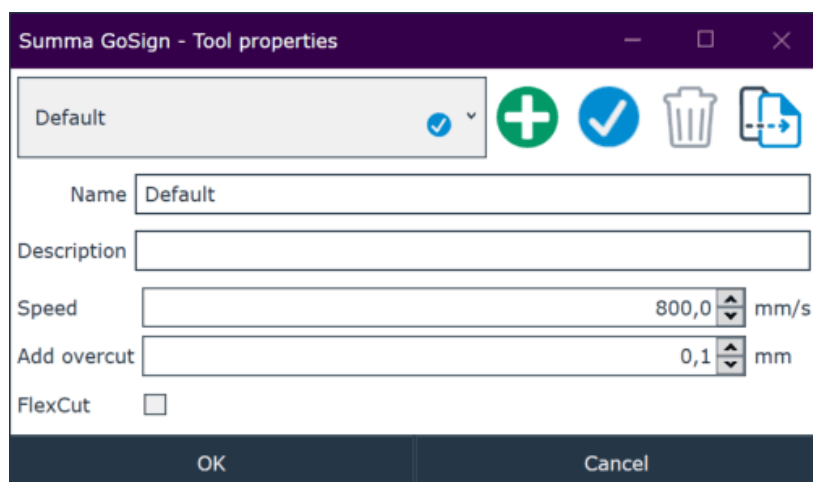
: Choose a tool to link to the selected method:







The tools currently linked to this method are highlighted. To add a tool for the selected method, click a non-highlighted tool. To remove a tool for this method, click the highlighted tool again.



: Set the parameters for the selected tool. Select the tool by clicking the cross-hatched area in front of the tool name. You can configure different parameter sets for each tool:

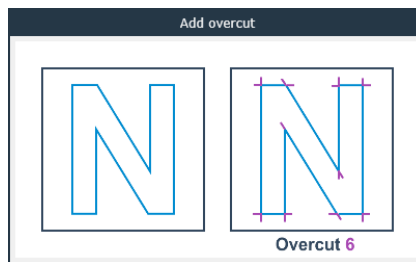


-  : Create a set of parameters.
-  : Set this set of parameters as default.
-  : Delete this set of parameters.
-  : Duplicate this set of parameters.

2.3.3.1.1.1 Tool parameters

TANGENTIAL KNIFE TOOLS

- **Pressure:** This is the pressure used by the tool.
- **Number of passes:** This is how many times the knife cuts the same line.
- **Speed:** This is the speed at which the knife cuts. Reduce this speed for thicker materials.
- **Add overcut:** Used to facilitate weeding. Each time before the knife goes up or down, the cutter cuts a little further. This parameter determines how far the knife cuts further. This overcut is the overcut of the centre of the knife point. Do not use a large overcut when the job contains lots of small curves.



- **FlexCut:** Used for cutting through. Possible settings are *Off*, *Default* (default FlexCut method), *Grid Cut* (stable cutting method following a grid pattern). Grid cutting can only be done with an S Class 3 model.

DRAG KNIFE TOOLS

- **Pressure:** This is the pressure used by the tool.
- **Number of passes:** This is how many times the knife cuts the same line.
- **Speed:** This is the speed at which the knife cuts. Reduce this speed for thicker materials.
- **Add overcut:** Used to facilitate weeding. Each time before the knife goes up or down, the cutter cuts a little further. This parameter determines how far the knife cuts further. This overcut is the overcut of the centre of the knife point. Do not use a large overcut when the job contains lots of small curves.
- **FlexCut:** Used for cutting through. Possible settings are *Off*, *Default* (default FlexCut method), *Grid Cut* (stable cutting method following a grid pattern). Grid cutting can only be done with an S Class 3 model.

PEN TOOL

- **Pressure:** This is the pressure used by the tool.
- **Speed:** This is the speed at which the pen draws.



NOTE: The type of pen depends on the cutter type that is used.

EXTRA PEN TOOL

- **Pressure:** This is the pressure used by the tool.
- **Speed:** This is the speed at which the pen draws.




CREASER TOOL

- **Pressure:** This is the pressure used by the creaser.
 - **Grain direction:** Set the grain direction correctly. Possible settings are none, X and Y.
 - If you select grain direction X or Y, the **Grain direction pressure** parameter allows you to select a different pressure based on the grain direction to achieve an optimal crease line.
- **Number of passes:** This is how many times the creaser creases the same line.
- **Speed:** This is the speed at which the creaser tool creases.

2.3.3.2 Methods



The different methods are used in the design software. A method is material independent and only defines the action/result.







-  **New** : Create a method.
-  **Edit** : Edit the selected method (change its name or colour).
-  **Delete** : Delete the selected method. A method cannot be deleted when it is being used in the materials manager.

2.3.3.3 Camera profiles (optional)

When the Pro Pack is installed then an extra menu is visible in the material tab. This menu allows adjusting the camera parameters for regmark recognition.

Different registration marks, different registration colours, different material colours... All these parameters influence the parameters the camera needs to recognize the registration marks and material edges. A number of standard camera profiles are installed when installing Summa GoProduce Flatbed Edition. A single camera profile can usually be used for a wide range of materials.

There are two types of camera profiles: *Regmark* (to detect registration marks) and *Barcode* (to detect barcode).

-  **New** : Create a camera profile (preferably after starting a cutting job, so you can set the parameters based on the job preview shown on the screen).
-  **Import** : Import a camera profile.
-  **Edit** : Edit the selected camera profile (preferably after starting a cutting job, so you can set the parameters based on the job preview shown on the screen).
-  **Export** : Export the selected camera profile to use on another computer.
-  **Delete** : Delete the selected camera profile. A camera profile cannot be deleted when it is being used.
-  **Duplicate** : Duplicate the selected camera profile.



NOTE: We do not recommend changing the parameters of a profile that is installed by default. If parameters of a default installed profile need to be changed (for example, because a strange ambient light source is present), duplicate the profile, rename it, and modify this profile.

2.3.3.3.1 Creating camera profiles

You can create a *Regmark* or *Barcode* camera profile. The easiest way to do so is described below.

2.3.3.3.1.1 Regmark

1. Load a job (that contains registration marks) in the cutter and import the corresponding cutting file in the GoSign software. If you do not use the default import action set, make sure that it contains the **Search regmarks** action.
2. Click the **Output to Roll** or **Output to Sheet** action set and place the camera above the first registration mark when the software prompts you to.
3. Click **Edit profile settings**.
4. Change the parameter values as required for the software to detect the registration marks. You can follow this on the screen. When a registration mark is detected, it is outlined in green.
5. Click **Save camera profile to material manager**.

2.3.3.3.1.2 Barcode

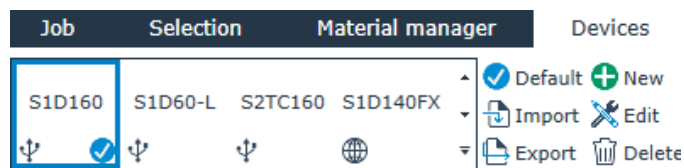
1. Load a job (that contains registration marks and a barcode) in the cutter and import the corresponding cutting file in the GoSign software. If you do not use the default import action set, make sure that it contains the **Search regmarks** action.
2. Click the **Output to Roll** or **Output to Sheet** action set and place the camera above the barcode when the software prompts you to place the camera above the first registration mark.
3. Click **Edit profile settings**.
4. Change the parameter values as required for the software to detect the barcode. You can follow this on the screen.
5. Write down the parameter values.
6. Open the *Barcode* camera profile and change its values to the values you wrote down in the previous step.
7. Click **Save camera profile to material manager**.

2.3.3.3.2 Parameters







A brief description of all parameters is given below, but not all parameters are available for every type of camera profile. Depending on your choice of camera profile type, certain parameters may or may not need to be set.

- **Imported from job:** When enabled, this option allows the camera profile to automatically adopt the registration mark settings defined in the job itself (in the Action Properties of the “Search Regmarks” action), rather than using a fixed registration mark type predefined in the profile. This provides greater flexibility, as the camera will detect and apply the shape and parameters of the registration marks as specified by the individual job. If disabled, the profile will rely on its own static mark type configuration.
- **Mark type:** Only available when **Imported from job** is not enabled. Can be a circle, a square or a cross. If a registration mark is recognized, it will be outlined in green in the preview.
- **Median filter:** Preserves the edges but smooths out patterns. Tip: Start with a low value and increase if necessary.
- **Truncate filter:** All grey levels above the selected value are reduced to the selected value. Tip: Start with a high value and decrease if necessary.
- **Blur filter:** Blurs the picture slightly to smooth out sharper edges. Tip: Start with a low value and increase if necessary.
- **Edge smoothing filter:** Blurs out the pattern near the edges. Tip: Start with a low value and increase if necessary.
- **Threshold filter:** Sets the level to decide whether an edge is white or black. Tip: Set this filter first. Start with a low value and increase systematically in increments of 10 if necessary.
- **Size margin:** Sets maximum deviation between the size of the printed registration mark and the size in the data file. Tip: Start with a low value and increase if necessary.
- **Minimum roundness:** Sets the maximum deviation between the roundness (difference x size – y size) of the registration mark. Tip: Start with a low value and increase if necessary.

2.3.4 Devices tab



This tab is used to add or delete cutters that need to be controlled by GoSign. When the program is launched for the first time, a window pops up to install a cutter, but you can also use this tab. A default cutter can be set by first selecting the cutter from the list and then clicking the default icon.

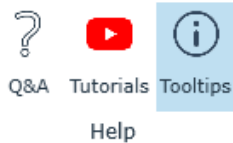
-  **Default** : Set the selected device as default.
-  **Import** : Import a device that has already been used (on this computer or on another one):
-  **Export** : Export the selected configuration to use later or on another computer.
-  **New** : Add a new device.
-  **Edit** : Edit the selected configuration.
-  **Delete** : Delete the selected cutter configuration. A configuration cannot be deleted when it is being used in the materials manager.

2.3.5 General tab

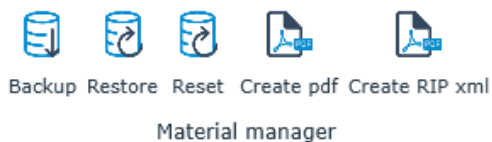
The fifth tab in the ribbon contains some general parameters and settings.



Click this icon for information about the program. The license manager opens to add more licenses for additional options, if needed.



Click this icon to connect to the Internet for frequently asked questions and their answers or click the YouTube logo for a link to small instructional videos. Click the Tooltip icon to switch the tooltips on or off.



Click **Backup** to create a backup of the material manager. Click **Restore** to import a previously created backup. Click **Reset** to reset the material manager. Click **Create pdf** to generate a readable list of all the different materials in the material manager and the tools settings. The option **Create RIP XML** is used to create an XML that can then be imported into the RIP so that the material can be selected when the job is printed.



Click **Backup** to create a backup of the action sets. Click **Restore** to import an earlier saved backup. Click **Reset** to reset the action sets. The purpose of the actions are discussed in the next section. We recommend that you make a backup of your actions before resetting it to avoid losing important action sets.

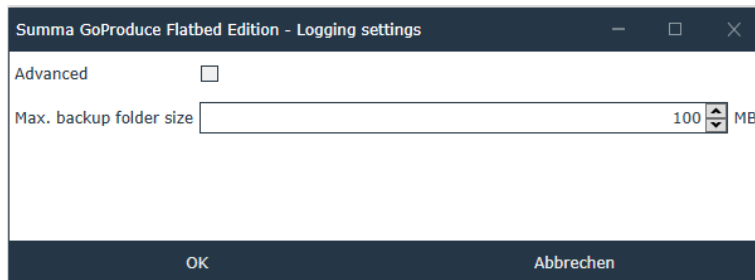


In the **Logging** pane, click **Backup** to create a backup of the loggings for future reference:

- Original design file
- Separate cut log for each workflow



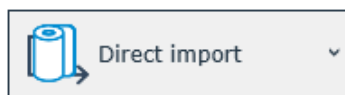
Clicking **Edit** opens the following dialog window.



Ticking **Advanced** in this dialog window will also log:

- Job file in native format
- Metadata where possible
- Image processing

You can also define the maximum allowed backup folder size.



Plugin settings

This allows defining which action will be performed when GoSign is opened with the plug-in from CorelDRAW or Adobe Illustrator. Choosing **Direct Import** will open the job in GoSign when the plug-in button is clicked in the design software. Choosing **Direct Output** will send the job with GoSign directly to the cutter when the plug-in button is clicked in the design software.



NOTE: Although this list contains the same action sets as the **Action sets** pane, it only makes sense to use either **Direct Import** or **Direct Output** here as the other action sets are not suitable for working with plug-ins by default.



The available interface languages are displayed here. Click a flag to change the program's interface language to the corresponding country language. The program must be restarted before this change is applied.

mm

cm

inch

Unit

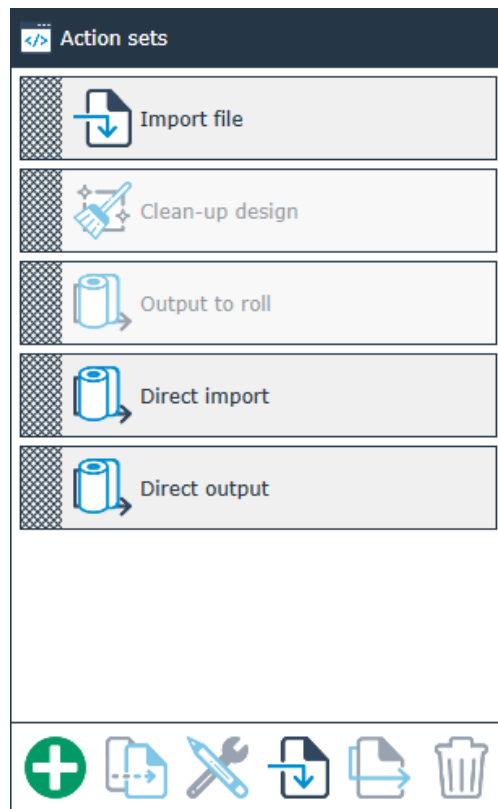
You can select your unit of measurement here.

Software rendering

Motion detection







Tick **Software rendering** when the camera window in GoProduce Flatbed Edition shows the video image but freezes when you move the cursor. This issue is possibly related to certain video cards. **Motion detection** can be enabled if it causes delays and noise with head cameras.

2.4 Action sets



Action sets can be workflows or a group of frequently recurring processing functions that determine how the material is to be processed. When Summa GoSign is installed, a few default action sets are installed as well.

2.4.1 General

-  : Create an action set.
-  : Duplicate the selected action set.
-  : Edit the selected action set.
-  : Import a predefined action set.
-  : Export the selected action set.
-  : Delete the selected action set.



NOTE: Select an action set by clicking the cross-hatched area in front of the action set name.



NOTE: Action properties depend on the chosen workflow (Cut-only or Print&Cut) and on the setup configuration (cutter model and Pro Pack installed or not). This section describes all possible action properties. However, they may not all be available in your configuration.

2.4.2 List of available actions

2.4.2.1 Clean up

Break at intersections: This action breaks curves at intersections. You can also consider objects as intersection points if they are very close to one another. The maximum distance to still be considered intersection points can be set.

Close objects: This action checks whether all objects are closed. If an object is not closed, this action will close it.

Reduce nodes: This action reduces the number of nodes. The distance below which the middle nodes are to be deleted can then be set. This action is applied to all objects.

Remove double lines: This action removes double lines. The action automatically selects all lines (open curves) and deletes any doubles. The maximum distance between the lines can then be set before the software decides whether or not to delete the lines.

Remove double objects: This action removes double objects. This action automatically selects all objects (closed curves) and deletes any doubles. The maximum distance between the objects can then be set before the software decides whether or not to delete the objects.

Stroke to contour: This action converts strokes to contour lines. Sometimes jobs are poorly designed, and a contour line was defined using a brush or other less appropriate tool, rather than by a single line. In that case, the program can convert those double lines into a single line. The inner lines will be deleted, and the outer line will be kept.

2.4.2.2 General

Go to: This action can be used to jump to a defined action in the action set. It is usually used to create a loop to automate jobs.

- **Action ID:** Specifies which action the sequence has to be restarted from.

Import job: This action imports a file. There are several parameters.

General

- **Import mode**
 - **Manual:** The operator manually searches and selects the required file.
 - **Barcode:** When this option is selected, more parameters appear:
 - **Barcode reader:** Default set to *Handheld scanner*. When the Pro Pack is activated, *Camera* and *OPOS* are available.
 - **Origin:** Determines where the camera starts scanning the barcode. Default set to *Center*. When set to *Center*, *Left* or *Right*, the camera moves to the centre, left or right of the loaded material and scans the material from bottom to top to search for the lower barcode line. When the camera detects this line, it moves to the right side of the line to read the barcode and start the workflow. If set to *Manual*, the camera must be manually placed under the barcode.
 - **Import directory:** This is the folder that contains the cutting data. This is usually a folder on a server where the cutting data is sent from the RIP or design software (click the three dots to browse to the appropriate folder).
 - **Import order:** By creation date or alphabetical.



NOTE: When using barcode, the file name must be between 8 and 13 characters long.

- **Hot folder:** Only available with the Pro Pack. The hot folder system is especially useful when the design software is located on another computer on the network, because then the plug-ins cannot be used. Files stored in a folder can now also be automatically opened in GoSign. Thanks to the flexible action sets, everything that happens next is completely customized to your needs.
- **Direct mode:** The direct mode is used when the job is imported direct from the design software with the plug-in installed by Summa GoSign Tools.
- **Close active job:** You can choose to close the current job before opening a new one, or have a new tab opened containing the job.
- **Combine layers with same name:** Files that are imported sometimes contain multiple layers with the same name. If this option is checked, these layers will be merged into one layer.
- **Scaling factor:** This is used when importing cut-only jobs drawn to scale from Illustrator or Indesign. This is sometimes used for jobs longer than 5 metres (200 inches).



NOTE: Do not use the scaling factor if a pdf creator has been used that scales automatically. Normal pdf export (as in Illustrator and InDesign) outputs files of max. 5 metres (200 inches) wide and long. Some other programs have pdf export filters that output larger pdf files. They have a scale factor in the file itself so the scale factor should stay on 100% for such files.

DXF

- **Import unit for DXF:** Auto, millimetres, inches.
- **Separate layers:** The methods can be separated by layer name, by spot colour name, or by colour. We recommend using colours for DXF.
- **Exclude layers:** You can exclude layers from import. This is useful if the print data is still located in the DXF file, because opening this file could slow down the program.

PDF

- **Separate layers:** The methods can be separated by layer name, by spot colour name, or by colour. We recommend using layers for PDF.
- **Exclude layers:** You can exclude layers from import. This is useful if the print data is still located in the PDF file, because opening this file could slow down the program.
- **Crop to page size:** For importing only the part of the design that is visible in the PDF file.

SVG (created with SVG 1.1 (or newer) Full)

- **Exclude layers:** You can exclude layers from import. This is useful if the print data is still located in the SVG file, because opening this file could slow down the program.

ZCC (only supported when Pro Pack is installed)

- **Add remarks:** You can opt to import the registration marks. If this box is checked, the **Shape** and **Size** must be defined correctly in order to import the ZCC file correctly.

i-CUT (only supported when Pro Pack is installed)

- **Add remarks:** You can opt to import the registration marks. If this box is checked, the **Shape** and **Size** must be defined correctly in order to import the i-CUT file correctly.

Output job: This action sends the job to the cutter. A lot of parameters that are considered default values can be set here. However, when processing the job, these parameters reappear on the screen and, if necessary, can be changed to be applied only this one time. This depends on the parameter setting.

- **Segmentation:** If the job is very long, GoSign can divide it into segments. Before the program starts sending the data to the cutter, a preview can be shown. If set to *On*, the length of the segments can be set.
- **Number of jobs:** This defines how many times the job needs to be repeated.
- **Copies per job:** Sets the number of copies to be processed with this parameter. If sheets are used, this parameter applies to the number of copies per sheet. If the job is on a single sheet or roll, this parameter only determines the number of copies to be processed. There are a few additional options for this parameter if set to more than 1:
 - **Autofill:** If checked, Summa GoSign checks how many copies can be cut side by side in width. This value then represents the number of copies in width. This option is not usually used in print and cut jobs.
 - **Number of copies - Width:** If the option **Autofill** is not checked, the required number of copies in width direction can be set here.
 - **Space between copies - Width:** Determines the distance between copies in width (imagine a frame around each copy, including registration marks - the distance between those frames is the space between the copies).
 - **Space between copies - Length:** Determines the distance between copies in length (imagine a frame around each copy, including registration marks - the distance between those frames is the space between the copies).



NOTE: If the distance between copies is not known for a Print&Cut job, enter 0. When processing the job, set the camera above the first registration mark of the second copy. The program will then automatically use this distance for the third, fourth, etc. copy.

- **Tiling:** If this option is checked, GoSign divides the job into tiles and cuts them row by row. Tile height, width, and overlap need to be defined.
- **Weed box:** This parameter allows you to place a weed box around a cut-only job. When this option is checked, an additional option is available to determine the distance between the weed box and the job.
- **Send design relative to origin:** If not all objects are selected to be cut, the origin of the job is automatically set to the origin of the selection if this box is not checked. If this box is checked, the origin remains as defined in the job.
- **On end of job:** Determines the action after processing the job. According to the setting of this option, extra parameters will be shown or hidden:
 - **Replace sheet:** You receive a notification to replace the sheet. If this option is selected, the following parameter appears:
 - **Automatic:** In combination with the Tray One sheet feeder. Check this option if you want the Tray One sheet feeder to automatically replace the sheet.
 - **Feed job length:** The job length will be fed. If this option is selected, the following parameters appear:
 - **Margin:** If necessary, a fixed length can be added if you choose to feed after the job. This can be used with cut-only jobs to add a margin between two consecutive jobs.
 - **Cut off:** The choice of whether or not to cut jobs off a roll.

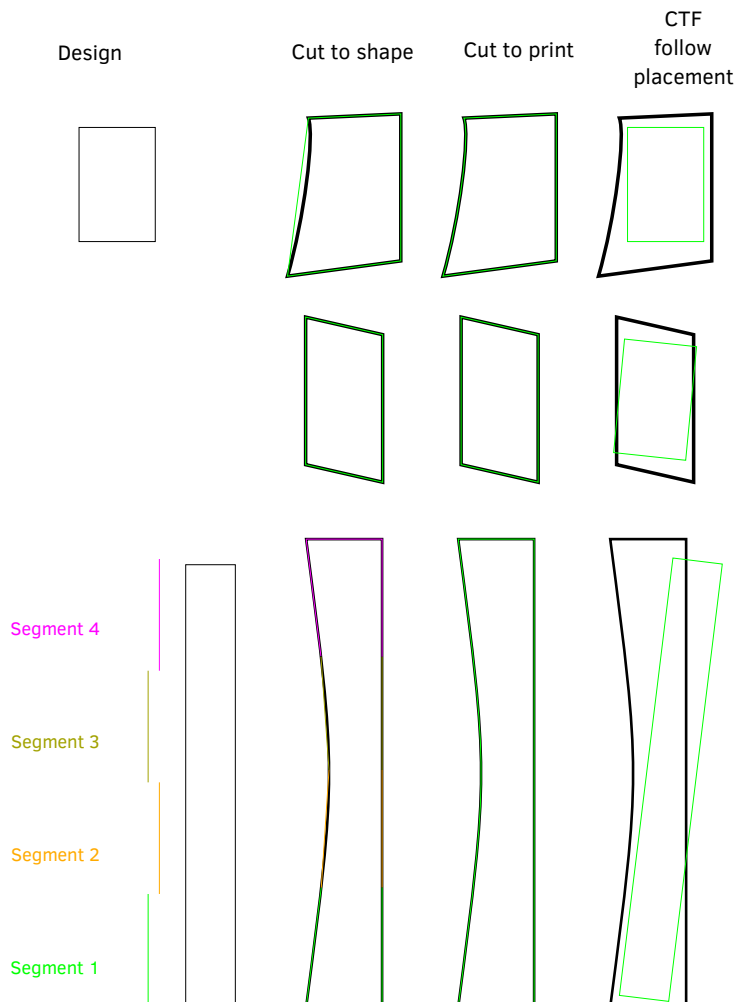


NOTE: If the cutter has no cut-off knife, FlexCut is used as a cut-off tool.

- **Preload:** This function feeds the length of the job before cutting. If this option is checked, the following parameter appears:
 - **Margin:** This value determines how much more to feed on top of the length of the job.

- **Compensation mode:** There are five compensation modes to choose from, of which some are especially suitable for segmented jobs. The difference between the several methods is clarified with images below.
 - **Cut to shape:** The cutter cuts the design exactly as it is printed and does not add extra nodes. The existing nodes remain the same as well as straight lines between nodes.
 - **Cut to print:** The print is followed as accurate as possible; some extra nodes are added to try and take into account all the print distortions.
 - **Cut to frame follow placement:** Only the rotation and displacement distortions are taken into account for compensation. The original design is cut out, only the placement of this design is influenced by the print-out.

When the job is segmented, the first segment determines everything: the rotation and displacement in the first segment are used for the entire job. This means that if the rotation and/or displacement in the first segment is significant, it's possible the cutter may cut outside the printed design in the later segments.



NOTE: When OPOS is the chosen registration mark placement method, there is no choice in compensation mode; it will always be **Cut to shape**.

- **Skip mark when mark is not recognized:** Some registration marks might not be printed correctly. If this option is checked, marks that cannot be read by the program are ignored. If unchecked, the program will pause so you can intervene. You can then either skip the registration mark or manually position the camera above it.



NOTE: This is only applicable for round marks (not for standard OPOS marks).

- **Direct mode:** If this option is checked, when the output is started, the program does not display the output parameters as described above; the job is started immediately with the settings configured in the action set. This option is essential for the barcode workflow on a roll.
- **Wait for device to finish:** Tick to close the progress screen only after the machine has finished the job.

Save job: This action allows you to save the current job as a GoSign file (SGSJ file type).

Undo: This action undoes the previous one.

2.4.2.3 Job

Fit working area to device: This action fits the working area to the loaded material (the cutter must be connected, and the media must be loaded).

Mirror horizontal: This action flips the entire job on a horizontal axis through the centre of the job.

Mirror vertical: This action flips the entire job on a vertical axis through the centre of the job.

Rotate 90°: This action rotates all objects and the work area 90° counterclockwise.

Rotate 180°: This action rotates all objects and the work area 180° counterclockwise.

Rotate 270°: This action rotates all objects and the work area 270° counterclockwise.

Set default material: This action sets the default material. Click the drop-down button in the Action Properties column to get a list of all materials and select the required material.

Set default device: This action sets the default device. Click the drop-down button in the Action Properties column to get a list of all devices and select the required device.

Set job origin: This action starts a job at a certain offset from the origin. Change the X and Y values as necessary.

2.4.2.4 Layer

Remove layer: This action deletes a layer. Click the drop-down button in the Action Properties column to get a list of all methods and select the method (layer) to be removed.

Search remarks: This action searches the registration marks. You can scan **All Layers** for this purpose, or only specific layers by entering **Layer names** (layer names are case sensitive). The **Shape** and the **Size** of the registration marks to be searched can be defined if **Random Regmark placement** is chosen. If registration marks with these characteristics are found on the selected layer, they are given the "Regmark" property. They are then moved to the Regmark layer and are made clearly visible on the screen.



NOTE: When working with ZCC or i-CUT files, do not forget to set the parameters **Shape** and **Size** correctly in the action properties of the actions **Search remarks** and **Import Job**.

Select layer: This action allows you to select a certain layer (**Method**). Click the drop-down button to get a list of the methods and select one.

Set layer method: Choose the method for the selected layer.

Set layer properties: Layers have two properties. They can be (un)locked and made (in)visible. Set **Target** to determine which layer the properties should apply to.

2.4.3 Predefined action sets

When Summa GoSign installed, the following predefined action sets are installed along with it:

- Import file
- Clean-up design (only if *AdvancedActionSets* was chosen at installation)
- Output to roll
- Direct import (useful when working with plug-ins)
- Direct output (useful when working with plug-ins)




NOTE: When you import a PDF file (action set **Import file**), you will be given the option to choose which pages of the document should be imported.

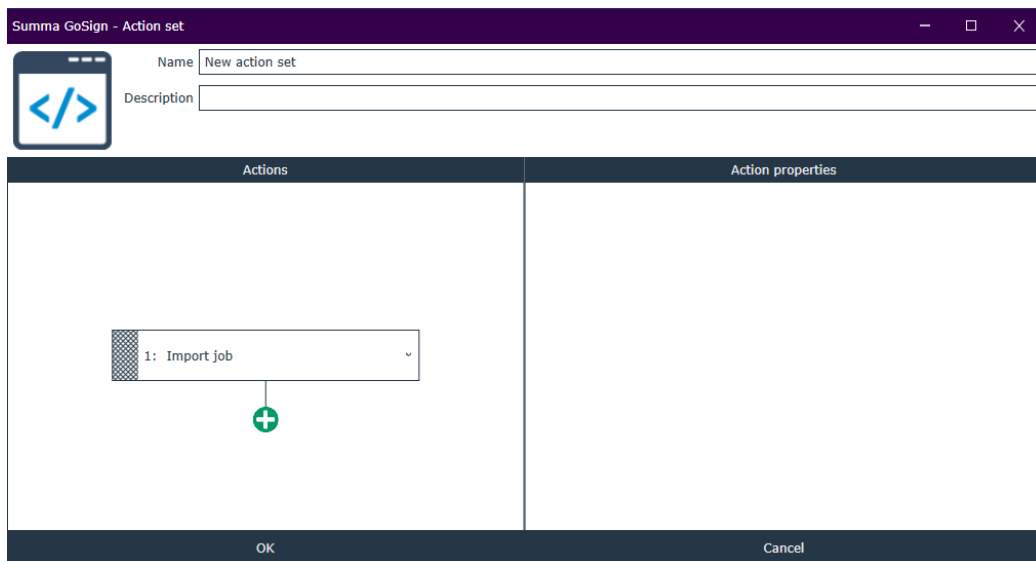
If the Pro Pack is installed, the following action sets can be imported from `..\Documents\Summa GoSign\Action sets`:




- OPOS barcode workflow on roll (see p. 42 for more information)
- Twin (X) Mode (see p. 43 for more information)

If you are using predefined action sets, it is important to know what they do. Right-click in the cross-hatched area in front of the action set name so that the structure of the action set appears. Then, by clicking in the cross-hatched area in front of the action, the specific action properties appear.

2.4.4 Creating action sets

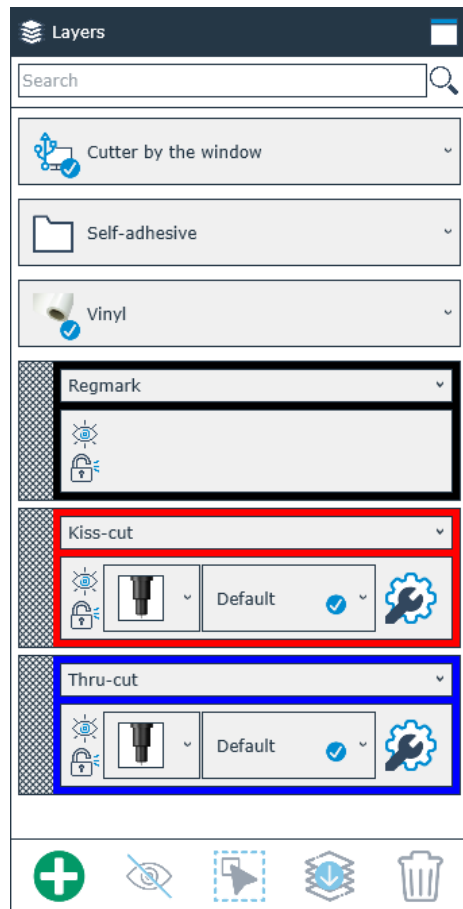
1. Click  to create an action set. The following window appears.



2. Name the action set, describing clearly what it is used for. You can also add a description and choose a different logo by clicking the default logo .
3. Click the drop-down button to the right of the action name to choose an action. This list contains all the actions of the **Job** and **Selection** tabs, and some additional actions.
4. Click in the cross-hatched area in front of the action number. If special settings need to be changed for this action, they are now listed in the right column.
5. Add as many actions as needed to create a new action set. If you need to change the order () of the actions or delete () an action, click in the cross-hatched area before the action number so these buttons become available.

2.5 Layer window

2.5.1 General



The **Layers** window shows the material, method, and tool settings. If the RIP has a driver for Summa GoSign and the settings in the RIP are correct, all the information in this window is automatically chosen as soon as the file with the cut data is imported. If the automatically chosen settings are not correct, you can set things manually. In that case, after importing the cut data file, the **Layers** window looks like this.



NOTE: When making changes in the **Layers** window, always work from top to bottom as changing a setting may influence all the settings below.



NOTE: If the Import action set is set to separate layers by layer name, all objects in unknown layers names (methods) are put in the top layer of the list.



: Create a layer.



: Show only the selected layer.



: Hide only the selected layer.



: Select all objects on the selected layer.



: Move all current objects to the selected layer.



: Delete the selected layer.



: Lock or unlock this layer.



: Open a list of tool parameters to change the parameters. From the moment a parameter is changed, the **Save to material manager** button becomes available to change the setting permanently in the material manager.

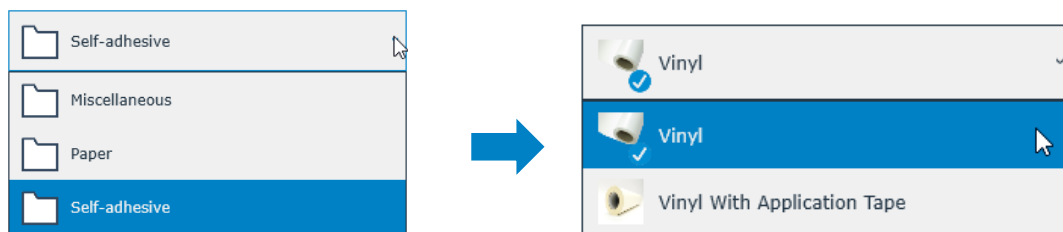
2.5.2 Set materials

If the material is not specified in the cut data file, the default material is used. If you need to change the default material, you can do so before opening the cut data file (see p. 15) or you can change the material in the **Layers** window when the cut data file is opened.

Option 1: Enter the name of the material in the search box.

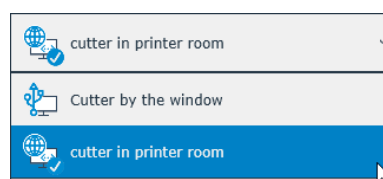


Option 2: First select the relevant material group, then the material itself.



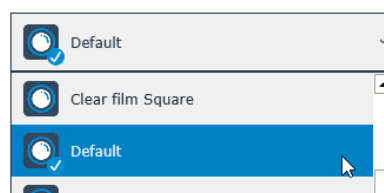
2.5.3 Select cutter

If more than one cutter is connected, the default cutter is chosen when a file is opened. If you need a different cutter to process the job, you can select it from the list by clicking the drop-down arrow. This changes the default cutter: All future jobs will be processed on this cutter, until a different cutter is chosen again.



2.5.4 Set camera profiles

If the methods are set correctly in the cut data file, the camera profile should be set correctly automatically. If you want to use another camera profile, you can select it from the drop-down list (the registration marks need to be identified first by clicking **Search regmarks** in the **Job** ribbon).



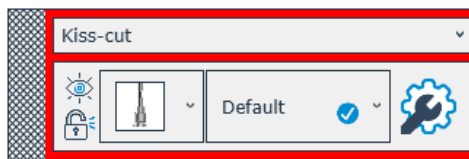
2.5.5 Set methods/tool parameters

If everything is set up correctly, it is not necessary to change the method or tool (settings). However, if a special material is used or the data in the cut file is not set correctly, the methods and corresponding tools can be set/changed.

The cut data is shown in layers. In simple cut-only jobs requiring only one tool, there may be only one layer. If more than one tool is needed, there will be more layers. For example, in a print and cut job, there is a Regmark layer and a layer per method.

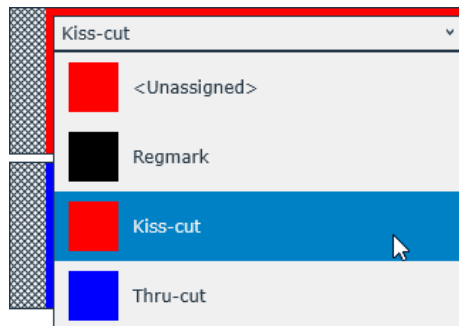
Possible layer properties after importing:

2.5.5.1 Case 1: Default material and method set correctly in the cut data file

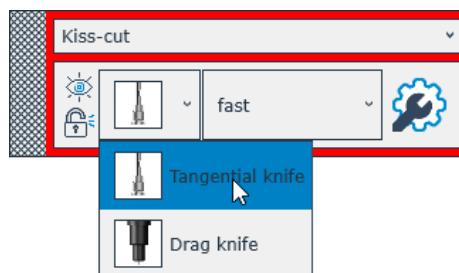


This means that a method has been assigned to the cut lines on that layer and a tool has been assigned to the methods, according to the data in the material manager. The settings for that tool are also copied from the material manager.

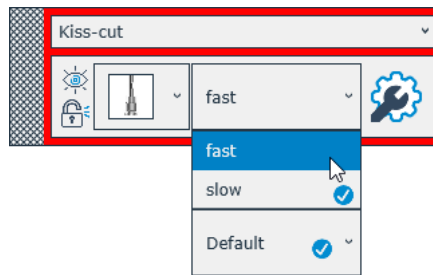
Click the drop-down arrow of the layer name to change the method for the vectors on that layer.



Click the drop-down arrow next to the tool icon to change the tool if necessary. The program always shows the default tool after importing the file and the assigned layer/method. If available and required, an alternative tool can be used.



Sometimes a list is available next to the tool type with predefined parameter sets for the chosen tool. The default setting will always be chosen, but alternative parameter sets, if available, can be chosen by clicking the drop-down arrow.



2.5.5.2 Case 2: Material not set correctly / wrong or unknown method



Either the material has not been set correctly or the wrong method for that particular material type was chosen. To set the material correctly, see section 2.5.2. If the material is set correctly, a tool (method) will be assigned to it automatically. By default, GoSign assigns the Kiss-cut tool to all the cut data of which the method is unknown.

You can change the chosen method by clicking the drop-down arrow next to the method name. Once the method and material are set correctly, the parameters can be changed as described in section 2.5.5.1.

3 PRO PACK

3.1 General

The optional GoSign Pro Pack offers the following advanced features:

- Ability to import other file types
- Ability to export to PDF
- OPOS CAM support
- Barcode Workflow
- Twin Workflow
- Hot folder support

3.2 Ability to import other file types

Thanks to the Pro Pack, the following file types can also be imported:

- PLT files (*.plt, *.PLT)
- HPGL files (*.hpgl, *.hpg, *.hgl, *.HPG, *.HGL)
- DMPL files (*.dmpl, *.dmp, *.DMPL, *.DMP)
- i-CUT files (*.cut, *.CUT)
- ZCC files (*.zcc, *.ZCC)

3.2.1 Single-line font rendering

The software supports single-line font rendering when generating output in HPGL (.hpgl, .hpg, .hgl) and PLT (.plt) formats. Single-line fonts (also known as stroke fonts or engraving fonts) are designed using only centreline strokes, rather than outlines or filled areas. This allows the machine to process the job faster, as it only needs to follow a single path per character.

The single-line font currently supports the following character ranges:

- Standard ASCII 32–126
- Extended ASCII 128–154 and 160–165

If a character is not available in the single-line font:

- It will be rendered using the standard outline font.
- This character will be converted to vector outlines and cut as usual, maintaining output integrity.

This ensures consistent output without missing characters, although rendering may take slightly longer for outlined glyphs.

3.3 OPOS CAM support

This allows for processing jobs on an OPOS CAM cutter the same way that jobs are processed on the F Series flatbed cutter. GoSign can import SGP files that were created by programs that have a driver for the F Series. These files have round registration marks, and the position of these marks is not as restricted as of the OPOS marks: they can be placed randomly. Also, extra compensation methods are unlocked (smart compensation and fixed-size).



NOTE: The traditional camera control functionality is still available for free in Summa Cutter Control. An OPOS CAM cutter can thus be used in combination with GoSign and processes jobs the same way as roll cutters with an OPOS sensor do.

3.4 OPOS barcode workflow

This is an expansion of previous barcode functionality with Summa Cutter Control (which is still free). The setup of the barcode workflow with GoSign offers the following advantages:

- Possibility to adjust speed and tool pressure if necessary (when these parameters are set in the cut file by the RIP, they cannot be changed using the standard barcode workflow with Summa Cutter Control).
- Possibility to process barcode jobs that were initially created for jobs on an F Series flatbed cutter or an OPOS CAM roll cutter.
- Ability to set up a barcode workflow with PDF, DXF, SVG, ZCC and i-CUT files.

3.5 Twin workflow

3.5.1 About Twin workflow

By combining the best of both worlds, kiss-cutting on a roll cutter and cutting through on the F Series flatbed cutter, a significant performance increase can be achieved.

How does it work?

1. The media rolls are processed on a roll cutter, cutting kiss-cutting lines only. Kiss-cutting is much faster on a roll cutter than on any flatbed cutter.
2. The media is loaded on the F Series, cutting cut-through lines. This is useful when a complete cut-through line is required and it creates the possibility to reduce the workload on your roll cutters, so that more jobs can be processed.

There are two different Twin workflows. The difference between the two is the driver that was used for preparing the files with the cut data for the jobs in combination with the type of roll cutter that is used.



NOTE: To use the Twin workflow on S Class 2 roll cutters, USB connection is required.

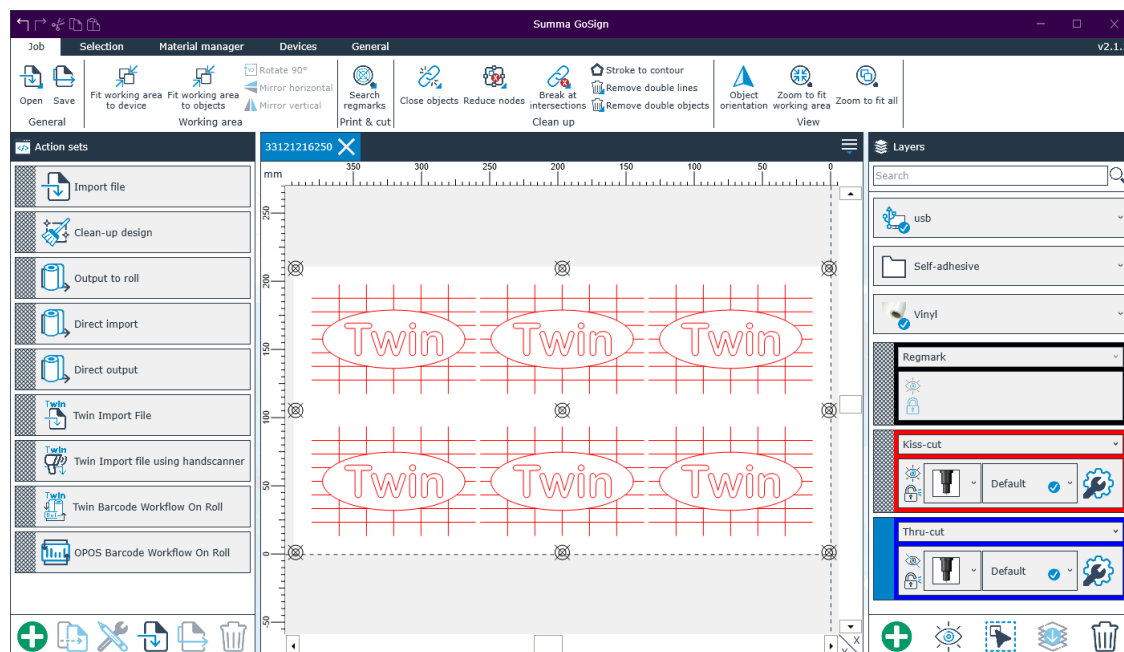
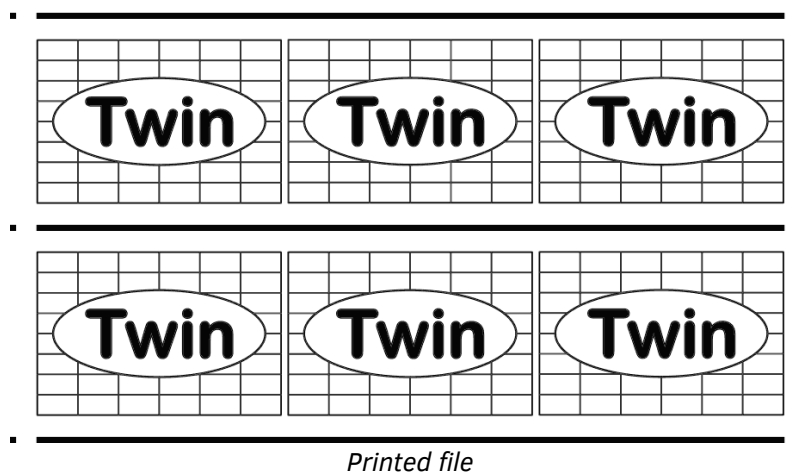


NOTE: We recommend closing Summa Cutter Control when using the Twin workflow.

3.5.2 Twin X Mode

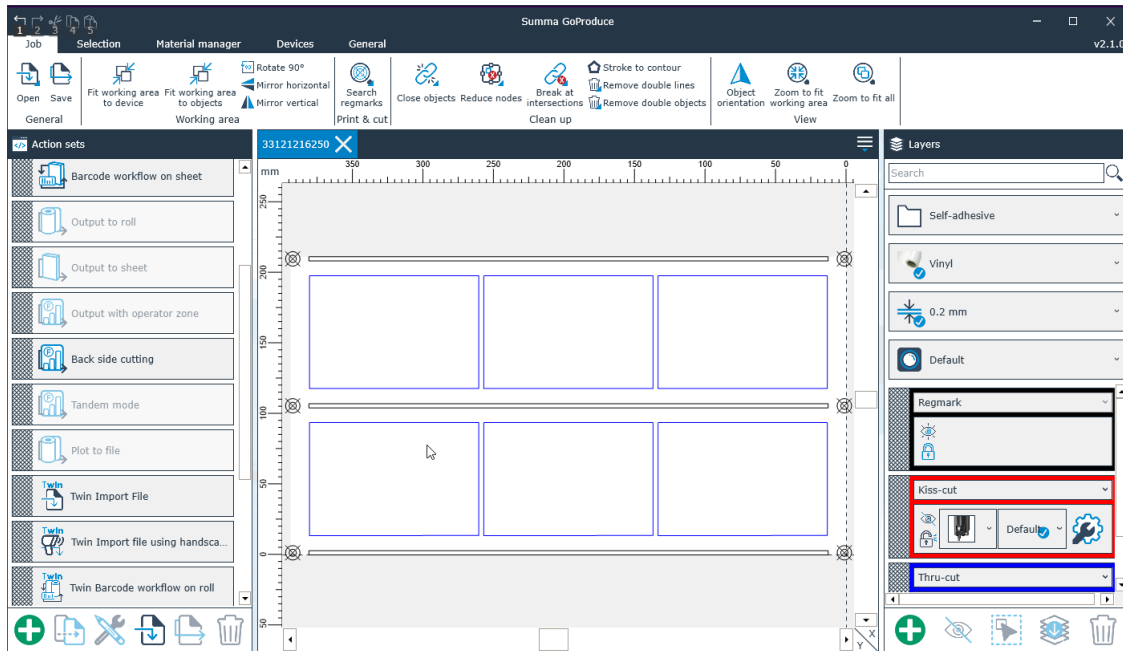
The Twin X mode is developed for roll cutters with a standard OPOS sensor in combination with the F Series flatbed cutters. The required files are provided by RIP's that have drivers for roll cutters. They create PLT files (either DMPL or HPGL files).

Typically, a PLT file created by a RIP that is used in Twin X mode is a cut file with data for the position of the OPOS marks, kiss-cut lines and FlexCut lines. When a file like this is opened by means of an action set, the OPOS marks are put on one layer, the lines that need to be kiss-cut are put on another layer, and the lines that need to be cut through are put on a third layer. The third layer will then be hidden so that only the kiss-cut lines will be cut when the job is sent to the cutter. If this same file is then opened with GoProduce to cut the cut-through lines on the flatbed, the layer with the kiss-cut lines will be hidden in GoProduce.



The PLT files were made with a driver for the roll cutters and used as OPOS mode OPOS Xtra. This means that extra XY lines are created between copies. These lines can be read by the OPOS sensor on the roll cutter, but not by the camera on the flatbed cutter. For this reason,

these extra lines are shown in GoProduce as lines. They will not be cut because they are in a layer that has no tool assigned to it.



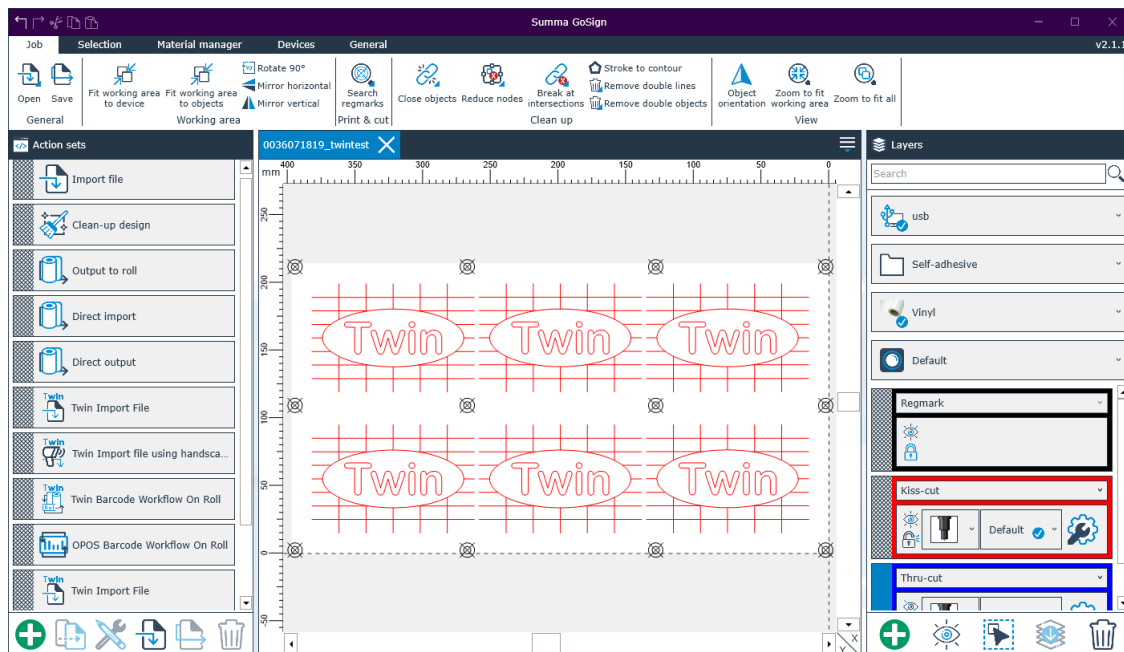
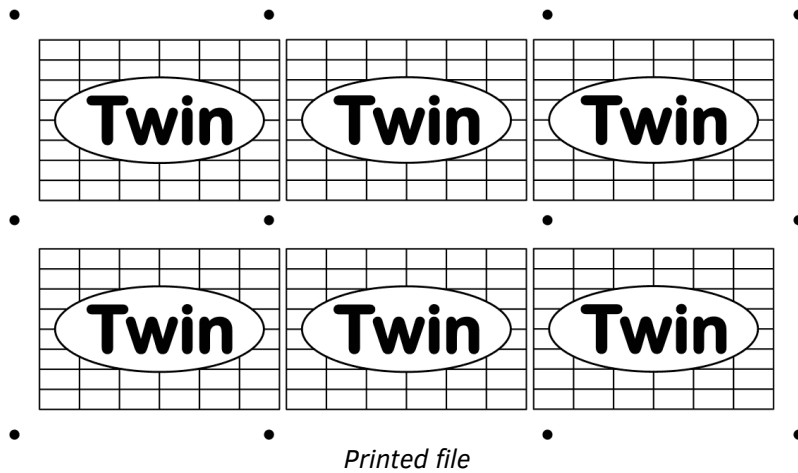
In GoSign the position is shown where the sensor will detect the edge of the printed line to compensate.

3.5.3 Twin Mode

The Twin mode is developed for roll cutters with a standard camera sensor in combination with the F Series flatbed cutters. The required files are provided by RIP's that have drivers for the F Serie cutters or GoProduce. They create SGP files (older versions might still create OXF files).

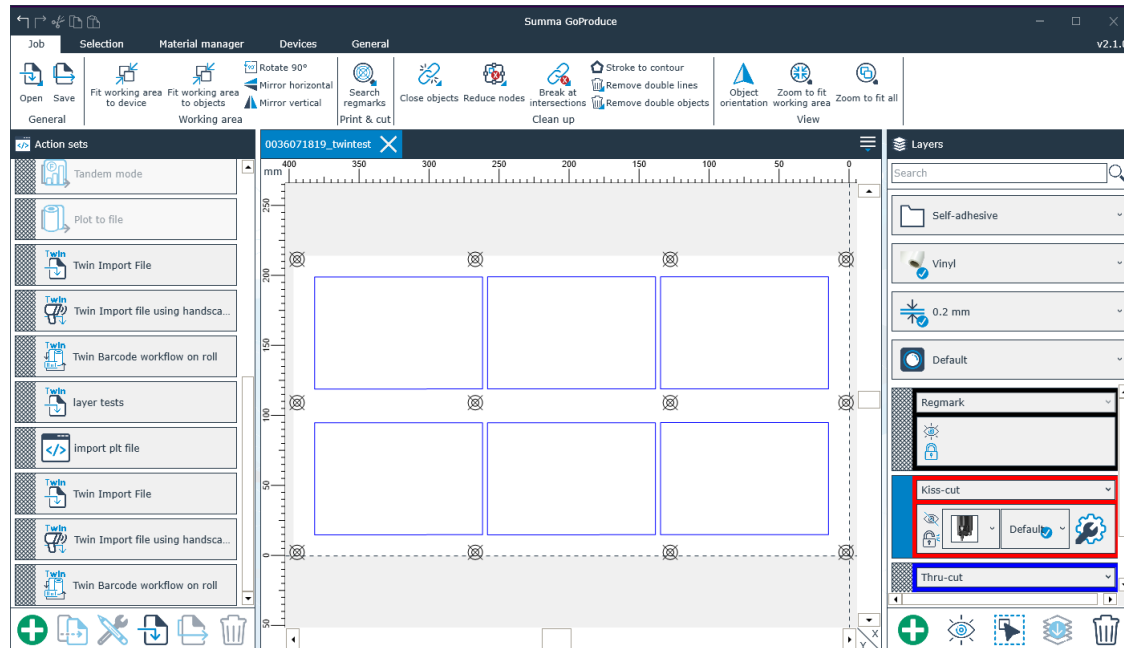
Typically, an SGP file created by a RIP that is used in Twin mode is a cut file with data for the position of the round registration marks, the Kiss-cut lines, and the Thru-cut lines. When a file like this is opened by means of an action set, the round marks are put on one layer, the lines that need to be kiss-cut are put on another layer, and the lines that need to be cut through are put on a third layer. The third layer will then be hidden so that only the kiss-cut lines will be cut when the job is sent to the OPOS CAM cutter.

If this same file is then opened in GoProduce to cut the cut-through lines on the flatbed, the layer with the kiss-cut lines will be hidden in GoProduce.



Imported SGP file for the Twin mode workflow

All registration marks are circles. Both the OPOS CAM roll cutter and the F Series flatbed table have a camera that will read all these marks to compensate for the print and cut job.



3.6 Hot folder support

The hot folder system is specifically useful when the design software is located on another computer in the network, because in this case the plug-ins cannot be used. Files stored in a folder can automatically be opened in GoProduce. Thanks to the flexible action sets, everything that happens next is completely customized to your needs.



NOTE: In the properties of the import action, the type of import needs to be set to **Hot folder** and the import directory needs to be specified. In the output action the property **Direct mode** needs to be checked.