

Borderless Printing on Tauro 2.0 or later

Borderless printing

Alternatively referred to as full-bleed printing, borderless printing is a printing technique that makes a printer print an image without any margin or other border. It allows the graphic to be printed without a white margin at the sides of the print. This can be achieved by creating a larger image file than the sheet size. This is required to overcome position deviation tolerances of the media on the printer. This implies that ink will be jetted outside the sheet dimensions.

Therefore Tauro has a borderless print option, this to load Kraft RTR media to cover and protect the printing belt. The Kraft paper is light enough and minimizes the impact on the vacuum with as result that sheets can be loaded on top of the Kraft paper and still have sufficient vacuum.

This tutorial describes how to create borderless printing jobs.

In Asanti you will need to use the bleed function to create an image overlap with the sheet.

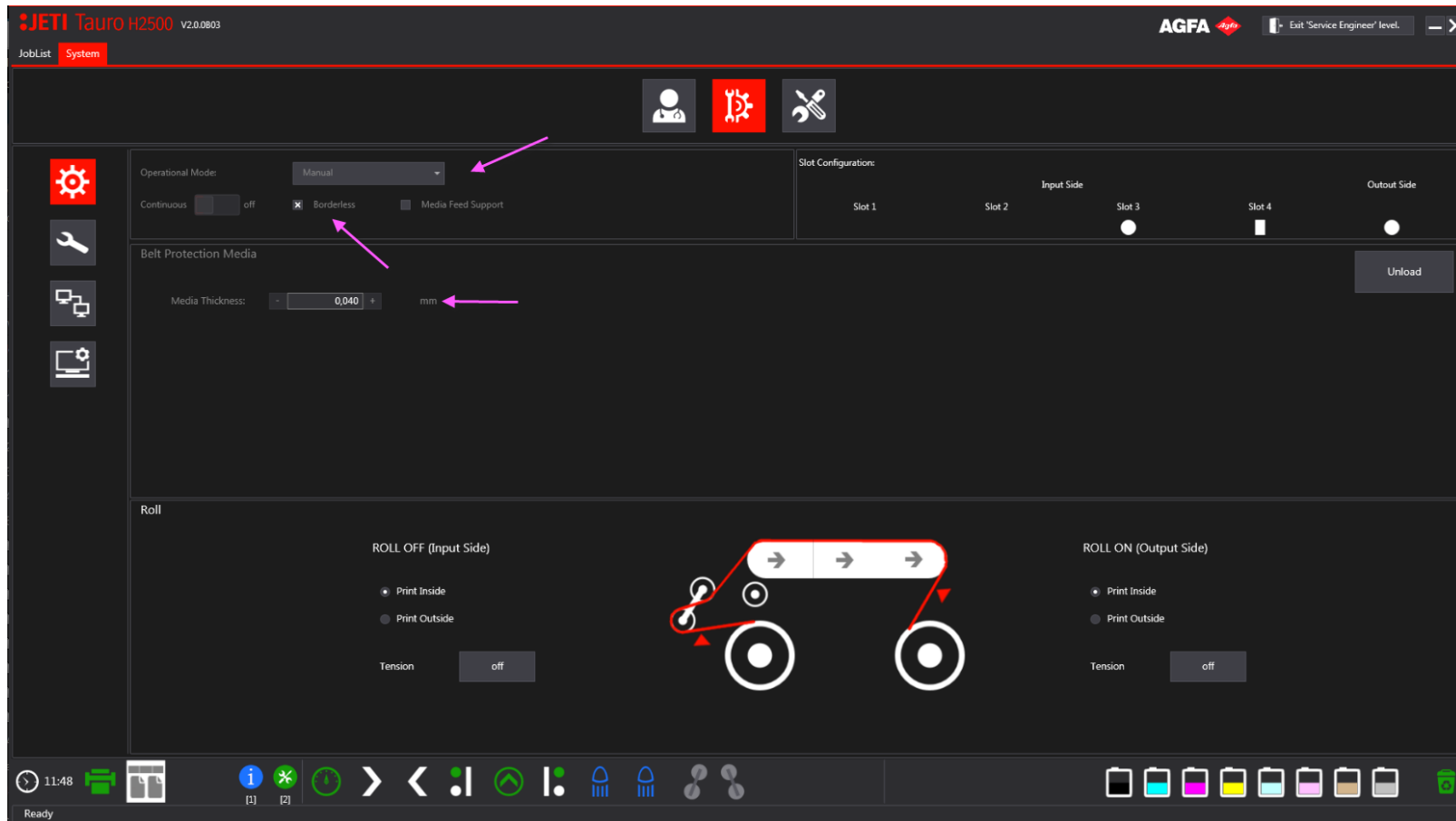
- Prepare the Tauro for borderless printing.
- 3 Different ways to create a borderless print job in Asanti.
 - Using the available bleed of the print file.
 - Creating bleed on the image.
 - Enlarging the print file.
- Consult the working with bleed tutorial for more details about bleed.
- Sample Files: Download the Asanti Sample Files via the Asanti Client (Help > Asanti Online > Download Sample Files).
- This tutorial is created for Asanti Client 1.64.0.32 (you can find your Asanti client version under Help > About Asanti).

1. Tauro –Prepare your borderless print job

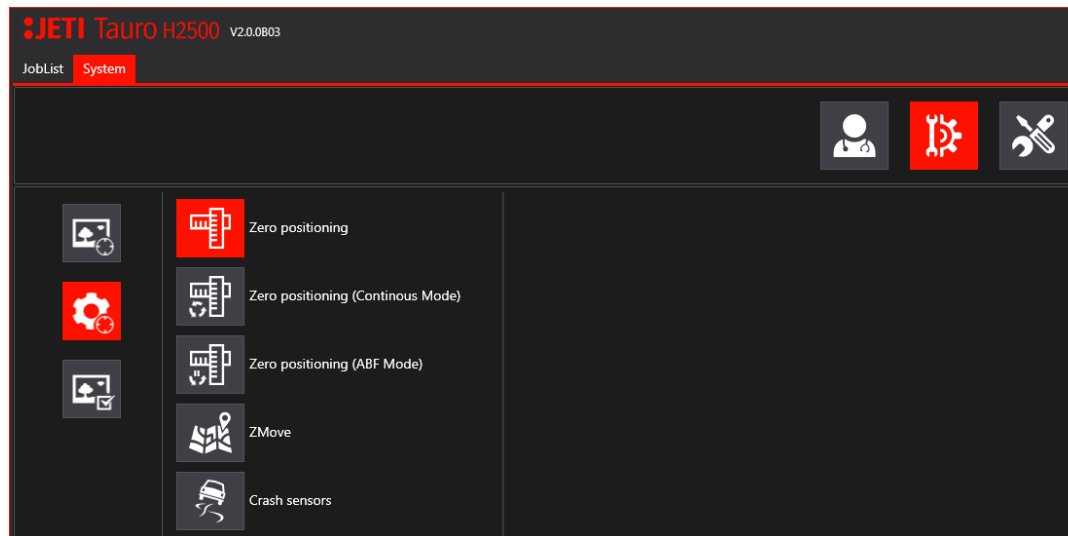
- Borderless printing on Tauro is compatible with following guidelines:
 - A bleed or overlap of **max 5mm** at each side is recommended.
 - More or less bleed is possible but the recommendations are a max of 5mm per side of the sheet.
- Tauro can start printing:
 - At **-5 mm in x direction**, thus before the 0 point on set bar.
 - At **-5 mm in y direction** thus before the set bar.
 - And the images can exceed the media width/height with 10mm, 5mm at each side in both x and y direction.

a. Prepare the printer – Media Printing Modes

- The belt of Tauro needs to be protected in the Borderless printing mode.
- The Belt protection Mode can only be enabled in Manual Operational mode.
- Borderless printing is possible in Continuous, RTR and Semi-ABF Operational Modes by printing the image overlap on the transport belt however this is not advised. Tauro allows printing the image outside the sheet range. It is the print operator's responsibility to take the corrective actions by using the correct operational mode.

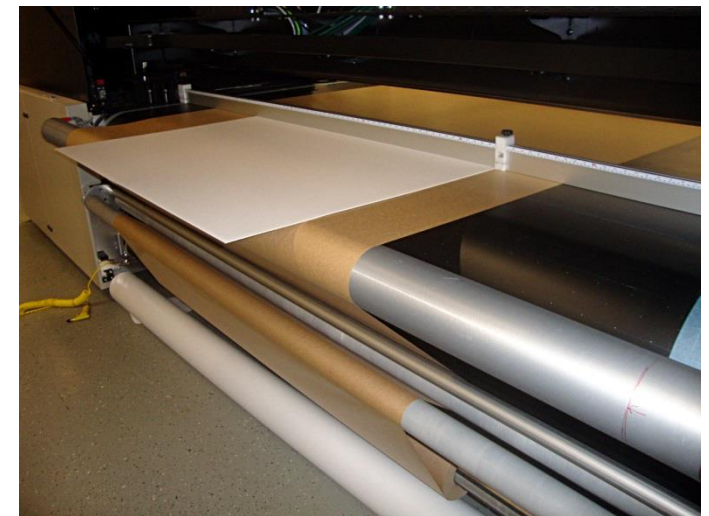


1. Load Manual in the Operational mode.
2. Activate Borderless.
3. Fill in the correct thickness of the Kraft paper.
4. Physically load the Kraft paper centered.
 - Consult the JETI Tauro Operator Manual v2.0, chapter 5.4 - How do I print in borderless sheet mode for more information.
5. Place the set bar and rollers in the correct slots.
6. Execute the "Zero Positioning" calibration.
 - This will check and correct the xy 0 position of the image for the manual media operational mode.



b. Read out the Position of the pin

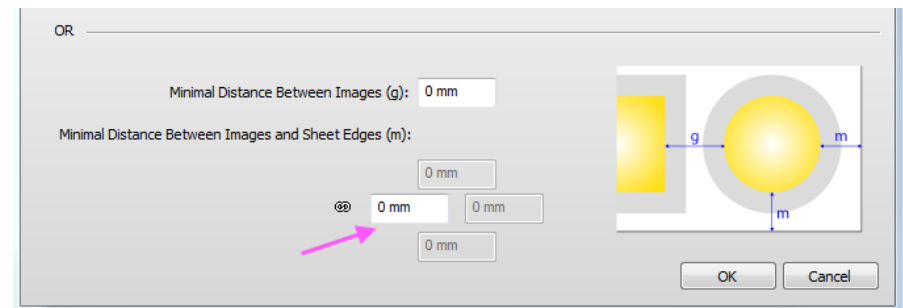
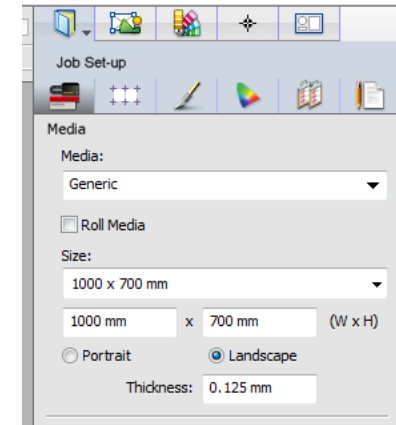
7. Position the left side of the pin minimum 6mm of the right edge of the Kraft paper.
8. Lower the set bar and read out the position on the set bar ruler of the left side of the right pin. This value will need to be used to position your sheets in the print layout inspector.



2. Asanti –Prepare your borderless print job

For these exercises we will work with

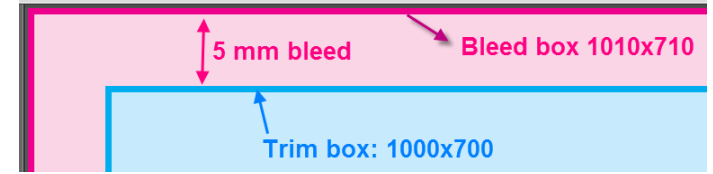
- A sheet size of 1000x700 mm.
- Use the Tauro printer device.
- Set the cutter to none.
- Finishing margins of 0.
- The image trim box (=frame) size needs to be minimum 1000x700mm or as big as the sheet size.
- The image needs to be placed centered by holding the c key when placing the image on the sheet.



All Job Set-up settings (e.g. bleed) are saved to the client preferences when submit a job. When creating another job, the same settings will be used.

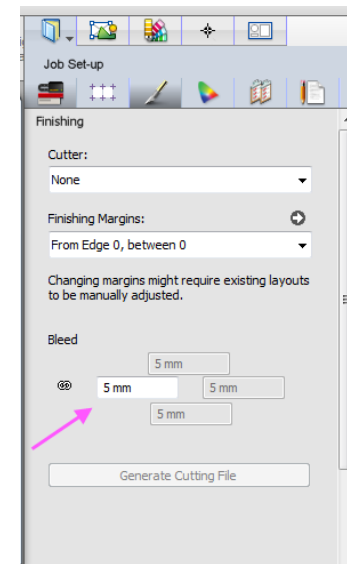
a. Prepare the job- Image has bleed

1. File>New Layout, set your job settings as defined in [Asanti – Prepare your borderless print job.](#)
2. Add the file “bleed - 5mm.pdf” to the images panel.
This file has a bleed of 5mm defined at each side.

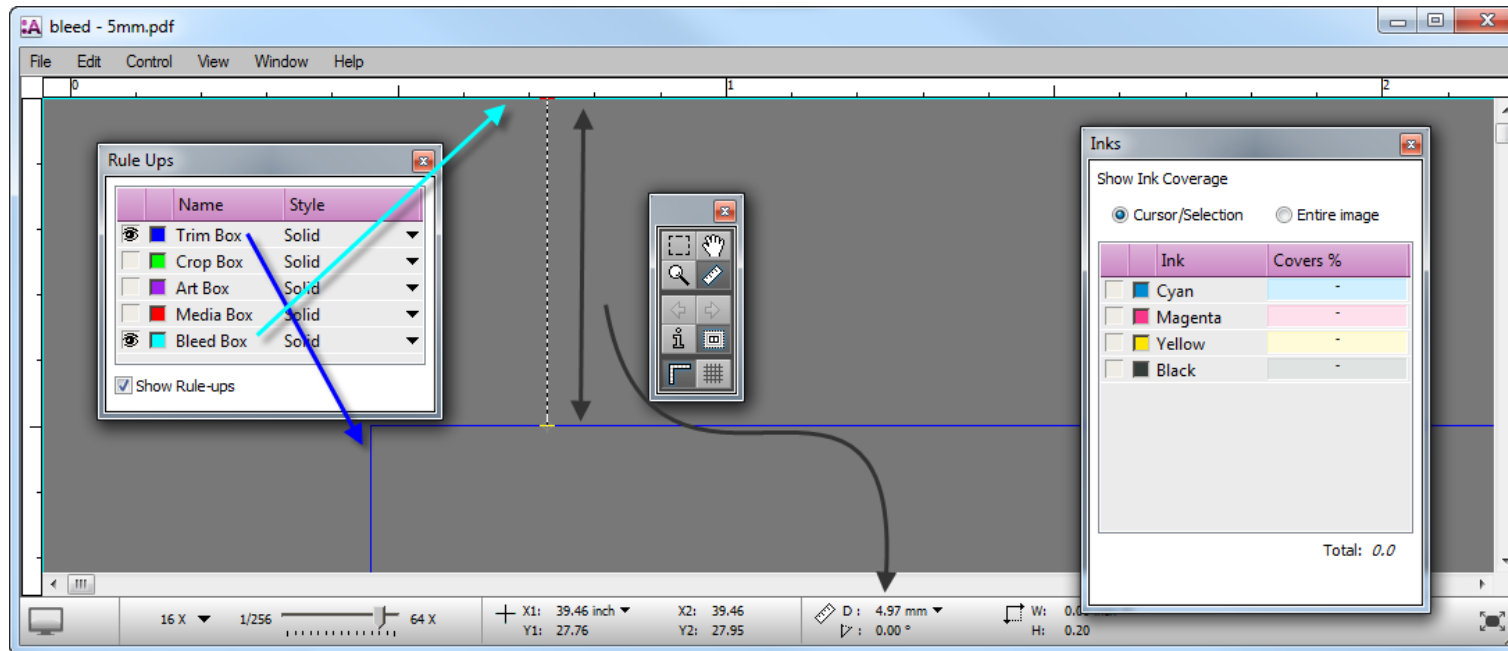
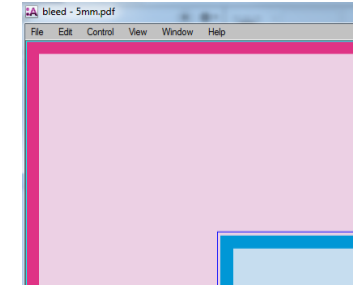


Page	Trim Box	Bleed Box	Crop Box
Page 1	1000.0 x 700.0	1010.0 x 710.0	1010.0 x 710.0

3. Go to Job Set-up> Finishing Inspector>
 - Set Bleed 5mm.





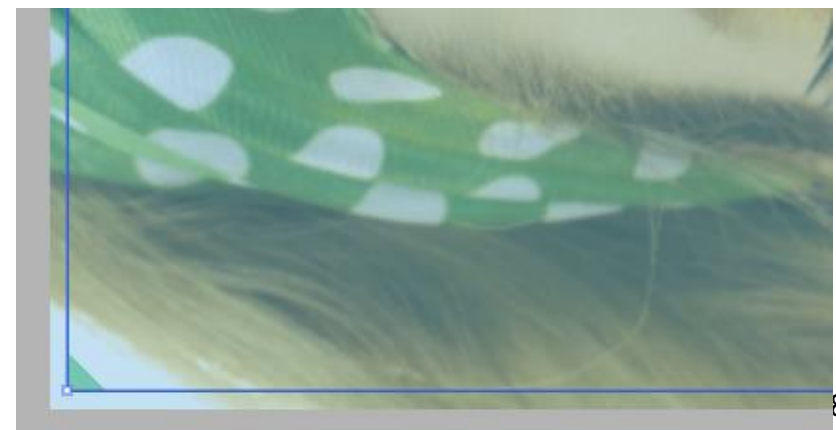
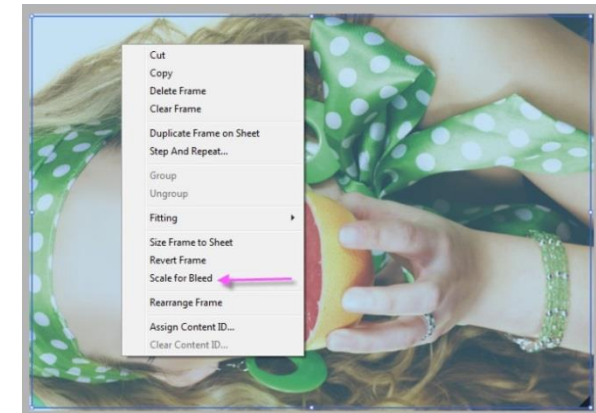
4. Double click the file in the Image Pane to open the Raster Preview. Zoom in at all the corners to visually check if the 100% Magenta box (Bleed Box) and 100% Cyan box (= Trim Box) are available.
5. The raster preview provides following tools to verify:
 - Rule ups to check the trim and bleed box.
 - Inks to disable the preview of the colors, this to view easily the boxes.
 - Measure the bleed trough the Measure tool in the Tools palette (black arrows).



- Submit your job.

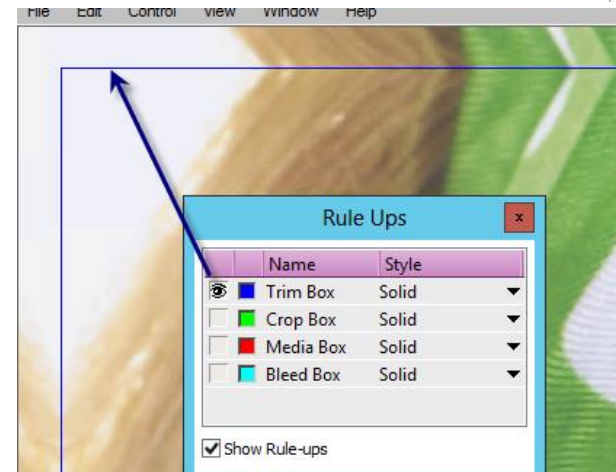
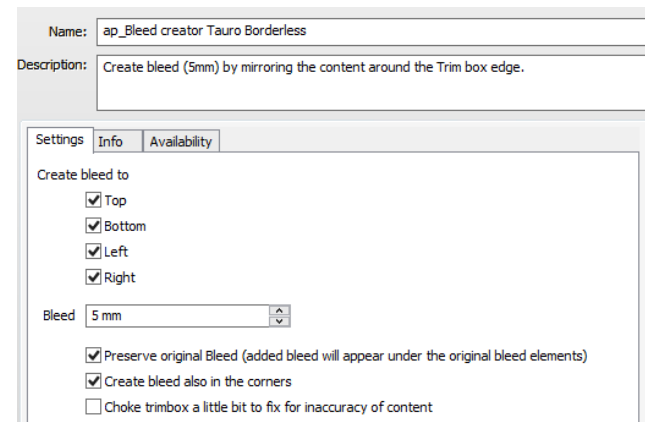
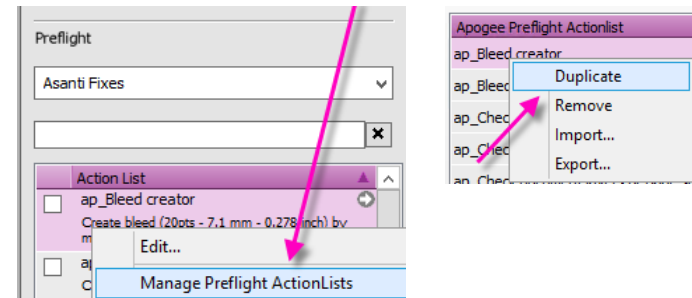
b. Prepare the job – Image has no bleed – Scale the image

1. File > New Layout job.
2. Open the Finishing Inspector to verify if your bleed is set to 5 mm.
3. Add the “Woman with grapefruit 493x740.jpg” file.
4. Rotate the image 90 degrees (select tab- key) and place the image centered (hold the c-key) on the sheet.
5. Select the image on the sheet and select size frame to sheet.
 - The bleed zone can be viewed through the view options but is empty outside the media box.
6. Context-click the image on the sheet and select “Scale for Bleed”.
7. The image has now the bleed applied.
8. The image frame size stayed the same but the image was scaled automatically to fill the 5mm bleed set in the image Inspector.
 - Use the selection  tool to check the frame size (1000*700mm).
 - Select the image icon  in the center of the image to check the image size (710*1010).
to check the image size (710*1010).
9. Submit the job and give it the name “Bleed by scaling”.



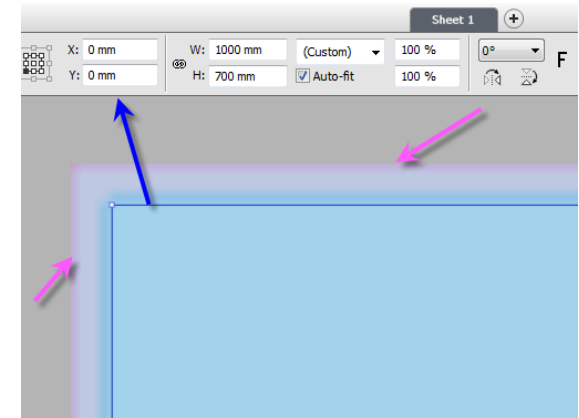
c. Prepare the job - Create an Action List to create the desired bleed for borderless printing on Tauro

1. File > New Layout job.
2. Job Set-up>Preflight Inspector.
3. Context click ap_bleed creator> Select Manage Preflight Action List.
4. Duplicate the ap_bleed creator action list via the cog wheel or by context click.
5. Change the bleed to 5 mm and rename the action list to "ap_Bleed Creator Tauro Borderless".
- The action list will create a bleed of 5mm by mirroring the image around its trim box edges.
6. In the Job Set-up>Preflight Inspector: check the check box next to the "ap_Bleed Creator Tauro Borderless" action list.
7. Add the Sample File "Woman with grapefruit 493x740.jpg" to the Image Panel.
8. Open the Preview by double clicking the image in the image panel to check the Bleed.
 - Use Rule Ups to enable the trim box and to easily view the bleed.
 - Use Tools to measure the bleed distance.
9. Close the Preview and place the image on the sheet.
 - Hold the c key to center the image.
 - Press Tab to rotate the image.
10. Context click the image on the sheet>Size Frame to Sheet. This scales the frame of the image to the sheet size.

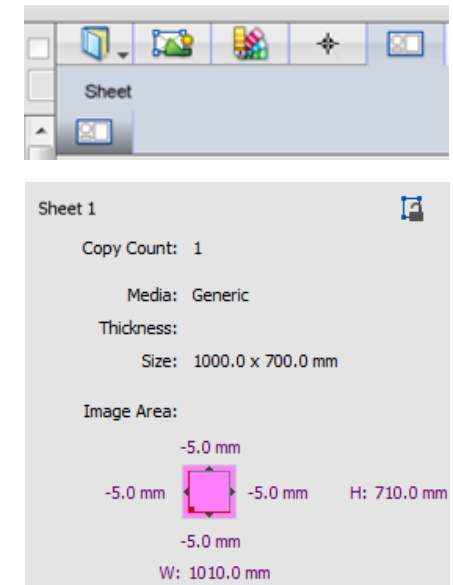


3. Asanti –Check the position of the image on the sheet

1. Edit the job “bleed-5mm”, select your image on the sheet.
 - The xy coordinates of the image frame are 0-0 mm. And are used to position the image on the sheet (blue arrows and blue box).
 - Visually you can see that the bleed box overlaps the printing sheet (magenta zone + magenta arrows).



2. Select the sheet inspector.
 - The sheet size of 1000x700 mm is shown.
 - The pink colored image area section indicates that the image is larger than or as big as the sheet size.
 - The -5.0mm values display the bleed or image overlap on the sheet.



4. Position the sheet centered in the print layouts window

1. Click the Print Layouts tab to go to the Print Layouts view.
2. The sheet (thin blue line) is automatically placed on XY 0-0 mm in the print layouts.
 - The image overlaps (pink zone) the printing area in the layouts window.
3. Adjust the (1) x position of the sheet, use here the values retrieved in step [Read out the Position of the pin.](#)

- The Print layout information.

- Is displayed in the Print layout inspector.

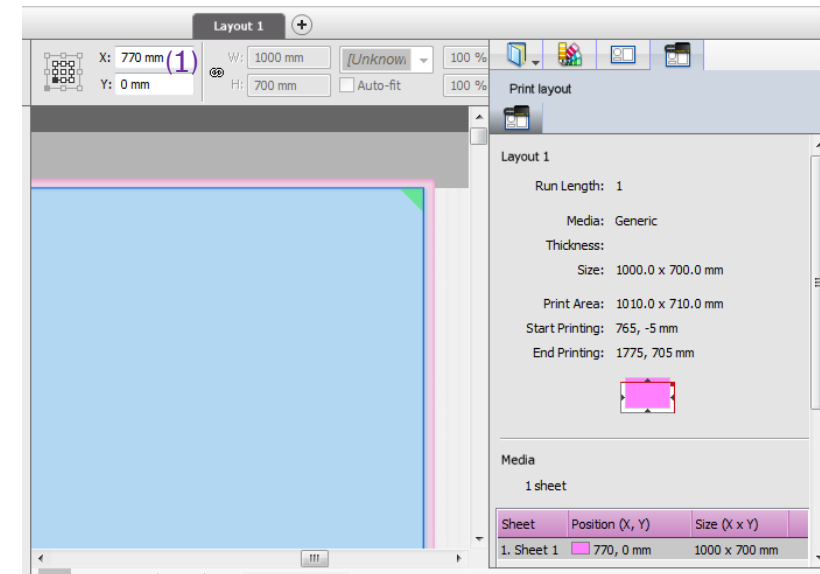
Media		
1 sheet		
Sheet	Position (X, Y)	Size (X x Y)
1. Sheet 1	770, 0 mm	1000 x 700 mm

- The position and size of the sheet is displayed and is send to Tauro.

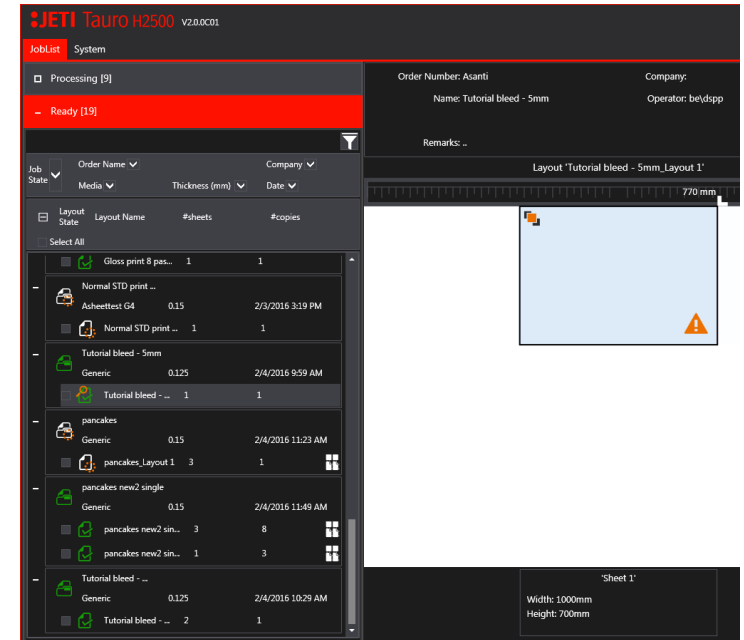
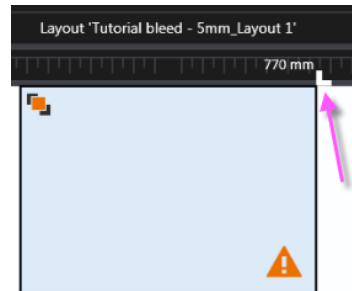
- The position and dimension of the image is displayed and sent to Tauro.

- Print Area 1010x710
- Tauro start printing at 765, -5 mm
- Tauro ends printing at 1775, 705 mm

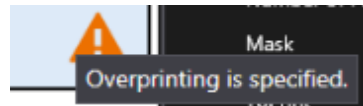
Media:	Generic
Thickness:	
Size:	1000.0 x 700.0 mm
Print Area:	1010.0 x 710.0 mm
Start Printing:	765, -5 mm
End Printing:	1775, 705 mm



4. Submit your job to tauro.
5. Go to the Tauro printer and Select your job in the Tauro job list
 - Check if the position of the pin on the tauro GUI corresponds with the position of the pin on the set bar.
 - Load your sheet and print your job



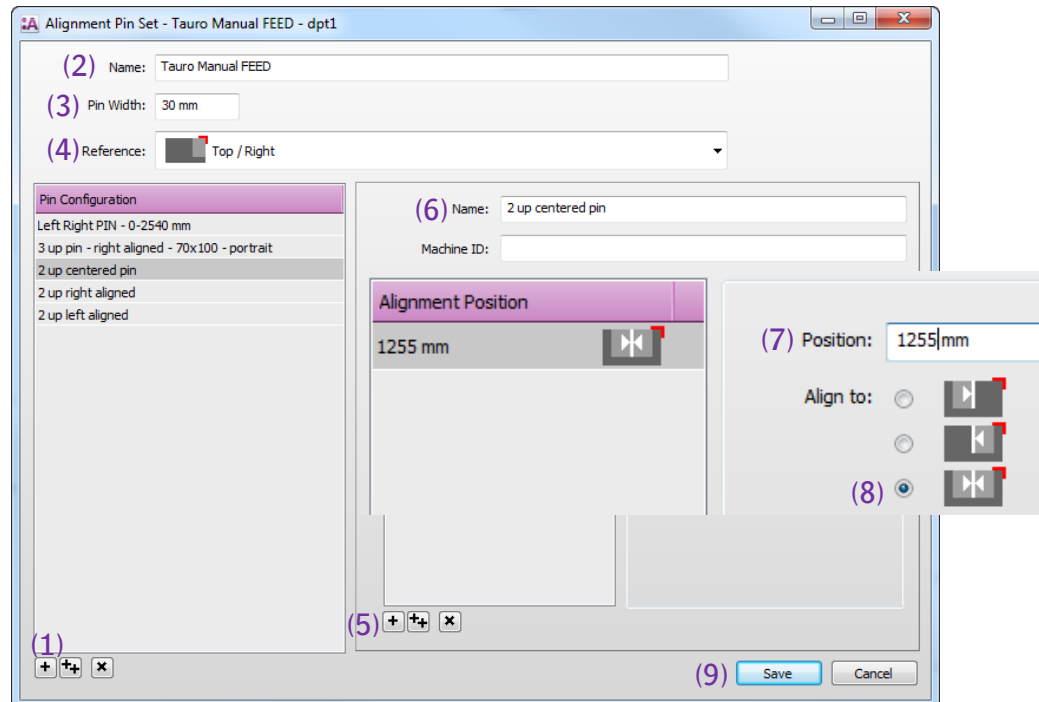
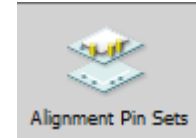
The yellow triangle informs



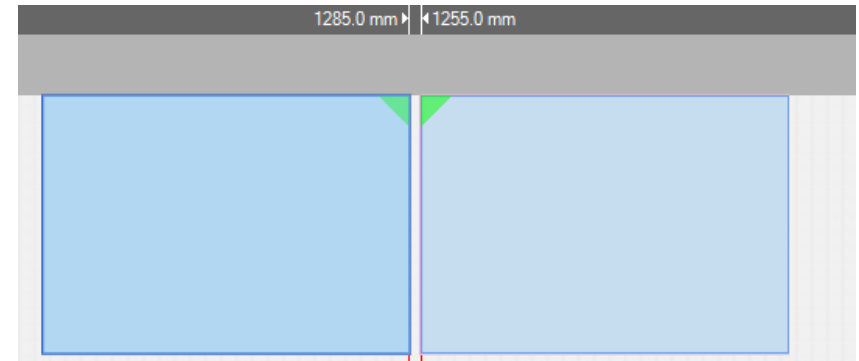
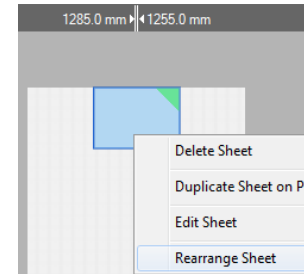
the printer operator that the image is larger than or as big as the printing sheet.

5. Position 2 sheets centered on the print layout

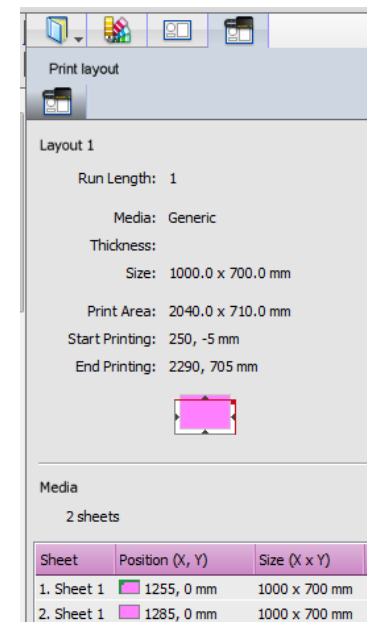
1. Go to System Overview > Tauro Printer> Resources for Tauro> Alignment Pin Sets.
2. (1) Create a new pin set (+)
 - (2) Name: Tauro Manual Feed
 - (3) Pin width 30 mm for Tauro.
 - (4) Reference is TOP RIGHT.
3. (5) Add new pin configuration (+).
 - (6) Fill in the Name: 2 up centered pin
 - (7) Fill in position 1255mm (= (maximum media width/2) - half of the pin width, thus $1255 = (2540\text{mm}/2) - 15\text{mm}$).
 - (8) Select the pin that aligns to the middle.
4. (9) Save.



5. Edit the job "bleed 5mm"
6. Select the Print Layouts to go to the Prints Layout view
7. Layout Sheets> Horizontally > Select your Pin Set> Tauro Manual Feed and pin configuration 2-up centered pin.
8. Context click and "Rearrange sheet". The placed sheet is automatically aligned to right side of the centered pin
9. Drag the same sheet from the sheets pane on the print layout. The sheet is automatically aligned to the left side of the pin.



10. Check the sheet and image information in the Print layout inspector.



11. Submit your job and give it the name "5mm Tutorial Bleed 2 up".

12. Select the job "5mm Tutorial Bleed 2 up_Layout1" in the job list of Tauro and check the position information.
13. Set the pin on the correct position on the Tauro Set bar.
14. Load 2 sheets and print this job.

