



IC SPLIT Manual

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IC-Split - Because Size Matters!

IC-Split is a cross-platform, user-centric, tool and a method of use, that expands the size constraints of popular print methods, especially as it relates to transfer printing associated commonly with garment decoration.

IC-Split is available as both Windows and Macintosh applications.

IC-Split was designed from the ground up with user ease of use as a paramount consideration. There are very few controls to allow the user to focus on that part the user can contribute the most - helping find the best starting point to split each job.

The current version supports loading most of the common image formats, with a preference for PNG files with transparency. Transparent PNG files are the most widely supported files that easily and visually insure to the user that the transparency of the background is present and properly defined. Additional formats will be added.

The main use of the application is to load a job such as a transparent PNG file, which is then displayed in the user interface. To then check the sizing of the file and make adjustments to the desired size by entering in either a new width or a new height to have the image resized proportionally. The user can also adjust the orientation, where the very likely case of a large portrait size image such as A3 or Tabloid would be rotated 90 degrees for printing on two portrait A4 or Letter size sheets. Once the size and orientation are correct the user then can drag the two bars that represent the "Split Zone". The idea is to drag those bars to the least obvious areas where a good split line can be calculated that will, fit the final print sizes, be well hidden, and be able to be easily reassembled later.

Once the split zone is defined the user presses the Split button. The application first asks the user for some parameters about the final intended use to help it further define non-printing colors and then does an exhaustive analysis of the image looking for ways to cut the image using non-printing colors - like transparency - and to try and follow natural contours in the image in such a fashion that the cut is well hidden and not easily seen after reassembling.

The program then saves the split pages into either an easily printable PDF file or as a set of PNG in case additional processing is desired.

The program works as an integral part of a system of a decorating system where the split pages are then printed to a transparent transfer sheet. One of these sheets is then applied to some surface and the additional sheets are then lined up visually through the transparent sheet.

There are many benefits to this kind of system:

Conventional screen print designs for T-Shirts are commonly 14" to 15" square. This size alone is larger than any of the conventional color laser printers. IC-Split opens the door for even the smallest format laser printers to print these common design sizes!

Many market segments cater to "Plus Size" garments where 2X, 3X, 4X and more are common. The



ability to print designs that properly “fill out” these large sizes create the opportunity for High-Value garments that can fetch a premium price.

The market for “White Toner” laser printers that can print full-color designs is growing substantially. The cost of these printers is quite high and the tabloid size printers costing in excess of double the price of the smaller letter size printers. IC-Split enables users who can not afford the expense of the large size printers to effectively print larger images than a user with the large printers who do not have IC-Split.

As the options for various new laser toner printers expand, IC-Split enables the smaller printers to meet a large enough percentage of the user print requirements to give a substantial ROI. This can substantially help a larger group of users adopt these new technologies and grow into them without such a substantial investment.

These are only the beginning of the capabilities of this application, print technologies such as dye sublimation can greatly benefit where it is very common to sublimate entire garments or large areas. This can now be done with any size printer.

IC-Split is a very productive process. The application is able to process files quickly to produce print-ready results, and production methods with multiple prints can be handled with very little additional overhead to single print production. For example, conventional two-step media requires a pre-pressing to apply an adhesive layer, two letter size sheets can be pressed at the same time as one tabloid sheet. The application time to a garment is also roughly similar due to the shortened initial assembly process followed by the standard finishing press.

IC-Split WORKS!!! A tremendous amount of research and testing has proven the concept that using the method implemented in this application will produce results for a very high percentage of designs that are virtually imperceptible by even those who know that a seam exists.

It is getting even better! The proven and Patent Pending technology employed in IC-Split is constantly being fine-tuned and improved to make it work in more and more circumstances.



IC-Split Manual

Summary of Use:

Start the application and drag and drop on the window to load a transparent PNG file of a type of design to be used with any transparent transfer media. Designs with lots of detail are preferred over designs with large solid colors.

Check the image size parameters and adjust to the desired size for final printing as a composite image. Determine the size of the transparent print sheets you wish to print the two or more pieces onto. Then adjust the orientation of the image for the best possible fit for the print sheet sizes.

Slide the small bars to create a zone for splitting the image. Keep in mind several important factors; 1. The displayed cut page sizes should be small enough to print on your final sheet size taking into account any margins required. 2. The position of the cut zone should be placed in an area where the cut line will be the least noticeable. 3. The width of the cut zone needs to be wide enough so the application can completely follow the natural contours in the image for best results.

Press the split button, if you are using Rip software for printing that has a Rasterization or Masking feature then select the button for Dark or Light depending on your garment color. If you are not using any rasterization or masking then select the third button.

Next preview the result. If the result looks like it could be improved with different settings then press the Revert button and try again. When you are happy, press the Save As button and save the results, either as a two page PDF or as two PNG files. (Note saving PNG files enables you to reopen these PNGs and cut again if desired.)

Open the saved print files in your RIP or print driver and use the Rasterization/masking option as specified above and print your sheets to a transparent transfer media.

Apply the first sheet as directed for the media but typically using less pressure to keep the transferred pigments sitting high on the substrate.

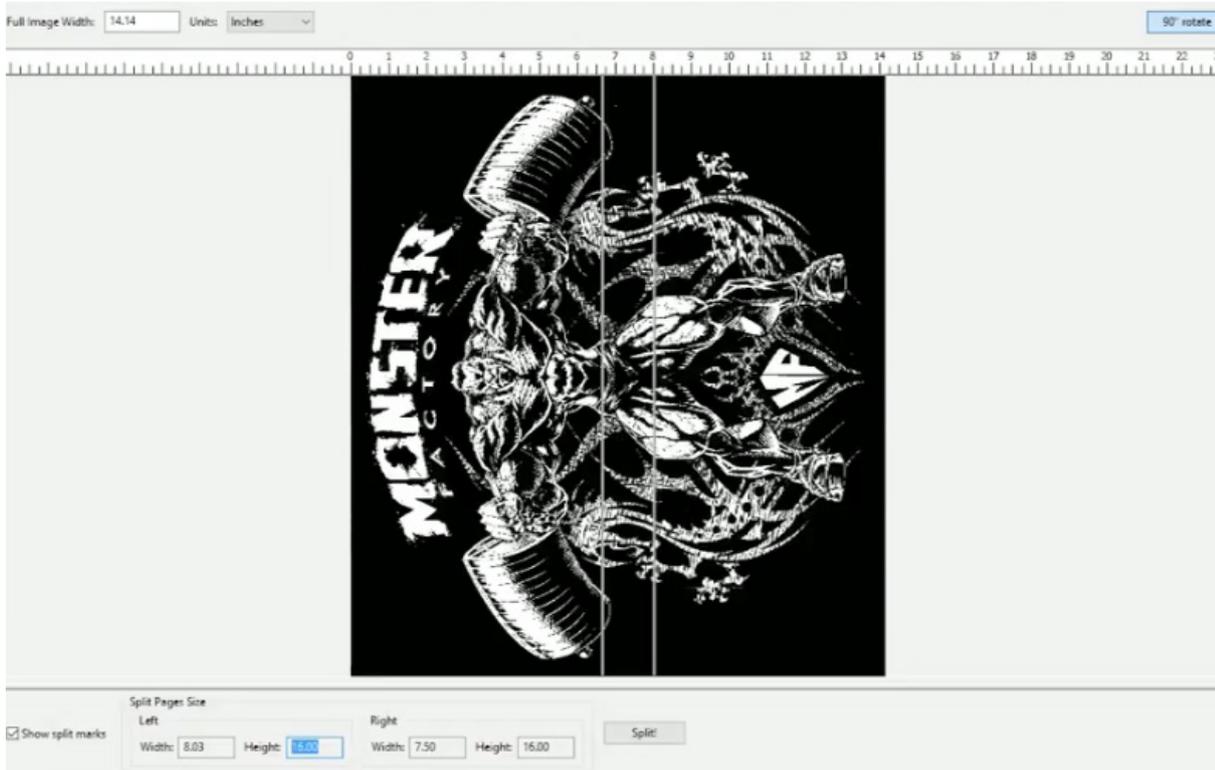
Position the next sheet using the transparent aspect of the media to ensure it is properly aligned, taking great care to check the alignment several times before applying. Position a pressing sheet next to the edge of the transfer sheet to help support the sheet edge from marking up the previously applied image and then cover both with another pressing sheet. Again apply using a lower pressure and very carefully remove.

Apply one final pressing sheet with the full designated pressure to meld the two images into one seamless result. We recommend using a large size pressing sheet that covers the entire area of your design to avoid any edge marks. Marvel at the beautiful results and the amazing ability to achieve such large designs using your equipment!.



Example Workflow Description:

Open image and setup size and orientation as needed and move sliders to appropriate location for best results.





Run the Split function to divide the image into two parts



Load the resulting split file(s) into your favorite rip or print software.



Print the Split Pages onto transparent sheets for final transfer.



Prepare the transfer sheets for the application. It is recommended to use both sheets to ensure proper placement and alignment.



Apply the first sheet of the design.

When applying to garments it is recommended to use a lower than normal pressure for the shortest possible time so that the transfer is not pressed deeply into the garment at this stage. Peel away carefully to not damage.



Visually align the second sheet.

This can be done either on a table and use heat tape to hold in place or position it right on the heat press. Positioning on the heat press can use the ambient heat to help hold the transfer in place. After positioning the second sheet it is recommended to lay a piece of parchment next to the transfer sheet edge to help keep the edge from marking the previous design and then cover both with another sheet of parchment. Again press using low pressure for minimal time (15-20 secs for example) to keep the sheet from pressing hard into the garment.





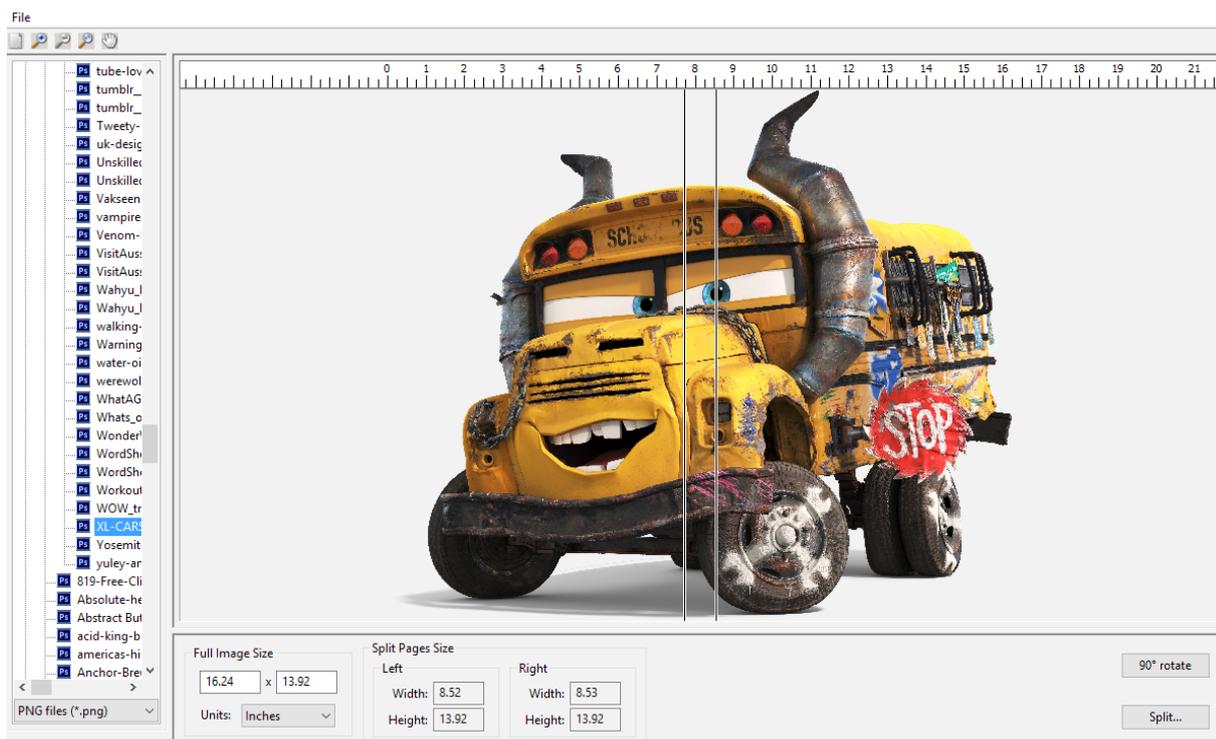
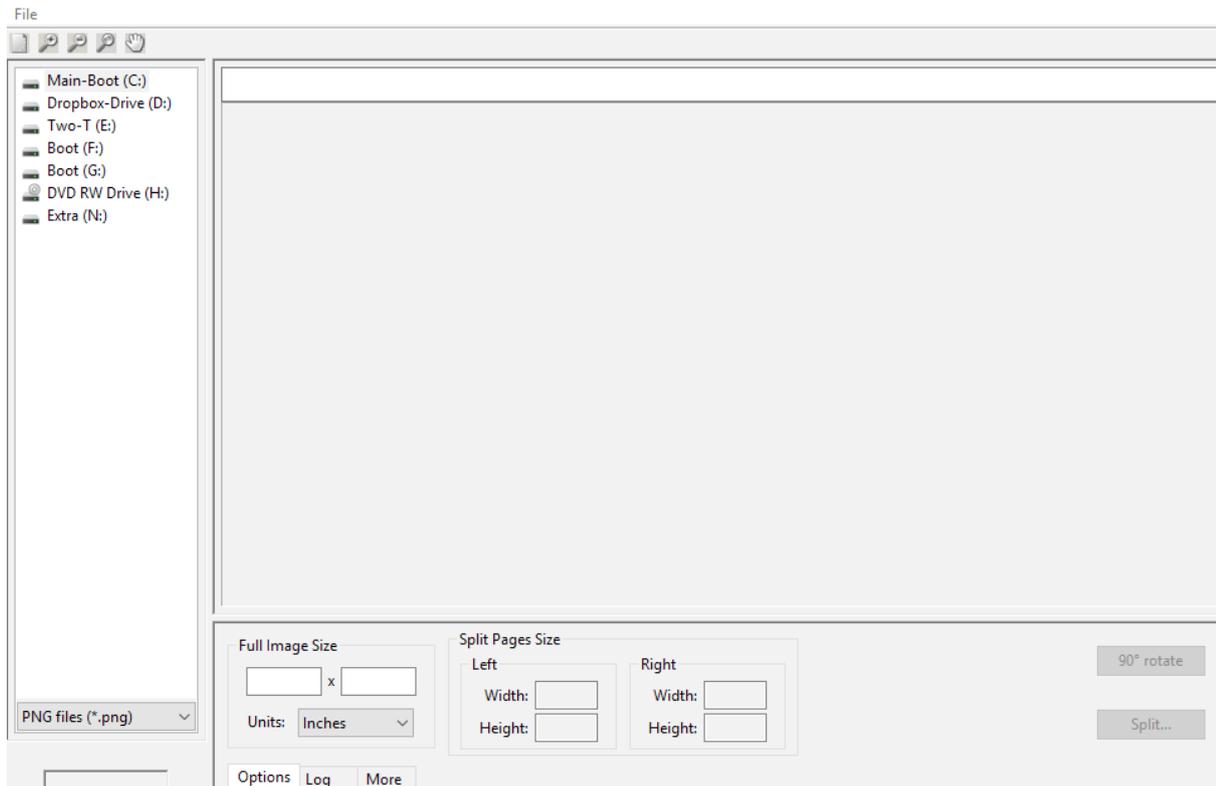
Cool and carefully peel. Then repress the final design with a parchment sheet at the highest recommended pressure for the full recommended time to blend both sides together.





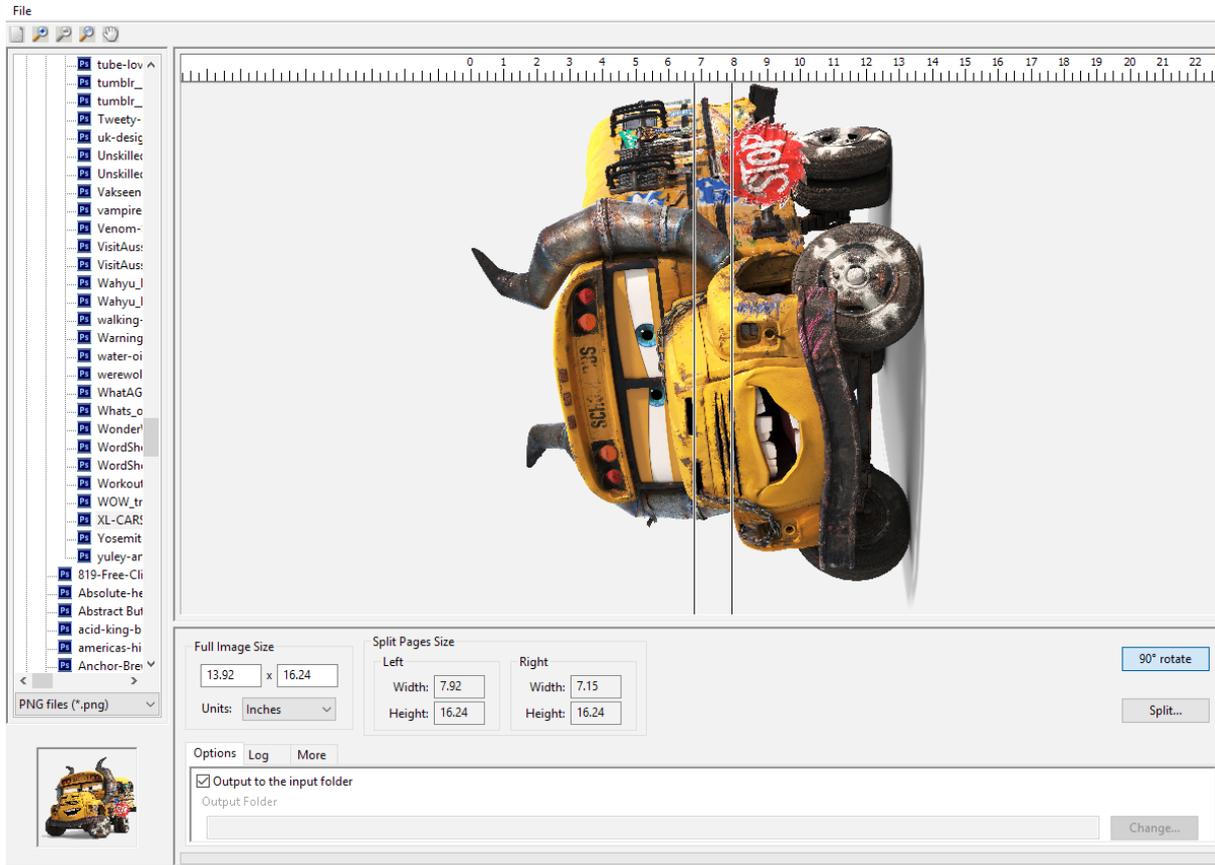
Application Usage

Main Startup window - Drag and Drop Images or use Folder navigator panel with lower preview

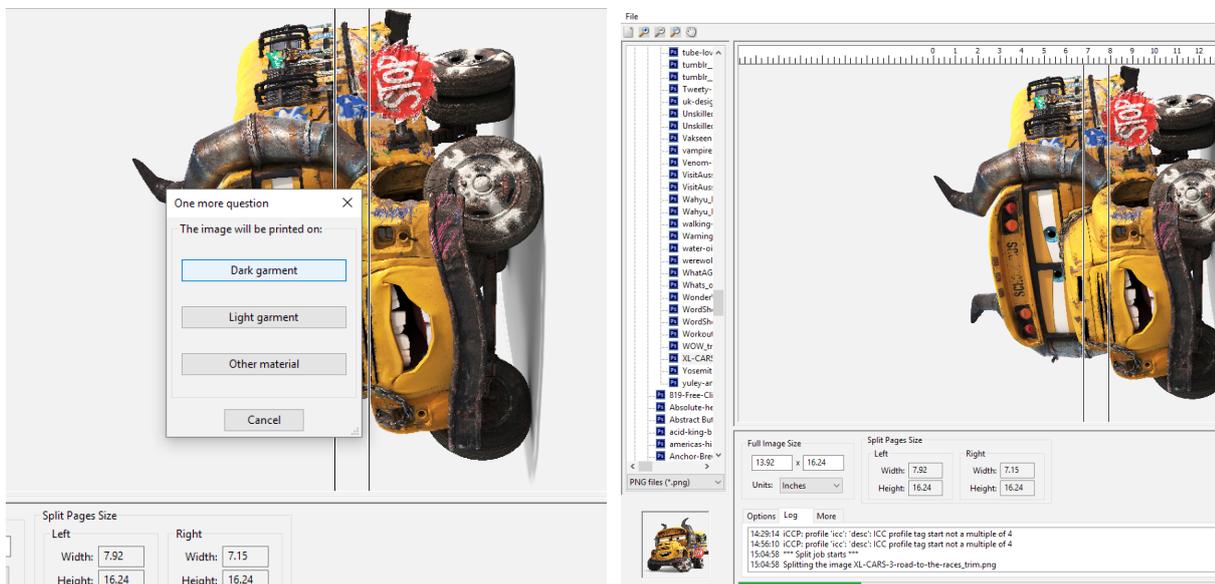




Use the rotate button to change orientation and Click the Image size fields to change the print size of the image. Then drag the split bars to select the best zone for splitting.

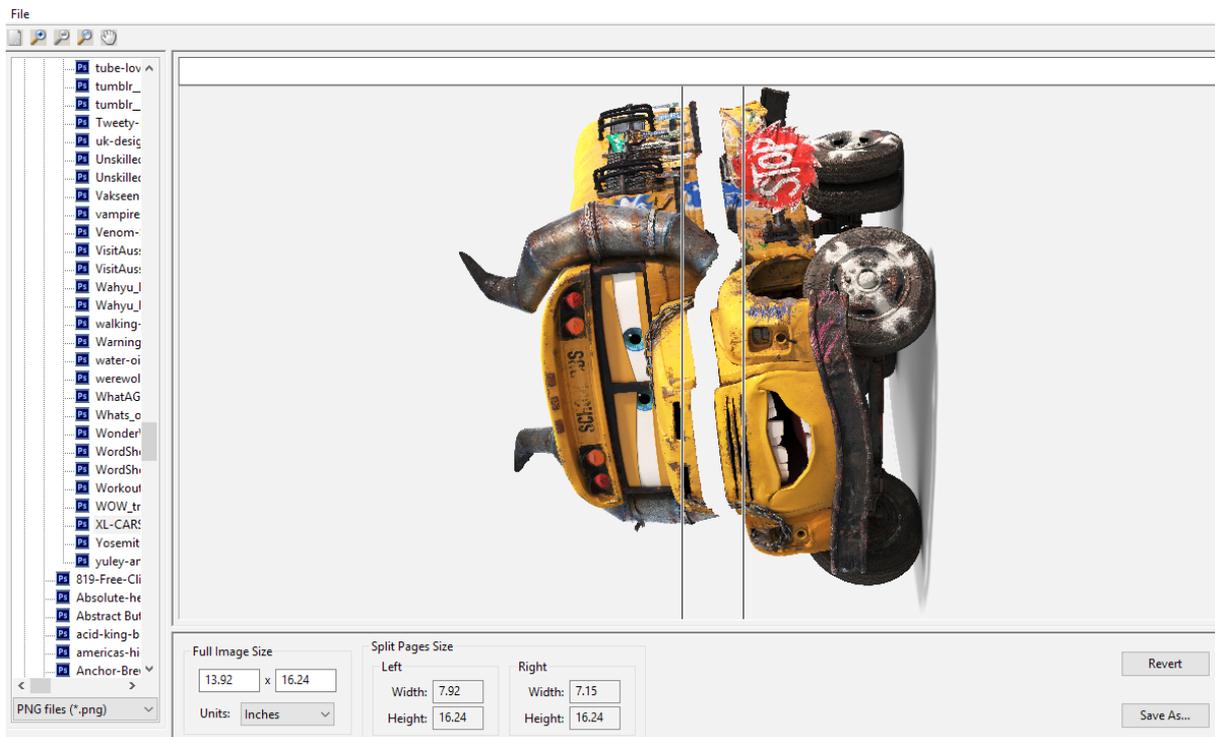


Press the Split button to start the split processing. You will see a dialog asking how the split file will be used . The split function always splits through the transparent areas as the highest priority. The Dark Garment option causes the split function to treat Black as a transparent color, the Light Garment option treats White as a transparent color. Other Material causes it to follow edges without regard to color.

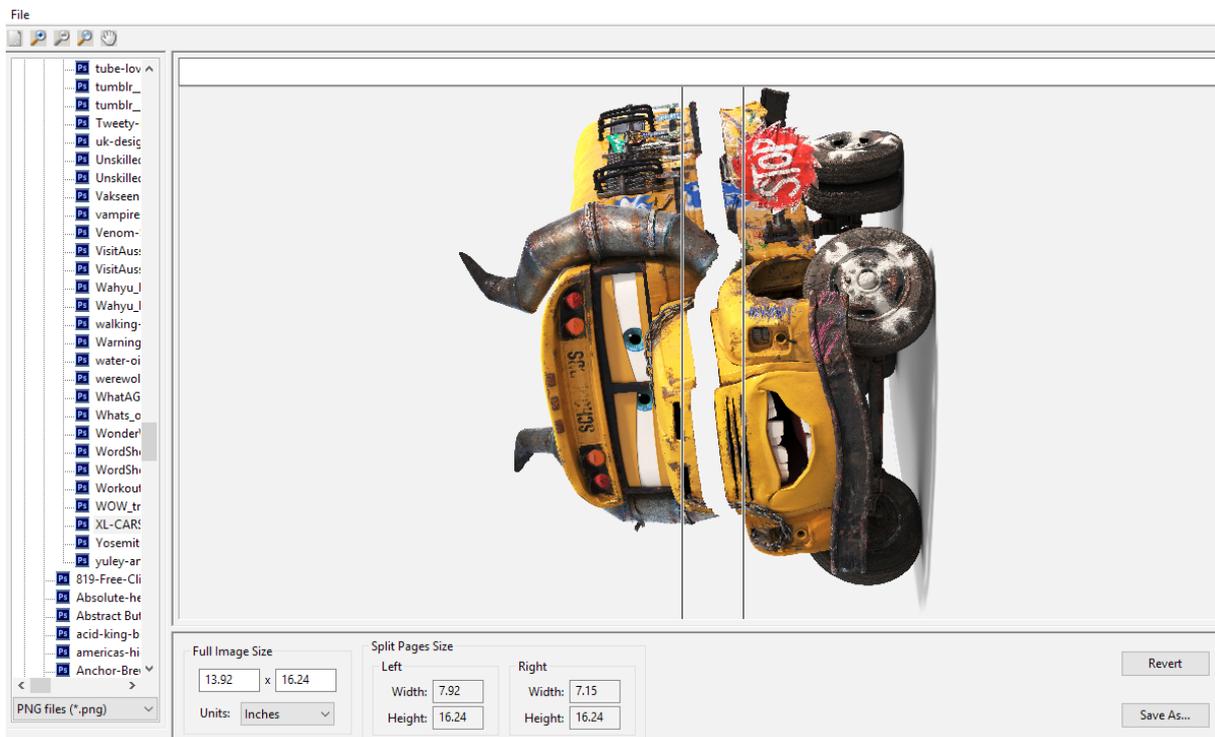


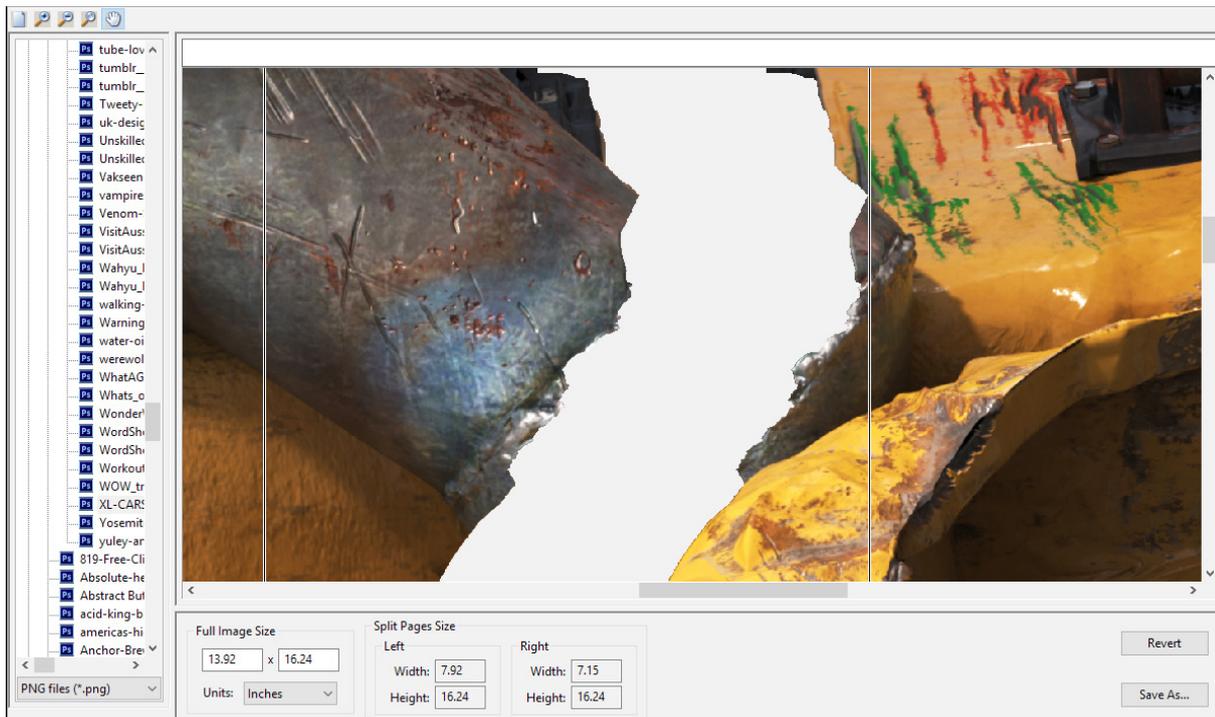


After the Split function it will display a preview of the two split images.

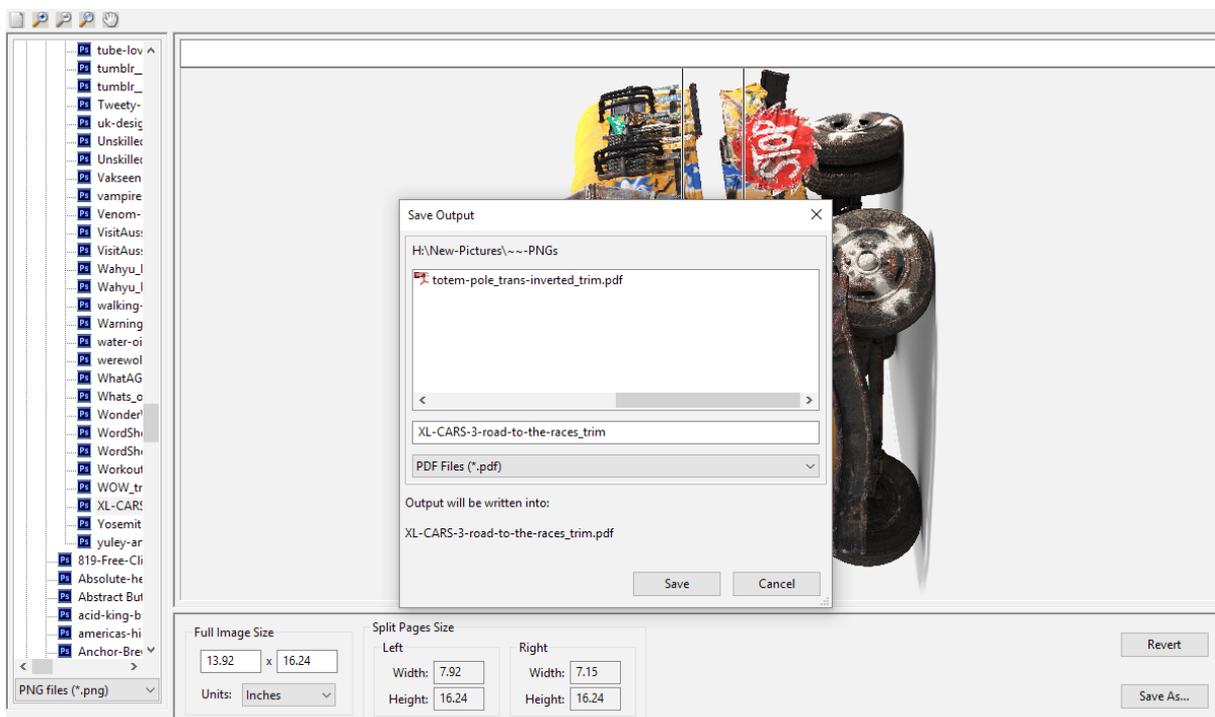


Use the five preview tools in the top left corner to zoom in and out, display full page, to zoom a selection area and to pan the image. In addition, the scroll bars can also be used to scroll the image.





The Revert button can be used to undo the split for changes in split zone position and the Save As is used to Save the Split results. The default save format is two page PDF file, this can be changed to save two PNG files. Saving PNG files can be useful if you wish to split a job again into even more pieces. Once saved the file Navigator will update to show the saved PNG files for reloading.



This shows a preview of the Saved two page PDF in Adobe Acrobat (not included) using the two page display option.