Importing an image set using RTI Card Importer
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In order to process the images captured using the dome into a final product the images have to be sorted into specific folders. One folder set per capture sequence. The required hierarchy is shown in Figure 1. The file names of the images also have to match those in the calibration file. The `original-captures folder` contains the images as captured by the camera, `jpeg-exports` any processing required can be applied to these images and the updated files stored in this folder. `assembly-files` is used to store the intermediate files required for processing the images. The final output image will be saved in `finished-files`.
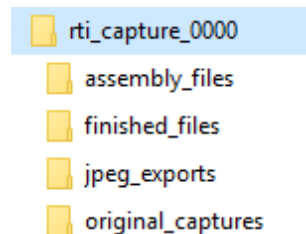

Figure 1: Arrangement of struts following assembly of the first ring

In order to simplify this process a graphical importer is provided, the user interface for this is shown in Figure 2. This handles creating the folder structure, renam- ing files, and splitting the individual captures into separate hierarchies. As currently captures have to be performed in jpeg format this program copies the images to both `original-captures` and `jpeg-exports`.
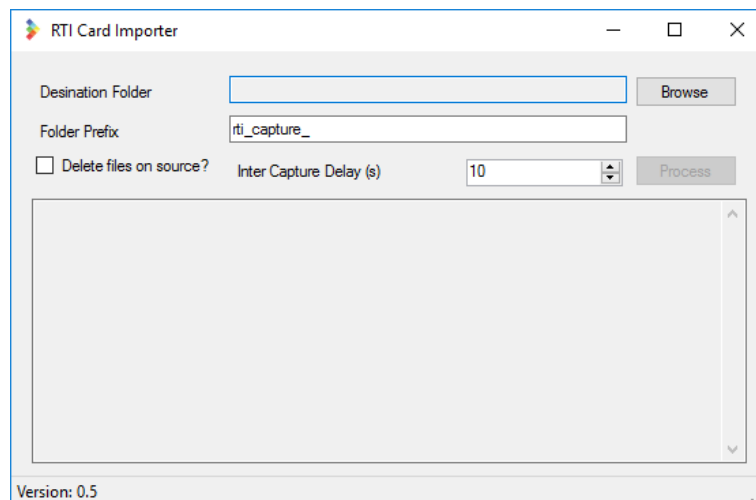

Figure 2: Card Importer GUI

The 'Destination Folder' is the location you want the folder hierarchies to be created in. This can be chosen using the 'Browse" button. In order to generate a unique name for each capture sequence the program uses a prefix and then appends a 4 digit number to the end. The prefix can be changed using the GUI. If it does not end in an underscore then this will be automatically added before the number. The program scans through the destination folder for any folders adhering to the naming convention and will start numbering above that.

By default the importer will leave the files in the source folder, however, this behaviour can be changed by ticking the 'Delete files on source?' button. This will delete any file that has been successfully copied into a folder hierarchy.

In order to split the images into separate hierarchies the program looks at the number of seconds between images. If a image is taken more than this number of seconds after the previous image then it is treated as the start of a new image capture sequence. This currently defaults to 10 seconds, but can be adjusted. One reason for adjusting would be to allow the program to import highlight based capture sequences which might have a significantly longer period between images.

To start importing images click Process button to choose the folder containing the images to process. All images in the folder will be copied into the destination folder.