## Shingling the page images for creep compensation

Creep in a book can cause content to be trimmed due to pages pushing out when the sections are folded. You compensate for creep by progressively shingling the page image areas towards the binding to decrease the page gutter or margin width, without affecting content. If you must maintain the gutter and margin widths, you can choose to progressively scale the images instead of shifting them.



The amount of creep in a book is affected by the number of folds and by paper thickness, and the affected pages depends on the binding style:

- In saddle-stitched books, the increased thickness at the fold can cause the inside section to push out.
- In perfect-bound books, creep is limited to the inner pages in each individual section.

**Note**: References to Automatic Shingling in the Stock resources pane do not mean that shingling will be automatically applied to every job that uses that stock. Shingling or bottling will be automatically applied only if the Job has Auto Shingling enabled.

## **Bottling**

To additionally compensate for page skew that might be due to the number of pages, the thickness of the paper, or the folding equipment, you can apply **Page Rotation (Bottling)** in the template page properties. You can also override a product's shingling settings for specific template pages.

- 1. Configure the related settings on the **Output** tab in the Preferences dialog box as needed:
  - Scale shingled pages
    - Choose a default scaling type: **Proportionally** (retains the vertical and horizontal aspect ratio) or **Anamorphically** (**Horizontally**) (changes the vertical and horizontal ratios)
  - **Shingle crop marks**: Shifts the crop marks along with pages that are shingled for creep
  - Remove crop marks when exceeding the center of gutters
- 2. Determine the amount of shingling to apply, using either the approximate formula or exact method.

**Tip**: The value of stock thickness is measured in microns. Use a micrometer or obtain the thickness from the paper supplier.

	(number of sheets/4) x stock thickness The value that you use for the
formula	number of sheets depends on the binding type. If perfect bound, it is the
	pages per section. If saddle-stitched, it is pages per product or part.

Exact
method

- a. Using the same kind of paper and the same folding equipment that you plan to use for the job, make a folding dummy.
- b. Use a precise instrument to measure the amount of creep.
- c. Measure the difference between the outer edge (face) of the outermost page and the outer edge of the innermost page. This is the total creep compensation amount that is needed, which you can apply to either the innermost or outermost pages or divide between the inner and outer pages.
- To apply your calculations, select Job > Layout Details.
  Note: You can also set or adjust the shingling values in the Part Properties pane. This will allow you to set different shingling values for each part of a product.
- 4. In the **Shingling (Creep)** area, select the product that requires adjustment.
- 5. Optional: Select the **Scale** check box to preserve the margins and progressively scale the images.
- 6. To determine the direction of shingling, from the **For all impositions select** list, select either **Left Bound** or **Right Bound**.
- 7. In the **Inner** and **Outer** boxes, specify the distance and direction to move the innermost and outermost page edges.
  - If **Scaling** is not selected, positive values move the image area toward the binding edge of the page, and negative values move the image area away from the binding edge.
  - If **Scaling** is selected, positive values reduce the image area, and negative values increase the image area, based on the Preferences settings.
  - For a perfect-bound or come-and-go product or part, the **Inner** amount shifts or scales the innermost pages of each section. The specified amounts are applied to the largest sections, and shingling on any smaller sections is scaled back so that all sections match each other after binding
  - For a saddle-stitched product or part, the **Inner** amount shifts or scales the innermost pages.
- 8. To override the shingling for specific pages, edit the template page properties. For example, to prevent image distortion in crossover text or images that spread across adjacent pages, you can apply zero shingling and zero-bleed margins.