TITLE: **EDGE foil wrinkling can be caused by uneven foil use across the roll**

Gerber FastFact #:   4251

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Summary: The following document offers suggestions for keeping foil from wrinkling in your GERBER EDGE® and GERBER EDGE 2.

If a job contains a shape which uses only part of the foil, the diameter of the takeup or used foil roll changes. This is usually apparent only on a long production run of a repeated job. The following repeat job is used to illustrate the principle. (Since it is only four repeats, the diameter change probably would not be enough to cause wrinkling.)
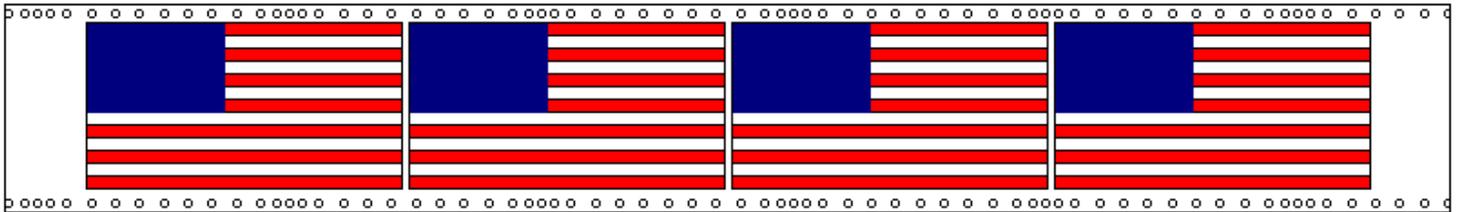

In this example, the blue portion of the flag uses about half the width of the foil. As the design is repeatedly printed, the diameter of the left side (top of the foil cartridge) of the used roll will be less than the right or bottom side because the resin is removed from the carrier. The following drawing shows this (the diameter difference is exaggerated to illustrate the concept):
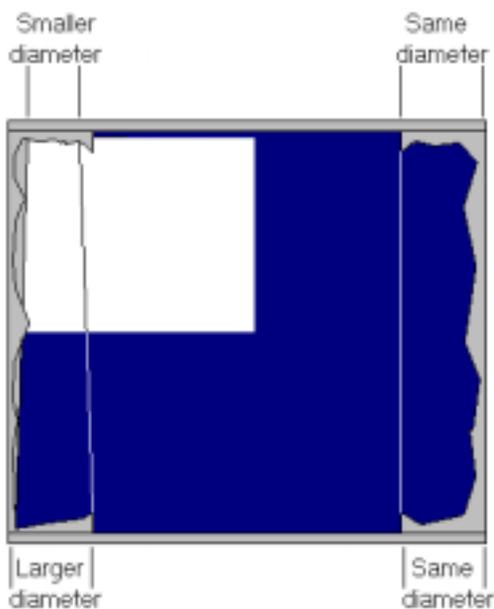
The diameter difference, combined with the fact that the diameter of the unused roll remains constant, can cause wrinkling because the pull on the foil is uneven.

1. The solution is to design the job so that foil is used evenly across the width as shown in the following example:
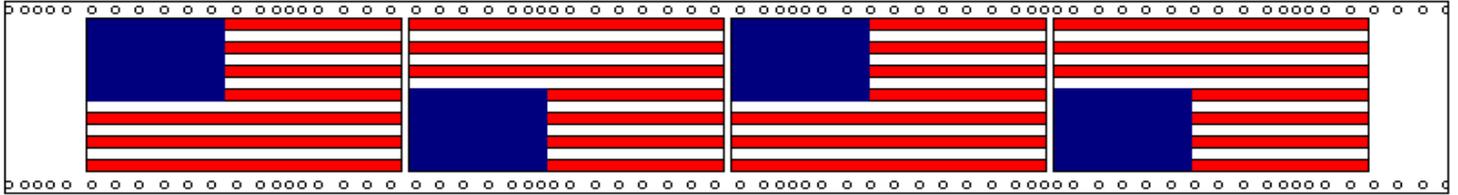

You must change the design in Composer before sending the job to the printer.

1. Make the design.
2. Make a copy of the design.
3. Flip or rotate the copy of the design so that foil use is nearly equal across the foil. In the example, the copy of the first flag is vertically flipped, then placed next to the first flag.
4. Save both the design and the copy as one PLT file.
4. Output the job to the Plot program.
5. Make the repeats in the Plot program.
6. Send the job to the printer.

Here's another tip for reducing wrinkling. If a job only uses part of the vinyl which would result in using only part of the foil turn on the Center on Vinyl check box in the Layout dialog box in the Plot program. This will move the job to the center of the vinyl and may reduce the tendency to create wrinkles due to uneven foil use.

2. Spreading out data repeat

   Ex: If a single shape is being repeated numerous times, place the repeats in different positions across the foil.

3. Printing extra shapes on the non-printed part of the foil web.

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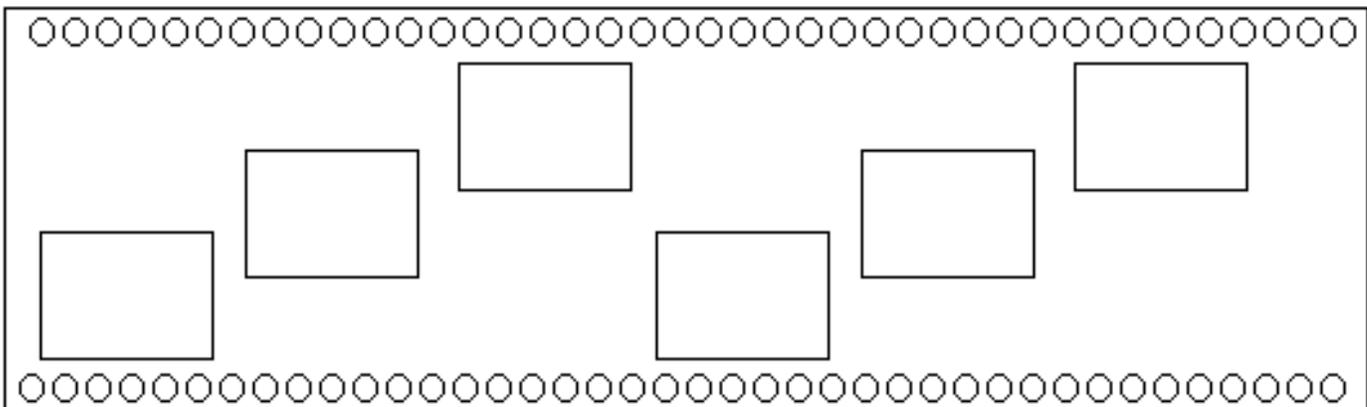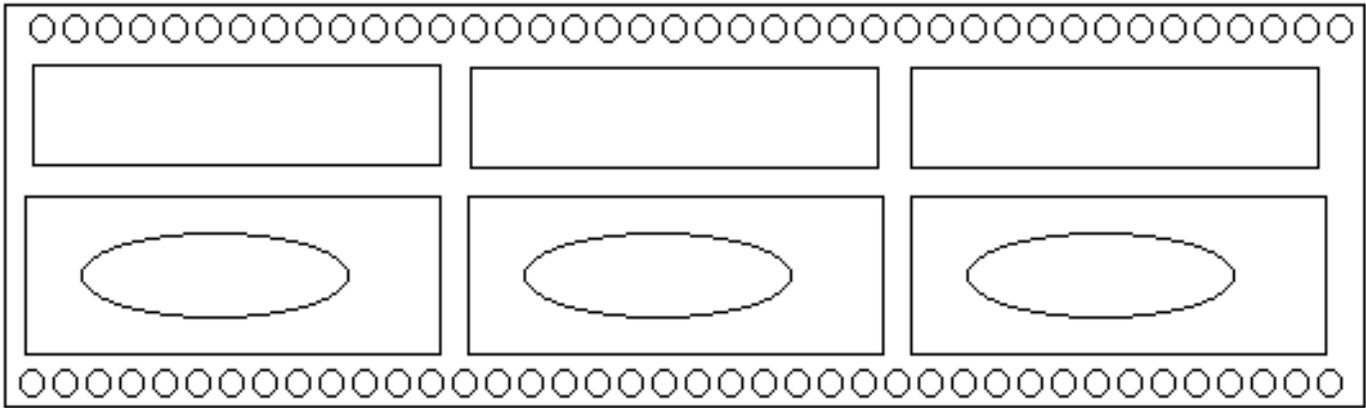
Ex: On some jobs it is not feasible, to rotate or spread out the data repeats. Printing extra shapes on the non-printed part of the foil web equalizes the take-up roll diameter and eliminates the wrinkles.