

Shrink sleeve label design: Considerations for reducing shrink distortion



Shrink sleeves —if designed, printed and shrunk correctly — have countless benefits essential to any rebrand: Product differentiation, 360-degree branding, improved appearance retention and maximum shelf impact. Sleeves also add value to a product's total packaging system by providing added strength (and [allowing for the use of lightweight product containers](#)) and enabling easy incorporation of tamper-evident elements.

Shrink sleeves are a great branding opportunity, which explains [the staggering growth of the segment](#) in recent years. But companies switching their product labels to shrink sleeves as part of a rebranding strategy need to plan for the primary challenge of the shrink sleeve label design process — accounting for shrink distortion in the artwork origination process.

Preventing shrink distortion: Then and now



As you know, [shrink sleeves](#) are printed flat onto a film, seamed and dropped over a bottle or container before going through a heat tunnel to shrink the sleeve around the contours of your product's container. This process presents a serious design obstacle — while the final product is 3D, the artwork is printed in 2D.

A crisp, clear 2D graphic will distort when shrunk around the curves and angles of your product's container. To prevent this, label converters will pre-distort graphics to account for the shape of the container, the shrink potential of the material chosen (PVC, PETG, PLA or OPS) and the design of the heat shrink tunnel.

Proper distortion of the 2D image will ensure your graphics display as intended when the sleeve is shrunk around the container. But getting the pre-distortion right is arguably the hardest part of transitioning to shrink sleeves — and the process for doing so has changed quite a bit in recent

years.

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Then: Manually preventing distortion through trial and error

In the past, pre-distortion was a manual process requiring many rounds of trial and, inevitably, error. Naturally, estimating shrink distortion by hand shrink led to long pre-press, proof and approval cycles.

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Now: Using 3D software to streamline the pre-press process

Now, this process is made much simpler —and quicker— with the advent of [3D modeling technology for packaging](#). After receiving a sample of your packaging, your converter can render a 3D version of it. Using the artwork and the 3D rendering of the container, the converter can predict the level of expected shrink and distort the image accordingly.

This technology even allows you to simulate how the finished product packaging will appear on the shelf next to the competition. This will give you a clear idea of what the final product will look like before your shrink sleeve design ever hits the press.

Pre-press virtualization programs have certainly streamlined the shrink sleeve design process. But it's still important to have your converter run a sample sleeve to ensure the digitized artwork looks good on your physical container.

Preventing shrink distortion: Best practices for brand owners



Although your label converter will handle the pre-distortion, you can streamline the pre-press process—and reduce your lead time—by ensuring your artwork is optimized for shrink sleeves when you hand it off.

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Select the material best-suited for your container

While there are many [shrink sleeve material options](#) out there, the two most common are PVC and PETG. Which you choose will depend on budget, application and how much the material will need to shrink to wrap around your container.

PETG tends to be more expensive, but has a higher shrink potential—good for uniquely shaped packaging—and is considered more environmentally friendly than PVC. PVC is cost-effective and performs well in use, but only offers 60% shrink potential, limiting which containers it can be used for.

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Pay attention to seam placement

It's harder to prevent shrink distortion close to the seam. You can place your seam

anywhere on the sleeve — just make sure you plan for seam placement when designing your artwork. Choose an area without small text or realistic imagery and avoid having continuous graphics go through the seam.

- **Orient barcodes correctly**

Barcodes must be printed with a high level of accuracy to ensure they can be scanned. Orient your product's barcode vertically rather than horizontally in your design to minimize the possibility of distortion.

- **Avoid small text, realistic imagery and intricate design in high-shrink areas**

Even with new technology, replicating realistic imagery or geometric shapes in high-shrink areas is difficult (think grips on a trigger bottle or the neck of a soda bottle). Instead, opt for abstract shapes in high-distortion areas — these shapes are more forgiving of a small degree of distortion.



A quick note on the shrink sleeve expertise of your converter

What used to be an imperfect science of trial and error has turned digital. And while new 3D modeling technology has made it easier to get into the game, the proven expertise of your label converter is still key to the success of your transition to shrink — it's the difference between having a label that looks good on the screen and a label that looks good on the shelf.

To ensure you choose the right converter, ask the right questions during your consultation: Look at their portfolio of custom sleeves, find out if they've done sleeves for your product segment and make them identify potential challenges in your product's sleeve design. Only partner with a shrink sleeve labeler whose answers exhibit expertise in designing sleeves for your product segment and experience manufacturing sleeves similar in design to yours.

At Resource Label Group, we don't just design, print and ship shrink sleeves. We take ownership for delivering sleeves that achieve your desired brand image when you shrink them around your container.

Our team of shrink sleeve experts has successfully delivered sleeves for a myriad of products in a variety of industries. We have the in-house capability to run sample shrinks tests with your label on your sample product. And we take the parameters of your particular heat shrink tunnel into account when designing your sleeves — ensuring our sleeves will look as good on the shelf as they do on the screen.

[Start a conversation with our team](#) today. We'll listen to your branding strategy, and offer value-added labeling ideas to help differentiate your product from the competition. Our diligence during pre-press not only ensures your brand manager will love the way your products look on the shelf, but your packaging engineer will also sing your praises for taking everything from container shape to tunnel design into account.